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**JOURNAL**

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## the story of a dilettante by John Hartford

Today the word dilettante is rarely used even at dull cocktail parties where those whose names have been dropped onto the carpet are eased into it with a heavy foot delicately shod.

What is a dilettante—an amateur of diverse interests which he picks up here but mostly there. He dips into or sips at or may plunge through them at varying degrees—irregularly. If he dips in a metre or two he may get dug into the bottom and stuck—warning for early flowering dilettanti—*inches* were the thing. Some achieve footnotes in the various most recent and socially orientated biographies of those fascinating people living at the turn of the century. These had large noses to catch odd scents from non-flowering plants and tired butterflies.

A dilettante is eccentric, but is an eccentric a dilettante? One or two bizarre habits make the eccentric, but the eccentric rarely achieves dilettantism. The eccentricities should occupy sixty per cent or more of his time, the rest being more severely taken up in doing quite nothing. For today's aspiring dilettanti the sixty per cent question is an obstacle which will be got over. This problem is solved by finding that antique aunt obscured by aspidistrae, potted in pound notes, in Pont Street, Budleigh or Boenor.

The eccentric has no axis, the dilettanti many; some of which are off centre and most of which he strolls round, with swinging stick, anticlockwise. Galsworthy's Shropshire was apparently a classic eccentric, he dabbled clockwise around the idea and practice of electricity; but having breakfast in a vast room seated at an end side of long sagging table whilst pondering from time to time whether it's worth the effort to reach out for the Piccadilly marmalade is mere idleness.

We are in the mid-nineteenth century to thirties where we find *de luxe* to grade D dilettanti. Why here?—Income tax was intriguingly new and temporary, death duties at the bottom of the tax volcano and everyone had a little money and knew of a few dance movements to perform in the waltz. Let's paint an incomplete drawing of a grade A dilettante and add just a touch of colouring here and there.

Mister John Smith, back-ground irrelevant, educated at fifty-seven minor establishments. When six left £400,000, sorry guineas, by some thrice removed, half-relative. Changed his name at seven to Edward Gerald Louis Aubrey John Smith Fitzrottingham-Beaumate. When at Oxbridge he founded "The Bin of Odde Champagne Corks Club" which held five monthly breakfasts at eleven ante meridian, members sipping Chateau Grillet with their burnt crumpets and oysters prior to the Snark hunt. He was considered by his archeology tutor to be—dashing in all directions. At twenty-four after extensive travels published "Opinions on Slavodkian Culture", privately, and "A Glance at the early French Tympressionists" by Quintin Bookend and Co. of West Molton Street, S.I. By twenty-nine he had acquired the now famous and finest collection of musical Orreries in the world. Released from membership of the Athenium after a tea-time strip piquet game with thirty-two shady cards in the middle of Loowater Place. The Duke of Tellington said "By Jove, he nearly lost his leg". At thirty, becoming keen on moonlight croquet, he quickly pushed up his handicap to  $-1\frac{1}{2}$ , with candles on the hoops. Drove the Alvis into the river practising wrist strengthening exercises and grandiloquently reciting Siegfrozen Tattoon's "We" to his long-haired Siamese cat, whilst on the way to the Hurtingham evening croquet tournament final of that year. His Alvis was firmly stuck in Thames mud. Suffering from exhaustion, gained strength at Gartington Manor, Oxford, with Lady Utterly Immoral languidly hanging over him spilling invigourating cigar ash into his steaming wrist balms. He stayed with Rose Carroll at the Cavendish living it up on champagne cork sandwiches before setting off in a purple taxi on a fact-finding mission to South East Turkey. He reported for "The Tymes Monday Review" on eructation tonality and witchcraft amongst the locals. Beaumate was killed at thirty-two the instant he knocked his head against a four-poster after smashing his reading pince-nez during the tactile admiration of a young lady's violaceous leg rash. Obituary notice during the one day republication of "The Morning Toast"—half a column—ended "Mister Fitzrottingham-Beaumate died quietly in his bed at Rottingham Towers, Witheringshire, whilst entertaining the blue lights of his time".

Like Lear watercolours, blend these lines with what's between, and I ask—where have all the dilettanti gone?

## editorial

On Wednesday, April 9, a new president of the National Union of Students was elected at the Union's Easter conference at Liverpool University. He stood on the platform, "for making the N.U.S. more active and in trying to transform it into a real student movement".

There is criticism at Bart's that there is not enough student involvement in precisely those affairs that are going to affect them most, namely their sort of education they are going to receive; their relationship with the staff; their conditions of work; and for the future, their relations with other students who at the moment are facing the sort of patterns of change that they are so reluctant to come to terms with.

Bart's does not belong to N.U.S., apart from material advantage to be gained from such a connection, there are other more intangible gains at stake. An argument against such a connection, is the concept of the special problem; as medical students B.M.S.A. fulfills the function of N.U.S. for us. This is untrue: B.M.S.A. is an organisation drawing its executive members entirely from medical students, as such, largely from a rather close knit section of the community who know little about administration, committee lobbying and generally getting things done; they would benefit from connection with a group, whose studies and careers have been orientated around just these sort of affairs, such as the executive group within N.U.S.

The concept of medicine as a special problem is the perpetuation of a dual myth, that of the speciality and that of the problem. To invoke that of the speciality is to be able to say to an outsider, we must deal our own affairs, since only we know what is involved; that of the problem is to say that the state of affairs which exists is a problem therefore we are justified in doing nothing about it. Medicine, in a wide sense, is not special; it cannot afford to remain a problem.

The same is true of the special problem of the medical student. It is one thing to have a large organisation of students within B.M.S.A. deciding their group policy, by what sort of number of active participants may be judged by reading the B.M.S.A. report in this issue, it is quite another to imagine that other people are not going to be concerned with medical student affairs to the same extent that medical students themselves are. This rather splendid isolation has to go.

Health and medicine are political issues which are hot, it is one of the easiest things in the world for newspapers to produce a public outcry over almost any issue, reintroduction of prescription charges, transplants, Ely Hospital. It would be difficult to do this amongst the medical profession as a whole, certainly amongst medical students.

Whatever the argument put forward by any negotiating group, at an extreme level within such a small unit as an individual college, the easiest way of killing it is by asking how many people support it; to the answer, everyone; the retort, prove it. It is necessary to rave a rabble outside to point to.

Recently, Mr. Richard Crossman visited this hospital, one of many such visits throughout the country. His purpose, reorganisation of hospital services and of local government, a government Green Paper will be produced in due course. One of the things he said, at an impromptu Press conference, was "there is no doubt, that there is a lot of goodwill within this hospital." He continued that with this it might be hoped that something might be achieved. He would not be specific about what this might be.

Goodwill is fine, but if it is based on the idea that medicine is a special problem, more special than anything else; in a time of changing patterns, it is not enough.



## Announcements

### Engagements

BLANCHETTE—YEARWOOD—The engagement is announced between Mr. Victor Blanchette and Miss Yvonne Yearwood.

GARDINER—ELPHICK—The engagement is announced between Dr. Allan Bruce Gardiner and Dr. Hilary Jean Elphick.

RICHARDS—COLLINS—The engagement is announced between Dr. Colin John Richards and Miss Ann Deidre Collins.

### Births

BARTLETT—On March 8, at Bart's, to Inge, wife of Dr. Michael Bartlett, a son (Oliver).

EDMONDS—SEAL—On March 19, 1968, in Oxford, to Pamela (née Young) and John, a daughter (Louise).

JORY—On March 5, in Vancouver, to Carolyn (née Shephard) and Dr. William Jory, a daughter (Virginia Jane), a sister for David and Richard.

CANTRELL (adoption)—By Beth (née Grunsell) and Dr. Ted Cantrell, a son (Matthew Ross), now aged five months.

### Deaths

BENNETT—On February 28, Arthur Henry Bennett, F.R.C.S. Qualified 1923.

BEVAN—On February 9, at Bart's, Dr. James Eustace Carus Bevan, M.R.C.S., L.R.C.P., aged 53. Qualified 1942.

HILTON—On February 13, Dr. Reginald Hilton, M.D.Cantab., F.R.C.P., aged 73. Qualified 1922.

PAGE—On March 15, Sydney Watson Page, B.A., M.R.C.S., L.R.C.P., aged 75. Qualified 1917.

WOOD—On March 1, Dr. Stanley Wood, B.A., M.R.C.S., L.R.C.P., aged 85. Qualified 1908.

### Change of Address

Dr. K. M. Stevens now lives at 3, Tarnegic Place, Park Side, Wimbledon, S.W.19.

Dr. & Mrs. R. H. A. Swain have now moved into their new house at 8, South Gray Street, Edinburgh 9.

Miss M. T. Haworth, (formerly Sister Bowlby) and Miss E. C. Hall (formerly Sister Harmsworth) to 3, Brookfield, Sandhurst, Hawkhurst, Kent.

### Announcements

Sir Michael Perrin, C.B.E., retired from his appointment as Treasurer of the Hospital on March 31, 1969.

The Secretary of State for Social Services has appointed Mr. Robin Brook, C.M.G., O.B.E., to succeed Sir Michael as Treasurer as from April 1, 1969.

## christian aid week

Christian Aid Week runs this year from May 12 to 17.

This is the time when a nation-wide effort is made to deepen concern for those who live in the hungry two-thirds of the world and to raise as much as possible both for their immediate relief and for the sponsoring of long-term development projects.

In this effort members of the churches in Britain collaborate with the many people who do not call themselves "Christian" but who share this concern. Christian Aid has a universal appeal, for it allows no barrier of creed, race or colour.

Entertainers are among those who will give their services during the Week. On the steps of St. Paul's Cathedral, at lunch-time, Donald Swann and the Swann Singers will appear, and children from the Hogarth School at Chiswick will contribute to the programme outside the Cathedral.

A Christian Aid service will be held at the City Temple on Thursday, May 8, at 1.15 p.m. The Bishop of Kensington will preach.

Helpers in the City are joining the rest of Central London in allocating collections to a project in East Pakistan for the control of animal disease, which figures prominently in the root causes of poverty. The large livestock population is a potential asset, but half of it dies very soon after birth, resulting in enormous waste and havoc.

Christian Aid is supplying a mobile veterinary dispensary, together with field and laboratory equipment and a supply of drugs for two years to enable a team to survey the farms and treat the animals.

This project is of course only one of many sponsored by Christian Aid.

For 1969 the target is £2,000,000.

So please give generously! Donations may be handed in at any collecting site or sent direct to Christian Aid, P.O. Box No. 1, London, S.W.1.

## letters to the editor

### STUDENT UNREST AT THE L.S.E.

Dear Sir,

The recent episodes of unrest at the London School of Economics have received little sympathy from the London medical schools. We feel that many medical students now antipathic to the unrest might reconsider their point of view if they knew the factors responsible. These have been misinterpreted by certain sections of the Press, and I felt compelled to put pen to paper when I read the "Malcolm Fletcher Column" in the March edition of this Journal. May I use your columns to attempt to correct some of the false arguments used in that article?

In it, "Moderate" appears as the new euphemism which right-wing opinion uses to describe itself. I quote:

"... Large numbers of moderate students entered the union building, democratically voted that the occupation (by L.S.E.) should cease forthwith and then proceeded to eject anyone who did not agree with... this decision".

This sentence is either so amusing as to read like something from the Peking Journal of Medicine, or unnervingly reminiscent of news stories from the Berlin of the 1930s.

There has been much talk of the handful of thirty activists. These people exist, but their extreme views are not the essence of the struggle at the school, which is the problem of student participation. To state that the strikes, sit-ins and demonstrations are aimed indiscriminately at any authoritarian group or figure, and are the work of an ultra-left-wing minority is to ignore the facts of the case.

The January troubles at L.S.E. culminated at a meeting attended solely by L.S.E. students in the Friends' House, Euston Road, on February 3. Nearly two thousand students (60 per cent of the total at L.S.E.) were present. Try getting that proportion of Bart's students to a union meeting. The same meeting passed by an overwhelming majority the following resolution:

1. No victimisation of staff, students or workers.
2. An end to staff informing.
3. Re-opening of L.S.E. without gates or police.

Where is the minority there? It is far too easy for busy medical students isolated in their own schools, with fears of cuts in grants, and only the national newspapers for source of information, to ignore the need of students in many universities and colleges in this country.

Meanwhile, distrust at the L.S.E. becomes worse. In a college like ours, it is difficult to appreciate the deterioration of staff-student relationships necessary to result in the following paragraph from L.S.E. Socialist Society bulletin, January '69.

"Adams says 'This is a community affair, which I'm sure we can handle within the family'. Only a few hours before he had called in the police".

I cannot appreciate the metaphor that Britain is at the moment teetering on a political precipice, poised for the plunge either to the extreme left or the extreme right. I believe that we are a stable nation, progressing slowly without danger of major deviation. We should be grateful that at Bart's we have a good staff-student relationship, and not condemn other students who are less fortunate.

Yours faithfully,

W. E. J. Leverton,  
The Abernethian Room  
The Medical College

### THE MALCOM FLETCHER COLUMN

Sir,

We respectfully submit that the brief appearance of M. Fletcher, Esq., on the steps of U.L.U. on the evening of January 28 does not entitle him to pontificate on a matter of which, as the article shows, he displays a superficial acquaintance.

We recognise the aim of the *Journal* to stimulate and inform, but are doubtful whether the *Malcolm Fletcher column* fulfills either of these requirements.

In consequence we would consider its continued appearance to be detrimental to the quality of the *Journal*.

We beg to remain, Sir, your obedient servants,

Anthony Hammer  
Oliver Bastard  
David Edwards



# The Black Death

## by Roger Rolls

*Ring-a-ring of roses  
a pocket full of posies,  
Atishoo, atishoo,  
We all fall down.*

Sometime during the summer of 1348, a ship docked at a small port on the south coast of England. On board was a cargo which was subsequently to cause one of the worst disasters which has occurred during man's recent history. From that day until the late seventeenth century, England, and indeed most of Europe, was disease-ridden as never before or since. In a short period of three years after 1347, it has been estimated that one fourth of the population of Europe perished. For no matter how far persons fled, the Black Death crept on relentlessly and would sooner or later catch up with them. Mediaeval man was powerless: there was neither cure nor prevention. As disaster inexorably advanced, terror gripped the minds of everyone. It is hardly surprising that such a phenomenon should have produced profound psychological, moral and religious effects as well as greatly disturbing the economic structure of the community.

The name "Black Death" was not used in contemporary writing, but first appears in a 16th century account as "*atra mors*", and black is probably an over-literal translation of terrible or dreadful, rather than referring to livid blotches which appear on the skin.<sup>1</sup> As will be discussed later, such marks are more a feature of bubonic forms of plague which appear to have become predominant in the outbreaks of the later centuries where the disease was confined to cities and towns.

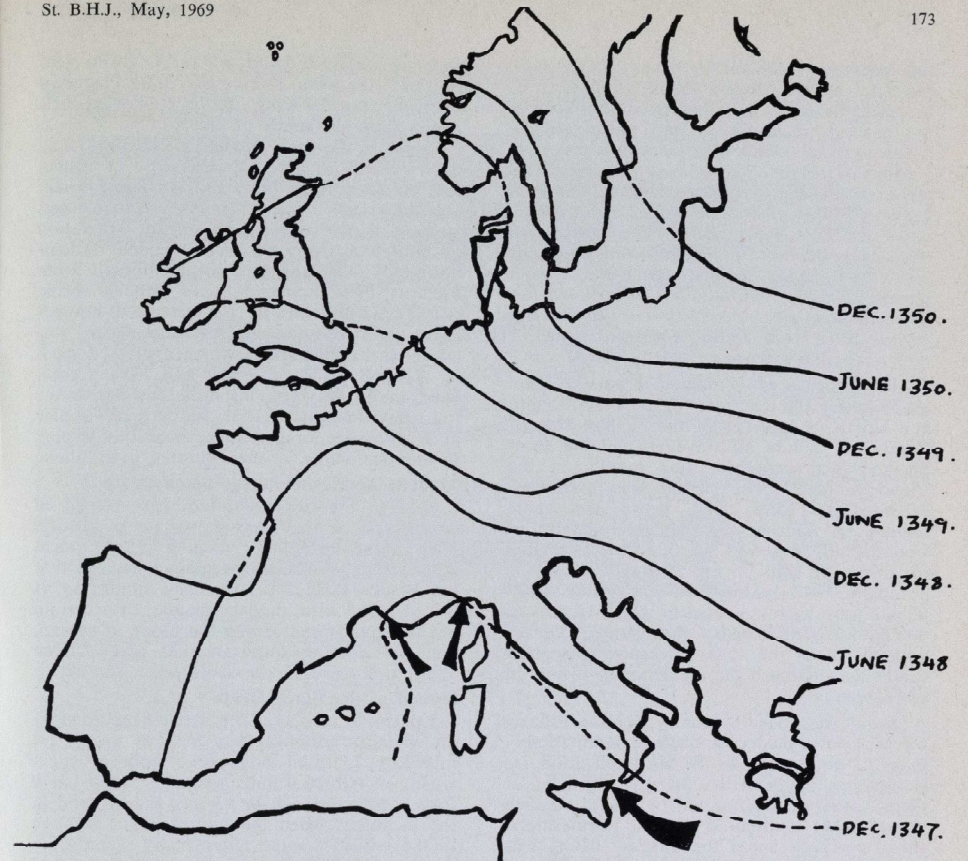
The Black Death is known to be the second of three great plague pandemics which have been recorded during the last two millennia. The first manifested itself during the late years of the Roman Empire (some historians attribute the final weakening of the Empire to this pandemic). The plague of Justinian, as this first pandemic is called, probably reached England just after the middle of the seventh century.<sup>2</sup> There are references to plague in *Bede's Ecclesiastical History*<sup>3</sup> and the *Irish Annals*. Sporadic outbreaks in monasteries are recorded over the next twenty years. Reports of plagues

during the next seven centuries are sparse, but the records of early chroniclers are not always exhaustive even if they are extant. The third pandemic began in 1892, and briefly visited this country at the beginning of this century, but the number of cases was a mere gesture as compared with the previous visitation.

In order to put the Black Death into perspective it is necessary to briefly discuss some aspects of the epidemiology of the disease. Plague is essentially a disease of rodents, of which rats are particularly important as reservoirs. The bacillus, *Pasteurella pestis*, is transmitted from one rat to another by rat fleas, of which the most important is *Xenopsylla cheopis*.

Epidemics of plague are usually preceded by outbreaks (epizootics) among rodents, which may be precipitated by a number of factors such as changes in host resistance or increased virulence of bacillus, humidity or temperature. In general, warm moist conditions favour the development of an epizootic, while extremes of temperature do not. When the rodents die, the fleas find themselves on a sticky wicket. In the case of *X. cheopis* and the black rat, humans are often not far away, and the flea turns its attention towards a new host. In this way the disease is passed to man.

In humans, plague may present as one of three clinical types. The bubonic form, which results from inoculation with the bacteria, is the familiar form which has been described by countless observers both ancient and modern. "In men and women alike it first betrayed itself by the emergence of certain tumours in the groin or the armpits, some of which grew as large as an apple, others as an egg, some more, some less, which the common folk called buboes. From the two said portions of the body this deadly buboc began to propagate and spread itself in all directions indifferently; after which the form of malady began to change, black spots or livid markings appearing in many cases on the arm or thigh or elsewhere, now few and large, now minute and numerous." (Boccaccio-"*Decameron*"). Although there is a high mortality, recovery is possible from this form. The other two types, septicæmic and pneumonic, pursue a more acute course and are nearly always fatal. From an epidemiological point of view these two types are important since they favour spread of the disease without the intervention of animal reservoirs, the pneumonic form being contagious by droplet infection and the septicæmic form allowing dissemination by human fleas.



The progress of the Black Death across Europe in the Mid 14th Century. Arrows indicate possible ports where infected ships may have introduced plague from the East.

### Ancient theories of plague

*Be as a planetary plague, by Jove,  
Will o'er some high-voiced city hang its poison  
In the sick air.*

*Timon of Athens, 4.3.*

Plague was long thought to be God's punishment for wickedness, both general and due to specific sins, such as the theatre in Restoration England, long-pointed shoes and fashion. Until the discovery of the bacillus by Yersin and Kitasato in 1894, opinion as to the aetiology of plague was divided between two schools of thought, those supporting the idea of plague as a *miasma* or corruption of air and those others who maintained that plague was a *contagion*. Both viewpoints produced a host

of ideas for prevention, all of which proved largely futile. Advocates of the miasma theory recommended such steps as burning huge bonfires in the streets of London during the worst outbreaks of plague. Methods for fumigation of rooms by shutting windows in cold and misty weather, and purifying the air by burning juniper branches, allowing the heat and smoke to pervade the room, or the personal use of inhalations of bizarre preparations, were common during the sixteenth and seventeenth centuries. Pomanders, currently enjoying a fashionable revival, contained mixtures which not only served to combat the stench that was prevalent during the summer in Old London,



but were also claimed to be a suitable prophylactic against plague.<sup>4</sup> Some supporters of the miasmatic theory went as far as implicating the general uncleanness and putrid smells, which were so common in mediaeval cities, as a cause of plague. The scholar Erasmus, in a letter to Cardinal Wolsey, describes how in London houses "there is a degree of uncleanness, and even filth, portrayed of which we have no conception in our times. The floors are commonly of clay strewed with rushes, which are occasionally removed, but underneath lies unmolested an ancient collection of beer, grease, fragments of fish, spittle, the excrements of dogs, cats, and everything that is nasty."<sup>5</sup>

The doctrine of contagion began to take shape during the first years of the Black Death, and led the authorities of the Sicilian City of Ragusa to isolate all travellers coming from plague-ridden areas for one month on the island Mercana. The period was eventually extended to forty days, hence the name *quarantine*.<sup>6</sup> During the plague epidemics of London, all houses in which plague was discovered were shut up for forty days, with the occupants both healthy and sick inside. Pest-houses were hastily erected in which victims of the disease were forcibly incarcerated. Unfortunately many of these measures increased rather than reduced the incidence of plague in the community.

During the fifteenth century, Jerome Fracastor evolved a theory of contagion remarkably close to modern ideas. In his publication *De contagione*, he describes invisible particles or germs (*semina*) which could be spread through contact with a diseased person. Furthermore, these particles could be carried from their infected source on certain articles, such as wool and clothes, which he suggested held the particles in the crevices of the material. He even suggested that the particles could infect from afar and he gives the example of the ability of onions to draw out tears at a distance by virtue of their volatile essence. Air from time to time becomes impregnated with the infective particles which are dispersed to persons and objects. Both this latter idea and the doctrine of miasma led to one other measure to avoid infection, which was not always encouraged by the authorities. Approaching danger induced the fundamental human reaction of flight, and it was invariably the rich and noble who were the first to go, leaving the common people to look after themselves. During the London plague of 1563, Queen Elizabeth I fled to Windsor and thereupon installed a gallows in

case anyone from London should care to venture near the town. During the Great Plague of 1665, the court of King Charles conducted their affairs from the safety of Oxford.

Some of the more revolting therapies may have evolved as a result of a sense of collective guilt colouring popular feeling and which led to a development of masochistic urges. Urine and pus were drunk and the inhalation of bottled flatus were recommended. Disembowelled toads and entrails of animals were used as local applications to buboes.<sup>7</sup> Most therapeutic measures were a mixture of homeopathy and self-punishment. Masochism was accompanied by sadism, which expressed itself in a search for scapegoats and led to great witch-hunts and persecution of Jews during the fourteenth century.<sup>8</sup> The church and secular authorities encouraged these activities hoping to shift the blame for their failures on to others.

**Modern theories about the Black Death**

Modern theories are almost as steeped in controversy as the ideas prevailing in history. There seems little doubt, judging by the clinical descriptions which have remained extant, that the Black Death was extremely similar to, if not identical with, modern plague. Less certain are the details concerning the mode of spread, and the final disappearance of plague from Western Europe in the seventeenth century.

**Spread of the Black Death**

Epidemics of plague are usually preceded by an epizootic amongst rats and, in towns, rat mortality is often noticeable, both at night when, as Albert Camus remarks, "their shrill little death-cries can be clearly heard," and in the mornings when the bodies might be seen in the gutters, "some bloated and already beginning to rot."<sup>9</sup> Some association between rats and plague may have been observed at a very early period of civilization. In a passage from the Old Testament (*Samuel 1.6*) the Philistines are advised by their priests "to make images of your emerods (buboes) and images of your mice that mar the land" during a plague outbreak. Mention of rats in connection with plague appears in some contemporary accounts of mediaeval Eastern outbreaks, but records of the Black Death in Western Europe do not remark on this coincidence. Certainly rats must have been in evidence during the fourteenth century, for Chaucer (1340-1400), in the *Pardoner's Tale*, tells of the purchase of poison from an apothecary "that he might his ratouns quell."

Absence of remarks about rats in accounts of the Black Death has led to the idea of the

for the City of LONDON, And Parishes Adjacent:  
1665, being the Account how many Persons died Weekly in every of those Years, &c. How many Figures of the Greatness of the Calamity, And the Violence of the Disease in the Last Year, 1665.

The broadsheet contains a grid of 12 illustrations (3 rows by 4 columns) showing various scenes of the plague in London, including people carrying the dead, and a large table of mortality statistics for various parishes from 1665 to 1667. The table lists parishes such as St. Dunstons, St. Martin's, and St. Andrew's, with columns for the number of deaths in each year. The text at the top and bottom provides context for the data, including the title and a note about the collection of the broadsheet.

Collected by *John Colburn*.

Contemporary broadsheet, by courtesy, Trustees London Museum



fourteenth century pandemic as being predominantly pneumonic in type.<sup>10</sup> However, absent historical evidence of rat mortality cannot be taken *a priori* as indicating pneumonic spread, and bubonic forms, which certainly occurred, implicate rats.

The geographical progress of the Black Death is better appreciated than the mode of spread. Records of an abnormally high mortality occurring around 1338-9, coupled with recent archeological evidence indicate an area around Lake Issyk-Kul, in Central Asia, as the original focus of the pandemic.<sup>11</sup> It is likely that *Pasteurella pestis* has smouldered continuously as an enzootic in wild rodents which inhabit a zone between latitude 50° and 40° North, from the Caspian Sea in the West to Manchuria in the East,<sup>12</sup> and that all the great pandemics have arisen in this area.

From Central Asia, the Black Death spread east to China, south to India, and west to the Crimea. Chronicles suggest that infection was carried by galleys from Eastern ports, so establishing the disease at the large trading centres of the Mediterranean; Genoa, Venice, and Messina, arriving in Sicily in October 1347 (see map). In most of its course, the disease followed closely the main trade routes, but it swiftly spread inland. It ravaged the whole of Europe, and in a like manner swept through England after its introduction at Melcombe Regis (now part of Weymouth) in 1348. Virtually no part of Western Europe was spared.

What is particularly striking is the way in which rural as well as urban populations were so severely affected. Can the catastrophic involvement of rural areas be explained by assuming that the early phase of the Black Death, as already mentioned, was primarily a pneumonic disease or was there a preceding epizootic which swept across England? After the fifteenth century, outbreaks seem to centre on towns where there must have been a large indigenous rat population in close proximity to humans. Yet it is hard to believe that such a proximity existed ubiquitously in rural England during 1348, although there had been a considerable degree of famine in preceding years and as Siegrist<sup>13</sup> remarks, "when granaries are empty, rats move closer to man and if there happens to be an epidemic the chances of human contamination are great." Hoskins<sup>14</sup> has examined the incidence of outbreaks in Wigston Magna, Leicestershire, and correlated them with the increase in population size of the village which occurred both in the fourteenth and seventeenth centuries. With a

diminished village population during the intervening centuries, no plague outbreaks are recorded. Many historians have pointed out that Europe entered a period of economic decline during the fourteenth century which was primarily due to overpopulation, and if such was the case, the likelihood of heavy mortality from a plague epidemic would be much greater, but so would mortality from other adverse factors such as bad harvests. For this reason, much of the de-population occurring in Europe which was originally attributed to the effects of the Black Death may well have resulted from many other adverse factors which were operative during this period of economic decline. Beresford<sup>15</sup> has suggested that most cases of village de-population in the Middle Ages were not due to the Black Death, and that many villages were already in decline long before the pandemic arose. It would seem that the Black Death was more of an opportunist epidemic in an already debilitated continent than the prime cause of its trouble.

### Three Centuries of Plague

A further enigma is the way in which the Black Death lingered on for more than 300 years and then mysteriously died away. The plague of Justinian in the sixth century seems to have lasted a mere twenty years in England. Possibly the answer was with the animal reservoir. The black rat may have colonised Europe only after being shipped back from the Middle East during the crusades but this theory has never been proved. There may have been a predominance of rodents other than the black rat. A more tenable explanation lies in the deployment of the population. At the time of the Justinian plague, communities in England were almost exclusively small and rural since the cities which had grown up during the Roman occupation were associated with evil spirits and were left to decay uninhabited; what has often been thought of as a backward step may well have prevented the persistence of the Justinian plague after it had declined from its initial phase. During the Black Death, urban communities had once more grown to sizeable proportions (See Table 1).

Town	Taxed	Estimated Population
London	23,314	44,770
York	7,248	13,590
Bristol	6,345	11,904
Plymouth	4,837	9,069
Coventry	4,817	9,032
Norwich	3,952	7,410
Lincoln	3,412	6,399

Sarum	3,226	6,048
Lynn	3,127	5,863
Colchester	2,955	5,540
Newcastle	2,647	4,963
Canterbury	2,574	4,826
Oxford	2,357	4,420
Gloucester	2,239	4,198
Leicester	2,101	3,939
Shrewsbury	2,082	3,904
Yarmouth	1,941	3,640
Hereford	1,903	3,568
Cambridge	1,722	3,230

TABLE 1. Population figures estimated by Creighton (History of Epidemics in Britain, C.U.P. 1891, p. 201) from Poll Tax returns in 1377. Estimations allow for tax evaders and those under fourteen who were exempt.

Another factor which influences the persistence of the disease within the community is the pattern of immunity developing within the population. In this respect, pneumonic plague is peculiar. Unlike diphtheria, the disease is invariably fatal, and, whereas with diphtheria, asymptomatic infection is possible sufficient to induce antitoxin formation, in the case of pneumonic plague the affected members of the community die before they have a chance to protect themselves by producing antibodies. Nevertheless, epidemics of pneumonic plague in modern times have declined spontaneously. It must be assumed in these cases that a change in virulence of the organism takes place, or else, that environmental conditions alter causing a reduction in the possibility of infection. It is attractive to attribute such a change of environment to seasonal climate, but the Black Death appears to have produced heavy mortality in England continuously throughout the whole three years of the epidemic. Greenwood<sup>16</sup> explains this continuous progress by a cyclic change from pneumonic plague in cold damp months to bubonic plague in the warmer seasons. With regard to change in virulence, an increase as well as a decrease may paradoxically terminate an epidemic rather than prolong it. Wu Lien-Teh<sup>17</sup> has shown in studies on plague in the East (1926) that in certain epidemics, a change in clinical type may occur near the end of the epidemic: the pneumonic form, which runs a course of two to three days during which the patient develops highly infectious cough, gives way to a pulmonary form, which has such an acute course that patients die before they have developed a cough, and as such are no longer able to spread the disease. Such a phenomenon may have happened in the Black Death. However, there were at least five further outbreaks recorded over England

between 1350 and 1391, which may have been due to reinfection from an endogenous animal reservoir. The 2nd epidemic in 1361, according to records, is supposed to have affected children more than adults: possibly a reflection of some degree of immunity in the adult population which may have arisen through recovery from bubonic plague in the first epidemic ten years before. None of these subsequent outbreaks showed the severity of the first visitation.

### The final years

After three hundred years of endemic plague, with frequent epidemic outbreaks in cities, there was an abrupt decline in the number of recorded cases taking place in Europe. A recent analysis of figures in the *Bills of Mortality* for London during the sixteenth and seventeenth centuries by Sutherland<sup>18</sup> suggests that plague was on the decline in the city over this period. He shows that, if figures of mortality during plague years are examined with reference to variations in population level, the *Great Plague* of 1665 is by no means the greatest! (See Table 2). The Great Plague of

Year	Area	Recorded Burials	Population Index (expected christenings)	Relative Mortality Index
1563		20,372	2,646	7.70
1578	City of	7,830	3,425	2.29
1582	London	6,930	3,633	1.91
1593	and Liberties	17,893	4,205	4.25
1603		31,861	4,725	6.74
1609	City of	11,785	6,853	1.72
1625	London	54,265	8,455	6.42
1636	Liberties and	23,359	10,366	2.25
1665	outparishes	80,696	14,920	5.41

TABLE 2. A comparison of estimated mortality in the nine plague outbreaks between 1563 and 1665. Mortality is relative to the level of mortality during the plague-free period of 1632-1635, using indices of the population growth derived from the recorded christenings in the periods free of plague. Figures based on a table by Dr. I. Sutherland, by kind permission.

London is well known and widely described<sup>19</sup> and there is a popular belief that the fire in the following year was a major cause of the disappearance of the disease. This is a doubtful explanation, especially as areas like Stepney and Cripplegate, where the Great Plague was most devastating, were unaffected by the fire. On the other hand, the Fire may have promoted an increased awareness of the needs for public health measures, and a rebuilt City, like a new car, is more likely to be kept clean than an old one. However, other towns and cities



through Europe did not share the same fate as the City, yet plague, which was undoubtedly endemic in many of them, disappeared in a similar fashion. In London, deaths from plague dropped to 35 recorded cases in 1667, 14 in 1668 and three in 1669. By 1679, the last case of plague had been recorded on the weekly Bills of Mortality. Plague appears to have declined somewhat earlier in other parts of Europe although occasional outbreaks, notably at Marseilles in 1720 and Messina in 1743, occurred at ports where shipping carried cargo from Eastern areas where plague was still endemic. (See Table 3).

Approx. date	Area
1640	Wales
1650	Ireland and Scotland
1660	Norway, Sweden, N. of England
1670	Southern England, Switzerland and Flanders
1680	Western Europe
1840	South-East Europe

TABLE 3. The disappearance of plague from Europe. Between 1670 and 1840, the disease remained endemic in Turkey, Egypt and the Levant, producing occasional ship-borne outbreaks at ports in Western Europe, e.g. Marseilles 1720. Figures compiled from Creighton and Hirst.

It has been suggested that the disappearance of the disease was due to a displacement of the black rat by the larger and more superior brown rat. A mass migration of the brown rat westwards across Europe did occur<sup>20</sup>, but not until the eighteenth century and there is doubt that the black rat was displaced to the extent that has sometimes been suggested. Brown rats keep well away from humans unlike their black cousins which scurry quite happily in domestic circles. For this reason, transmission of plague to humans is far less likely from brown rats, although these creatures are by no means immune to the disease. Furthermore, *X. cheopis* is rarely found as a parasite on European rats, although this flea surprisingly turned up on some brown rats found under Guy's Hospital.<sup>22</sup>

Recently attention has been directed by Roberts<sup>23</sup> towards the observations that laboratory rats can be immunised against plague by using a specific fraction of *Pasteurella pseudotuberculosis*, a mutant of *P. pestis*, which is only mildly pathogenic to humans; it occasionally causes acute mesenteric lymphadenitis in children. This mutant has a predominantly European distribution. An epizootic of *P.*

*pseudotuberculosis* during the seventeenth century could have conferred upon the European rat an immunity to *P. pestis*, and explain the sudden departure of plague from the continent.

Inevitably, any explanation must be speculative with such a paucity of historical data. The Fire of London, improved Public Health, rats, fleas, bacterias, all have had their protagonists and will no doubt continue to do so. Presumably all played some part in ridding this country of a disease which had produced so many years of chronic suffering and made the immediacy of death a burden upon the mind of everyone who lived. Many fears were generated producing fundamental changes in moral and religious life, changes from which modern society is still unshackling. Europe has been almost free of plague for two hundred years, and yet in many parts of the world the third great pandemic has not yet claimed its toll. But while the shadow of doom in the form of plague may have gone, another fear of human extermination casts an even blacker death over civilisation.

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## ST. BARTHOLOMEW'S HOSPITAL MEDICAL COLLEGE

# The Wine Committee

(President: Mr. George Ellis)

announces that the Seventh Annual

## Barbecue Ball

will be held at Charterhouse Square

on Friday 6th June, 1969

Attractions to occupy your time between 10 p.m. and 5 a.m. will be:—

THE PEDLARS and 3 other groups

A Steel Band

Cabaret Jeremy Taylor

Discotheque

A Victorian melodrama early in the evening

Too much barbecued food for all at 1 a.m.

Licensed bars until 4. a.m.

Breakfast from 4.30 a.m.

All to the usual high Wine Committee standard

Double Tickets:

5 guineas (Students 4 guineas) are available  
from the Wine Committee

The Ball is open to all past and present members of the Students' Union. Applications for tickets should be sent to Mr. M. W. Navin, Secretary of the Wine Committee, not later than 26th May. Cheques should be made out to St. Bartholomew's Hospital Students' Union and crossed 'Bar Account'. Ticket are not transferable.

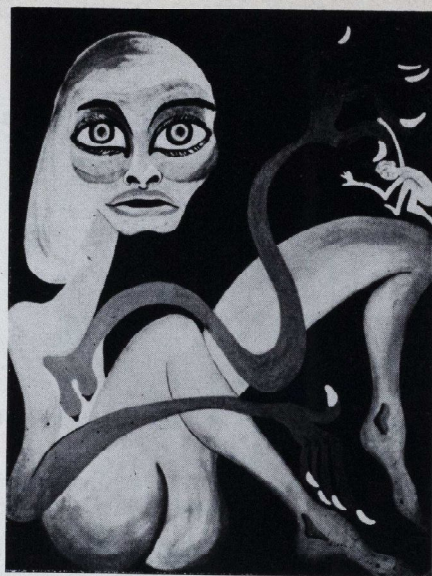
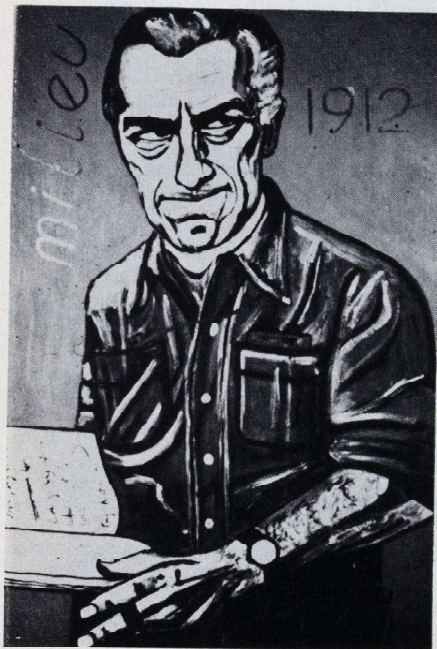


## One man's view

by C. J. Sedergreen

Michael Joyce is a 23-year-old computer programmer who, by virtue of clean cut and conservative appearance, is rather removed from the popular image of the "artist". He has just given a one month exhibition of his paintings at the "Arts Laboratory", Drury Lane, W.1, which was even more successful (not to mention lucrative) than even he had imagined.

As a painter Mr. Joyce has an individual style which resists classification with existing styles, and though it may associated with "Pop Art" there is considerably more to be found than reproductions of "Campbell's Soup" tins. Probably the most striking feature is his fondness of bright colours—not the luminescent hues of those dreadful "Boot's Prints", but strong and contrasting reds and yellows, oranges and blacks—pretty gaudy in fact.



Photos: H. A. Adelsberg.

These paintings have been likened to cartoons, a comparison which is both unfair and inaccurate. At best a cartoon is a comprehensive comment on, or reflection of contemporary events, situations, or attitudes (c.f. Jak or Bristow in the *Evening Standard*). Mike Joyce's paintings certainly reflect contemporary phenomena but in addition they contain a whole range of the artist's responses to and interpretation of these phenomena.

A recurrent theme in these paintings is the effect of a materialist society on the relationships between man and woman, with a particular interest in what he sees as a devaluation of sex. The *Adventures of Happy* shows us in a serial fashion the artist's appraisals of marriage in a variety of situations.

Mr. Joyce is also interested in the effect of one art form upon another (as well as a painter he is a painstaking film maker) and some of the pictures show his almost idolatrous devotion to Jean-Luc Goddard and Antonioni. In others he uses cinematic techniques to encourage the viewer to see a painting not as an isolated event in time, but having a past, a present, and a future.



It is possible that Mr. Joyce's paintings will be on sale in print form in New York—that is if they haven't already been sold to private buyers on this side of the pond. Personally I would no more pay money to hang one of these

in my home than I would for a Boot's print, though they are undeniably a relief from the ubiquitous "white horses in the sea" and enigmatic oriental ladies.



# the chemotherapy of malignant disease

by G. Hamilton Fairley

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Consultant Physician, Chester Beatty Research Institute, Institute of Cancer Research and Royal Marsden Hospital, Sutton, Surrey.

It is now nearly 100 years since Billoth (1871) first recommended arsenic as the treatment for Hodgkin's disease, but it is only in the last twenty-five years that significant advances have been made in the chemotherapy of malignant disease. Surgery and radiotherapy still remain the treatment of choice for localised tumours, but once spread has occurred beyond the point at which these two methods can be applied, one has to turn to medical treatment. Initially this simply took the form of some drug which would attack all dividing cells, but additional methods are now available which include the use of hormones, enzymes and possibly in the future immunotherapy.

It would not be possible, nor is this the place, to list all the various cancer chemotherapeutic agents with their mode of action, or to deal with every form of malignant disease. Instead, it is proposed to give a brief general outline of the commonly available forms of treatment, and to show how both the aims and the approach to chemotherapy have changed, particularly in the last ten years.

## ANTI-CANCER AGENTS

### 1. Cytotoxic Drugs

Most of the chemotherapeutic drugs used in malignant disease today interfere by one mechanism or another with the synthesis of DNA, RNA or protein, and act against both malignant and normal cells. The first to be introduced was nitrogen mustard at the end of the 1939-45 war, and was used initially in this country by Wilkinson and Fletcher (1947). It acts rapidly and is given in the form of mustine hydrochloride, by injection into a fast-running intravenous infusion to prevent burning of the tissues. Clearly it had disadvantages, and many further compounds have been introduced which carry the nitrogen-mustard warhead. The ones in common use at

the present time are chlorambucil and melphalan, which were both produced by the Chester Beatty Research Institute, and more recently cyclophosphamide. The use of other alkylating agents, busulphan and a nitrosourea BCNU will be discussed later.

Another group of chemotherapeutic agents are the antimetabolites. They owe their action to the fact that they obstruct the working of an enzyme system because chemically they are very similar but not identical to an enzyme substrate, and once combined with the enzyme prevent further reaction. The first to be used in man were the folic acid antagonists by Farber *et al* (1948) in acute leukaemia, the one in common use now being amethopterin (methotrexate). This was followed by the introduction of the purine antagonists, 6-mercaptopurine and more recently azathioprine, and now there are many more including 5-fluorouracil, cytosine arabinoside, and hydroxyurea.

A further group of "cytotoxic" agents come from bacteria and plants. The antibiotics actinomycin and rubidomycin, and the vinca alkaloids vinblastine and vincristine from the plant *Vinca rosea* have marked anti-tumour effects both in man and animals.

### 2. Hormones

Some tumours grow especially well in an environment where androgens predominate over oestrogens (e.g. carcinoma of the prostate) and reversing this balance by giving a synthetic oestrogen may lead to tumour regression and control of the disease for several years. (See Review by Fergusson, 1969). Similarly in some cases of carcinoma of the breast treatment with androgens may be successful in controlling the disease for many years. In addition in breast carcinoma changing the hormonal state by adrenalectomy, pituitary ablation, and the administration of synthetic adrenocortical hormones may also have a beneficial effect on the tumour. (See Review by Hayward, 1968). More recently progestational hormones have been used in malignant disease, particularly in carcinoma of the body of the uterus.

Adrenocortical steroids such as prednisone and prednisolone are widely used in the management of leukaemia. They have a direct effect on the malignant cells in acute lymphoblastic and chronic lymphatic leukaemia, as well as in lymphosarcoma, and have additional advantageous actions in lessening the degree of haemolysis in a variety of malignant diseases, decreasing the tendency to haemorrhage in thrombocytopenia, and possibly protecting the marrow to some extent against the

toxic effects of other forms of chemotherapy and radiotherapy.

### 3. Enzymes

The observation by Kidd (1953) that guinea-pig serum would lead to the regression of some transplanted lymphomas led to the discovery by Broome (1961) that it was the presence of the enzyme L-asparaginase which was responsible for this effect. Broome showed that some malignant cells, particularly leukaemias, were unable to synthesise asparagine and would die unless asparagine was present in the medium, or if the asparagine was destroyed by the enzyme asparaginase. From the theoretical viewpoint this is one of the most exciting developments in the treatment of malignant disease, for at least we have a metabolic defect in the malignant cell which is not present in a normal cell, and an enzyme which will therefore act specifically against the malignant cell, leaving the normal cells unaffected.

## METHODS OF USING ANTI-CANCER AGENTS

These will be considered under the following headings:

1. As an adjuvant to radiotherapy and surgery.
  - (a) Continuous treatment
  - (b) Cyclical treatment
  - (c) Intermittent treatment ("Pulse").
3. Used in combinations (Combination chemotherapy).

### 1. Chemotherapy as an adjuvant to radiotherapy and surgery

Even with some localised tumours where the definitive treatment is either radiotherapy or surgery, chemotherapy may prove of great value. For example, spinal cord compression, superior vena caval obstruction, or pressure on a major bronchus in Hodgkin's disease can be relieved very rapidly by intravenous mustine hydrochloride, following which a course of radiotherapy can be given. Some tumours, particularly in the head and neck, may be so large that they cannot be removed but following the local intra-arterial infusion of a metabolic analogue such as methotrexate the tumour may shrink to a size where curative surgery becomes possible. Attempts have been made to prevent or delay the recurrence of malignant disease following surgery by giving chemotherapy at the time of, or following, operation but the results have been disappointing.

### 2. Agents used singly

#### (a) Continuous treatment

Following the introduction of the alkylating

agents it became apparent that some malignant disease could be controlled for many years by the continuous administration of the drug. The best examples of this form of treatment are found in the chronic leukaemias. The standard treatment for chronic granulocytic leukaemia since it was first used by Galton (1953) is busulphan, the dose of which is carefully titrated against the effect on the blood. Great care must be taken to avoid overdosage with this drug, as it can cause a fatal aplastic anaemia. This is continued until the terminal blastic phase when the drug is no longer effective, and the treatment becomes similar to that used in acute leukaemia. Similarly in chronic lymphocytic leukaemia continuous chemotherapy either with chlorambucil (Galton *et al*, 1955), or cyclophosphamide (Fairley, 1964) may control the disease effectively.

Until recently the continuous use of single agents has been the conventional treatment for Hodgkin's disease, the commonest drugs being one of the alkylating agents (chlorambucil or cyclophosphamide), vinblastine and procarbazine. However, the remission rate with these drugs alone is not as high as that obtained with the use of combination chemotherapy (Carbone, 1967) which will be discussed later.

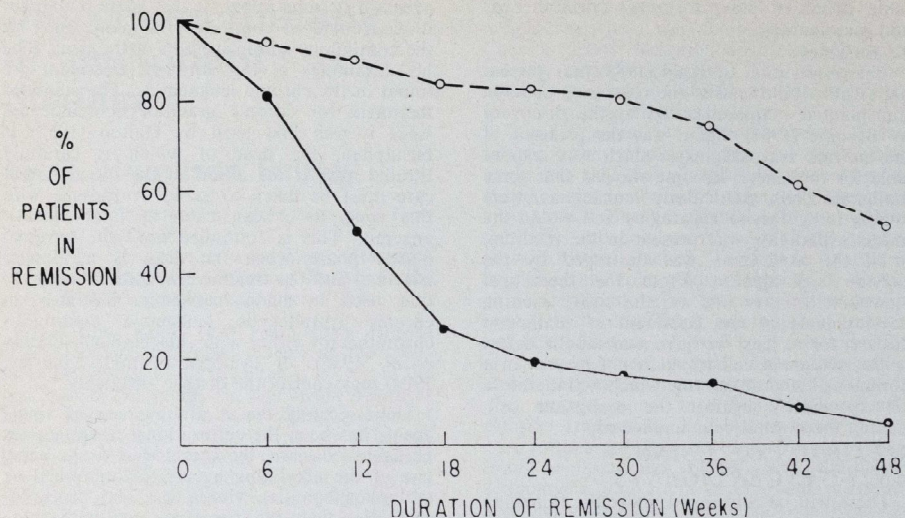
Other examples of continuous treatment are the use of androgens and corticosteroids in cancer of the breast, and oestrogens in carcinoma of the prostate.

#### (b) Cyclical treatment

One of the obvious facts about continuous chemotherapy is that eventually the malignant cells become resistant to the agent being used, and the treatment has to be changed. Based on this fact, the idea that to give the known effective agents in a deliberate cyclical manner, changing from one drug to another at specific time intervals, might lessen the chances of a resistant population of malignant cells emerging, has developed. This has been used most successfully in the maintenance of remissions in the acute lymphoblastic leukaemia of childhood by Zeulzer (1964), although a recent report from the Australian Cancer Society (1968)\* failed to reveal any difference between the cyclic and non-cyclic use of vincristine, 6-Mercaptopurine, methotrexate and cyclophosphamide in maintaining remissions in this disease. The principle of cyclical chemotherapy is now being incorporated into many of the regimes of combination chemotherapy being used now in the treatment of acute leukaemia.

\* Lancet (1968) i, 313.





(c) Intermittent (pulse) treatment

Originally in acute leukaemia single drugs were administered every day, but the work of Skipper (1968) has shown that with some agents, particularly methotrexate, intermittent administration is more effective both in animal leukaemia and in man. The probable reason for this is that the old concept that malignant cells are dividing rapidly is untrue (Cronkite, 1968). Indeed in some malignant diseases the cell doubling time may be much longer than with normal cells. The use of methotrexate in an intermittent manner enables the normal cells to recover more rapidly than the malignant cells between the doses of the drug, and when used in this way can be given in larger doses and is much more effective in prolonging remissions in acute leukaemia in man (Djerassi, 1967; Frei, 1967 (Fig. 1) and curing the L1210 leukaemia in mice. It is interesting that this concept does not apply to all drugs, e.g. 6-mercaptopurine is no more effective when given intermittently than continuously.

3. Combination Chemotherapy

Until recently the generally accepted regime for treating malignant diseases such as acute leukaemia and the lymphomas was to give one chemotherapeutic agent continuously until it failed to have any effect, by which time resistance had occurred, and then to try another. The aim throughout was to prolong useful active

FIGURE 1

Graph taken from an article by Frei (1967) showing the comparative effects of two dose schedules of methotrexate in maintaining remission in acute leukaemia in children. (— 3 mg/M<sup>2</sup>/day orally). (—○— 30 mg/M<sup>2</sup> twice weekly by injection).

life, but the idea of curing a patient by this means was not envisaged. However, the fact that resistance to one drug, such as 6-mercaptopurine was not accompanied by resistance to another, such as methotrexate, led to the idea that providing each drug was given in the best possible way it might be feasible to kill all the malignant cells leading to permanent cure (the theory of "total kill") by the use of combinations of drugs. At the same time, the fact that some transplantable leukaemias in animals could be cured by chemotherapy encouraged such an aggressive approach. Figure 2 which is taken from an article by Holland (1968) shows the effect of single drugs compared with combinations in inducing remissions in the acute lymphoblastic leukaemia of children. The best combination shown here being vincristine and prednisone which produced complete remission in 84% of the patients.

With acute lymphoblastic leukaemia it becomes apparent that some drugs were best used when the patient was in relapse in order to

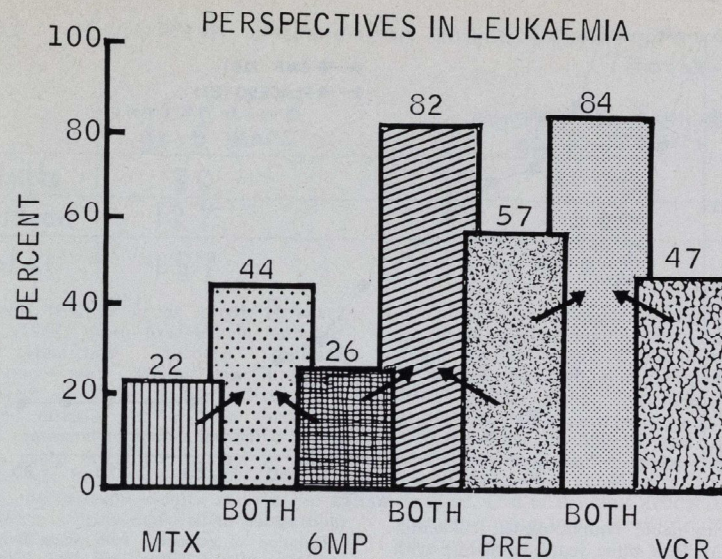


FIGURE 2

Effect of single drugs and of combinations (shown as adjacent pairs) in inducing remission in acute lymphocytic leukaemia of children. (Reproduced from an article by J. F. Holland in "Perspectives in Leukaemia").

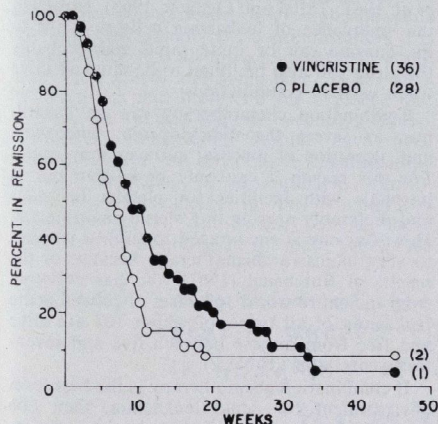


FIGURE 3

Duration of remission of children with acute lymphoblastic leukaemia after remission induction with vincristine, comparing the use of vincristine with that of a placebo. (Reproduced from an article by J. F. Holland in "Perspectives in Leukaemia").

induce remission, while others were better at maintaining remission once it had occurred. Figures 3 and 4, also taken from the same article by Holland (1968) show that vincristine

had no effect in maintaining remissions, whereas 6-mercaptopurine had a marked effect.

There are now at least nine drugs known to be effective in acute leukaemia, prednisone, vincristine, cytosine arabinoside (which has been extensively studied in this hospital by Sir Ronald Bodley Scott and Dr. J. S. Malpas (Malpas and Scott, 1968)), rubidomycin, asparaginase, cyclophosphamide, 6-mercaptopurine, methotrexate and BCNU. The first five of these are best used for induction, and the last, BCNU, for maintenance. Cyclophosphamide, 6-mercaptopurine and methotrexate are slow inducers and can be used for this purpose, but are probably best used for maintenance. It is easy to see from this that the possible combinations and permutations are very considerable, but the three best established regimes, which originated in the U.S.A. and are known as VAMP, POMP, and BIKE, all involve different ways of giving at least four agents, vincristine, prednisone, 6-mercaptopurine and methotrexate. Using these regimes 50% of



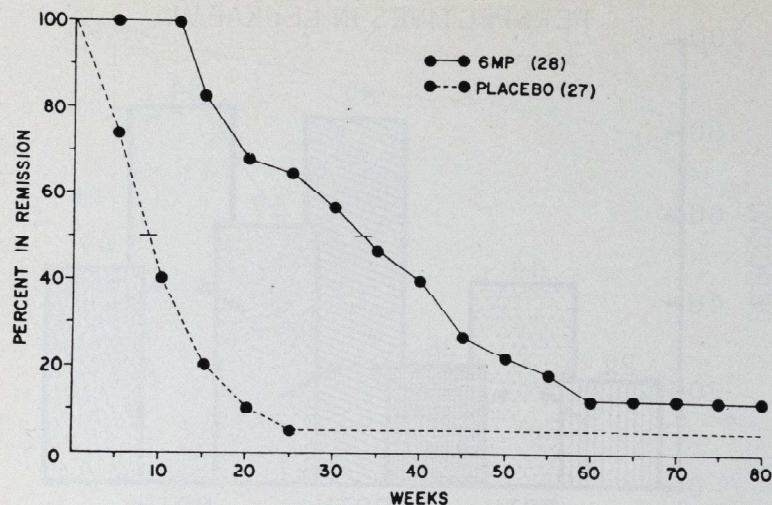


FIGURE 4 Duration of remission with acute lymphoblastic leukaemia after remission had been obtained with vincristine, comparing the use of 6-mercaptopurine with that of a placebo. (Reproduced from an article by J. F. Holland in "Perspectives in Leukaemia").

children with acute lymphoblastic leukaemia survive more than three years, compared with only five months in the days before specific chemotherapy was available (Freireich *et al*,

TABLE 1. MEDIAN SURVIVAL IN CHILDREN WITH ACUTE LEUKAEMIA AS MORE TREATMENTS HAVE BECOME AVAILABLE

NO SPECIFIC TREATMENT	5 MONTHS
FOLIC ACID ANTAGONISTS AND STEROIDS	9 MONTHS
PURINE ANTAGONISTS	12 MONTHS
VINCRIStINE AND CYCLOPHOSPHAMIDE	14 MONTHS
INTENSIVE CHEMOTHERAPY	>3 YEARS

TABLE 1.

1965; Henderson, 1967). Table 1 shows how the median survival (the time taken for 50% of the patients to die) has improved as more forms of treatment have been introduced. The prognosis in myeloblastic leukaemia is much worse than in lymphoblastic, but there is evidence that combination chemotherapy has definitely improved the prognosis (Holland, 1968).

Despite the improved survival, most patients eventually become resistant to treatment, and this problem is present even with the newest type of agent, the enzyme L-asparaginase. This enzyme has so far only been found to be of benefit in acute leukaemia, as other forms of malignant disease, with the possible exception

of melanoma, are not affected by it (Oettgen *et al*, 1967; Tallal and Oettgen, 1968). However, the emergence of leukaemia cells resistant to the enzyme can be quite rapid and probably this drug will also be found to be most effective when used in combinations.

Combination chemotherapy can be hazardous, as severe thrombocytopenia, leucopenia and ulceration of mucosal surfaces may occur. For this reason it can only be carried out in hospitals with facilities for platelet infusions and preferably nursing in a sterile environment. However, one is encouraged to subject patients to very intensive chemotherapy because of the results of Burchenal (1967) who has collected from the entire world 157 cases of proven acute leukaemia of all types, of whom 103 are alive and free from disease between five and seventeen years later (Table 2).

If combination chemotherapy is the best form of treatment for acute leukaemia, then one might expect it to be effective in other malignant diseases as well, and this is indeed the case. For example, in Hodgkin's disease the effective single agents, such as chlorambucil, cyclophosphamide, procarbazine and vinblastine produce definite improvement in about 70% of

Table 2 Long term survival in acute Leukaemia (Burchenal, 1968)

	number alive at 5 years	number free from disease at 5-17 years
adults	30	16
children	127	87
total	157	103

the patients (Fairley *et al*, 1966). However, Carbone (1967) using four agents simultaneously (vincristine, nitrogen mustard, procarbazine and prednisone) produced improvement in 90% of the patients with generalised disease, and in 80% there was complete remission as shown in Table 3. We are now using a similar regime, in which vincristine has been replaced by vinblastine, and obtaining the same results, and the use of combinations is being explored in many other malignant diseases.

One cannot discuss successful chemotherapy without referring to two remarkable tumours. First, Burkitt's lymphoma: some patients with this disease appear to have been cured by the single injection of a cytotoxic agents, such as vincristine, methotrexate or cyclophosphamide (Burkitt, 1967). Under these circumstances it is inconceivable that all the malignant cells could have been killed, and some other factor must be operating, and there is some evidence that it could be immunological. Secondly, choriocarcinoma: remarkable results have been achieved by the use of intensive chemotherapy in the treatment of disseminated choriocarcinoma, particularly in this country by Bagshawe (1968), and some patients have remained free from disease for many years. One

of the factors responsible for this may be that in this disease we have a very sensitive index of the presence of cancer cells in the excretion of human chorionic gonadotrophin hormone (HCG) in the urine. This means that it is possible to detect recurrence long before it is clinically apparent. Also the excretion of HCG is a guide by which to judge how long to continue treatment after clinical remission has occurred. One of the most difficult decisions in chemotherapy is to know when to stop successful treatment, but in this disease there is a scientific basis for both stopping the drugs, and for starting treatment again. This is illustrated in Fig. 5 taken from Bagshawe (1968) showing the effect of methotrexate and 6-Mercaptopurine on the urinary excretion of the hormone.

Much of this article has been devoted to the treatment of the leukaemias and the related lymphomas, because it is in these diseases that the drugs are most effective and where the best methods of administration can be studied. However, they represent a very small proportion of the patients with malignant disease in this country, and one is frequently faced with the situation of a patient with disseminated disease for which there is no particular chemotherapeutic agent known to be effective, e.g. carcinoma of the bronchus and stomach. Under these circumstances it is probably worth giving

Table 3. comparison of the results of using chemotherapeutic agents singly and in combinations in Hodgkin's disease (Carbone, 1967).

	% of patients with complete remission	% of patients with partial remission
using single agents	26	71
using four together	80	90



one course of treatment with one of the alkylating agents which have on very rare occasions produced remarkable remissions.

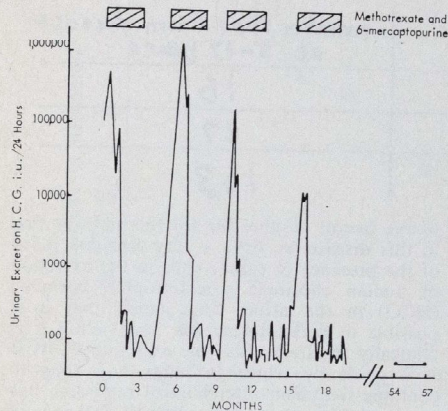


FIGURE 5  
Graph taken from an article by Bagshawe (1968) showing the urinary excretion of human chorionic gonadotrophin (HCG) by a patient with choriocarcinoma. There was a relapse following each of the first three courses of methotrexate and 6-Mercaptopurine, but following a longer fourth course complete remission was obtained and the patient is free from disease over three years later.

### SUMMARY AND CONCLUSIONS

The best treatment for malignant disease is surgery or radiotherapy, and chemotherapy should only be given to diseases which are disseminated beyond the point at which these can be used.

The advent of many more cytotoxic drugs, and the discovery of an enzyme active only against malignant cells and not normal cells, has greatly improved the value of chemotherapy in the control of malignant disease.

The use of drugs in combination and the techniques of giving them in a cyclical manner or by "pulse" therapy rather than by using them singly and continuously has further improved the results to the point at which in some patients with some diseases the malignant process may be permanently arrested. It can no longer be said that chemotherapy has never cured anyone.

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## common cold centre

### What is it?

It is an establishment owned jointly by the Medical Research Council and the Ministry of Health. It was built and furnished by the Americans in 1941 to research into infectious diseases—epidemics after the war were feared—but was returned to the U.S. Government in 1943 and was used by their airmen over here as a hospital. In 1946 it was given back to us and work was started on the Common Cold. More recently influenza has been investigated. Details of the research programme are sent on request.

Chimpanzees and humans are the only suitable experimental animals and humans are cheaper, more reliable and more conveniently looked after. Up to thirty volunteers may be accommodated at any one time in centrally heated flats for two (married couples or same sex) or three.

### How long does one go for?

Trials last from Tuesday of one week to Friday of the next. One must arrive by 12.50 p.m. and may arrive the night before by prior arrangement. Isolation ends at 2 p.m. on Thursday and one may leave then; most people leave next morning—the last car to the station is at 9.30 a.m.

### Advantages:

1. Escape from the people one sees every day for 30½ or 46 weeks a year, from rush hour travel and so on—at no cost whatsoever (see items 2—8).
2. Train fare from home to Salisbury paid either by travel voucher (exchange for ticket) or by cash at end of stay if travelling by car.
3. Minibus to meet one off one's train and to take one to the Centre.
4. Subsistence allowance if journey sufficiently long.
5. Three cooked meals brought to one's flat each day in thermos containers. Tea, coffee, cocoa, milk, bread, butter, jam, and marmalade also supplied.
6. Free bottle of beer (1pt. Courage Pale, ½pt. Mackeson) or cider (1pt.) each day. Squash provided if preferred.
7. Free daily newspaper, Sunday paper and Radio Times.
8. Radio, toaster, electric kettle, iron and refrigerator in each flat.
9. 5/- pocket money per day.
10. Beach's—an excellent second-hand bookshop—in Salisbury where one can spend one's 50/- on the last afternoon! The cathedral is considered by some to be the finest in the

world; it has the tallest spire in the United Kingdom at 404 feet. A guide to Salisbury is to be found in each flat.

11. There is a telephone in each flat—one can chat with occupants of other flats and make calls to outside (and receive incoming calls) via the switchboard during office hours. One can also request shopping—chocolate, cigarettes, postcards, oranges, apples, etc.

12. Books (choice of about 800 in their library), playing cards, chess, draughts, darts and even jigsaws are supplied on request. There are also facilities for table tennis and clock golf. Footballs on request.

13. Freedom of the countryside—on foot or by bicycle but not by car. The centre is just outside Salisbury and has fields on three sides of it. Some excellent walks may be taken and there are several interesting churches within easy reach—just keep 30 ft. from anybody except one's flat-mate(s). There is a 2½ in. O.S. map in each flat but the 1 in. S.O. Sheet 167 (Salisbury) will be useful for fairly energetic people. There is copious hot water for a bath or shower after a walk, and they even provide the towels!

14. Peace and quiet—ideal for studying or reading. Bedrooms are single and are large enough for study purposes and there are enough tables to go round—remembering if one's companion wants Radio 1 on all day!

The two trials held during the Easter vacation are traditionally filled by Cambridge students.

### Disadvantages:

1. Getting up by 9.15 a.m. every other day for visits by Matron and the medical superintendent. 10.30 a.m. on other days.
2. Washing up of own crockery and cutlery.
3. Giving of two samples of blood (10ml. each), one on arrival, the other ten days after leaving.
4. A certain loss of dignity in having vaccine dropped up one's nose (once only) and in having nasal washes with saline (three mornings).
5. The possibility of being isolated with a person one cannot get on with. This is not very likely if one states one's interests when applying for a particular trial. One can always go with one or two friends to avoid this risk.
6. For strongly religious people—isolation precludes attendance at services.

### How does one apply?

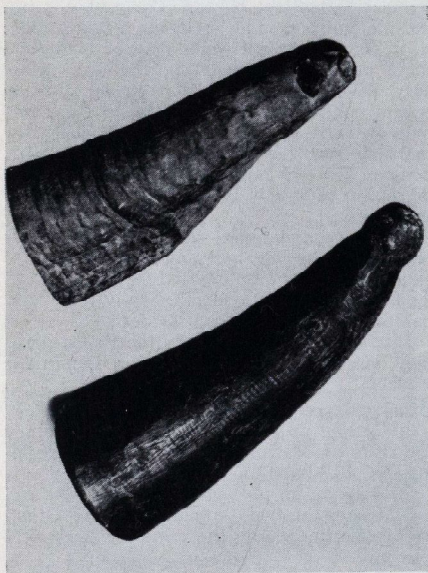
Write to: The Common Cold Research Unit, Harvard Hospital, Coombe Road, Salisbury, Wiltshire.

Robin Rayner



# In Olden Times

by Nellie J. Kerling,  
*Archivist.*



## Cow Horns

photos: courtesy of  
Department of Medical Illustration

It is sometimes very difficult to visualise how and under what circumstances patients were treated before the general use of gas and electricity and before the discovery of antiseptic surgery and anaesthetics. Old equipment has seldom survived and very few of us have ever worked at night by candle light. Yet candles were for centuries the only means of

lighting the Hospital at night. Each year the Governors arranged a "candle contract" usually with a City merchant. London was one of the first places in the world where gas lamps were installed in the streets in the early years of the 19th century. Following this example the Governors suggested to have gas lights for St. Bartholomew in 1821, not for the wards but for the square by way of street lighting. More than 20 years later, in 1845, they ventured to have gas chandeliers put into the Great Hall by Messrs. Strode and Ledger of Huggin Lane, Wood Street, for the sum of £254. This was apparently a success for in December 1848 the Board of Governors decided that the wards should be fitted with gas "whereby at night the ward would always be provided with a small light which might be immediately increased when required." Bringing in gaspipes and fittings was no doubt an elaborate work which took some time. In the meanwhile the buying of candles continued all through the 19th century. The last contract ended on 25th March, 1902. We still possess some of the brass candlesticks which were used in the wards and also two brass candlesticks—each provided with a snuffer—which have glass mantles round the candles. These were used at night in operating theatres or when wounds had to be dressed by artificial light. A poor attempt to keep the soot away from the patient but who could have done more under these circumstances?

In 1852 Dr. Patrick Black was appointed the first administrator of chloroform though this new method of "rendering the patient insensible" was already in use in this Hospital before that time. Not all the patients' notes of the middle of the 19th century have been preserved and therefore one cannot discover when and by whom chloroform was first used on the patients. We have, however, a description of what must have been one of the early operations with chloroform, performed by Mr. Stanley (surgeon 1838-1861), in the casenotes of James Chard, chimney sweep, aged 25. He was admitted on 4th September, 1848 having a growth in his groin. Medically speaking these notes are not very valuable but they give an interesting picture of the life of a London chimney sweep. James told Mr. Stanley that he had worked since he was a small boy climbing down chimneys which his master had to clean. He was naturally always in close contact with soot yet he was only washed once in about five or six years. When he got older he washed himself once a week and for the last year or so he washed every night. He was apparently a



## candlesticks

very healthy young man for after his operation under chloroform on 12th September he gradually recovered and was discharged as cured in the following November. He probably thought himself very lucky to have had this modern treatment. Formerly patients who had to undergo an operation were sometimes given a dose of gin beforehand but it seems doubtful whether this had the same effect as chloroform!

Just over a year ago an old box was found behind a cupboard in the basement of the old Pathology Laboratory. It contained six horns, four of cows and two smaller ones which may have belonged to goats. Round the narrow end of each of them a piece of wax has been fixed in the shape of a nipple in which a small hole was made. On the larger ones a kind of scales has been marked out. From old pictures we know that such horns were used for feeding infants and old people, and also for giving an enema. It probably depended on the quantity

which was needed, whether one used a small or a larger horn. When they were last used is impossible to say. I. G. Wickes in: *A history of infant feeding* (London 1953), p. 419, mentions horns and says that they were in use until the end of the 18th century. If this is true our horns may well have been preserved in the Museum in the 19th century but taken out when the exhibits were re-organised. Somehow they came to the basement of the Laboratory where they remained quite forgotten until the other day.

One wonders whether the horns were acquired in the Smithfield live cattle market? They were cleaned, no doubt, but with our knowledge of the causes of infection one cannot help contemplating how much they contributed to the high rate of mortality among babies and other Hospital patients.

One of the horns with the candlesticks and the gin measure are on exhibit in the Great Hall, in a glass case standing near the Guild room.



## Antique Silver by Victoria Medvei

The study and the collection of antique silver can give great pleasure; one may specialise in periods, designs, tableware, drinking vessels, buckets, school medals, silver for the tea and coffee ritual, for religious and medical purposes; one can study silver made by women silversmiths, by Huguenots; or the marks of the various Assay Offices in England and Scotland and—of course—there is foreign silver.

Although the price of silver is not pegged like that of gold, this does not merely imply the disadvantage of speculators intruding into this field; it also means that the intelligent small collector can still derive pleasure and be successful in his search. Apart from a certain amount of reading, a little money, a great deal of patience and a feeling for old things and craftsmanship, one needs a good pocket magnifying glass and a guide to hallmarks.

This may be F. Bradbury's Pocket Guide, or Cleaffer's Handbook, or Sir Charles Jackson's great work. In Britain, Assay Offices have been established for hundreds of years; the London Date Letter system—which is still valid—was instituted in 1478.

The presence of Hall Marks is meant to guarantee:—

- (1) the place of assay;
- (2) the year in which the assay was carried out;
- (3) the standard of the quality in the metal.

The system used in Britain seems very efficient and much simpler than that on the Continent, for example, in France. There were, however, excellent and important articles of silver made which remained unmarked, or had the "marker's mark" punched only; these were often made for public bodies, such as, colleges of universities, senior officers of state (the Speaker of the House of Commons), Colonial Governors, Privy Counsellors) and for members of the Royal Family.

The mark of origin indicates the Assay where the piece was tested. For sterling silver (925/1000) one finds the Leopards Head, crowned or (after 1821) uncrowned for London; the Anchor for Birmingham; the Crown for Sheffield, and the Hair Crowned for Dublin. Rare marks were a Stag's Head for Cannongate, a Pot of Lilies for Dundee, or a Scallop Shell for Poole.

The Date Letter changes in alphabetical order for each year and each new cycle of the alphabet is distinguished by a change in the

type face in the outline of the shield which contains it. The cycles of the alphabet vary from town to town and assay office to assay office. The letters J, W, X, Y, Z are omitted in the London list.

The Standard of Sterling Silver (925/1000) is expressed by the Lion Passant in England and by the Thistle in Scotland. When, in 1697, the standard of silver was raised to a minimum of 958.4 per 1000, the assay marks were those of a Lion's Head erased and the "figure of a woman commonly called Britannia". They replaced the Leopard's Head and the Lion Passant. This measure was introduced to discourage conversion of coins of the realm into silver plate. It remained compulsory until 1719 when the old standard was restored. It is important to remember, however, that the higher "Britannia's Standard" is still legal until this day; and if used is still stamped with the figure of Britannia and the Lion's Head erased.

Edinburgh, Glasgow, Birmingham, Sheffield and Dublin did not employ the mark for Britannia Silver from 1697-1719.

The maker's mark first became compulsory in 1336, but was used before that time. Early craftsmen preferred an emblem, such as a fish, a crown or rose, but the goldsmith had to be known to the Assay Master and later, his name properly registered at the Goldsmiths' Hall or Assay Office.

After 1513 (Henry VIII), the maker's mark became more often one or two letters for the first name or two letters for the surname; and after 1710, the maker's initials. After 1675, the Goldsmiths' Company ordained that the plate workers should strike their marks on a table kept in the Assay Office, some craftsmen had several types of maker's marks deposited in the course of a long career. A small star, cross or gullet sometimes indicated a craftsman in a large workshop.

A special duty was introduced, in order to raise money, after 1784 which continued until 1890; the head of the reigning monarch, in profile, was used to show that the duty had been paid, "the Duty Mark". After 1876, foreign plate had to bear a special assay mark, (F).

Small objects, such as teaspoons, bodkins, winelabels, can still be found at reasonable prices, often under £6 and offer a variety of interesting observations to the student and the collector. Medical instruments have become more expensive, although I obtained four Eighteenth Century small scalpels in their original chagreen and silver etui for under £5 as recently as last summer, good hunting.

## life with rheumatoid arthritis

by H. Wyckham Balme

This miserable disease, when severe and progressive, is lived out at home, alone, bleakly, and too often with enduring pessimism. Every day starts badly, for morning stiffness is rarely absent, and because of it the housewife has to get up an hour or two earlier than usual, to get her husband off to work and the children to school: for the first few hours of the day all movements are so much stiffer and the grip so much weaker that even dressing and cooking can be most difficult. By mid-day she has improved, but in the early evening fatigue brings a return of stiffness, and this is again strangely worsened by short periods of rest in a chair. She therefore tries to keep herself on the go—her own medical attendant probably, and very wrongly, encouraging her to do so at all costs—and so the fatigue builds up and the disease must worsen.

Prolonged periods of rest lessen the severity of the disease ("keep inflamed parts at rest!"), but the tempo of the condition is so slow that weeks or months must pass before the benefit comes. Early severe cases require months of it, for in these correct management may lead to complete and permanent cure. But rest is the most expensive of all treatments, and during this time wage earners may lose their jobs, wives of selfish husbands may lose their marriages, and the self-employed may have to sell their businesses. It is like the pre-streptomycin days of tuberculosis, when sanatorium treatment for a year or two on end was the accepted penalty for contracting the condition, and as yet there is no safe alternative. Take courage, however. Try, some day, asking a severely crippled rheumatoid whether she would rather have a million pounds or her health back, and she will opt for the latter without hesitation every time.

Mild self-limiting cases are extremely common, and many probably require no treatment at all, but prognosis is impossible and rest

obviously benefits them, so it would be most prudent not to advise it. This means being in bed at least twelve hours at night and two at mid-day for weeks or months; and unfortunately, like the advertisement, "There is no substitute for rest". All other considerations—work, family, ambitions—must take second place until improvement has properly set in, and even then it still remains essential to avoid fatigue and emotional crises for several more months.

The same applies to the established chronic cases that throng the rheumatoid diseases clinics of every Hospital. Although these represent only the small minority of cases of rheumatoid arthritis, nevertheless the disease is so fearfully common that there are many thousands of them about. It comes and goes, waxes and wanes, destroying joints, bones and tendons, and the more the patient keeps on the go the faster it destroys them. Treatment cannot reverse this, any more than an egg can be unscrambled, but it can certainly slow the process down. Gold helps somewhat, steroids help a little though at very high cost, immunosuppressive drugs may prove to help; but rest, properly organised, is known to do so. Affected wrists need splinting, affected knees must not be walked around on, affected elbows must not do heavy work, so the conditions of employment have to be altered to fit the disease. Electric typewriters for the typist, washing up machines for the housewife, and strategically placed stools so that she does not have to stand, help enormously. Even so, earning capacity falls, personal expenses rise, and employees face the danger of dismissal if the necessary absences for periods of rest become too frequent,—especially if the employer is a Government Department. Jobs have to be changed: a milk roundsman for instance has almost every possible disadvantage—work, against the clock, in the stiff early mornings, handling cold and surprisingly heavy bottles, continually getting in and out of the float, and up house-steps—and all this quite apart from the dangers of being chased by angry dogs or, contrariwise, housewives.

The badly disabled, whether housewife or bread-winner, when bad enough to be condemned to solitary confinement at home during the working hours of the day, needs much help and ingenuity to keep as independent as possible. The lavatory seat may need to be raised so that she can get on and off it; hand grips on the wall nearby help, and these can be placed near the bath too; a huge variety of



gadgets are available to assist in dressing and cooking; handles and taps can be adjusted for easy turning; and, very important, she will require a high chair, for most modern ones are impossibly low for her to get out of. Departments of Occupational Therapy have kitchens equipped with ingenious devices of these sorts, to advise the needy, and even specially adapted gardening tools are available, for the yet undemoralised enthusiast.

Patients and their relatives are advised to visit these departments, and the Occupational Therapist may in turn be able to visit the patient at home, to advise on the spot. Precious independence is soon lost if the doctor does not maintain a keen interest, and in fact pessimism is rarely justified in this disease, for unless the patient has been superbly handled already, her condition can nearly always be improved. Many a case has been abandoned, to grow contractures, pressure sores, and a state of complete helplessness, when she could still be kept mobile at home. Even a wheelchair life—which is a considerable skill in itself—allows much independence, as Sir Ludwig Guttman showed us many years ago with his paraplegics. Unfortunately the worst sufferers of all cannot even manage this, if hands, elbows and shoulders are severely damaged, and after a lengthy rear-guard action with mechanical hoists, periods in hospital when the morale is slipping, and every adjustment to the home that can be thought up, the provision of long stay accommodation in a geriatric unit or chronic sick ward becomes necessary. By this time such patients are an enormous financial drag on the whole family, and of course realise it all too vividly, needing so much looking after as they do; but it may be a very long time before such accommodation can be found, in the present state of affairs. In the meanwhile help can be obtained from local voluntary organisations, from the district nurse, from the provision of a home help, and from good neighbourliness all round, but even so we in the medical profession are at fault for allowing these people to be so badly forgotten and neglected. They need much more in the way of hospital accommodation both for treatment and for long term care, than is available under the National Health Service, and I am sure we must ultimately take the blame for that.

Perhaps; however, somebody who is reading this article may come to play his part some day in devising genuinely curative therapy for this horrible condition, and thus render every word I have written obsolete. Let us hope so.

## the malcolm fletcher column

Crossing a "West End" street, one Saturday night, my companion and I were nearly run over by a van load of evangelists, who were, with the aid of a loud hailer, treating the neighbourhood to their rendering of a well worn, Victorian hymn.

We closely examined them for signs of drunkenness, it being the prerogative of a drunkard to sing, in that insomniac portion of London. There was however, with the exception of a glassy eyed Irishman, sitting on the spare tyre, no sign of alcoholic inspiration and we were forced to conclude that they had insinuated themselves among us in order to spoil our fun.

I deplore this kind of kill-joy, holier than thou, exhortation for us sinners to repent of our frivolity; which equates cinemas with opium dens and suggests that a benevolent deity, would rather see his subject mortals spend their Saturday nights on their knees, instead of using one of their rare opportunities to enjoy the few good things afforded by this somewhat imperfect sphere, which we are assured is His creation.

By coincidence, about six months after this incident, I was passing through a certain northern town, when I saw a crowd of gaily clothed gentlemen of various complexions, obviously wearing the national dress of several different countries. They struck a sharp contrast against the stark, ugly background of the grey little town, which I found visually interesting and so I stopped and began to photograph them.

I quickly ascertained that this was some kind of missionary conference and after I had taken a number of shots I fell into conversation with a gentleman, who had also been photographing the scene. He was an expensively

dressed American in a handcut suit and silk shirt, carrying a magnificent Rolleiflex camera. We talked for a short time about photography and I admired his camera.

"Do you like it?" he said. I replied in the affirmative. "Actually, I'm very proud of it, my flock gave it to me before I came over for the conference." Up to this point I had assumed that he was either a tourist or a successful, professional photographer. Associating missionaries with a certain degree of asceticism, I assumed that he had nothing to do with the conference. I asked him which missionary body he worked for and he gave the name of the organisation, which had apparently been the guiding light of our "wandering West End minstrels," six months earlier.

"Oh," I said, "and where is your mission?"

"In Monaco," he replied.

## misfit

*It's well known that a shallow youth  
Before a fair maid quails  
And ladies—though they spurn the  
truth—*

*Prefer maturer males.  
You wait for years your love to hold  
Your lyric still unsung:  
The trouble is that when you're old  
They say they like them young!*

J.D.J.P.



"... It's some newfangled theory they've got about post-operative dehydration  
... personally I think they're slightly overdoing it."



# cheese

by  
Robin Rayner

*Cheese has been described as "milk's leap to immortality". It bears the same relationship to milk as wine does to grapes—both are preserves. Here some are considered.*

**ENGLISH CHEESES.** Cheese has been made for about eleven thousand years—ever since man first domesticated animals and collected more milk than he could drink—and has always been made by adding rennet to milk to separate the curds from the whey.

The type of cheese that can be made from these curds depends on many factors. The origin of the milk is important—cattle, buffalo, sheep, goats, camels, asses, reindeer or yaks—as is the nature of the herbage and water the beast feeds on. The curds may or may not be drained, pressed and inoculated or sprayed with mould. The milk employed may have been enriched with cream before the initial separation. Salt may be added to the curds. Even the way the curds are cut affects the final outcome. The size and shape of the cheeses and the temperature at which they are cured are other important factors.

English cheeses—apart from fresh "cottage" cheeses which are more like sour cream than cheese—are "pressed" cheeses: most of the moisture is expressed from the curds to form a firm cheese. Blue Vinny is made from skimmed milk. The others are made from full cream milk and, with the exception of Stilton, these are all related by flavour to Cheddar cheese.

**CAERPHILLY** is now nearly all made in Somerset. It is a snowy white cheese about 9 inches in diameter and 2½ inches thick. It is

said to have been designed for coalminers—in the cramped and dirty conditions at the coal face they can hold a lump conveniently between fingers and thumb and so get as little dust on their lunch as is absolutely unavoidable. Caerphilly is easily digested, is salty and has a tough skin (produced by soaking it in brine) which prevents its drying up—all useful attributes for a miners' cheese. It has a mild flavour (milder than a good Cheddar) but does not keep for very long—it is sold in 5–10 days.

**CHEDDAR** is the Englishman's idea of cheese and as its name suggests it comes from Somerset. Farmhouse Cheddar is difficult to find and is consequently expensive. It is made from May to October from the milk of one herd of cattle, usually dairy shorthorns. Factory Cheddar is made from a mixture of milks from different herds. Cheddar is sold at six to nine months, and traditionally weighs 70–78 lbs. and is 14½ inches wide and a foot high. Its colour depends on the amount of annatto (a tasteless vegetable dye) which is added to it; the colour is varied to suit regional preferences. Sometimes a Cheddar cheese will have a bitter taste or after taste which can be traced back to a herd fed on silage instead of hay or on pastures contaminated with weeds, or to cattle which have been milked for too long; it also can be the result of forcing the cheese to mature too quickly.

**CHESHIRE** is reputed to be the oldest British cheese. Its flavour is mild and is improved by melting. Pale yellow is its natural colour but annatto makes it the familiar apricot orange. The best Cheshire is made in July and August only, from shorthorn milk and is cured for a long time. Most, however, is made at any time from May to September and is only medium-ripened (6–8 weeks); it keeps for a shorter time.

Unlike Cheddar, Cheshire cannot be imitated. The soil of Cheshire is rich in salt and this is reflected in the milk and therefore in the cheese. This saltiness is not immediately striking.

**BLUE CHESHIRE** represents about 6 per cent. of the cheeses in any batch of Cheshires. It just "happens" and this accounts for its high cost to the consumer. Recently the blueness

has been artificially induced with *Penicillium glaucum* and Blue Cheshire should become more common. It has a rich, ripe flavour.

**DERBY** is a pale, honey coloured cheese with a mild taste when young and a definite tang as it matures. Most is sold in 6–8 weeks and it spoils if kept for much longer. It was the first cheese to be "factory produced"—in 1870.

**BLUE DORSET** or **BLUE VINNY** is a Dorsetshire cheese which is seldom encountered outside that county. Even Messrs. Fortnum and Mason do not sell it! It has a blue streak running through its middle and is dry and exceedingly hard, even when fresh. It has a fairly strong flavour.

**GLOUCESTER** used to be made from the milk of Gloucester cattle but these have almost disappeared nowadays as Guernsey cattle produce more milk even if it is slightly inferior in flavour. The cheeses are shaped like millstones. They may be single (about 2½ inches thick and 16 lbs.) or double (5 inches and 25 lbs.). Single Gloucester is sold at about six weeks whereas Double is allowed to mature for 6–12 months. In flavour, Gloucester is almost as good as Cheshire. Single Gloucester is sold in its natural colour but Double may be a carrot colour to suit Londoners and other consumers. For purely decorative purposes the rind of Double Gloucester is stained a reddish brown and the top and bottom edges are rubbed until the cheese colour shows through.

**LANCASHIRE** is eaten mostly locally but it has reached London supermarkets in recent years. It is the softest of the Cheddar relatives and it spreads like butter. Lancashire is stronger than Cheddar or Cheshire, is ideal for toasting and is eaten at two or three months.

**LEICESTER** is a very bright orange colour and any patches of lighter cheese on the cut surface indicate areas of unpleasantly stronger flavour. It is a rich and creamy cheese but is rather moist and is too old at a year—it should be at least three months old, though. Leicester is a soft, crumbly cheese.

**STILTON** has been called the King of English cheeses and is one of the great cheeses of the world. It is a blue cheese but is not pungent like other blues. It is made from very rich milk to which has been added cream from other milk and yet the cheese does not taste creamy in the way that Danish Blue does—one does not quickly tire of it.

The blueness is distributed throughout the whole cheese to give a very fine marbled appearance, the non-blue parts being off-white. It has a dark, crusty rind. Stilton is firm, even at room temperature.

Whilst ripening, it has to be turned more often than other cheese and in the later stages of its maturation it has to be brushed down daily to discourage mites. However, the extra care afforded to Stilton is amply rewarded!

A whole Stilton should be sliced in half horizontally and one half should be covered with a damp cloth and should be left somewhere cool. The exposed part of the other half should be left uppermost and portions should be cut horizontally from the cheese always levelling the top before going down a level. By this method the smallest area is exposed to the air and its life is prolonged.

Some people like to scoop some cheese out of the centre of a Stilton and then to pour in some good port wine: this is a waste of port and it does not improve the cheese.

Most Stilton comes from Leicestershire but some is made in Rutland and Huntingdonshire.

**WENSLEYDALE** is a rich double-cream cheese which spreads quite easily. It comes in 1 lb. cylinders. Young ones taste like Caerphilly and older ones are more like older Cheddar.

**BLUE WENSLEYDALE** is more delicate in flavour than Stilton. Once all Wensleydale cheeses were blue but now most of them are white—blue takes too long to mature to be a good commercial proposition.

**KEEPING CHEESE.** Once a cheese has been cut it should be covered with a damp cloth or aluminium foil (better) to prevent its drying out, and should then be refrigerated (35°F. to 38°F.) or be kept in a cool place. Blue cheeses have to be able to "breathe" and should be covered with a cheese dome or a damp cloth and not with foil. The mould continues to grow, even in a refrigerator, and so blue cheeses become stronger on keeping.



# B.M.S.A.

by D. A. Stringer

This report is about the policies of B.M.S.A. for the coming year. These were decided at the A.G.M. held in Birmingham during the last week-end of March. Unfortunately Bart's was not well represented at this meeting as only one delegate from Bart's attended. This was most disappointing.

*The policies of B.M.S.A. for the forthcoming year.*

## 1. Education

An Education Conference was held in London earlier this year, and a short report of this appeared in the February issue of this Journal. Students and visitors attended this conference from most of the Medical Schools in England and Scotland. The policies given below were formulated at the Conference and have since been accepted at the A.G.M. and integrated into B.M.S.A.'s policy.

(a) The conference accepted the recommendations of the Todd report that there should be optional educational modules, providing for the teaching of behavioural sciences, statistics, advanced sciences, and non-medical subjects, in order to give students a more broadly based humanitarian and critical attitude to clinical practice.

(b) All medical schools should convene regular meetings of a staff-student curriculum committee.

(c) Students should take responsibility for urging changes in medical education at their schools, which they realise to be necessary.

(d) The conference specially endorsed the Todd Commission's proposals for modular and collaborative teaching, and urged all medical schools to introduce integrated teaching based on a rational curriculum.

(e) The regional meetings of the B.M.S.A. should concern themselves with medical education in their area. The representatives should produce reports on the educational structure of their own schools for the information of the others. A further and more comprehensive questionnaire should be produced to canvass student opinion more thoroughly. Any decisions arrived at should be strongly urged upon constituent schools.

(f) The opportunity should exist for medical students to transfer from their medical school of choice to another for shorter or longer periods.

(g) More than one kind of medical school and education should be maintained in the belief that some variety is of value in the total medical education in this country. Therefore medical schools, should make more effort to inform sixth formers of the type of course which they offer.

(h) The implementation of the recommendations for general professional training in the immediate post-registration years should be dependent upon the provision of adequate posts in hospitals with suitable conditions to pursue the training commitments of the period. These conditions include:—

1. Adequate married accommodation,
2. Reasonable working hours,
3. Reasonable salaries,
4. Adequate qualified supervision.

(i) Since the teaching given at peripheral hospitals is usually extremely good, as much use as possible should be made of the teaching potential in these hospitals;

(j) B.M.S.A. Executive should regularly keep the student body informed of the progress through ministerial and government channels of all reports and official documents concerning medical education.

I have a detailed report on the Education Conference and anyone who is interested may borrow it from me. More people from Bart's

attended this Conference than from any other medical school, and I would like to thank them for taking such a large part.

A further proposal was passed at the A.G.M. This was that the Todd's Commissions recommendations for a three year degree course in basic medical science should not be compulsory for all medical students. Also any student who wished to undertake this third year should be able to do so at several points during the undergraduate curriculum.

I personally was against both parts of this proposal as I thought that it undermined the principle upon which the Todd Report is based. If you have any opinions on this I would like to hear them.

## 2. Cheap flights to America and American Clerkships

The Executive is going to negotiate with B.U.N.A.C. to arrange special cheap flights for medical students.

The regional chairmen of B.M.S.A. are going to compile a list of North American hospitals offering clerkships and the conditions of these clerkships. I would therefore ask you to submit any information that any of you have concerning North American clerkships to one of the B.M.S.A. representatives.

## 3. Grants and Welfare

This I covered in some detail in the February issue of this Journal. To this I will only add two proposals passed at the A.G.M. One was that B.M.S.A. should investigate fully the question of student locums. The other was that B.M.S.A. requests a minimum allowance of £10 per week to be made payable to students doing locums. Bart's students are lucky in this respect as they are paid more than £10 per week. However some students at other schools are less lucky, e.g. students at one school are paid only £1 per week plus free board and lodging. Scottish Region has already started an investigation and the other regions are now going to start their own.

## 4. The National Clinical Conference

This was held in Birmingham for the four days preceding the A.G.M. The response to this was very disappointing. Those who went en-

joyed the conference immensely and found all of the lectures to be of a very high standard and stimulated interest in the subjects under discussion.

The A.G.M. decided that the National Clinical Conference should continue to be held even though it was poorly supported. To increase the support it was suggested that the organisers of future N.C.C.'s should consider the inclusion of a Clinical Pathological Competition and the inclusion of any other feature which could increase the attendance.

I hope that some of us from Bart's will be interested enough to attend next year.

## 5. Ways of achieving results

The policy of B.M.S.A. is to become a "political" and truly representative organisation and to this end, each Region or local branch of B.M.S.A. is going to experiment and report to national B.M.S.A. the relevant "political" mechanism and results.

We already have a "political" voice as I stated in the February issue. Part of the reason why we have one is given below. It is a list of some of the committees and other bodies upon representatives of B.M.S.A. sit.

Junior Member Forum (of B.M.A.)	
	B.M.S.A.
	President
	(Ex-officio)
	2 Student
	Members
	(B.M.S.A.)
Royal College of General Practitioners	2 ..
National Union of Students	1 ..
Scottish Union of Students	1 ..
Services Liaison	1 ..
World University Service	1 ..
Association for the Study of Medical Education	1 ..
Medical Women's Federation	1 ..
Junior Hospital Staff Group Council	1 ..
Junior Hospital Doctors Association	2 ..
	(since A.G.M. '69)
Family Planning Association	1 ..
Committee on Audio & Visual Aids	1 ..
British Medical Student Trust	2 ..



### Junior Hospital Doctors Association

I will enlarge on this as it directly affects all of us at Bart's. Clinical students at Bart's are members of J.H.D.A. This was voted in at the Extra-ordinary General meeting of the Student's Union this year. B.M.S.A. is associated with J.H.D.A. now, as it is going to support J.H.D.A. on topics of mutual interest by informing students and enrolling their support. Also two members of the B.M.S.A. Executive is going to sit on the Executive Council of J.H.D.A. in order to achieve the aims of B.M.S.A.

### Communication between students and B.M.S.A.

In the February issue I said that the major fault of B.M.S.A. was its lack of communication with students. I hope that communication will improve, and following this A.G.M. the Executive and School representatives of B.M.S.A. should give more literature and lectures on the structure and working of the N.H.S. to medical students, including pre-clinical students. Also inter-regional liaison should improve.

### The British Medical Students Journal

The format of the Journal is in the process of being changed. It is being changed into a bi-monthly newspaper. It will have a distribution of 10,000. There are 13,000 medical students to cater for, and so 77 per cent. of medical students in each medical school will be able to get hold of a copy instead of the 15 per cent. (approx.) who can now.

I have become Editor of this newspaper and so would be very grateful to any advice, and/or help, from people interested in journalism. I would be very grateful if any of you would like to submit articles for publication. I would like to thank the previous Editor for having carried out a lot of the groundwork for the intended newspaper, and for having produced the Journal in its old form for the last year. The content of the old Journal was very good indeed, but it was just not getting read.

### Your views

Your views are important. I want to hear them, so please tell me all about them. I will make no apologies if I keep on repeating this because I will go on repeating this until I have your views. So, if only to make me shut up, please express them!

### Student Nurses' Association

It is always sad to see how easily the only organization representative of the student nurse may slowly grind to a halt, without a murmur of concern from those it so closely involves. An occasional "What's it for anyway?" is the only encouragement, and cut price travel the only incentive.

So Bart's has taken a new look at its S.N.A.—and we can't grumble. There is plenty for the new committee to get its teeth into, with both room for its enthusiasm and scope for its abilities. Ideas flow freely and response is good.

The junior members are particularly keen to help and are fast becoming an integral part of our organization. Which is all very necessary of course. Soon it will be their turn to take charge, and a responsibility of this size needs all the active assistance it can get!

"New Look" S.N.A. can be envisaged as an organization actively represented by an adequate cross-section of staff, preferably two members per set present at each meeting, and one in which sub-committees will be elected to control activities in which the "New Look" S.N.A. will be engaged, both social and professional.

We hope to achieve an optimum of fortnightly meetings which promise to be varied and stimulating, coupled with "fund-raisers" held at intervals throughout the year. We have laid the ground for our budding sailors and possible integration with various other societies looms on the horizon. It takes only the energy of one squash player, one bridge or chess enthusiast, one modern dance innovator (and don't you think nurses could equal the best of the ward shows?), coupled with some active organisation to make anything go with a swing. If you are not made so much of the get up and go, you can help make up the other half of the society that we couldn't do without. Pop in and buy a white elephant, or watch a professional make-up or hear the latest in Nursing Politics. It won't all be of interest to you, but there's a good deal that will be. And we need only your presence to make it worth while!

You will be hearing from us regularly both personally and via the "Bart's Journal", so if you think we're on to something, lend us your support.

We have a committee just waiting to show you how.

Su Dermitt, *Chairman.*

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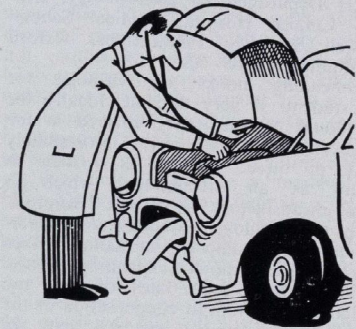
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# book reviews

**Textbook of Medical Virology**, by A. Cohen, M.A., D.M.(Oxon.), M.C. Path., Senior Lecturer Department of Bacteriology, University College Hospital Medical School. Blackwell Scientific Publications, Oxford and Edinburgh, 1969. 60s.

Recommending books on virology for medical students is very difficult. Ideally the subject should be adequately covered in the many bacteriology textbooks. Unfortunately in many of these, virology is written in apparently as an afterthought which is generally unsatisfactory. It is not, therefore, surprising that virology textbooks are appearing in increasing numbers, particularly since this is a young and rapidly expanding science.

Dr. Cohen's book is the latest of these and is essentially an attempt at condensation of the larger and more detailed standard texts. In my opinion, this attempt has been extremely successful. The important aspects of the subject are described with great clarity and the book is adequately, but not profusely, illustrated.

The subject matter is dealt with along conventional lines. Each chapter deals with a particular virus or group of viruses. In each will be found information on the physical and biological properties of the viruses and also accounts of the pathology, clinical features, laboratory diagnosis, treatment and prevention of the diseases which they cause.

With the present crowded medical curriculum one is of course reluctant to recommend the acquisition of yet another text book, so I will conclude by merely saying that this is a very good book and students should certainly have a long look at it before deciding on purchase.

R. B. HEATH,  
Senior Lecturer in Virology

**Urinary Tract Infection**, Proceedings of the First National Symposium. Edited by Francis O'Grady, M.D., MSc., M.C. Path. and William Brumfit, M.D., Ph.D., M.R.C.P., M.C. Path. Oxford University Press, pp. 244. Price 50s.

This fascinating short book is the result of a meeting, held in London in April, 1968, at which a group of bacteriologists, radiologists, physicians and surgeons with a particular interest in urinary tract infections met to discuss their current work. The papers read at that meeting have been modified to form chapters in the book, each being followed by a summary of the ensuing discussion.

As the field available for discussion was enormously wide it had to be deliberately restricted so that the topics which were included could be dealt with at some depth. There is thus a compact and authoritative discussion of the factors which affect bacterial growth in the urinary tract; of the reasons why bacteria usually fail to thrive there; and of how, why and where they may become established. The importance of radiology is made very clear, both in the diagnosis of renal involvement and in assessing the contribution of anatomical abnormalities to persistent or recurrent infection. There is an excellent section on the significance of bacteriuria in pregnancy, and the symposium ends with a series of chapters discussing the treatment of urinary tract infections in relation to the underlying cause of the infection.

Urinary tract infections are common, and may be dangerous. It is extraordinary that such a common ailment has been so little understood and that such wide gaps in fundamental knowledge remain. Because this is so the symposium has a wide interest. It is not necessary to have studied the specialist literature to understand it. The discussion at the end of each paper brings out points of disagreement and adds to the reader's sense of involvement. This book is concise enough for an interested undergraduate or non-specialist, and authoritative enough to bring anyone interested in urinary tract infections rapidly up to date with current thought and knowledge in this fascinating and very important field.

BRIAN RICHARDS,  
Chief Assistant,  
Department of Urology

**A Short Textbook of Kidney Disease**. Published by Blackwell Scientific Publications, 1968. Price 60s.

This short but comprehensive textbook covers all the more practical aspects of renal disease, and is written for the undergraduate

or postgraduate student, rather than for the specialist. Difficult controversial aspects of renal pathology and physiology have rightly been avoided as far as possible, and this has allowed the authors to include enough practical detail to make the book a useful guide for junior hospital staff and others treating patients with renal disease.

There are no separate sections on renal anatomy or physiology. These are covered, sometimes rather thinly, in the relevant chapters on the individual diseases. This may make the going rather difficult for the student whose knowledge of these aspects is weak; he would be best advised to revise them in a physiology textbook first.

It is a pity that this new book should contain an old fault common to so many textbooks: the photograph of X-ray or histological section made almost meaningless to the uninitiated by the lack of any labelling or accompanying line drawing. Unlabelled renal biopsy photographs mar the very clearly written descriptions of nephritis and the nephrotic syndrome.

There is a short section on surgical aspects of renal disease, which could well be expanded, perhaps at the expense of some of the rather excessive detail in the chapter on hereditary renal disorders.

In general the balance has otherwise been very well kept, and no important practical topic has been omitted. There are some particularly well-chosen and up-to-date references at the end of each chapter.

This book fulfills a definite need, and can be recommended.

M. C. BARTLETT

**Lecture Notes on Gastroenterology** by R. D. Tonkin and J. A. Parrish. Published by Blackwell Scientific Publications. Price 22s. 6d.

This little book sets out to give a pragmatic account of gastroenterology, mainly for the undergraduate student who may be preparing for examinations. In many ways it fulfills this function, being written with great clarity and set out in such a way that the available information is easy to locate. The general balance of the book is good but, of course, this is very much a basic grammar and offers little intellectual stimulation. Qualification of statements is of course impossible in a book which has to be necessarily dogmatic and this may

account for some of the controversial views which are baldly put forward. For example, the account of gastritis is rather old-fashioned and most workers have been disappointed in the role of gastroscopy in the diagnosis in the chronic condition which any way seems to have doubtful significance as a cause of indigestion, although of course a useful explanation to give to patients. Furthermore, for many the diagnosis of chronic cholecystitis as a cause of relatively painless dyspepsia is only rarely made and it seems probable that the treatment advised to restore function to the gall-bladder would have strong placebo value. The treatment of peptic ulcer is also very traditional, not enough stress is laid on the difference between easing symptoms and altering the natural history of the disease: as is so common in chronic relapsing conditions for which there is no medical cure, there seems to be a tendency to blame the patient for any failure by assuming they have not kept to a "modified way of life". These attitudes are happily belied in the section on diets which is both sensible and practical—apart from the misconception that a high protein diet is more efficient than normal protein intake in raising the hypoalbuminaemia of liver disease. All in all a handy summary, but one hopes this will not be the only source of reading for the student.

A. M. Dawson

**Bacteriology and Immunology for Students of Medicine**. 9th Edition. F. S. Stewart. Bailliere, Tindall and Cassell. Price 55s.

This ninth edition of Bigger's Handbook of Bacteriology is considerably larger than previous editions of the book. The main increase in size is in the chapters on general properties of bacteria, immunology, virology and chemotherapy, but the author has managed to include a large amount of new information without loss of the clarity which is such an attractive feature of this text book.

Some students of medicine may feel that this book is now too large and detailed for them, but those who do read it will find its use very rewarding for the clinical aspects of microbial diseases are well described and in particular this book provides a good basic knowledge of the fundamentals and principles of microbiology which will give the interested student an excellent foundation on which he will be able to build his knowledge of the subject.

E. Mary Cooke, M.D.,  
Lecturer in Bacteriology.



# SPORTS NEWS

## RIFLE CLUB REPORT

Full bore shooting is now well under way. It is hoped many members will come down to shoot this year. Any members who are interested should contact Ian Franklin.

Small bore shooting had unfortunate results owing to a minority of team members who did not come down to shoot their cards, resulting in lost points for those continuing to shoot. An evening shoot was held early in March. This was an enjoyable evening improved by several pints of beer. The rifle shoot was won by John Johnson.

I would like to take this opportunity to offer the club's congratulations to John Reckless and Simon Crocker on being awarded their university purples.

P. J. Ciclitira.

## SAILING CLUB REPORT

### Castaway's Cup

This event, which takes the form of a knock-out team racing competition for all University of London colleges, was held over the weekend of March 1st and 2nd.

Bart's entered two teams:

"A" Team	"B" Team
{ Roger Chapman	{ Brendan O'Farrell
{ Andrew Tidswell	{ Roger Thomas
{ Mike Williams	{ Bruce Noble
{ Jo Walsworth-Bell	{ Sarah Rowntree
{ Richard Smythe	{ Tom McEwen
{ Janet Dinwiddie	{ Chris Waite

The Saturday morning found both teams at the Welsh Harp by 9 a.m.; the majority of members suffering severely from the effects of the previous night's ball. It was a bitterly cold day; however a gentle breeze, which freshened to a force 3 as the day wore on, made sailing conditions good.

The "A" team was drawn against the College of Estate Management in the first round, and started sailing early. All three Bart's boats started well in the first race, and kept the opposition well covered throughout to finish in the order: Williams 1st; Chapman 2nd; Smythe 3rd. In the second race the fastest of the opposing helmsmen made a superb start and led all the way home; Bart's kept the other

two boats in 5th and 6th positions, and thus won this race and went through to the second round.

In the second round a strong Kings College team proved more than a match for the Bart's team. In the strengthening wind, Kings sailed well up the first beat, and gained a winning position which they were able to maintain throughout the race, finishing 1st, 2nd, 3rd. The second race found Williams and Chapman challenging strongly up the first beat, and they had reached a commanding position when, in the middle of a vital tack close to the mark, Chapman succeeded in hopelessly fouling his tiller and mainsheet, and although he and Tidswell managed narrowly to avert a capsizing, they had filled with water badly and slowed. From then on Kings went on to win 1st, 2nd, 3rd with Williams close behind and Chapman and Smythe trailing badly. Thus Kings won the match, and knocked out Bart's in the second round.

The "B" team in the first round were drawn against Charing Cross Hospital; however Charing Cross failed to turn up and Bart's had a bye and a long, cold wait until sailing against Imperial College II in the second round, late in the afternoon.

Unfortunately, they were well beaten in both races, Imperial College taking first three places in the first race; and disaster overtaking Bart's in the second, when Tom McEwen capsized in a treacherous puff at the gybe mark and Noble filled up with water during a tack. O'Farrell completed the race to finish 4th.

### Rosenheim Trophy

This trophy is awarded by the United Hospitals Sailing Club in a competition for individual performance, not team racing.

Three races were held on March 27th, and each helmsman was to count his best two races to find the winner. Eleven boats from six different hospitals sailed on a sunny afternoon in a brisk force 3-4 breeze which provided some good sailing on a good course, which included a tricky dead run on which several people capsized during the afternoon.

The following people represented Bart's:

{ Mike Williams
{ Brendan O'Farrell
{ John Durham
{ Jill Durham
{ Roger Chapman
{ Marilyn John

A feature of the racing was the consistent performance of the best four helmsmen, who finished in the first four places in every race.

Chapman started well in the first and last races, but each time was gradually outsailed, and finished 5th in the first and 6th in the last race, this time also handicapped with a boat half full of water from a leaking bailer. In the second race he tried a port tack start across the fleet, but misjudged a narrow gap between two boats and had to retire. Williams sailed into 7th position in the first race but retired from the second whilst in a poor position and did not complete the series. The Durhams were handicapped by being strange to both the boats and the Harp, but sailed round, finishing 8th in the first and 7th in the last races. They all but capsized in the second race and returned water-logged but well protected from the cold by wet-suits.

The overall winner was Jessop of U.C.H., a University of London team member. For Bart's, Chapman finished 5th overall and Durham 8th. Williams was unable to complete the necessary number of races. Roger Chapman

## JUDO CLUB

In the last Journal report, I indicated that much more competitive match practice was required if we were to produce a formidable team for the Hospitals' Cup Competition.

"Friendly" matches against Chelsea College, Royal Veterinary College, Imperial College and others provided us with such exercise, and we are now reaping the benefits of this policy.

For the first time we have won the London University Inter-college Championships held in February. This event took place at U.L.U. Gymnasium one Saturday morning, and was decided on a points system. We had three tough contests as the results show below:—

### Versus West Ham

John Dearlove (4 kyu) v. 1 kyu lost by ippon  
John Davis (3 kyu) v. 3 kyu won by ippon  
George Dunckley (4 kyu) v. 3 kyu won by ippon  
Tom McEwen (U/G) v. 3 kyu won by ippon  
Hugh Jones (3 kyu) v. 3 kyu won by ippon  
WON 40 points to 10 points

### Versus St. Mary's

John Dearlove v. 4 kyu lost by ippon  
John Davis v. 3 kyu won by ippon  
George Dunckley v. 2 kyu drew  
Tom McEwen v. 1 kyu lost by ippon  
Hugh Jones v. 6 kyu won by ippon  
Drew 20 points to 20 points

### Versus University College

John Dearlove v. 1st dan lost by ippon  
John Davis v. 2 kyu won by ippon  
George Dunckley v. no contest won by ippon  
Tom McEwen v. 3 kyu lost by ippon  
Hugh Jones v. 5 kyu won by ippon

WON 30 points to 20 points  
Total of 90 points for and 50 points against placed us overall winners, beating our old rivals, St. Mary's into second place by 10 points. Congratulations to Hugh Jones and John Davis for winning all their contests in fine style, and to Tom McEwen for performing well as reserve against much more experienced opposition.

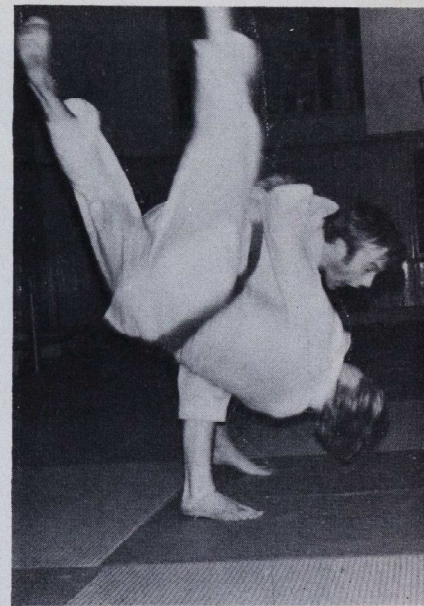
The photographs show the winning team and team members practising in the College Gymnasium prior to the event. I hope we can repeat this performance in the Hospitals' Cup due to take place in May.

Mr. Todd has presented the club with a cup which will be awarded each year to the best all-round judoka of the season.

Finally, congratulations go to John Davis on gaining his "blue belt" (2 kyu) and to George Dunckley on gaining his "green belt" (3 kyu). We hope this will be a stimulus to other club members to grade this year.

The A.G.M. of the Judo Club will be held in the Hospital Abernethian Room at 1.00 p.m. on Tuesday, May 27, 1969.

H.G.D.



Haraigoshi by Hugh Jones

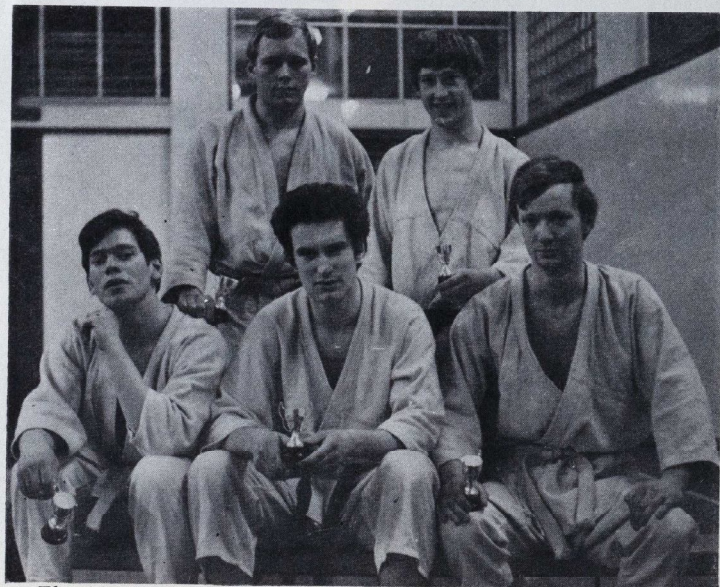




*Tiotoshi by George Dunkley*



*Adrian Ruddle's Ukigoshi*



*The winning team*



Saint Bartholomew's Hospital

# JOURNAL

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1st June 1969

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## journal staff

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**Managerial Staff:** Roger Lambert  
 Brendan O'Connor



## announcements

\*

### Engagement

HORDER — THOMPSON — The engagement is announced between Dr. Patrick T. Horder and Miss Daphne M. Thompson.

### Deaths

BINTCLIFFE—On April 12, Eric William Bintliffe, M.B.E., M.S., F.R.C.S., L.R.C.P. Qualified 1934.

ROSEFIELD—On March 20, Dr. Paul Rosefield, M.R.C.S., L.R.C.P., D.O.M.S.Eng. Qualified 1931.

### St. Bartholomew's Hospital

Mr. Robin Brook has been appointed chairman of the board of governors of St. Bartholomew's Hospital in succession to Sir Michael Perrin.

### Royal College of Surgeons of England Award of the Honorary Medal of the College

At the meeting of council on February 13 an Honorary Gold Medal was presented to Sir Geoffrey Keynes.

### Fellows of the Faculty of Anaesthetists

At the meeting of council on March 13, Diplomas of Fellowship in the Faculty of Anaesthetists were granted to the following Bart's men:—

FRY, David Edmond.

LAMMIMAN, David Askey.

### Handcock Prize

The Handcock Prize was awarded to Dr. Susan F. Pearsall of St. Bartholomew's Hospital Medical College.

### Birmingham University

Dr. D. V. Hubble has had the title of emeritus professor conferred on him.

### Change of Address

Dr. and Mrs. C. A. Hood now live at "Dillamores", High Street, Chinner, Oxon. Tel: Kingston Blount 225.

### Royal College of General Practitioners

The following Barts men were elected. Fellows at the Spring Meeting in Cambridge.  
R. H. Cooke, 1917—1924.  
G. G. M. Edelsten, 1931.  
J. W. Squire, 1942.  
M. Westwood, 1932.

### 4th HORDER MEMORIAL LECTURE

To be given by

PROFESSOR E. B. ADAMS, M.D., F.R.C.P.  
PROFESSOR OF MEDICINE, UNIVERSITY  
OF NATAL

Entitled

### BACTERIAL ENDOCARITIS AND OTHER INFECTIONS IN AN AFRICAN SETTING

To be held in

The Physiology Lecture Room  
St. Bartholomew's Hospital  
Charterhouse Square.

on

MONDAY, 16th JUNE, 1969

at

5.30 p.m.

## letters to the editor

Dr. Piggott has written an interesting paper on Medical politics and obviously it is in a student's own interest that he should know about the politics of the Health Service. Dr. Piggott, however, is quite in error in placing the Royal Colleges in the political machine. The Royal College of Surgeons of England takes no part in the financial organisation or function of hospital medicine and is not concerned with the terms of service of Medical staff. Its principal aims are to maintain and improve the standard of surgery. It is greatly concerned in the training of surgeons and was instrumental in the formation of the Joint Committee for Higher Surgical Training.

It provides essential instruction in basic medical sciences. It maintains the Nuffield College which is a residential college for some 80 Post-graduates who come not only from the British Isles but from many countries through-

out the world. It maintains a number of research departments in Lincoln's Inn Fields and at Downe in Kent, and as Dr. Piggott must be well aware, not the least active of these is the Department of Anaesthesia. It is rich in tradition, influence and vested interests but these are good, and none of them are political.

Yours sincerely,

Alec Badenoch.  
147 Harley Street,  
London, W.1.

Dear Sir,

There is a job vacant at the Royal Perth Hospital for a Casualty Registrar, commencing July 1st, 1969. The post is for 6 months and constitutes part of a 2-3 year rotating job for surgical registrars including a year teaching Anatomy at the Medical School of Western Australia for applicants without Primary F.R.C.S./F.R.A.C.S.

The Casualty Department is busy in comparison to many English hospitals, receiving trauma cases from the whole state, either by air ambulance or road and serves a population

of about 800,000. The hours for the two casualty registrars are good: alternate days on from 9 a.m. to 10 p.m. There are married and single quarters available in the hospital, the pay is from \$5,225 per annum.

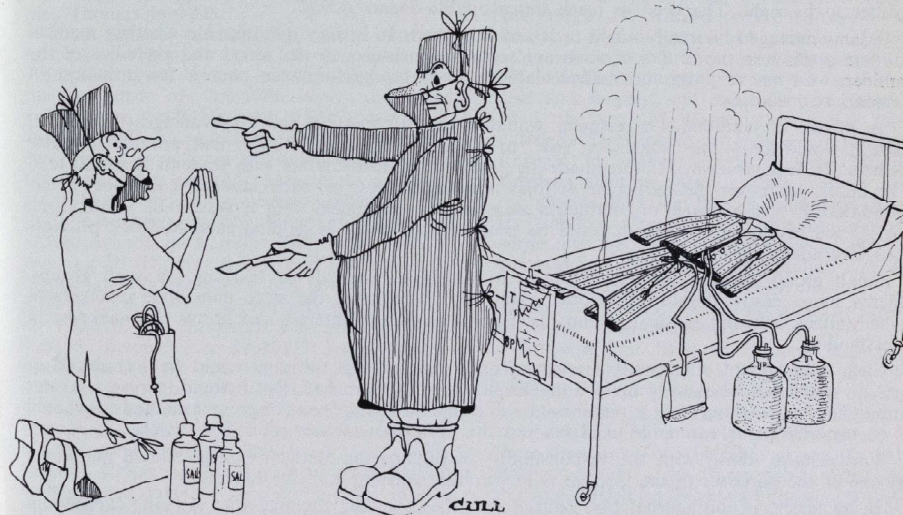
I feel that this post has much to recommend it for a surgical registrar waiting to take final F.R.C.S. The road toll in Western Australia is the highest per head of population in the world, so the Casualty, Orthopaedic and Neurosurgical jobs offer very good experience, while a major proportion of their admissions are traumatic. The hospital is a modern and well equipped teaching unit and the weather in Perth is superb. The chance to see another type of Health Service in action should not be missed.

Anyone interested in applying for this post could write to me as soon as possible at the address below.

Yours sincerely,

W. M. Castleden,  
M.B.B.S., M.R.C.S., L.R.C.P.  
2c Marginata Flats,  
83 Hill Street,  
Perth, W.A. 6000.

### the great fluid replacement controversy (continued)



... "I don't care if he is a trifle dehydrated-'op it"



# editorial

*Item: Doctor, Standard British, Evaluation, Method of,*

In April, part one of the final exam for MB, BS was set as an internal exam for the first time at Barts. The relationship between examiner and student, and between what is taught and what is examined should become less remote. It is a welcome change.

Exams are necessary. There are several reasons: the maintenance of standards of learning, an incentive for study, to protect the public from ignorant practitioners, and to ensure good results from public expenditure. The Conjoint exams also provide revenue to maintain the ancient guilds, the Royal Colleges.

The present system is not an inevitability, and has many disadvantages. There are two major exams: MB, BS and the Conjoint diploma of the Royal Colleges. In London MB, BS is taken by almost every medical student. The Conjoint diploma is still taken by many. Both these exams maintain uniform standards although these standards may not be the same. The standard of university medical finals throughout the country is maintained at a uniform level by the interchange of external examiners. This is true for exams set externally and internally. The chief advantage of the Conjoint diploma is the frequent opportunity allowed for taking it which makes for easier spacing of the final year exams and less time wasted between failing and retaking.

Medical finals, particularly the degree finals, can be criticised on several counts. Coming at the end of the clinical course, they have little value in providing an incentive for steady work throughout the clinical course and the strain on the student taking so many exams in such a short time is unnecessary. As exams are now, they tend to encourage the teaching of "exam medicine"; too many teachers teach what they imagine the examiners want rather than what they consider to be right. The need to teach unreasonable dogma is felt.

Exams managed internally ought to lessen this need. It is also questionable whether medical finals are a fair test, the results of vivas are notoriously subject to the mood and prejudice of the examiner, who has to judge the student's ability from his performance over a few minutes, in strained circumstances.

A system of continuous assessment would overcome many of the disadvantages of medical finals. It would allow the "student at risk" to be identified in good time and provide a useful incentive. If such assessment were made by teachers in close contact with students it would tend to be fairer. Moreover the particular abilities and difficulties of each student could be better appreciated. If such a system of continuous assessment were linked with a system of small group tutorials the results of assessment could be used constructively in guiding each student's progress to his best advantage.

Small group tutorials have been shown to increase standards of learning. In such groups, students more easily develop a critical approach to medicine; the more immediate involvement of the student, inherent in small group discussions, maintains interest and brings out weakness in understanding.

Such a system of continuous assessment and small group tutorials could be introduced at Barts. It would not necessarily involve the employment of more staff, but it would involve a greater commitment to teaching and a readiness to examine the effectiveness of present methods. It should not be regarded as unreasonable to expect just this from those whose job it is to teach.

Furthermore, those with the responsibility of running the Medical College should not forget that one of the purposes of the College is to provide teaching for its students.

In an article in this journal Mr. Bourne describes teaching research that is being carried out in the Department of Obstetrics and Gynaecology. This is most encouraging and it is to be hoped that other departments will be stimulated to follow the example.

## the wix prize essay

### 'The Life and Works of Thomas Addison'

#### bis pueri senes

by Jake Mackinnon

The ancestors of the Addison family were yeomen who had lived for several centuries at Lanercost in Cumberland, and for at least four generations they had inhabited a small house in the hamlet of Banks. Joseph Addison had lived there until he moved to Long Benton to marry Sarah Shaw in 1793, and to take over the flour and grocery business that her father had owned when he was alive. It was here that their two children were born, John in 1794, and Thomas in 1795.

There remains extraordinarily little information about Thomas' early life; Dr. Lonsdale, Addison's great friend and biographer, was the one person who knew the family and wrote about them, yet in his book, *"The Worthies of Cumberland"*, he concentrated mostly on Addison's fame as a great physician, saying very little about his life and character as a young man. The fragmentary evidence indicates that until he was ten years old, Thomas attended the village school in Benton. This small school was run by Thomas Rutter and his wife Ann in their own house which they rented from the Earl of Carlisle. The school was sponsored by the Church, and the pupils who attended paid fees of threepence a week. To augment this small income, the schoolmaster used to look after the accounts of the local farmers.

Thomas was seen to make good progress at the school, and he was soon way in front of all the other children. The local vicar, John Squarey Clapp, an educated man from Balliol College, had taken a personal interest in the boy's education and suggested to his father that he would benefit by continuing his education elsewhere.

In the Michaelmas term of 1806, Thomas started his new school, the Royal Free Grammar in Newcastle. He was one of 130 pupils under the expert guidance of the Rev. Edward Moises, M.A. He stayed at the school for five years, and although there remains no evidence about this period of his life, we know that he distinguished himself, particularly in Latin, for he was able to speak and write Latin so fluently, that he later used to take down his lecture notes in that language. The great success of his school career impressed his father and he realised that Thomas was easily capable of entering one of the great professions. Joseph wanted him to read Law and the Vicar had discreetly hinted at the Church, but Thomas was keen to take up Medicine. Joseph's business was by this time flourishing, the coal mines brought much trade to the area, and the bakery across the road boosted the flour sales. As a result Joseph had become rich enough to send his son to Edinburgh, where a three year apprenticeship was arranged at a premium of £300. For some reason, Thomas never took up the appointment that had been arranged for him with a Dr. John Thompson, but entered instead, on the 1st October 1812, into the University of Edinburgh. His future colleague Richard Bright was also a student at the University, beginning his final year.

Again, little is known of Addison's time in Edinburgh. He studied only chemistry in his first term and midwifery in his second. He then attended classes in materia medica, institutes of medicine, anatomy, botany, clinical medicine and surgery, and eventually graduated in 1815, the year of Waterloo, writing a thesis entitled, *"De Syphilide et Hydrargyro"*. Having finished his degree in Edinburgh, Thomas Addison went to spend a short holiday with his parents in Long Benton, and then set off for London, where he took the job of house surgeon to the Lock Hospital. Here he obtained a considerable knowledge of syphilis, *"although a topic not in strict accord with the branch of the profession that he had adopted, he always spoke on it authoritatively"*.

Addison first lived in Skinner Street and from there he moved to Snow Hill and then to Hatton Garden where he began to practice. He made £50 in his first year and £100 in his second which for a newly qualified doctor in those days was a considerable success. In 1819, Addison went to the Carey Street dispensary to succeed Richard Bright as Physician. Thomas Bateman was the Physician in charge of the dispensary, and under the tuition of the great dermatologist, Addison learned a lot about



skin diseases. Bateman had been the pupil of Willan and was completing Willan's book, "*On Cutaneous Diseases*", when Addison joined him.

The Public Dispensary was a small charitable institution which had opened in 1783 for the "relief by advice and medicine" of the sick poor of Drury Lane, Holborn and Fleet Street. The staff consisted of two physicians, one surgeon, and an apothecary. The consulting sessions began at noon and home visits were arranged for those who were too sick to attend. The service was by no means confined to treating skin diseases, although the Industrial Revolution and the social accompaniment of overcrowding, lack of sanitation and adequate water supplies, poor personal hygiene, malnutrition and appalling working conditions, tended to produce a great deal more skin infections and infestations.

Bateman was forced to resign his post at the dispensary soon after Addison arrived, on account of ill health, and he died soon after in 1821. With the death of Bateman, the path lay open for Addison to succeed him and become an extremely distinguished dermatologist. He had already acquired a considerable reputation in the field, his wide knowledge and acute observation and diagnosis were often called upon by much older colleagues in distress. Addison disliked specialisation, "it savoured of quackery", and for this reason he failed to make any attempt to fill the vacancy that was his for the asking. Lonsdale writes, "*With Addison the investigation of any disease meant the full exercise of his abilities till he had mastered it, and having done this he could not rest till he broke up fresh ground for tillage*".

Despite his insistence on not specialising in dermatology, Addison was attached to the dispensary for eight years, and at the end of the association, the Governors showed their gratitude and esteem by presenting him with a silver claret jug.

The start of Addison illuminated career came when he enrolled at Guy's Hospital; in the books of the medical school appeared the following entry, "*Dec 13th 1817, from Edinburgh. T. Addison, M.D., paid £22 1s. to be a perpetual Physician's pupil*". There began Addison's 42 year association with the Hospital during which time its fame increased magnificently. Two other men were to be instrumental in the acquisition of such a great reputation for Guy's; Richard Bright, who had studied at the Hospital in 1810 before going to Edinburgh, and who was appointed to the staff in 1820; and Thomas Hodgkin, who entered

Guy's as a Physician's pupil in 1819.

Addison made rapid headway in his studies at Guy's and quickly attracted the benevolent attention of the omnipotent Treasurer of the Hospital, Mr. Benjamin Harrison, who in 1820 was in his 23rd year of office. It was with his helpful influence that Addison was eventually appointed Assistant Physician on January 14th 1824. The vacancy had been created by the promotion of Richard Bright to the post of Full Physician. Wilks tells us, "*There were other candidates for the appointment, and amongst them, we believe, Dr. Seymour, well known for his West End practice. He worked up considerable interest on his own behalf among the governors and actually got a recommendation from the future King William IV. Such was the estimation in which Addison was held, Dr. Seymour sent his son some years later to Guy's in order to study under his former rival*".

An extract from the minute book for the 14th January, 1824, gives the following information. "*Mr. President requested to know if it was the pleasure of this Court now to proceed to the election of an Assistant Physician in the room of Dr. Bright, now appointed one of the Physicians of the Hospital. Resolved that this Court do now proceed to such an election, whereupon the Petitions of Thomas Addison, M.D., John Burne, M.D., Thomas Cox, M.D., James Dunlop and Edward Seymour, M.D., were presented and read, respectively praying to be chosen such Assistant Physician, and they were severally called in whilst their petitions were read and then withdrew, after which it was represented by one of the Governors that John Burne, M.D., Thomas Cox, M.D., and James Dunlop, desired to withdraw their petitions and the same being withdrawn the Court proceeded by ballot to choose an Assistant Physician, when it appeared that the numbers were:—*

for Dr. Addison .....	38
for Dr. Seymour .....	6

*Whereupon Dr. Addison was declared to be duly elected Assistant Physician to the Hospital during the pleasure of a General Court, and he was called in and acquainted with his election and the conditions thereof.*"

Addison's appointment to the staff was not in the strict Guy's tradition of accepting only former pupils. Addison had qualified at Edinburgh, and he was in fact the second "foreigner" to be appointed in this way, the first being William Saunders in 1770.

Addison was made lecturer in *Materia Medica* in 1827. His lecturing was unsurpassed, he had a genuine interest in his class, always eager to draw out their best talents. His reputa-

tion spread rapidly, and at a time when medical students were not expected to receive all their instruction from one school, Addison drew an extensive following from all over London, and his fees for lecturing often amounted to £700 or £800 in one year. Wilks, who was one of his pupils, wrote, "*His lectures were of a very superior order, extempore, couched in good language, which sometimes amounted to real eloquence*." This is well illustrated by the way in which Addison once concluded a long lecture on the diseases of women.

"*Gentlemen, if you require an apology for detaining you so long, I find ample material for that apology in the lively interest in which we must all feel in the comfort and happiness of the other sex, doomed as they are, both by the decrees of providence and by human institutions, to drink of the cup of suffering. Whatever may be her lot in this World we, as men, must at least acknowledge that, whilst Infinite Power gave us being, Infinite Mercy gave us women.*"

He was an exceptional clinical teacher on the wards and he was particularly capable of illustrating physical signs on the patient, whilst his definition and demonstration of the disease was often superb. Any interference with his methods made Addison indignant and often angry, once when he had been away from the wards for a while, one of his colleagues had changed the treatment of one of his patients with pleurisy, Addison returned, at once asked why this had been done and was told that the Physician who had looked after the patient while he was away had believed the case to be one of pneumonia and solidification of the lung. "*Ah indeed,*" said Addison, "*give me a trocar*", and he plunged it into the patient's chest and drew off a few ounces of fluid, wryly insistent that he had been correct.

Addison's interest in teaching led him to introduce in 1828 the system of ward clerking as we know it today. Originally the ward clerk acted as a loud speaker, relaying at the top of his voice to the students gathered around, the conversation between the Physician and the patient.

This was an exceptionally interesting period in medical history, because for the first time physicians were attempting to correlate the post-mortem findings with the physical signs found when the patient was alive. Addison, in particular, was an avid morbid anatomist and was in daily attendance in the "dead house" until the last few years of his life. In point of perform a post-mortem and so the new think-

ing was still hampered by practical difficulties. Nonetheless, Addison, Bright and Hodgkin had realised the importance of an accurate description of disease in all its manifestations and that any effective form of treatment would have to pay heed to the pathology of the condition.

These three men were among the first to introduce the consistent use of scientific principles in the process of investigation and diagnosis of diseases. The invention of the stethoscope by Laennec in 1819 was an extremely important landmark in the evolution of this school of thought and Addison appreciated the obviously powerful advantages that it afforded, and became a skilled auscultator.

He was a great admirer of Laennec, "*that truly great man, at once the most distinguished and most successful cultivator of medical science that ever adorned the profession*". Hodgkin too was impressed by the great fact it was still difficult to obtain permission to Frenchman and visited him in Paris in 1822, probably returning with the first stethoscope in this country.

The beginning of this new era was attended by the usual cynicism that one now expects of such occasions, Dr. Cholmeley, for many years Bright's senior and whom Addison succeeded as full physician in 1837, was essentially one of the old school and would have nothing to do with what he regarded as a foolish toy. One day, to everyone's amazement he arrived at the hospital carrying a brand new stethoscope, once in the ward, he placed the stethoscope on the table, inserted a flower into the chestpiece and exclaimed, "what a capital bouquet holder".

Cholmeley's attitude demonstrates the stubborn opposition to change that was to be met with during this very revolutionary period. The age of black bile and white bile was not long passed, some old fossils may still have believed and practiced in a manner, which had advanced little since the teachings of Hippocrates and Galen! That the flavour of "humoral pathology" was still detectable, goes to show what innovators that triumvirate of Guy's men were.

The evidence that their research was deliberate is to be found in the preface to volume 1 of Reports of Medical Cases by Richard Bright.

"*To connect accurate and faithful observations after death with symptoms displayed during life must be in some degree to forward the objects of our noble art; and the more extensive the observation, the more close the connexion which can be traced, the more likely*



# ST. BARTHOLOMEW'S HOSPITAL

## Election to the Council of the Royal College of Surgeons

On 17th April, 1969, a meeting was held of Fellows of the College who are currently working at Barts. Mr. Ellison Nash is to apply for membership of the College Council at the forthcoming election, and it was agreed that Mr. Nash's application would receive full support as the nomination from Bart's.



*Patients may be casual ones - examinations should never be*

### THE MEDICAL PROTECTION SOCIETY

offers world wide security for doctors  
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*we are to discover the real analogy and dependence which exists, both between functional and organic disease, and between these and the external symptoms which are alone submitted to our investigation during life."*

It was against this background that Addison continued his work at Guy's. He was mostly interested in teaching, writing comparatively little and remaining entirely uninterested in private practice. This is a little baffling since he died worth £60,000; to amass such a sum, without a private practice and without a large inheritance from his father, would be difficult. Unlike Bright, he was an unsuccessful consultant, some attributed this to his very hard and rather academic character. He certainly seemed to have the wrong disposition to attract the ailing gentry to his consulting room.

In 1837 he was appointed Full Physician on the death of Dr. Cholmeley, and at the same time he was appointed joint lecturer in medicine with Bright, a post which he held alone after Bright retired, in 1840.

In September 1847, when he was 52, he married Elizabeth Hauxwell in Lanercost Church. She was a widow with two children by her first marriage, whom he had met on one of his visits to Banks some months before, she was described as an extremely amiable and excellent wife. They lived at his house in Spring Gardens until shortly before his retirement in the Spring of 1860, made early by the development of gallstones and jaundice and some threatening brain disease. In a touching reply to a letter of condolence sent to him by his pupils, one can see the charming and affectionate kindness that he felt towards his students.

March 17th, 1860

*"My Dear Sir,*

*A considerable breakdown in my health has scared me from the anxieties, responsibilities and excitement of the profession; whether temporarily or permanently cannot yet be determined; but whatever may be the issue, be assured that nothing was better calculated to soothe me than the kind interest manifested by the pupils of Guy's Hospital during the many trying years devoted to that institution.*

*I can truly affirm that I have ever found my best support and encouragement in the generous gratitude and affectionate attachment, as well as my proudest reflections, in the honourable and most exemplary conduct of its pupils. Present my sincere regards and best wishes to every one of them, and believe me,*

*Yours truly and affectionately,*

*Thomas Addison."*

It is very difficult to get a real picture of his character, to some he was a pompous, withdrawn, unapproachable individual. The following caricature appeared in the medical press some years after his death, and although its tone is scornful, it seems that many of Addison's contemporaries felt this to be his true nature.

*"He is a fine, dashing, big, burly, bustling man, proud and pompous as a parish beadle in his robes of office. Dark, and of sallow complexion, an intelligent countenance and noble forehead, he is what the ladies would pronounce a fine man. He has mentally and physically a tall idea of himself. Every sentence is polished, is powerful; he prefers the grandiloquent. Slow and studied are his opening sentences, studied the regularity of his intonations. The advantages of his tall and graceful person are artfully employed to add to the favourable impression; his attitudes, tones and manner are studied and systematic."*

Wilks was one of Addison's pupils and he referred to the above passage as scurrilous, and defended Addison, saying that he never posed for effect, and that nobody who knew him well could ever charge him with being anything but natural.

*"The personal power which he possessed was the secret of his position, much superior to what Bright could ever claim, and equal, if not greater, than Sir Astley Cooper. For many years he was the leading light of Guy's, so that every Guy's man during the 30 or 40 years of his teaching, was a disciple of Addison, holding his name in the greatest reverence and regarding his authority as the best guide to the practice of the profession. Addison was not learned in the history of medicine; whatever he said was his own and his sayings were eminently practical. He was dogmatic in his teaching, and thus the pupils accepted as pure gospel every word which flowed from his lips. The force of his words was enhanced by his mode of delivery and by the presence of the man himself. Addison was of good height and well made, stood erect, with coat buttoned up very high, over which hung his guard and eyeglass. He wore a black stock with scarcely visible shirt collar, and this further elevated his head. He had a well proportioned, good head, with dark hair and side whiskers, large bushy eyebrows and smallish dark eyes, nose thick, as were also the lips which enclosed his firmly knit mouth. His features were not refined, but belonged to a powerful mind, and showed no trace of any kind of sentiment. His penetrating glance seemed to look through you, and his*



whole demeanour was that of a leader of men, enhanced by his somewhat martial attitude."

Lonsdale said that Addison would have reached the top of any profession he had cared to enter, had it been the Bar, the Senate, the Navy or the Church. Addison was also a nervous man, admitting that every time he rose to speak in public he was anxious, and some said that it was because of this anxiety that he presented his brusque, sometimes rude exterior. He was also a kind man; he once met a former pupil of his who had recently been made a Fellow of the College of Physicians. On being congratulated by Addison the young man replied that owing to financial difficulties he was unable to accept the honour. Addison promptly took him into the museum, wrote a cheque for 50 gns., presented it to the amazed young doctor, and left without waiting for a receipt or acknowledgement.

Addison seems to be the sort of person who shunned public life as much as possible, an academic, supremely interested in his work, he was nervous, shy, and to some unpleasant. However, at an evening organised by the President of the Royal Medico-Chirurgical Society to which members of the medical press and eminent doctors were invited, J. F. Clarke met him for the first time and later wrote, "The evening was one of the most delightful I ever spent. Addison I had never met in private before; I had only known him as the great physician of Guy's Hospital and the somewhat haughty and pompous President of two medical societies, the Westminster and the Royal Medico-Chirurgical, I was astonished by his bonhomie, his hospitality and his powers of conversation . . ."

Addison wrote surprisingly little for a man who seemed to possess such a remarkable propensity for original and interesting thought and discovery. He is perhaps the only man to have his name immortalised in two diseases; Addisonian or pernicious anaemia, and Addison's disease of the adrenal cortex. Whether he was the first to describe pernicious anaemia is in some doubt but his beautifully produced monograph, "On the Constitutional and Local Effects of Disease of the Suprarenal Capsules" was a classic and marked the beginning of the now flourishing science of endocrinology. Amongst his other writings, appear papers on the anatomy of the lungs, the pathology of phthisis, fatty degeneration of the liver, uterine irritation, vitiligoidea, keloid, appendicitis and the use of electricity in the treatment of certain convulsive and spasmodic

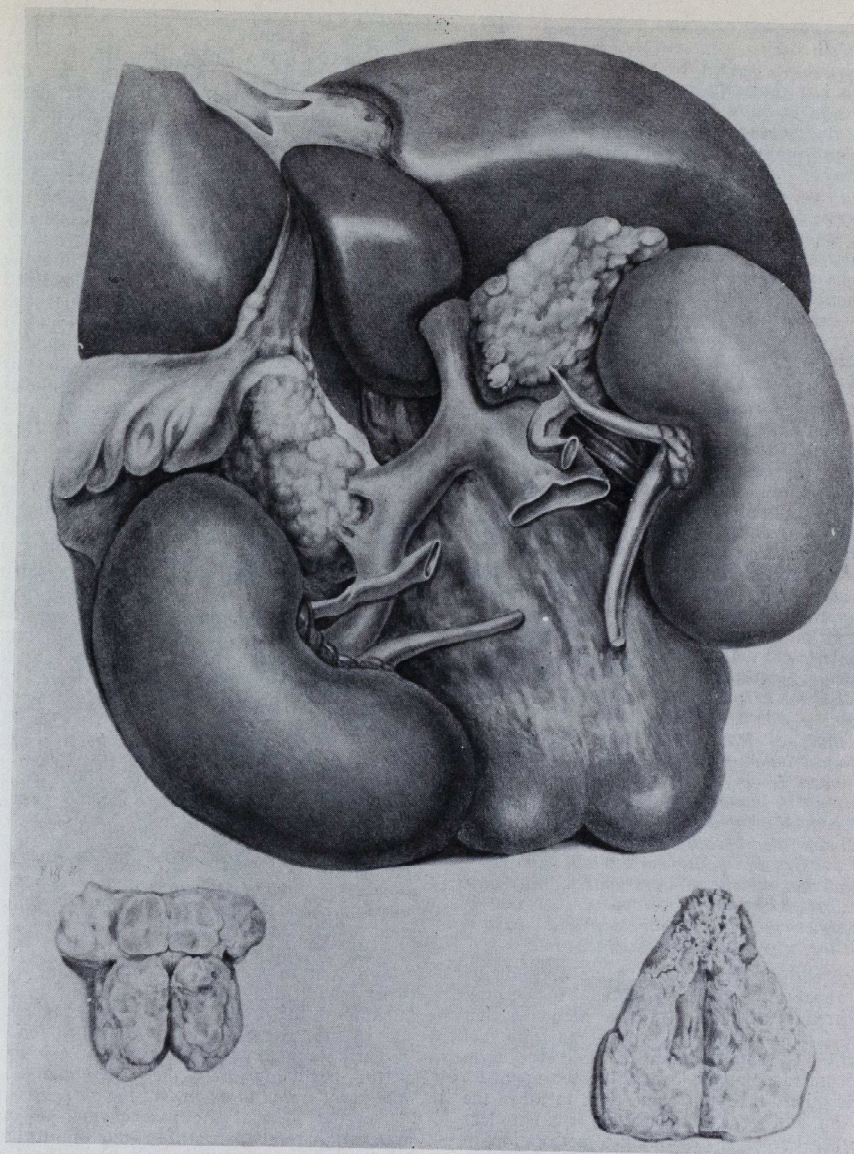
diseases. He also produced two books, one a small textbook of medicine that he wrote jointly with Bright, although Bright is known to have contributed very little to the text, and the other on the phenomena of general poisoning in the body, the first serious investigation of its kind to appear in this country.

From this incredibly varied list of published works one sees that Addison's contribution was a large one, it could have been much more had he been interested in writing more about the natural history and pathology of diseases of the skin. His two contributions on dermatology were both original descriptions of very rare conditions, vitiligoidea, (a) plana and (b) tuberosa, and circumscribed scleroderma, but two such rare diseases, so briefly described, tend to belittle his obviously vast knowledge of skin diseases. His objection to specialisation was first shown against dermatology, and it seems to have remained with him all his life.

In 1839 he published a book, in conjunction with Bright, entitled "Elements of the Practice of Medicine." Only one volume appeared and it is common knowledge that Addison wrote most, if not all of the text. In this book appeared a brilliant description of acute appendicitis. The description was not the first, but it is so characteristically thorough, and demonstrates so well the eloquent, somewhat flowery style used by Addison that it appears here in full.

#### "Inflammation of the Caecum and Appendix Vermiformis"

"That portion of the intestine which is lodged in the right iliac region is frequently the seat of inflammation and affords peculiar symptoms, with which it is right that the student should be well acquainted. The history of this affection is often as follows:— The patient has complained, more or less for some time past, of pain and uneasiness in this part, increased on exertion, or after neglect of the bowels, or excess in eating and drinking; he has however, retained such a share of health that he has not been interrupted in his daily avocation, till after some unusual exposure to cold, or some long walk, or other over-exertion, he has been suddenly seized with more severe pain, attended with rigors, chills, and sometimes with sickness and violent vomiting. The pain and tenderness become excessive and extend to the neighbouring parts of the abdomen. A hardness and tumefaction are soon very evident to the hand in the part first affected; this continuing, general symptoms of general peritonitis take place, and terminate fatally; but under careful treatment the inflammation remains circumscribed, and



The liver of Henry Patten, with the diseased supra-renal capsules in situ. Patten was the third case in Addison's monograph.



becomes even less extensive, assuming the form of a local deep seated abscess. The threatening symptoms of peritonitis subside; the tumefaction just above the crest of the ilium on the right side is more and more obvious to the touch, and gradually shows a tendency to point; the constitution still suffering severely. In the process of time it either opens of its own accord, or is assisted by the lancet, and a discharge of ill conditioned pus follows, which from its peculiar fetid smell, and from its appearance is soon discovered to be mingled with feculent matter. The discharge continues for many weeks and the patient sinks at length from exhaustion. In other cases, when the powers of the system are previously unbroken, the abscess closes and permanent recovery is obtained.

Morbid appearances: From numerous dissections it is proved that the faecal abscess thus formed in the right iliac arises, in a large majority of cases, from disease set up in the appendix caeci. It is found that this organ is very subject to inflammation, to ulceration, and even to gangrene . . . this little wormlike body is often detected in the midst of the abscess, with a perforation at its extremity; or by ulceration higher up in its parietes; a considerable portion of it, nearly or entirely separated, is found in a disorganised condition among the pus and faeces which fill the abscess . . . According to the circumstances under which the patient has died, the extent of the abscess will be greater or less; it will be more or less circumscribed, and more or less complicated with diffused peritoneal inflammation. It is but seldom that the abscess is very perfectly insulated; for the nature of the matter it contains does not favour the production of a healthy adhesive process; but it still often becomes circumscribed towards the cavity of the peritoneum, while it burrows behind that membrane, and finds its way into the surrounding cellular substance; so that it sometimes points at a considerable distance from the original source of the disease."

The earliest report of an acute appendicitis was apparently written by Fernel. This account appeared in 1554 in *Universa Medicina*, but there is some doubt as to what he is in fact describing. Many anatomists used the term "caecum intestinum" to describe the appendix while others used this same term to mean the caecum, and from this confusion it is not clear whether Fernel is describing a perforation of the caecum itself by an impacted quince, or whether he is giving a good account of perforation of the appendix with secondary

peritonitis.

However, despite the confusion, accounts also appeared from Lorenz Heister in 1711, and from Parkinson, also known for his "Shaking palsy", in 1816. Addison was therefore not the first person by any means to describe a case of acute appendicitis, but his description was practically faultless. During his life, Addison was particularly interested in the diseases of the lungs, until he cleared the air in his usual style, it was taught, particularly by Laennec, that pneumonia was an inflammation of lung tissue, an exudation into the lung parenchyma. In 1843 Addison described how he had traced out the small bronchial tube to a lobule or bunch of air cells in which it abruptly terminated, the blood vessels supplying these parts passing exteriorly to the air cells in a very loose and distinct interlobular tissue. He states, "I entirely fail to discover any structure to which the term interstitial or parenchyma can be fairly applied". Addison therefore defined the correct structure of the lungs and then went on to describe how he had found the seat of pneumonic inflammation to be in the air cells themselves.

He wrote two papers on pneumonia, the first in 1837 and the second in 1843. In his first paper he begins, "Any attempt at a further elucidation of pneumonia, after the splendid performance of Laennec, may probably appear presumptuous; and especially so, when made by one who acknowledges himself indebted for almost all that he knows of thoracic diseases to that truly great man . . .". He then goes on, "It is with the most profound deference and respect for his memory, therefore, that I venture to add this tributary mite to the riches of one of his favourite essays . . . My apology is that the very familiarity of the subject appears to have lulled medical men in general, and even the stethoscopist, into a too passive confidence in what is already known; and has probably proved a check to that correction and improvement which Laennec himself was at all times so eager to establish."

This is a very apologetic introduction to a paper whose main object was to draw to the attention of the profession the useful diagnostic sign of the "pungent heat of the skin", felt in the early stages of pneumonia. He also mentions at the beginning that "the inflammation is manifestly seated in or around the air cells".

The old idea of the parenchymal inflammation apparently persisted in spite of a further reinforcement of his views in a paper read in 1840 before the Royal Medical and Chirurgical Society. In his next paper, "Observations on

*Pneumonia and its consequences*" he is almost indignant and triumphant when he announced to the Guy's Physical Society, "There are probably some present who remember the time and occasion when, in this society, and in opposition to all existing authorities, I ventured to call in question the long cherished notion that pneumonia had its seat in a supposed parenchyma of the lungs, and that the products of pneumonic inflammation were poured into that parenchyma. Since that time I have had the satisfaction of witnessing a gradual, but comparatively rapid, renunciation of the latter views, and the adoption of those advanced for discussion in this Society so many years ago, viz., that pneumonia has its original and essential seat in the air cells of the lungs, and that the pneumonic deposits are poured into these cells."

Addison had the pleasure of seeing one of his ideas accepted during his lifetime. This was almost the only one that was—the writings on anaemia, skin diseases and disease of the Suprarenal capsules were for the most part ignored, partly due to the small circulation of the journals in which they were published and partly due to a large number of the medical profession finding Addison a particularly distasteful person.

Addison was fortunate in his earlier career to come under the guidance of Bateman at the public dispensary in Carey Street. The knowledge he gleaned there during his eight year association made him confident enough to be the first Physician in London to give lectures on skin diseases. He was appointed demonstrator of cutaneous diseases at Guy's at some time in the 1840's. It was not until 1919, when a Dr. H. W. Barber was appointed as a physician to the Department of Dermatology, that a full time dermatologist secured an appointment at Guy's.

During his first 20 years at Guy's Addison wrote little on dermatology, although he was supervising the collection of wax models being made by Joseph Towne, illustrating many different diseases of the skin. He made his written contributions to dermatology rather late in his career.

In 1850 there appeared the article written by Addison and Gull entitled, "On a Certain Affection of the Skin, *Vitiligoidea Plana, Tuberosa*", describing for the first time a condition now called xanthoma planum et tuberosum. In their article they described five cases of which only three would now be thought of as examples of xanthomata seen in hypercholesterolaemic xanthomatosis. The other

cases were of xanthoma diabeticorum and adenoma sebaceum.

Their description of the lesions, particularly drawing attention to the yellowish colour of the irregular patches which they liken to the colour of a fading leaf, is classic. The aetiology put forward by Addison was that the liver might be at fault, finding some supporting evidence in the fact that xanthoma occurred in diabetic patients, diabetes being at that time ascribed to some liver disorder. Their implication was that the liver produced some abnormal substance which got into the circulation. The delightful description which appears in the paper is repeated here:—

"Eliza Parachute, aet. 33, of middle stature, moderately well nourished; mother of six children; catamenia regular. Her present illness began in 1848; she attributes it to fright, and to a blow received in the left groin whilst attempting to separate two men who were fighting." It then goes on to describe how she became jaundiced, with paroxysmal pain in and about the hypochondria with an enlarged and tender liver. Her vitiligoidea had started after the jaundice, and had been present for 14 months before she again came under the care of Guy's. "It first appeared on the hands, spreading across the flexures of the joints of the fingers and palms. Soon afterwards a yellowish patch of discoloration began near the inner canthus of the eyelid, and then a precisely symmetrical one at the same part on the opposite eyelid. These patches are very slightly raised, and not obviously indurated; they have extended very slowly. In the early part of the year 1850, two models, 2733 (4th) and 2733 (5th) were made of the case. At this time the patches on the face existed as above described. Along the ridges bounding the flexures in the palm and about the joints of the fingers, there were yellowish, opaque, irregular, and somewhat raised lines. About the thumb, first joints of the fingers, and inner and interior parts of the wrists, there is a gradual transition to a tubercular prominence of the affected parts, and some distinct tubercles exist on the elbow and knee. The diseased parts are tender, so as to give her pain in using a knife to cut bread. The whole surface of the body is of a dull lemon tint.

During the last seven months the affection has become more tubercular, especially about the joints of the fingers of the right hand. The patch of confluent tubercles on the elbow has much increased since the model was taken. Both elbows are similarly affected. There are also tubercles on the right knee, on the superior



the hands the gradations from the plane to the tubercular variety are well marked, and the essential relations of the two forms demonstrable."

At the end of the paper, "Mrs. Parachute informs us that although none of the tubercles have disappeared yet, they are now less prominent than they were a year ago."

Addison's second contribution appeared in 1854. He read a paper before the Medico-Chirurgical Society, "On the Keloid of Alibert and the True Keloid." In this paper he describes what was to him, a new disease, true keloid, known now as morphea or circumscribed scleroderma, and he distinguishes this from the keloid of Alibert, commonly known as keloid. Addison was not the first to describe the condition, it had appeared at least a century before him in the writings of Curzio, and Henke had also described it in 1821. The credit given to Addison for his description of morphea was however justified in that he had never heard of the disease and so his description was at least original to him. The large number of models assembled under Addison's instruction can be seen in the Gordon Museum at Guy's. They are, without exception, accurate and beautifully made models which often deceive the eye into thinking they are real specimens taken from cadavers.

Now we come to the two diseases which bear Addison's name. These are surprisingly connected, because in his description of "the remarkable form of anaemia" he gives a classical account of pernicious anaemia and then goes on to say that in three cases only was a post-mortem examination performed, and by what appears to be a remarkable coincidence, a diseased condition of the adrenal capsules was found in each. It was quite natural that he should connect the condition that he had so admirably described with the diseased adrenal glands, and it was this chance finding that pushed him on to study the adrenals more closely and find a completely different disease. It is this red herring of the "idiopathic anaemia" introduced into his work on the adrenals that has perhaps led to the controversy that raged after his death as to who had been the first to describe the condition of "idiopathic anaemia". In 1874, an editorial appeared in the Medical Times and Gazette of London entitled, "Pernicious anaemia—a New Disease". It described how Biermer of Zurich had described a new form of anaemia, and concluded, "We are not aware that any case has, as yet, been reported in Great Britain but no doubt there

will soon be many observers on the lookout for it."

Samuel Wilks, Addison's ever rampant champion was quick to take up the challenge. In the British Medical Journal seven days later, on the 28th November, 1874, appeared a letter in which Wilks begged leave to remind its readers that the disease was well known in England. He said that he had heard Addison lecture on it as far back as 1843, and he himself had published accounts of several fatal cases in Guy's Hospital Reports between 1847-49.

The first report seems to have been written by James Scarth Combe in 1822 published in the Transactions of the Medico-Chirurgical Society of Edinburgh. Combe certainly never took part in the wrangle over the originality of any particular description of the disease, and in the obituary published in the Edinburgh Medical Journal. After Combe died in 1883, there was no mention of his valid claims to the discovery of pernicious anaemia. So Addison never published a separate paper on this anaemia, all his early descriptions of the disease were in connection with the suprarenal capsules. His preliminary report was in 1849, a short paper read to the South London Medical Society. Here he associated the two conditions because of this extraordinary coincidental finding of diseased adrenal glands in all three of the subjects on whom post-mortems were performed. Then in 1855, in his wonderful monograph "On the Constitutional and Local Effects of Disease of the Suprarenal Capsules," he explains that it was during a search to throw some light on this curious form of anaemia that he stumbled upon this diseased condition of the suprarenals which he then realised was entirely unrelated to the anaemia, and that he had been able to find no characteristic features on post-mortem examination to explain the pathology of this anaemia, and there the matter rested. His description at the beginning of his monograph is repeated here:—

"For a long period I had from time to time met with a very remarkable form of general anaemia, occurring without any discoverable cause whatever—cases in which there had been no previous loss of blood, no exhausting diarrhoea, no chlorosis, no purpura, no renal, splenic, miasmatic glandular, strumous, or malignant disease. It makes its approach in so slow and insidious a manner that the patient can hardly fix a date to his earliest feeling of that languor which is shortly to become so extreme. The countenance gets pale, the white of the eyes become pearly, the general frame flabby rather

than wasted; the pulse, perhaps, large, but remarkably soft and compressible, and occasionally with a slight jerk, especially under the slightest excitement; there is an increasing indisposition to exertion, with an uncomfortable feeling of faintness or breathlessness on attempting it; the heart is readily made to palpitate; the whole surface of the body presents a blanched, smooth and waxy appearance; the lips, gums and tongue seem bloodless; the flabbiness of the solids increases; the appetite fails; extreme languor and faintness supervene, breathlessness and palpitations being produced by the most trifling exertion or emotion; some slight oedema is probably perceived about the ankles; the debility becomes extreme. The patient can no longer rise from his bed, the mind occasionally wanders, he falls into a prostrate and half-torpid state, and at length, expires. Nevertheless, to the very last, and after a sickness of, perhaps, several months' duration, the bulkiness of the general frame and the obesity often presents a most striking contrast to the failure and exhaustion observable in every other respect."

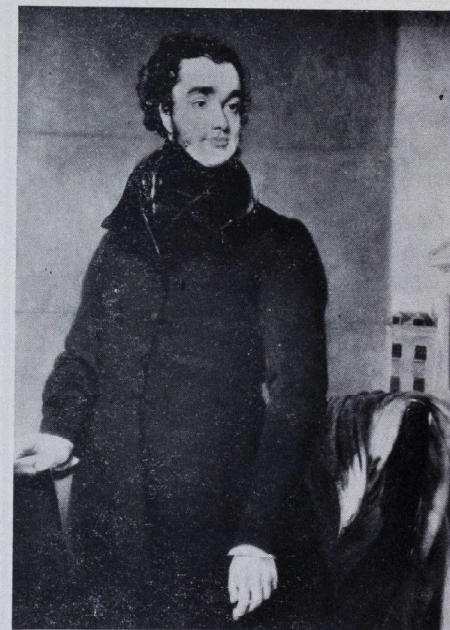
After this discovery Addison continues to describe his most famous piece of research. He had been interested in the adrenal glands for some time, since at least 1849. He began to realise that a curious brown pigmentation of the skin that he had seen in several patients was connected with disease of the adrenal glands. He got Samuel Wilks to collect details of possible cases and after some diligent dissection Addison managed to demonstrate unequivocally that there was such a connection and he began to collect further cases and finally there was enough material and suitable clinical evidence to warrant publication of his findings.

"The leading and characteristic features of the morbid state to which I would direct your attention are, anaemia, general languor and debility, remarkable feebleness of the heart's action, irritability of the stomach, and a peculiar change of the colour in the skin, occurring in connection with a diseased condition of the suprarenal capsules . . . The discoloration pervades the whole surface of the body, but is commonly most strongly manifested on the face, neck, superior extremities, penis, scrotum, and in the flexures of the axillae and around the navel.

He then described eleven cases, the first four of which were undoubtedly examples of the disease. The fifth was an interesting one: Richard Bright had looked after the case, a woman who had been admitted because of a

tumour in the left breast and a swollen right parotid gland. She had a very dark complexion, she was emaciated, her stomach became irritated and she vomited, her strength declined and she soon died. On post-mortem examination, it was reported that "the only marked disease was in the renal capsules, both of which were enlarged, lobulated, and the seat of morbid deposits, apparently of a scrofulous character. They were at least four times their natural thickness, feeling solid and hard; on the left side one part had gone into suppuration, containing two drachms of yellow pus."

Addison commented that, "It did not appear that Dr. Bright either entertained a suspicion of the disease of the capsules before death, or was led at any period to associate the colour of the skin with the diseased condition of the organs, although his well known sagacity induced him to suggest the probable existence of some internal malignant disease. In this as in most other cases, we have the same remarkable prostration, the usual gastric symptoms, the



Portrait of Addison by William Benick



same absence of any very obvious and adequate cause of the patient's actual condition, together with a discoloration of the skin, sufficiently striking to have arrested Dr. Bright's attention even during the life of the patient."

Bright in fact preserved the adrenal glands and they can still be seen today at Guy's. He had all the evidence before him but failed to make the connection of pigmentation of the skin with diseased adrenal glands. Had he done so he may well have been the first to attach his name to two diseases instead of Addison.

The monograph was richly illustrated with the most beautiful litho-engravings, and was truly a great work. It took some time however to produce the response that it deserved. There was no review of the book in the British Medical Journal, and that in the Lancet was frivolous. The Medical Times and Gazette said, "We believe that Dr. Addison has made a discovery which is the most important practical medicine has produced for many years, and one in every way worthy of the untiring zeal and energy in professional pursuits which have characterised his life." Many people ignored the discovery, some denied the existence of the disease, but the great Trousseau recognised the true value of Addison's work and suggested that the disease should thenceforth bear Addison's name. Addison was a great innovator and it is heartrending that he was so abused in his time. He was rather retiring and abrupt and for this reason those who did not know him well paid little attention to him or his work. There was no obituary published of him in the British Medical Journal or the Lancet, he was not elected a fellow of the College of Physicians until 19 years after he had become a Licentiate, nor did he hold any office or deliver any lectures in the College, he held no court appointment and received no honorary degrees. He was perhaps one of the very few men of his time who deserved such rich honours.

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# meminisse juvabit



by  
**John Howkins**

In 1938, as far as I know, Sir Thomas Dunhill had been the only extra-mural infiltrator in the closed shop of St. Bartholomew's Hospital and it was with feelings of awe and misgiving that I took up my duties of Resident Physician Accoucheur. This post was unique amongst London Teaching Hospitals in that it conferred upon the holder very considerable responsibilities together with onerous but none the less pleasant duties. It also carried a considerable seniority, since the holder enjoyed a semi-consultant status—he was entitled to lunch at the senior table, and was considered to be a cut above the other chief assistants. One particularly delectable privilege was a handsome suite of rooms in Surgery House, with a right to garage a car in the then sacrosanct inner purlieus of the Hospital. To those of us, who now as consultants find difficulty in parking our cars in the serried ranks of registrars, housemen, administrative pundits and other privileged badge holders this may sound a peculiar observation, but when I first beheld the beauties of the Square it was as yet undesecrated by the presence of any offending automobile. It is true that the Chief arrived for his round in some style and state in his chauffeur driven Rolls, but once alighted, his laundaulette was hastily and discreetly removed until such time as his duties were concluded, when he was accorded a ceremonial farewell by his various acolytes.





Apart from these comings and goings no wheeled vehicle was permitted to pass the portals of the Stewards Office. The fountain played, the plane trees rustled in the summer breeze and in this antiquity's pride all was calm and decorous, flanked by the superb masterpieces of Gibbs architecture.

The Obstetric and Gynaecological Department was quite an ambitious affair, housed in what is now the Children's Department. It occupied three floors and had its own theatre. John Barris was the head, Malcolm Donaldson number two, Wilfred Shaw the third and John Beattie the junior. Barris was a splendid undergraduate teacher and his rounds were always crowded. He had an amusing habit of closing his eyes when making a vaginal examination, presumably to exclude all extraneous stimuli from the immense effort of reaching a diagnosis. Having inserted the magic fingers on one hot summer afternoon, he became so absorbed that he is alleged to have dozed off in the contemplation of an obscure pelvic tumour, at four o'clock his Ward Sister tapped him on the shoulder and announced that his tea was getting cold. Donaldson was a great pioneer of the radiation treatment of pelvic cancer and his enthusiasm for this therapy somewhat tended to obscure the possibilities of surgery, although himself a bold and radical surgeon when the occasion demanded. Wilfred Shaw was a most lovable and picturesque character. He knew the name of every student, their wives and their children and I only once succeeded in flooring him on View Day as to the exact paternity of one of his alumni. Wilfred Shaw had studied in Vienna and was a complete master of all the techniques of vaginal surgery. These in 1938 were somewhat deficient in the London Schools which tended to concentrate on the abdominal approach. The popular operation for proci-dentia was ventrofixation by which the uterus was hitched up to the region of the umbilicus, a kind of sky hook. Wilfred soon altered this misguided philosophy and from him I learned all that I know of vaginal hysterectomy and pelvic floor repair. It can be unreservedly stated that Wilfred Shaw was then and still is the acknowledged master behind the shoulders of any British gynaecologist who repairs a prolapse. John Beattie, well known to many of you, was the fourth member of this noble quadrumvirate. This gentle, kindly giant was perhaps the most picturesque figure of them all. His beds, as befitting a modest junior were few but wonderfully elastic since we, his myrmidons, were completely incapable of refusing

him an admission. His empire, nominally four beds, was wonderfully diverse and to keep track of it involved long perambulations all over the Hospital. Though big of hand he was a most suave and beautiful operator and his judgment was impeccable; every surgeon has his heroes but to me Wilfred Shaw and John Beattie are immortal, the one taught me technique and enthusiasm, the other tempered it with wisdom and finesse.

The fifth member of the team possessed an ultra consultant status, since he reigned in a province of his own, the Williamson Laboratory. This appendage of the Department was unique, as no other London Teaching Hospital possessed its own private gynaecological laboratory; here all sections were cut, photographed and examined and all by one man, Bert Cambridge. He was my first, and at first, my only friend at Barts; he taught me histology and tact, introduced me to every member of the staff, and him I now salute in gratitude and affection.

One temptation of senescence is to become a laudator temporis acti and to declaim on the past glories to the belittlement of the present generation. When I contemplate the students I taught in 1938 and teach in 1969 I can see no difference whatsoever; there is, it is true, a certain latitude in dress and coiffure that might raise the eyebrows of John Barris, but the intellectual material is certainly not inferior, in fact the industry and enthusiasm with which the modern student attacks a syllabus vastly increased and complex is wholly admirable. There are, however, two very notable differences, the advent of women students and the departure of the perennial. When women first arrived at Barts I viewed them with suspicion and alarm. The advent of my first woman house surgeon converted me into a staunch feminist and since then I have been privileged to be assisted and sustained by a notable series of admirable women. There was a small and select number of perennial students in 1938. One was alleged to be a stockbroker as a sideline, another lived on licensed premises. These amusing gentlemen used the Abernethian Room as a club during the hours of closing time and played a good deal of bridge and poker. The war was for them a mixed blessing, since the demand for doctors eased their hazardous passage through the finals, yet a select few resisted the wiles of the Examining Boards to qualify them, and if any survive they are unqualified yet. A modern dean would give short

shrill to such hardy but decorative annuals.

One very sad loss to the Obstetric Department has been the demise of the District Maternity Service. In 1938 this was a thriving industry and to me primarily responsible for it, a far flung empire penetrating into the fastnesses of tenements in Islington and Finsbury. Richard Gordon, my able anaesthetist has immortalised the adventures of the young obstetrician on his bicycle, laden with the midder bag, strangely he does not exaggerate the picture that he has painted. It was undoubtedly a unique experience for the young accoucheur to find himself suddenly the sole responsible authority for the delivery of a woman in her own home in what would now be termed under-developed surroundings. Here, for the first time in his career, the future physician found himself at intimate grips with the doctor patient relationship, not to mention all the hazards of an obstetric delivery. It was an awe inspiring, but character building experience enacted in a setting completely divorced from the disciplined environment of the hospital labour ward. It was, moreover, a scene usually accompanied by darkness and bad weather, a fitting prelude to future medical practice: this is something priceless we have lost and shall never again recapture.

If I were to assess the progress that our Department has achieved in the last 30 years, I would pay tribute to the following: first, operative and diagnostic techniques are now indubitably more perfect and the training of the potential consultant immeasurably more thorough than anything my generation was afforded, nonetheless I do not believe that we are better surgeons than our forebears. It is true that difficult and dangerous operations have now become simpler and less hazardous but this is largely due to the very real and considerable advances in anaesthesia, the second factor is therefore the universal availability of expert anaesthesia for all obstetric and gynaecological surgery: It is easily forgotten that only since World War II has the status of the anaesthetist been given its proper place; while anaesthetists were undoubtedly good before this, they are now superb. Gone are the days when an operation could be accurately described as a dogfight between rigid abdominal muscles and coils of inflated gut. The modern surgeon is a spoiled darling who operates in a genteel environment of peace, quiet and leisure. The old chiefs who manipulated a drop bottle of ether and chloroform were undoubted masters of their

primitive tools but the modern exponent of the art has converted the difficult into the simple.

The third factor is chemotherapy. In 1938 sulphonamides, crude at that, were our sole chemotherapeutic agents, puerperal sepsis was still a potent killer. In 1969, it is difficult to keep pace with the antibiotic advance and peritonitis, once deadly, is now merely a tedious complication and rarely seen. Queen Charlotte's Isolation Block for Puerperal Sepsis has long been untenanted by patients and is now a grim memorial to an era happily past.

The fourth factor, also a product of the last world conflict is the universal availability of blood for transfusion. In 1938, there was no blood bank and if a transfusion was needed, it involved the bleeding of donors in hospital. To those of you who merely pick up an internal telephone and order as many pints as a round of drinks, it may be of interest to know how we organised a pre-war transfusion. There was a dedicated man named Oliver with a telephone number in South-east London who seemed, day and night, seed time and harvest, never to sleep or fail to answer the call. You stated your quantity with the group, curiously it was often O, or as we called it IV, and Mr. Oliver then got busy and in half an hour to an hour a donor arrived from the Red Cross to be assaulted by a large bore French's needle. Having relieved this equally dedicated donor of a pint, he or she was given a cup of tea and the transfusion then proceeded in circumstances not so sterile as now and with apparatus somewhat more primitive, Red rubber tubing, glass connectors, drip chambers and a glass cannula tied into a vein, dissected from elbow or leg were the order of the day, rhesus typing was a dream of the future and cross-matching was done on an earthenware glazed white tile. It is surprising that our reactions were not more common and that the jaundice we so often saw was regarded as an occupational hazard of the transfusé.

These random thoughts on the past thirty years may be of interest to the elders who remember and to the younger who never knew them. To one who has had a small part in the evolution of his department they are a source of pride and gratitude to the Hospital of his adoption.

*Old men forget . . .  
but he'll remember with advantages  
what feats he did that day.*

*W. S. Kg. Henry V*



# Outpatient care of patients with chronic bronchitis

\*

by  
Dr. N. C. Oswald

It may be argued that the only good reason why a general practitioner should refer a bronchitic patient to an outpatient clinic is in order to obtain a report upon a radiograph of the chest. This investigation will certainly reveal any pneumonia that may coexist and will go a long way towards proving or excluding a bronchial carcinoma. Those of us who have given much thought to such matters feel that there is rather more to a hospital consultation than that, although the sheer weight of numbers of patients attending clinics militates against detailed investigation at times.

Simple chronic bronchitis may be defined as cough and sputum on most days for at least three months annually in the absence of other cardio-respiratory disease. This is a common syndrome which often starts at about the age of 40 and affects roughly one-half of all men aged eighty. In many instances, it is closely connected with cigarette smoking and, at least in the early stages, often disappears if the habit is abandoned. Once the syndrome has become established, the bronchi become hypersensitive with hypertrophied mucous glands, multiplication of the epithelial goblet cells and excessive mucus lying in the air passages. The

principal objections to this state of affairs are twofold. The mucus tends to retain pathogenic bacteria which, especially when viruses are superimposed, are liable to initiate attacks of acute bronchitis—the so-called resistance lowering or virulence enhancing effect of mucus. The second objection is that sooner or later the bronchi tend to become spastic, temporarily at first and then permanently with increasing airways obstruction and consequent dyspnoea. These are not inevitable consequences of continued cigarette smoking, and many smokers survive for decades without undue respiratory distress, but the dangers are there as long as excessive mucus persists. Other factors contributing to simple chronic bronchitis include air pollution and an "allergic diathesis". Fortunately, air pollution in Britain is much less than it was; in London, it has been reduced by two-thirds in the last thirty years mainly by the replacement of coal by electricity and gas for domestic heat and the cleansing and lofty discharge of industrial effluents. An allergic diathesis, which cannot readily be defined, refers in this context to a swollen and soggy mucosa which often extends from the nose all the way down to the smaller bronchi and gives rise to recurrent respiratory infections with, sometimes, demonstrable extrinsic allergens. These lesser forms of chronic bronchitis, which are seen regularly in outpatient clinics, are in some ways the most important because they are amenable to treatment by abandoning cigarette smoking, avoiding atmospheric hazards, relieving defects in the upper air passages and giving appropriate antibiotic and antiallergic therapy.

Most bronchitic patients who are referred to hospitals have recurrent attacks of acute or subacute bronchitis and are breathless from airways obstruction with or without emphysema. Assessment consists of several quite different approaches, of which the following are the most important.

1. A general assessment with a view to determining which aspects predominate, for example airways obstruction, emphysemal bronchial infection, rigidity of the chest wall, upper respiratory disease, allergic features and the state of the cardiovascular system.

2. Reversible airways obstruction may be measured by estimating the forced vital capacity and the forced expiratory volume at one second before and after taking a bronchodilating drug. Facilities for doing this are not ordinarily available in general medical outpatient clinics, nor are they entirely necessary.

Breathlessness can be graded by degrees, according to whether it occurs at rest, when walking on level ground at an even pace or going up an incline. Reversibility is assessed by comparing the most with the least favourable circumstances. Ordinarily bronchitic patients have least dyspnoea, or none at all, during the warm summer months, their worst times being in the winters or only during exacerbations of bronchitis. The extent to which dyspnoea varies is a useful measure of the probable effectiveness of bronchodilators, of which the most commonly used are ephedrine, aminophylline and isoprenaline. The first two are often given together, with the addition of a barbiturate, in the form of franol or tedral; isoprenaline is best nebulised in a spray. None should ordinarily be given more than three times a day because over-dosage leads to tolerance; this, however can be overcome by omitting the drug for a month or so.

If simple bronchodilators are ineffective, or become so after a time, the question of a trial course of a corticosteroid drug usually arises. This consists of giving 30 mg. of prednisone a day and continuing in diminishing dosage over the next ten days. Only if clinical improvement is obvious, possibly measured by physiological testing, should the drug be continued. Over the years many bronchitics have been given prolonged courses with little or no benefit, and some of them have developed formidable respiratory infections as a result. On the other hand an appreciable number of bronchitics derive considerable benefit from a dose as low as 5 to 10 mg. of prednisone a day during the winter months and have no difficulty in stopping the treatment when the warmer weather returns. Successfully treated patients tend to have some evidence of an allergic diathesis either in their previous or family history, but skin tests are usually negative and they mainly fall into the so-called extrinsic group of asthmatics.

3. Irreversible airways obstruction may be caused by prolonged bronchial spasm, but is usually due to destructive changes in the lung substance. These consist of thinning and tortuosity of the smaller air passages and fibrous obliteration of the bronchioles. As a result, air trapping occurs distally with distension and rupture of the alveoli and consequent emphysema. The rate of progression of this process may be slowed by the avoidance of cigarette smoking, air pollution and respiratory infection. Definitive treatment consists of enabling patient to maintain tidal respiration

through the greatest possible range of exercise without undue effort. This often has to be attempted in the face of increasing rigidity of the chest wall in a position of overexpansion. Medicinal means of reducing airways obstruction may assist, but the principal aim is to make full use of the muscles of respiration. For this a combination of intermittent positive pressure breathing and physiotherapy is the best that can be offered.

4. Sticky mucus confronts bronchitics with one of their most difficult problems. Unfortunately no really effective mucolytic agent is available for this purpose. Heat, in the form of a hot drink or a steam inhalation, has some value and should at least be tried about a quarter of an hour before rising from bed in the mornings. Ideally, it should be supplemented with inhalations of isoprenaline followed by postural drainage, as taught by a physiotherapist.

5. Bronchial infection is ordinarily considered to exist when there is a mucopurulent sputum. This may be so only during exacerbations of infection but may continue through the winter months or, rarely, throughout the year. Two organisms seem to be principally responsible for purulence namely *H. influenzae* and *Str. pneumoniae*. Others, for example *N. catarrhalis* and coliform organisms, are potentially pathogenic but they seem to be of little importance. Indeed routine bacteriological examination of the sputum is valueless and may even do harm. Not infrequently testing reveals an organism whose sensitivities lead to the prescription of an exotic anti-bacterial agent with formidable side effects, which has no effect upon the course of the disease unless it happens to be effective against *H. influenzae* or *Str. pneumoniae*. The choice of antibiotics thus resolves itself into a choice between those to which both bacteria are sensitive. In practise this means the tetracyclines and ampicillin, and maybe septrin. Chloramphenicol also falls into this category and it is remarkably effective, but it carries a small risk of causing blood dyscrasias which limits its usefulness in a disease such as chronic bronchitis where repeated courses are likely to be needed. Short courses of the tetracyclines and ampicillin may be given in conventional dosage; small maintenance doses of either are now considered to have little merit.

6. The upper airways should always be inspected for evidence of a treatable condition. Many bronchitics are relieved by the removal of polypi or by other measures which re-



establish proper nasal patency. Infected sinuses may need attention. These methods of treatment rarely have much effect on the state of the lungs, but they certainly improve general health and may well reduce the risks of subsequent pulmonary infections.

7. The state of the cardiovascular system has considerable bearing upon the severity of the dyspnoea. The common triad of chronic bronchitis, obesity and hypertension is often disabling without any of these being particularly troublesome on its own. Measures which will reduce obesity and hypertension must be considered. An electrocardiogram is an essential investigation when myocardial ischaemia is suspected.

Elderly bronchitics frequently develop a persistent mucoid and often watery sputum, especially after respiratory infections. The cause may be partly or even predominantly cardiac, and a treatment with digitalis and diuretics is often more effective than pulmonary remedies.

None can deny that chronic bronchitis is a crippling and sometimes fatal affliction. Prophylaxis in the early stages may prevent needless disability. Later, systematic appraisal of its component parts may indicate the most promising lines of treatment.

## research into medical education

by Mr. Gordon Bourne

### Introduction

The traditional formal relationship between the pre-clinical academic course and the clinical apprenticeship is beginning to change. St. Bartholomew's Hospital Medical College is one of the largest single medical teaching units in the British Isles. It has always zealously guarded its high teaching reputation, which has perhaps frequently been equalled but never surpassed in this country.

The great wind of change flows through the field of medical education. Pre-clinical courses are being reassessed and their curricular content continuously altered. The pre-clinical depart-

ments at Barts, especially Biochemistry, have been constantly reappraising their subjects as well as constantly reviewing their methods of teaching and evaluation. The multiple choice technique in measuring the effectiveness of their teaching has been used since 1960 and Dr. Wills has shown a high correlation between such techniques of measurement and well controlled marking of essays in his particular subject.

The clinical side of teaching medicine, however, presents a slightly more difficult and complex problem, since it is our duty to produce clinicians and not pure scientists. The essence of the clinical course in medicine is, or ought to be, clinical teaching. It must never be forgotten, however, that actual clinical teaching can only be grafted on to a sound knowledge of anatomy, physiology, biochemistry, pathology and associated subjects. In the Department of Obstetrics and Gynaecology we have reviewed our role as teachers in an attempt to meet the increasing demands of a modern medical school. We found that we were faced with several specific problems:—

1. A total lack of modern teaching equipment.
2. A total lack of a room or space in which to teach students other than at the bedside.
3. An increasing number of students without a proportionate increase of either teachers or teaching time.
4. An ever increasing number of students in each individual set or class.
5. A realisation that as the majority of students had not been taught principles of learning, neither had the teacher been taught the principles of teaching.
6. An increasing proportion of our clinical teaching time was being spent on teaching the fundamentals of anatomy, physiology, biochemistry and endocrinology as applied to our particular subject.
7. A diminishing proportion of time was therefore being spent on actual clinical teaching or discussion—a factor rendered even more obvious by the increasing disinclination of many obstetric and gynaecological patients to be either examined by a multiplicity of students or introduced to a large group.
8. The increasing complexity of obstetrics and gynaecology demands that more clinical time has to be spent with each patient, resulting in yet a further diminution of teaching time.

9. Recent advances in obstetrics and gynaecology have greatly increased both the size and the extent of the syllabus.

### Response

We are most grateful to the Medical College for making a grant available for the purchase of teaching equipment. An internal re-arrangement of space within the department will result in the provision of a small classroom and small tutorial room, as well as a special audio-visual aid unit. We have every reason to hope that the board of governors will recommend that this space re-allocation be proceeded with at all possible speed. An academic unit in the Department of Obstetrics and Gynaecology has been formed under the direction of Mr. Hudson as Reader. During the past fifteen months a determined effort has been made to reduce the size of the clinical classes, or at least to redress this disadvantage by creating a tutorial system, so that each student is allocated for informal discussions to a small group, which seldom exceeds six in number.

With regard to the principles of teaching and learning, as well as to the teaching of applied basic sciences and the making of more efficient use of clinical material available, we have considered the application of modern and scientific teaching techniques and have endeavoured to project their application to the clinical teaching of obstetrics and gynaecology. In any reappraisal of the traditional methods of clinical teaching in relation to the latest techniques available, it is essential that the student and not the teacher should be the prime consideration. The main purpose of any clinical teaching department must remain the production of good doctors. This presupposes a certain amount of scientific knowledge, combined with a quantity of clinical judgement, acumen and ability.

Two years ago it was realised that the calls upon the teaching staff of the department were increasing to such an extent that the standard of teaching was beginning to suffer. The increasing number of students, combined with the ever increasing clinical load (which has nearly doubled in ten years both in obstetrics and gynaecology) meant that teaching time had to be more efficiently utilised. A study was therefore undertaken of advanced teaching methods in use both in this country and in North America. Whilst a great deal has been written concerning modern teaching methods and techniques in clinical medicine a systematic search through many clinical units showed that whilst plenty had been written on the theory

little had been done in practise. Many different methods were being used in different centres, with neither correlation nor assessment of their benefit. The Department of Obstetrics and Gynaecology devised a research programme in order to evaluate the introduction of modern techniques to the teaching of obstetrics and gynaecology. We are very grateful to the Department of Advanced Studies in the University of London for help and assistance in outlining the programme.

There is at present no satisfactory method of assessing student response or reaction to a given programme. This is due to many factors but chiefly to three main variables—firstly the students themselves, secondly the programme and thirdly the teachers. We were advised that each subsequent block of medical students coming into our department would act as a control for its predecessor and successor, especially as each block contained a sufficiently large number, i.e. 75. The teaching staff and the teaching course remain relatively stable and it should, therefore, in theory be possible to measure any variation in the course providing a satisfactory measuring instrument could be developed in order to establish a base line from which we could make subsequent comparisons. We were advised that in these circumstances the multiple choice question paper provides a satisfactory measuring instrument. It is not our intention here to enter into the controversy between the multiple choice and the essay type of examination.

Our first aim was to construct a bank of objective questions in both obstetrics and gynaecology. These were intended mainly to assess the students' breadth of knowledge in the subject as well as to discriminate between the good and the poor student. The first questions were introduced to the students who finished their obstetrics in December 1967, and this group together with students in the department from January to June 1968 formed the base line population. During this time monthly tests by multiple choice methods were instituted and combined with gynaecology exams. At the end of three and six months. At the beginning of the course all the students are requested to sit a multiple choice exam. in general medicine and basic sciences. This forms an essential part of the assessment, since it provides us with a merit order from which progress in the Department of Obstetrics and Gynaecology can be judged.

Having established a method of student assessment changes can then be made in the course. During 1968 an individual tutorial



system was introduced on a voluntary basis. It is unfortunate that the department had to cater for a double number of students from October to December 1968, but nevertheless the introduction of the tutorial system resulted in a very definite and marked student response, so that its beneficial effect could be statistically verified.

The tests are all measuring instruments themselves and consist of 40 multiple choice questions in both obstetrics and gynaecology. The students pencil their chosen answer to each question into special cards, which are fed directly into a computer. This method of assessment has many advantages, the greatest of which in the present programme is that a large number of tests can be performed and so a large amount of data be collected and assimilated. A large amount of detailed information has already been collected upon the effectiveness of our test material, which has enabled us to scrutinise the sensitivity and discriminatory ability of the large number of questions that we possess in a remarkably short time.

#### Results

Despite the fact that we have not yet embarked upon any major introductions or innovations in the technology of our teaching, the introduction of this measuring technique has not only enabled us to develop a well constructed and validated test, but has also helped us to evaluate our present teaching methods as well as the student performance. Without going into detail it has already exposed several defects in our standard teaching system, which we have been able to correct. It has also exposed gaps in our curriculum and has indicated to us that we have failed on occasions to emphasise the importance of some particular aspect of the subject. We also feel that the order of presentation of the course material has an important bearing upon student performance throughout his time with us.

A weekly discussion in gynaecological pathology has been introduced and alterations have been made in both ward rounds and out patients which are to the advantage of the students. Time wasting attendance at operations is reduced to a minimum and every effort has been made to increase the obstetric responsibility of the student.

#### Discussion

It is essential for the students to realise that the monthly examinations are not designed to test their knowledge but are meant to test the teaching that they have received. The more often and the more frequently the students sit

the exam, the more information do we have concerning our ability to transfer knowledge to him and his reaction to the methods utilised.

It is our intention to introduce modern teaching methods in the form of audio-visual aids during this year. We are at present building a library of audio-visual instructional material which will be presented later this summer. The construction of this material has and is taking a great deal of time and effort and has been hampered by lack of funds. During its production members of the department have learnt a great deal about teaching techniques and methods. So that this form of teaching can be accurately assessed we shall not introduce it to the students until we have sufficient material to make an impact and therefore assess the response by means of the monthly test. The audio-visual material will be available to students at all times for use on supervisor machines in the department. A number of cassettes have, and are being prepared which deal with the fundamental clinical pathology, histology, biochemistry and endocrinology of both obstetrics and gynaecology, so that teaching time can be more satisfactorily spent discussing clinical differential diagnosis, management and treatment. Next year we plan the introduction of audio-tape lectures and closed circuit television, the advantages of which are obvious when one considers the increasing reluctance of patients to be examined by students.

#### Conclusion

Techniques in medical teaching must incorporate modern teaching technology acceptable to the medical student. Providing new techniques are used in the proper manner they can be of enormous benefit, but they can only be introduced if the student co-operates and is thereby seen to benefit from their use. Someone has to prove they can be efficiently used in teaching a clinical subject to the advantage of the student, the patient and the teacher. We are most grateful to those students who have co-operated with us so far in the production of audio-visual material and a short textbook of obstetrics as well as in the exams, themselves, but in future we need even greater co-operation. It may be significant that other teaching schools are now becoming interested, not only in our method of assessment but also in our progressive teaching programme, and most especially in the interest and actual involvement of our students.

The help which students have given in compiling material for the teaching programme has been most gratifying and student participation is, and will be, encouraged at all levels.

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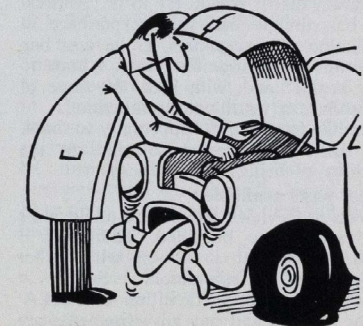
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## british medical students' association news

from D. A. Stringer

During the last month B.M.S.A. has been developing the policy which I outlined in the last issue of this *Journal*. As I have not been informed of any further developments, I would like to concentrate this article on the proposed bi-monthly newspaper which has replaced the British Medical Students' Journal.

### The need for change :

Everyone has agreed that the British Medical Students' Journal was ineffective. This was due to various reasons. Firstly, the journal was only produced in small numbers and secondly, it had to compete with the hospital's individual publications. All of the reasons for the failure of the old Journal can be summed up in one word—MONEY. This is the main reason for changing the *Journal* into a bi-monthly newspaper, as the cost can be cut down, the circulation increased five fold and a more attractive publication can be produced.

### Newspaper posts filled :

This newspaper is, for the next year, centred at St. Bartholomew's. Therefore, I have started to recruit people with journalistic tendencies, to spread out the work. I have managed to recruit two sub-editors, Andrew Fletcher and George Lodge. George Lodge has had the same limited experience in journalism as I have had but has some very good ideas about the type of publication that it should try to be. Andrew Fletcher has already had some experience in the production of newspapers, as he was one of the editors of *Varsity*. Therefore, I hope to "pick his brains" and, with luck, the three of us will produce a worthwhile publication.

I would like to take this opportunity to thank both of them for agreeing to take on the responsibility of being sub-editors.

### Newspaper posts available :

The posts of Reviews' Editor and of Business Manager are yet to be filled. Therefore, if interested, please get in touch with either myself or one of the sub-editors.

There are free office facilities at B.M.A. House for our use and our advertisements are

organised by the B.M.A. advertising agency. This brings me back to the question of MONEY.

### Money for you :

Any of you can earn yourself some money from this newspaper, in one of two ways. The first is that contributors receive remuneration for all articles printed, and the second is that for any advertisement which you obtain for the newspaper, you will earn 10 per cent. commission. If you are interested in the latter, I can give you an advertisement blank which gives full information about charges, position, etc.

A Classified advertisement column will also be present in the newspaper. This column should be particularly useful for students wishing to advertise to all the medical students in the London Region about such things as Sublets, Locums, cars for sale, etc. I hope that this column will be fully subscribed to.

### The name of this Newspaper :

This is a problem that has vexed me for the last two months. By the time this article is published it will most probably have been decided upon but any suggestion that will appeal to the students and not repulse the advertising (the newspaper's bread and butter) will be most gratefully received.

This newspaper is a complement to the hospital Journals and it will be a success only if you, and the advertisers, support it fully. So please do.

## student nurses' association news

from Su Dermitt. (Chairman)

April 17th, 6.30 p.m.—our more enthusiastic members gathered in the Isla Stewart Library. As we talked an amazingly talented committee was slowly born.

Although expecting numbers to be small (two dozen arrived, a personal invitation having been sent to every student nurse in the hospital) response by those who did come surpassed all hopes. Each one had something to offer (if only an application form!) and seemed more

than willing to back enthusiasm with some positive action.

Our meeting was presided over by Matron and opened with the election of Shelagh Wynn as secretary. Shelagh's great store of energy should get us cracking in no time, and coming from New York as she does she will no doubt have plenty of high-powered efficiency that will help us take the S.N.A. to where it should be!

We had now reached a vital part of the meeting, where the new proposed structure for our unit was presented in detail for criticism. It was accepted virtually in its entirety and our committee was selected. The response with which it was received was impressive and the enthusiasm heartening. The lines along which it will be run will be as follows.

Bart's S.N.A. will be divided for convenience into professional and social. Under "professional" come talks and discussions on developments in the nursing and hospital spheres especially considering openings following registration, there will be talks by the W.H.O., nursing in the forces, Nursing Politics, and the Borstal and Prison nursing services. Our representatives at the Congress in Canada will be giving a talk about that and nursing in the States on their return in July.

"Social" covers events designed to raise funds, those activities that need money to function and activities classed as clubs and sporting.

The "fund-raisers" is a highly specialised department that will require much careful organisation if it is to succeed, for without it nothing else can take place. We aim to have large S.N.A. dances three monthly and to start an annual S.N.A. Ball which will be an entirely new venture. We will have our usual Annual Bazaar, but without the last minute panic which usually accompanies it! All members will work towards it throughout the year. Please bear it in mind when you have belongings too good to throw away but that you will never use again. Any member will relieve you of it at any time. Now until October. Another new event will be a Summer Charity Walk in which we hope all hospital staff will join. Proceeds will go towards some medical charity. Jenny Marks and Elizabeth Hartle are bravely assuming direct responsibility for all this.

Under "Clubs and Sporting" sailing is already a highly organised affair under Ros Aspdin's careful eye. An incredible number of members has already enjoyed a sail in a Firefly or Merlin at the Welsh Harp. Sea sailing may also be a possibility at some stage. This will culminate in

the formation of a Ladies' sailing team by the end of the summer. Preparations for hockey are being made (watch the board for information of practices and matches), and all those who wish to canoe should contact Jenny Roberts.

There are many members also keen to start drama and modern dance, and Mrs. Ilaff, our Social Secretary, is particularly keen to help in this sphere in which she is particularly talented. The S.N.A. feels very strongly that the nurses could produce their own Christmas Show of high quality.

Regarding those activities that need financial support we hope to start courses in Cordon Bleu cookery, modelling and make-up, flower arranging for different occasions and hair-care by people at the top of their profession. I personally feel there is a need for a society for The Arts (literary and artistic) as there was very little stimulation in this direction at the moment. It will take much careful handling however and is still something for the future as yet. If you want to help perhaps you would contact me directly.

Other facets needing committee attention include advertising and editorial. Viv. Durkee is in charge of advertising, and the Art Club has very kindly offered to help us for the next couple of months. Viv. is responsible for all advertising and poster design. The editorial I will handle myself at the moment—perhaps we will have enough material to start our own paper next year?

Caroline Catchpole, our treasurer, has been doing some home-work on the best use to which our funds can be put. All department heads have their own expenses sheet (which keeps Caroline busy!) and we hope to buy some unit shares as soon as feasible. Good handling of funds might mean that we will be able to donate a fixed percentage of our total income to some worthy cause later on.

The meeting then turned its attention to the "pay as you eat" scheme. A letter has been sent as representative of the feelings of our unit to Headquarters, stating that although we welcome the opportunity to pay for meals, £3 per week clear of tax, is the minimum that can be seriously considered. I have also had an interview with the Evening News which will have gone to press by the time this is out. We await results.

The meeting closed with coffee, biscuits and a good deal of animated discussion.

"New Look" S.N.A. is definitely under way. Interested?





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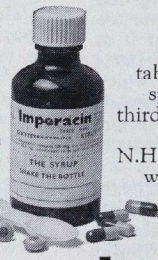
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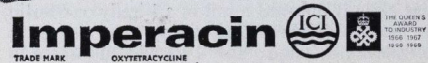
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# SPORTS NEWS



**Tour Party:** Left to right, Back Row: I. McClure, I. Barrison, R. Knight, M. Murphy, I. Weller; Front Row: D. Lindridge, R. Lovell, C. Ellis (Capt.), A. Wall, A. Scott A. House (behind camera)

## SOCCKER CLUB TOUR TO GERMANY

### Tuesday 25th March v. H.A.C.

We began a memorable week with a very enjoyable game against the Honourable Artillery Company at Armoury House. This pre-tour match allowed the tour party to blend into a team and get to know one another.

Bart's with attacking play took some time to settle in defence against the powerful H.A.C. forwards and were always in arrears. Dave Lindridge opened our score by running onto a through pass from Knight and after controlling the bobbling ball shot to score a good goal. We had to wait until the second half for the next goals. The first was scored by Mike Murphy from an incredible angle on the left. He shot with the defence expecting a cross and cunningly applied spin took the ball into goal

We spent Wednesday with some light physical training and heavy liver training and set off on Thursday 27th for Dortmund. Having celebrated Ian Weller's birthday on the train to Dover we soon found our sea-legs in the bar

off a helpless defender's shins as he attempted a last ditch clearance. H.A.C. with some excellent right wing play and strong defence from Graham Booker at left-half went to 4-2 ahead with a goal direct from a corner after a mix up between Chris Ellis and Alan House (the latter finally catching the ball inside the goal!) and with a rather off-side looking goal. Bart's last goal came shortly before time when Knight ran through to shoot inside the left-hand post from 13 yards.

Many thanks to H.A.C. for their excellent hospitality after the match and a fine game and especial thanks from Mike Murphy and Ron Knight for inviting us to play for H.A.C. in the Liverpool Ramblers' Easter Festival—which we did and thoroughly enjoyed.

where we stayed for yet more solid training and rousing singing until docked in Ostend. Countless games of the mysterious, nay, devious, "blackers" made light of the train journey and we were met at Dortmund by 2nd Lieut. Dick

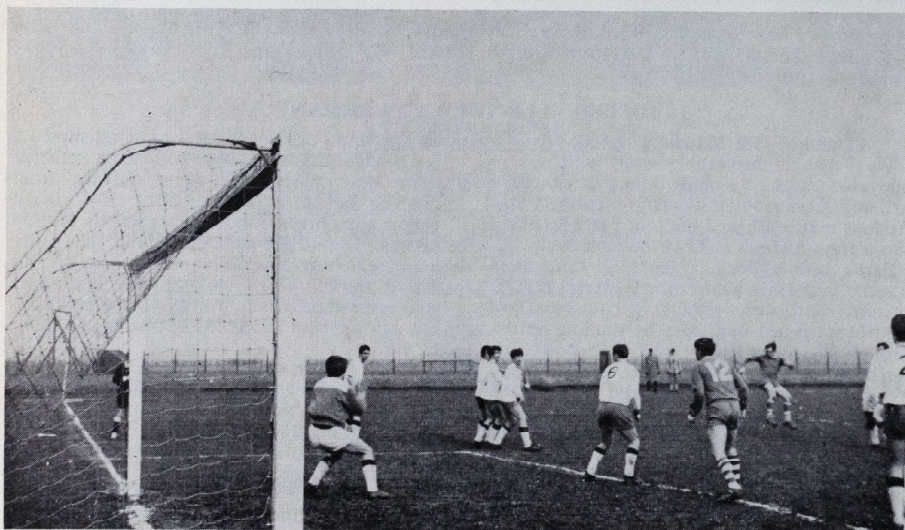


Lambe with transport to the Napier Officer's Mess. We arrived shortly after midnight, were shown our rooms, and then spent four hours getting to know the Napier drinks over a few officers. They taught us some ditties we didn't know but in the face of the cry "Drink Up" we held our own with variations on a blackbird theme and Eskimo Nell.

Friday was, justifiably, a day of rest with a few hours loosening up on the practice pitches in the afternoon. On Friday night we were entertained in grand style by the Sergeant's

### Bart's v. 12 Light Air Defence Regiment

On the Saturday we played our hosts 12 Light Air Defence Regiment. Bart's settled well and opened the scoring after 10 minutes when Knight ran on to a fine through ball from Ian McClure to shoot inside the left-hand post. Our second goal came 10 minutes later and was one of the finest scored this season. Dave Lindridge went down the left wing and cut the ball back obliquely to Mike Murphy. The inside-left beat two men with great ease and from the edge of the box crossed to the far post where Andy Skanderowicz leapt up to meet the ball with his head and crash it home from 7 yards.



Chris Ellis about to save a shot from a free-kick with Bart's defence covering the rest of the goal.

Mess. We separated into pairs and played a Sergeant's team at everything from dominoes to snooker with many jugs of foaming Double D Draught to see fair play.

A curry buffet was followed by the "boat race", a devious drinking game which was narrowly lost due to acute dilatation of the stomach despite a good start by the captain. This was followed by a "who can place the bottle furthest" competition which, despite valiant efforts by Bart's—notably Ian Weller, was won by the sergeant's man known aptly as "Lofty".

With a tight defence well marshalled by Dick Lovell and the cultured mid-field play of Andy Scott and Mike Murphy Bart's had plenty of the ball. We went further ahead after 31 minutes when a pass from Ian McClure was hit first time on the turn by Mike Murphy from 25 yards to send an arching shot over the advancing goal-keeper for a delightful goal. We turned round at half-time with the score 3-0 and Chris Ellis having had his quietest time for ages.

Fifteen minutes after the start of the second half Tony Wall, playing with great fire, took the

ball off the left-winger and passed 5 yards to No. 7 Andy Skanderowicz who crossed low into the middle where Ian McClure with his back to goal controlled the ball, pivoted, and shot past the goalie from 12 yards.

Ian Weller, at centre-half in the back four of Wall, Lovell, Weller and House, picked up a loose ball in mid-field and, seeing his chance, swept through a gap to find the top right-hand corner of the net with a drive from 30 yards. Although 5-0 was the final score we were unlucky not to double this. Dave Lindridge was

### Night on the town

On Saturday night Major G. G. Freeman kindly invited us to a cocktail party in his house. This lubrication set us up for the trip to Dortmund that followed. After a bar the first stop was at a discotheque where Chris Ellis upheld honour by being the first to leap on the floor with the German "lovelies". In a quiet corner Messrs. Barrison, House, Knight, Lin-

### Bart's v. Napier Sergent's Mess XI

Rising early for a morning game against the Sergeant's Mess XI Bart's staggered onto the pitch 10 minutes early to give Chris Ellis some goal-keeping practice that he might be able to decide which of the two balls he was seeing to catch. Mike Murphy was, unfortunately, unable to play in this match due to a burst blood vessel in his foot sustained after a kick in the first match but Bart's compensated well for this omission.

After the fluid entertainment the night before we were, understandably, a little disorganised but snatched a surprise lead after 5 minutes when Knight ran onto a fine through ball to rob the defence and stab the ball past the

### "Food"

On Sunday evening we were taken 60 kilometres to the Canadian Army Officer's Mess for the eating experience of the tour. After a few drinks in the bar we went into the restaurant to see a huge selection of food of which we could have as much as we liked. Steaks and

### Bart's v. 11 Regiment and R.E.M.E. XI

On Monday afternoon we played a strong side—the combined strength of 11 Regiment and R.E.M.E. The pitch was very heavy due to constant rain and in a hard fought match it was the Army who went ahead with a neat goal after 10 minutes. Bart's were playing well

unlucky with several efforts—a header from a corner was luckily scrambled away, one shot was blocked point blank by the keeper and another beat No. 1 only to be denied entry by the bar. Mike Murphy headed straight at the goalie from a Skanderowicz corner and saw a shot from his injured foot sail just over the bar from 20 yards. Knight using a piece of College Hall Green play bounced a ball off his thigh past a defender but the sight of an empty goal proved too intoxicating, for the ball took a drunken path past the far post.

Lindridge, Lovell, Murphy, Skanderowicz and Wall amazed even the Army Judo champion "Big Dick" with their sparkling demonstration of "clappers", an old English drinking game. Much later after dragging the skipper away from the attentions of the corporation lovelies we returned to the Mess and retired.

keeper inside the left-hand post. This early lead was soon lost by a ragged Bart's and we turned round at half-time 2-1 down. A sensible "pep talk" at half-time by the skipper, Chris Ellis, rallied the team spirit of the side who soon drew level. Andy Skanderowicz on the right scored to make it 2-2 with a great shot from 20 yards. Dave Lindridge was then pulled down inside the penalty area and the spot-kick was awarded. This was converted by Dick Lovell who left the goalie standing with a crisp shot to the right of the goal. The final score was 5-2 due to two fine goals from Dave Lindridge coming back to form after breaking an arm earlier in the season.

curries disappeared at a vast rate of knots to be followed by a whole galaxy of goodies with strawberries a popular choice. Intestines were then allowed to settle as we watched the film "Prudence and the Pill" over a few whiskies.

with spirited play by Ian Barrison and Andy Skanderowicz on the flanks and skillful constructive work by Dave Lindridge and Andy Scott in mid-field. With everyone supporting the man on the ball it was only 5 minutes before Bart's drew level. Fine mid-field play culmi-





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nated in a through pass from Dave Lindridge and Knight out-paced the defence to shoot to the right-hand post. The goal-keeper got a finger to the ball but could only help it in. Good defensive play by Bart's with some outstanding saves by Chris Ellis and one notable header off the line by the much improved Alan House kept the score at 1-1. We might have gone further ahead when Andy Skanderowicz after a few misses found the head of our inside right for him to head over the bar.

In the second half effervescent play brought some near misses from Ian Barrison, Dave Lindridge and Knight whilst Dick Lovell and Ian Meller in defence kept the ball coming through. The Army relied heavily on the strong play of

their powerful left-winger and it was much to the credit of Tony Wall at right-back that they failed to score. Bart's endeavour was rewarded after 25 minutes of the second half when that Old Caian Andy Scott brought the ball through from left-half and with the defence expecting him to lay the ball off he was granted a moment of freedom. Seizing his chance he shot from 25 yards with his left foot and curled the ball swiftly under the right-hand side of the cross-bar with the goalie an admiring spectator.

With the forwards tackling back and good team play Bart's held this to the end when they might have gone further ahead from a corner.

### Bart's v. 34 Light Air Defence Regiment

On Tuesday we played our final match against 34 Light Air Defence Regiment. Mike Murphy, back from injury, sent Andy Skanderowicz away on the right who scored with a blast into the roof of the net. The Army equalised and then Ian McClure headed for goal and slammed in the rebound. With cultured football Bart's went further ahead with a goal from close in scored at the second attempt by Mike Murphy from a right wing cross. Ian McClure scored two more to claim a well deserved hat-trick. The first came from a right wing cross from Andy Skanderowicz. Dave Lindridge then

picked up a long ball from Knight, who had dropped back into defence, and went down the left to clip the ball in on the far post. After a reply from the Army Ian McClure scored his third when Knight went for a canter down the wing and pulled the ball back for McClure to send the goalic the wrong way with a beautifully side-footed goal from the edge of the penalty area. Our last goal was scored 5 minutes from time to the applause of our supporters by Dave Lindridge who ran 60 yards down the left wing and placed the ball wide of the 'keeper. The final score was thus 7-2.

### Farewell

That evening we drank and sang in the bar until 4 a.m. with a zumba from the Hon. Sec. and a similar dance from Ian Barrison who was last seen undressing stone lions on the lawn clad only in a sock and, of course, his Bart's tie.

Rising at 6 a.m. we ate a small breakfast and after thanking our hosts set off for the station. Despite the efforts of Andy "Max By-graves" Skanderowicz the journey back to Dover was somewhat uneventful. On the train to London we were on better form and after fantastic games of "clappers" led by Dick "here we go boys" Lovell we finally rounded off a great week with a beautiful rendering of Auld Lang Syne.

Thanks must go to Dick Lambe and all the Officers and Sergeants of Napier Barracks who helped us arrange this tour and made it so enjoyable.

Final results:	P	W	D	L	For	Against
	5	4	0	1	22	9

### Goal scorers and appearances:

	Appearances	Goals
Ian Barrison	5	—
Chris Ellis	5	—
Alan House	5	—
Ron Knight	5	4
Dave Lindridge	5	5
Dick Lovell	5	1
Ian McClure	4	4
Mike Murphy	3	3
Andy Skanderowicz	5	3
Andy Scott	4	1
Tony Wall	4	—
Ian Weller	5	1

Ron Knight,  
Hon. Sec.



## Cross Country Club Report 1968-69

Although this has not been the most successful season in the club's history it has been both entertaining and eventful. The depth of running has greatly improved as we lost no team members at the end of last season and gained consistent support from Hugh Glennie (Cambridge) and Paul Taylor.

In the University of London Colleges League we maintained our position as the leading hospital in Division I in which we finished ninth. In the inter-hospital's championships we were narrowly beaten into second place by the St. George's Royal Dental "combo" partly due to the absence of Robin Barrett who tore his Achilles' tendon the day before the race. John Brooks was up to his usual form finishing second, followed closely by Richard Moody and Robert Thompson. Chris Sutton's fine performance would lead one to believe that the best training is done at the bar. We appreciated the sterling efforts of our elder members, Drs. Pickard, Pedoe and Garson.

The highlight of the season was the tour to Dublin in conjunction with United Hospital's when we were pleased to have our president, Mr. Lee "on board". The U.H. team lost to Trinity I but Barts managed to beat Trinity II by a narrow margin. It should be added that at the reception (Guinness only) we put up a considerably better showing due to our non-running members (Holmes *et al*).

Other enjoyable matches included a sunny afternoon spent on the Downs against Sussex

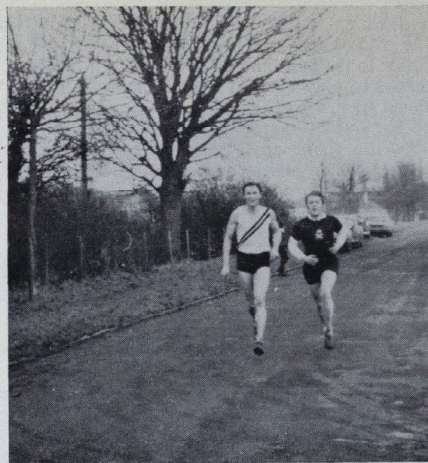
## St. Bartholomew's Hospital Golfing Society

This Society was founded in 1928. All past students of the Hospital who are on the Medical Register and members of the Teaching Staff are eligible to join, on payment of an entrance fee of 10s. The Club meets in June and October, and plays upon courses around London. There are several cups and prizes which have been presented by members of the Club, and have been so donated that they allow

## Rugby Club — Review of the Season 1968-69

The 1968-69 season will no doubt be remembered as the year when the Cup came back to Barts. The victory in this competition has tended to overshadow what has been a successful season in its own right. Our record finally standing at W 17, D 3, L 14.

The advantage of having for the first time for many years, all the preclinical members



University and a creditable performance in the Selwyn College relay in Cambridge.

### Inter Hospitals Pilgrim's Way Stroll

The second fastest time over the 29½ mile course was clocked up by John Brooks, a Barts student, out of a field taken from all the London Teaching Hospitals.

His time of 4 hours 20 minutes will stand as the record for the newly inaugurated Stroll; which has successfully replaced the old Brighton Stroll on the calendar of the year's sporting events.

even those beginners with a handicap of 24 to enter successfully.

New members are very welcome, particularly those who are newly qualified. If you wish to join, please apply to one of the Secretaries.

The next meeting is at Ashridge Golf Club on June 25th.

Hon. Secretaries,  
I. Kelsey Fry H. B. Ross

back before their term began enabled us to get off to a flying start. The tour to the West Country was again a success, both on and off the field, bringing to notice such players as May, Burley and Hill.

Although it is a trifle iniquitous to single out individuals, the constant improvement in the play of Carroll and Britton in the powerhouse,

allied to Lloyd's fiery example in the front row, and the performances of Lambert and Jefferson, have played a great part in our success. Packer too, at full back, after a shaky midseason period has settled down into a really solid and useful full back.

### The Cup

Little remains to be said after the lavish spread in the last journal. It was a great team effort, with everyone spurred on by the voluble Rees and the sniping attacks of Heslip from the base of the scrum. We called on 20 players. Sowden in particular was unlucky to be displaced after a tremendous defensive display in the first game against Tommies, when he marked his opposite number Smith completely out of the game.

The 1st XV success has perhaps detracted a

## Hockey Club Report

The one disappointment of this half of the season was the bad weather, which caused the cancellation of 14 matches in all.

Houghton and Edmonton made a welcome return to the 1st XI but we were without Hunt. It was decided to experiment with an unorthodox formation, playing four forwards and two link halves instead of the conventional five forwards and centre half. This formation proved successful, particularly in the United Hospitals Cup Competition.

### U.H. CUP COMPETITION

In early February we played Guy's at Chislehurst, in the Semi-Final of the Senior Cup. This was a hard fought game between two very evenly balanced sides. Guy's concentrated their attack on the right wing most of the time, but Van Zwanenberg, who was on fine form, seemed to foil them every time. There was no score at half time and so it remained until midway into the second half, when following a cross from Tweedie on the right wing, Barclay scored. Despite some breathtaking moments in the Barts goalmouth minutes before the end, we held on to win 1-0.

The final was played on the Westminster Hospital ground at Cobham against St. Thomas'. Although the ground was soft, on a smooth surface this was a very fast game. Both sides attacked relentlessly in the first half but neither defence would give way. Indeed, Rymer and Reid at full back seemed to stop anything Tommies threw at them. Only close on half time, from a free hit just outside the circle, did Thomas' get through and score. The Barts team certainly knew what was required of them, and in the second half made a supreme effort

little from the effort of the A XV in reaching the final of the Junior Cup Competition. In a close, hard fought game, however, Guy's scraped home by 12 points to 3. 1st XV calls tended to disrupt this side, but again this shows our depth in reserves. They were a young side, leavened with the experience of old warriors such as Leach and well led by Jolly. Particular mention should perhaps be made of the versatile Johnson, who may set a club record this season by playing at hooker, wing forward, full back and flyhalf.

Congratulations finally to all those who gained representative honours playing for U.H. sides throughout the season—Lloyd, Britton, Heslip, Packer, Fairhurst, Lambert, Cassidy, Fenton.

K. R. McIntyre

to equalise. Their efforts were rewarded with a short corner but Van Zwanenberg's shot clipped a goal post. Only a few minutes later Van Zwanenberg was unlucky not to score from a breakaway in our half but the gods were with Tommies and we had to concede honourable defeat by the meagre margin of 1-0.

In the Semi-Final of the Junior Cup we met Guy's at Honor Oak Park. At the beginning of the first half the sides looked well matched but when Guy's went ahead with a goal scored from a defensive error, they took control of the game. Despite some valiant attacks by the Barts forwards in the second half, Guy's went further ahead, to make it 2-0 by the final whistle.

### U.L. CUP COMPETITION

Despite the "will to win," there didn't seem to be the edge on the teams game when we met Imperial College in the quarter-final of this competition. Inevitably, one puts this down to post-cup blues following the Tommies game the week before. This is not to say that it was not a needle game, but Imperial College seemed to have that extra punch in attack which enabled them to go ahead just before half time. In the second half both sides attacked vigorously and Imperial College scored again from a short corner. Almost immediately, Robinson scored for Barts, but after this initial revival we slipped back and Imperial College were able to make it 3-1 at full time.

### PLAYING RECORD

	Played	Won	Lost	Drawn	For	Against
1st XI	24	11	10	3	49	37
2nd XI	10	3	6	1	14	28



# BOOK REVIEWS

**"An Outline of Psychiatry for Students and Practitioners,"** Second edition, by Frank Fish. Bristol, John Wright and Sons, pp. 300, 1 illus. Price £2 2s.

Following the recent tragic death of Professor Fish it is with a heavy heart that one turns to review the second edition of his general introduction to psychiatry for medical students. The author was instrumental in drawing to British psychiatrists attention the work of what might be called the modern German school of psychiatry. It is not surprising therefore that his book is perhaps more influenced than most of the undergraduate texts by this school, and, it seems to me that the book's strengths and its weaknesses spring from this particular influence. For instance, there is a very good chapter entitled general symptomatology which contains excellent brief descriptions of what in technical jargon is referred to as psychopathology, that is the abnormalities in psychological function which occur in mental illness. This was a particular strength of German psychiatry. Equally there is a clear exposition of psychogenic reactions—symptoms which are a direct response to something going wrong in the patient's life-situation. Unfortunately however, this chapter, and others such as the one on psychiatric organic states, are spoilt by what might be regarded as a Germanic attempt to subdivide these conditions into an unwieldy, and possibly invalid, number of sub-categories of illness—there are thirteen conditions listed under the heading "Reversible Organic States"; most authorities would recognise only two or three.

The chapter on schizophrenia, on which Professor Fish was an acknowledged authority, provides a clear understanding of the clinical features associated with the illness. Somewhat disappointingly however there is only scant mention of social factors in either pathogenesis or management. Furthermore, although it is made clear that insulin coma therapy has largely been abandoned in this country why bother to mention it at all, let alone give a whole page to a description of it?

In conclusion I would suggest that, while this book contains much information of value to the student, taken as a whole it is likely to prove a little indigestible for the majority.

TREVOR SILVERSTONE

**"Changing Man's Behaviour"** by Dr. H. R. Beech, published by Penguin Books Ltd. at 8s.

This is a comprehensive introduction to the theory and practice of behaviour therapy written by a psychologist at the Institute of Psychiatry. The term behaviour therapy was first used as recently as 1958 but the author traces its development from Pavlov's work on salivary conditioning and Watson's experiments on little Albert, the hapless eleven month old infant who was conditioned to fear white rats and whose learned fear spread to things which resembled the original conditioned stimulus. Watson's colleague, Mary Cover James, treated phobic children by associating the fear-object with a stimulus which evoked a pleasurable reaction.

Wolpe was the first to apply in a clinical setting the concept of reciprocal inhibition in which the patient is presented (in reality or in imagination) with each step in a hierarchy of anxiety evoking situations. The anxiety is inhibited by relaxation which extinguishes the fear associated with each successive stage.

Therapeutic activity is directed towards the unlearning of maladaptive behaviour rather than the unmasking of the symbolic significance of a particular pattern of abnormal behaviour. The author emphasises that behaviour therapy aims at target symptoms rather than at a hypothetical, concealed cause in the patient's personality.

Relaxation may be induced by training in control of musculature but some patients never achieve a level of relaxation which serves to inhibit anxiety adequately. Dr. Beech mentions the administration of anxiety reducing drugs as an alternative method of reducing situational anxiety but fears that pharmaceutical agents may reduce the capacity to learn from the situation. The experience of Friedman and others with methohexitone shows that a sub-anaesthetic dose produces the required degree of relaxation without impairment of the cortex of the capacity for forming learned associations.

A major advantage of behaviour therapy in contrast to psychotherapy is that it does not depend on verbal communication between therapist and patient or on the patient's

intellectual insight and no patient is excluded from treatment by low intelligence.

Much of the book is devoted to systematic desensitisation but there are also chapters on aversion therapy and operant conditioning. There is also mention of experimental neurosis induced in laboratory animals by providing them with an impossibly difficult task whose successful outcome would have brought them a reward.

The book is clearly written and can be recommended as the first readily accessible account of a relatively new approach to the management of neurotic behaviour.

M.S.L.

**"Drug Dependence: A Study for Nurses and Social Workers,"** by J. H. Willis, published by Faber and Faber at 18s.

The marked and rapid increase in the number of people in this country known to be dependent on drugs, principally heroin and cocaine has been reflected by an equally marked and rapid increase in interest in the problem that these patients present and the way in which their problems may best be dealt with. Although there is a considerable amount written about drug addiction in the United States of America little has appeared about this country's problems which are in many ways very different from those of U.S.A. Many apart from social workers and nurses have had to enter this field of work with very little to guide them. Dr. Willis has done a service to all involved in the treatment of addicts by writing a book presenting at a simple level some of what is known about drug dependence. As the title explains this is not an exhaustive medical treatise on the subject but rather presents basic medical, psychological, social and legal information which should prove of value not only to nurses and social workers, but to the many lay people who have come to work in this field.

Dr. Willis' sensible approach to the subject may be summed up by quoting his final paragraph "ill founded omniscience has no place in these complex areas. In dealing with the study of drug dependence professionals need to be flexible and to be prepared to demonstrate on occasion a little professional humility but most of all intellectual curiosity." There are chapters covering the problems of definition, drugs involved, aetiology, treatment and legal aspects. The section on the extent of the problem in the U.K. is especially helpful in showing the degree and urgency of the problem, emphasising the difference between this

country and the U.S.A. The chapter on treatment also is excellent. The lack of knowledge of any definitive "treatment" is emphasised as is the importance of viewing each patient as an individual who will require a method of treatment best for him but which may be quite inappropriate for another patient. The importance of social factors in rehabilitation and withdrawal is rightly emphasised.

In a subject where there are so few facts and so many opinions it is always possible to find points on which to disagree with an author. The only major omission that appears to this reviewer is a failure to emphasise the nature and strength of the group and cultural pressures that may be of paramount importance in getting an adolescent to start drug taking. This, at least in the rapidly growing group of London suburban adolescent addicts, appears to be a casual factor of greater importance than any defects of personality or home environment. The importance of this factor in aetiology is all the greater as it may suggest an area in which preventive measures may be taken. Other points with which one may disagree is the use of degree of physical dependence to measure total dependence and the emphasis on the need for in-patient treatment during withdrawal. There is some degree of repetition between the different sections and occasional lapses of presentation such as that which includes chloral, meprobamate and chlordiazepoxide dependence under the heading of barbiturates.

These, in the main minor, reservations apart this is a useful little book containing a lot of basic information which is easily read and absorbed. It is ideal for those to whom the title recommends it.

J. L. REED

**"Medical Physiology and Biochemistry"** by David F. Horrobin, published by Edward Arnold (Publishers) Ltd. London. £6 6s. (65s. net paper).

The author states in his Preface that "the uppermost thought in the mind of the medical student considering the purchase of a textbook is whether it contains enough information clearly presented to enable him to pass his 2nd M.B." Judged by this criterion his new textbook must almost approach the ideal. Shorn of most historical detail and dogma the text is lucid, brief and yet succeeds in presenting Physiology as an exciting and progressive science.

The book consists of eight main sections. The first deals with Biochemistry but not, I think,



in sufficient detail to satisfy the Examiners in Biochemistry at Barts. The second section is headed Communications and discusses the Nervous System in detail with subsequent chapters on the Endocrine Glands. Successive sections deal with the Alimentary Tract, Body Fluids and Circulation, Respiration, Urine Formation, Life Cycle (Medical genetics and Reproduction) and a final section on the Response of the Environment. This last section is particularly important since it allows the student to apply his knowledge and consider the ways in which the body adapts to polar regions, deserts, high altitude and Space. An appendix deals with the interpretation of medical statistics.

The main sections have two supplements. One of these is a summary of the preceding section grouped into possible examination topics as an aid to revision. I think this may be a useful innovation helping the student to see the wood from the trees.

The arrangement of information is novel and has been given great thought. The author, although having taught at 2nd M.B. level, is yet young enough to remember his own undergraduate studies and carefully guides the reader through those blackspots of the syllabus which most students find conceptually difficult.

Recent research work has been included where relevant. Discussion of presynaptic inhibition, the structure of the hypothalamic releasing factors and the role of the juxtaglomerular apparatus in the release of aldosterone is included to illustrate the way in which the science develops. No experimental tracings or histological photographs are included on the text pages although the book is liberally sprinkled with line drawings.

I think this Textbook, supplemented by lecture notes, would arm the student with sufficient information to face the Examiners in Physiology with confidence and perhaps enthusiasm." It has been a pleasure rather than a penance to read and I recommend this textbook very highly to students particularly those about to enter the final year for 2nd M.B. A paperback version is available (65s.).

PETER WITHRINGTON

**"Handbook of Communicable Diseases and School Health,"** a guide for Medical Officers of Schools, 14th edition, 1969, published by the Medical Officers of Schools Association, price 15s.

This brief book is an excellent handbook not only for Medical Officers of Schools but also for the Nursing and Lay staffs concerned with

health problems of children in day and boarding schools. In just over a hundred pages it briefly covers varied subjects from the medical responsibility of school doctors, general hygiene, medical services, disinfection, immunisation and adolescence to a brief survey of most bacterial and viral diseases encountered in children. Unfortunately, as is inevitable in a book of this size, the information is limited and is insufficient for the total management of any problem. One could hope for references at the end of each chapter but this would again lengthen the book. The authors have, however, consulted many publications and have derived much help from the longer and more detailed "Control of Communicable Diseases in Man" published by the American Public Health Association. The book is clearly set out under titles and sub-titles and is easy to read.

PARVEEN KUMAR

**"A Companion to Medical Studies,"** Volume I. Anatomy, Biochemistry, Physiology and related subjects, edited by R. Passmore and J. S. Robson, published by Blackwell Scientific Publications Ltd., reviewed by Dr. E. D. Wills in the March edition of the *Journal*.

The publishers point out that each of the three volumes is or will be available in cloth or limp bindings; in the case of Volume I the cloth edition sells at £6 6s. as opposed to 95s. for the limp edition.

#### FOUR POPULAR SCIENCE BOOKS

**"The Biological Time Bomb"** by G. Rattlay Taylor, price 8/6.

I recently saw a map of London made in 1850. Since then the green areas have been "developed" with no master plan behind them. The result is the chaotic agglomerate that now forms London's suburbia. This is typical of man's lack of foresight in his technology.

This book takes one aspect of this technology, that based on biological research, and considers the moral issues it is likely to raise in the future. The central issue is the possibility of interfering with the normal process of human ontogeny by genetic manipulation, artificial inactivation or insemination, extrauterine gestation, or by cloning, allowing a sexual reproduction and by preventing the normal process of senescence. Mr. Taylor's only answer to these problems is that the results of biological research should be placed in an ice-box till society is mature enough to make proper use of them. Otherwise, he threatens, they will lead to the disruption of civilisation as we know it.

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I can't help feeling that man will probably muddle through as usual, tidying up areas that have become unmanageable many years later, in the same way that motorways must now be built through the middle of London's chaos.

I found towards the end of the book the author was tending to repeat himself *ad nauseum*, with the same ideas dressed up in different words. His basic thesis, however, interesting and thought provoking.

**"The Language of Life"** by George and Muriel Beadle, price 8/6.

In 1958 Dr. Beadle was awarded the Nobel Prize for his work in genetics. He has explained each part of this subject to his wife, who was once feature writer and woman's editor for the Los Angeles Mirror News, and she wrote the book. The style is intensely American and journalistic. After the first eight chapters, an odd assortment of theory and speculation, she settles down to a lively historical account of genetics. Though fact and fancy intermingle in the early section of the book, the overall picture of modern genetics is accurately represented, albeit in cartoon form.

**"Man and Monkeys"** by Leonard Williams, price 8/6.

Leonard Williams has had no formal scientific training, and seems to resent the formal scientific attitude towards animal research. Throughout the book his monkeys are given human emotions and human motivations for their actions. In fact, sections of the book are conducted as conversations between author and monkey. Whenever he mentions formal research into primate behaviour his attitude is derogatory, and he seems to miss the point of the experiments. He interprets the infertility of animals in zoos to cruel living conditions, and takes the successful pregnancies in his colony to indicate that the conditions are much better for the animals. To a certain extent this may be true, but wherever this has been formally investigated, some much more specific cause has been found, such as the vitamin D<sub>3</sub> requirement of Squirrel Monkeys.

It seems to me likely that anyone reading this book with no knowledge of other works in the field of primate behaviour study would end up with a very distorted picture.

**"Sleep and Dreams"** by Gay Gaer Luce and Julius Segal, price 10/6.

Sleep is a pretty intangible subject for research, and till the advent of the EEG was virtually uninvestigated. Since then a vast amount of work has gone into its investigation,

mostly with small returns. This book is a good outline of these studies, sticking largely to ascertainable facts rather than indulging in flights of psychoanalytic fantasy. The twenty two pages of references in small print at the end of the book are some indication of the breadth of the authors' knowledge of the subject. There is nowhere an economy of words, and the prose is at times rather stodgy. Much time is spent in description of the scene in the laboratory with little addition of interest. On the whole, however, I found this a sane account of a field of research in which many workers tend to draw conclusions beyond the facts they have established.

R.S.H.P.

#### RECORD REVIEWS.

**Ella and Louis (MFP 1296. Mono).**

Ella Fitzgerald has one solo "Comes Love"—and Louis Armstrong has two—"Let's Do It" and "Makin' Whoopee". The pianist is Oscar Peterson. Louis's trumpet is much in evidence—"Stompin' at the Savoy" for instance. There are nine tracks in all. 43min. 52sec. of good listening for 14/6.

R.A.R.

#### RECENT PAPERS (ADDENDA)

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# JOURNAL

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## announcements

### Births

GRANT.—On May 17th at Crawley Hospital, to Shirley (née Glyn Williams) and Dr. Travers Grant, a daughter (Susanna), a sister for Andrew.

HUGH.—On May 14th at Bart's, to Dawn and Colin Hugh, a daughter (Sarah Dawn), a sister for Paul.

SCOTT-BROWN.—On April 22nd, in London, to Margaret (née Hawkes) wife of Dr. Graham Scott-Brown of The Shining Hospital, Khatmandu, Nepal, a daughter.

### Engagements

PUGH-ANDREW.—The engagement is announced between Mr. David Pugh and Miss Mary Andrew.

SEDERGREEN-TISSOT.—The engagement is announced between Mr. Christopher Sedergreen and Mlle. Dominique Tissot.

YOUNG-NORTHCOTT.—The engagement is announced between Mr. Gordon Young and Miss Lindsay Northcott.

### Deaths

CATES.—On April 19th, Henry Joseph Cates, M.D., D.P.H., aged 88. Qualified 1906.

WOOD.—On March 1st, Dr. Stanley Wood, M.R.C.S., L.R.C.P., aged 85. Qualified 1908.

### Change of Address

Dr. C. A. Keane to "Parca", Nether Lane, Flore, Northampton, NN7 4LR, Telephone WEEDON 563.

### Appointments

Mr. D. Garfield Davies, M.B., F.R.C.S., has been appointed consultant otolaryngologist to the Middlesex Hospital and Ferens Institute of Otolaryngology, Middlesex Hospital Medical School.

### Essay Competition

Medical News is once again running its Students' Essay Prize Competition; the subject this year is "Doctors and the Press".

Prizes as before will be £50, £25 and £10 respectively for the three adjudged winners.

The closing date for entry is December 31st, 1969, entry forms and rules are obtainable from: Essay, Medical News, Bracken House, Cannon Street, London, E.C.4.

### Retirement

The retirement is announced of Dr. W. J. Hanbury, Senior Lecturer in Pathology and the Curator of the Pathology Museum, we wish him good luck in his future activities.

This year marks the retirement of several respected employees of the Hospital and Medical College, and lengthy loyal service

should not pass unnoticed outside the close confines of individual departments.

We would like to pay tribute to Mr. W. T. J. Jackson (Tom to his many friends), Technician in the Pathology Museum, who has been responsible for the mounting of specimens among numerous other duties. Coming here straight from school, Tom Jackson succeeded his father in 1940, and has now completed 44 years in the Museum, having served at Hill End during the war years.

Tom could always be located in the small room at the top of the narrow staircase near the entrance to the Museum, or transporting specimens for demonstration at lectures. His advice was frequently sought on matters horticultural and botanical, for he was a keen biologist and amateur anthropologist. For many years he lectured at the Working Men's College in Camden Town, and his teaching material was of the highest standard. A fount of information made generally available to all enquirers, Tom Jackson is a master of his craft, and his knowledge of the specimens in the Museum, both historical and current, is unsurpassed.

Retirement can bring the problem of how to occupy one's time, but Tom Jackson has carefully planned his future. An attractive bungalow in Suffolk, surrounded by a suitable virgin plot of land, will be transformed when planted with the trees and shrubs (many grown from seed) which have been carefully tended over the years and prepared for transportation in suitable receptacles. Retirement will bring the opportunity of doing what he has always wanted to do—live in the country, cultivate the soil, and indulge in horticultural pursuits.

Tom Jackson will be missed in the Museum, and by his colleagues. We tender him our best wishes for a long and happy retirement.

B. CAMBRIDGE

## letters to the editor

Dear Sir,

I was intrigued by two articles in your March issue, "Medical Politics and the Medical Student" by Dr. Francis Pigott, and "B.M.S.A." by D. A. Stringer.

Dr. Pigott's propaganda on behalf of the J.H.D.A. must not blind us to the fact that he is a member of the Council of the B.M.A., and

is chairman of the B.M.A.'s Hospital Junior Staffs Group. Nor must we forget that he is a member of the B.M.A.'s Central Committee for Hospital Medical Services, and the Joint Consultants Committee of the B.M.A. and the Royal Colleges.

Mr. Stringer wrote in his article: "We just cannot afford not to be intimately connected with the J.H.D.A.", but did not mention that for 15 years the B.M.S.A. has been provided with its office and its permanent staff by the British Medical Association.

One thousand five hundred and fifty non-members of the B.M.A. recently returned a questionnaire in which they were asked to give their reasons for not joining the B.M.A. Only 59 stated that they preferred to belong to the J.H.D.A.

Incidentally, there is a strong Bart's contingent in the top management of the B.M.A. The Editor of the Journal, the Deputy Secretary and the Scottish Secretary are Bart's men. So, also, am I.

Yours faithfully,

Dr. Gibson,  
Chairman of Council,  
British Medical Association,  
Tavistock Square, London.

Dear Sir,

Family medicine is, for many of us, a satisfactory and rewarding branch in which to work, and there is at present a shortage of candidates for the many good vacancies available. I do not think this is realised by many young Bart's graduates, nor perhaps are they aware that a register of these opportunities is kept at the Sub-Dean's office. I am always pleased to advise in the preparation for and entry into general practice.

G. Melotte,  
Adviser in General  
Practice.

### DEFENCE OF CHRISTIANITY

Dear Sir,

The phenomenon and existence of the Christian and his way of life, has not only occupied the attention of commentators in all ages but also been a source of amusement and mystery to those not prepared to examine the facts.

In response to Malcolm Fletcher's article in the May issue of this Journal, it may be possible to clear up a few popular misconceptions about the Christian faith.

As a Christian, I believe by faith in Christ I come into a relationship with God which enables me to live a fuller and more complete life. This was impossible before, because of my unawareness of our responsibility before our Creator.

The accusation of "kill-joy" directed against the group of evangelists he met may therefore hardly be justified. Quite apart from killing any joy, they were simply proclaiming that to imagine that any lasting joy and peace of mind were to be achieved by a night out in the West End, was simply a mirage—and that true happiness was only to be found through faith in Christ, and a determination to live a life worthy of Him. In John's Gospel we read, "Jesus came that we may have life and have it more abundantly."

One thing the article may have done is to warn us against extreme or hypocritical evangelists who all too frequently make their appearance today. We are warned in Scripture about false preachers who appear as wolves dressed in sheep's clothing.

We are thankful at Bart's for many doctors and nurses and other staff who go to the mission field and other paths of Christian service. We today as a Christian Union at Bart's still glory in a risen and soon to return Jesus Christ; and in the possibility of salvation for all who are honest enough to commit themselves to, and live in the example of, this historic figure.

I thank Mr. Fletcher for his candid style of writing, but hope, as did the respondent in the May issue, that he will first equip himself with the necessary facts to prevent him falling into the unpopular propensities of certain modern day national columnists.

Yours truthfully,

John A. Rennie,  
The Abernethian Room,  
The Medical College.

Dear Sir,

A post for a part-time clerical assistant is available in the Clinical Haematology Department of this hospital. The work will involve an analysis of patients' case notes for research purposes. An ex-Bart's nurse or secretary would be particularly welcome since a knowledge of the hospital would be invaluable. The equivalent of approximately three days work will be required each week.

Further details may be obtained from Mrs. A. Davis, secretary to Dr. G. Hamilton Fairley.

Yours sincerely,  
D. Crowther.



## Editorial

"It is the filthiest book that I have ever read . . . sheer unrestrained pornography . . ." (John Gordon on *Lolita*)\* Mr. Gordon must have led a very sheltered life, for a book critic it reveals a catholic lack in his experience.

Pornography.—porn to the initiates, a return to the Greek from the stem porno—a harlot; the shorter O.E.D. has it as "the description of the life, manners, etc. of prostitutes and their patrons; hence, the expression or suggestion of unchaste subjects in literature or art." Granted, for Sunday lunch-time, pub-time book damning, it is necessary to say something pretty powerful but is it necessary to be misleading into the bargain, perhaps it is the sheer lack of restraint, that troubles Mr. Gordon and not the pornography itself.

Attitudes over the last 10 years as to what is pornographic, obscene and undesirable have changed much since the passing of the Obscene Publications Act of 1959. Now, it is a commonplace, in novels, journals and occasionally in newspapers to read the odd four letter word. The books which weathered the legal storms throughout this century, over their use of the unprintable words are remarkable for their restraint, the four letter word is only used to express sentiments that can be expressed in no other way. Ulysses was according to Virginia Woolf "the scratching of pimples on the body of a bootboy at Claridge's", D. H. Lawrence found it obscene; ironically, Lady Chatterly's Lover was to define obscenity in later years as far as the courts were concerned. Ten years ago, a sticker "unexpurgated version" made a book a best seller on all the best railway stations, nowadays, less is hardly expected. Henry Miller, Norman Mailer and others, with a more American approach dropped the euphemisms when talking about sex and not a few perversions on the theme. To some extent this has made everything as meaningless as the extravagant conversational technique of the average fo'c'sle head. Anthony Burgess in a

recent article in the *New Statesman*,\* made a plea for an academic self-discipline to get around the conventions; his "for cough" is phonetic self indulgence not discipline. Mailer could run for Mayor of New York, he did, admittedly he only got 41,136 votes in the Democratic primary, which was about 180,000 less than each of his two nearest rivals but people were voting for him.

Pornography, to its discredit, is becoming respectable, moreover acceptable, obscenities are already so commonplace as to become as meaningless and inept as they are in most conversations. In Denmark, the "porno" is freely available in book, film and photograph form, though surprisingly there is little in the theatre. Since, it has become unremarkable and the Government claim that the incidence of sexual offences has declined; maybe this is true but surely, "the expression or suggestion of obscene and unchaste subjects in literature or art", should be remarkable.

Bayswater streets are remarkable, for their anonymity if nothing else, each has its Indian restaurant, cobbler, newsagent and dirty book shop; are these remarkable shops to go out of business, the industrious Victorians with their ambivalent hypocrisy ensured they should come to be.

Experimental groups in the theatre produced the same phenomenon recently, The Royal Court had it's brushes with the Lord Chamberlain, the chief porn catcher, and on the whole succeeded, others followed. Now, in New York, Kenneth Tynan has produced *Oh! Calcutta*. Clive Barnes, Drama Critic of the *New York Times*, found it disappointing.† Donald Zec of the *Daily Mirror* had stronger words for it. Barnes apparently liked the "rather sweet grope-in immediately after the intermission" but on the whole found the show "gives pornography a dirty name."

Perhaps it is better, that in England at least, people make what they like out of porn,—after all the "sheer unrestrained pornography", mother's milk to the Sunday lunch-time indignant is the same thing as the ad. man's, "engaging tragi-comic love tale of a young girl in the first flower of her youth", to the Friday night philosopher.

\* Richard Hoggart, *Controls and Shocks*, *New Statesman* 13th June 1969.

† Clive Barnes, *New York Times Drama Critic*, *The Times* 19th. June 1969.

## a series of three articles on aspects of anticoagulant treatment with a concluding article from Peter Story on laboratory control methods

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## introduction:- anticoagulant treatment

\*

## Peter Story

Anticoagulants reduce the coagulability of blood either in the circulation, or by their addition to blood after its collection from a donor. By far the most commonly used in the latter category is sodium citrate which was first used clinically in 1914, by Agote

in Buenos Aires. Citrate removes calcium ions which are required for blood clotting, but it is not effective in-vivo and is not used in anticoagulant treatment.

Drugs used in anticoagulant therapy fall into two groups. The first, which includes heparin, act directly on the blood and reduce coagulability both in-vivo and in-vitro. The second group consists of the oral anticoagulants, coumarins and indanediones, which act indirectly by suppressing the formation of clotting factors, and have no direct anticoagulant action on blood. The best known of these at present are dicoumarol, warfarin, phenindione (dindevan) and nicoumalone (sinthrome).

### Heparin:

In 1916 a medical student named Jay McLean interrupted his studies to spend a year on research in Howell's department at Johns Hopkins University, Baltimore. He was studying the known ability of cephalin to accelerate blood clotting and made extracts from various organs. He found that hepatic extracts had a rather poor ability to accelerate clotting, and on storage this disappeared and they developed anticoagulant activity. This incidental finding led to the discovery of heparin. It is now believed to be produced mainly in the mast cells, and it is prepared commercially from beef lung.

Heparin is a sulphate-containing mucopolysaccharide with a strong negative charge which is probably important in its anticoagulant role, and it is neutralised by basic substances like protamine and toluidine blue. It has a powerful and complex anticoagulant action and influences all stages of blood clotting except perhaps the first. It also has a lipid-clearing action by the activation of a plasma lipase.

Heparin was first used clinically as an anticoagulant for transfused blood in 1924, but this has never been an important use. Much of the work necessary to prepare heparin in a form which could be used therapeutically was done by Best at the University of Toronto and in Sweden. The first patients anticoagulated with this drug were in Canada (1935) and Sweden (1936). Since then it has been employed widely in the treatment of thrombosis and embolism, especially in the early stages, and more recently during extracorporeal circulation in cardiac surgery.

As we have already noted, heparin was discovered incidentally during a study of the coagulation accelerating action of cephalin,





Fig. 1 Branding scene on Alberta ranch. All male calves are branded, dehorned, vaccinated (2 or 3 Clostridial diseases), castrated and ear notched. Heifers follow the same routine except for castration. (Photograph — Canadian Cattlemen)

and the antagonist to heparin, protamine, was identified by Chargaff and Olson in 1937 while testing the possibilities of prolonging the action of heparin. Protamine was used because it had been successfully combined with insulin to prolong its action. It was quickly found to be a powerful antagonist of heparin. During anticoagulant therapy with heparin it is rarely needed, but it is regularly used in cardiac surgery to neutralise heparin when extracorporeal circulation is discontinued.

#### Oral anticoagulants—coumarins and indanediones:

These drugs have come into medical use through observations made in veterinary

practice. In 1922 a paper by Frank W. Schofield appeared in a now long defunct journal, *The Canadian Veterinary Record*, entitled "A brief account of a disease in cattle simulating haemorrhagic septicaemia due to feeding sweet clover." At first this disease was thought to be infectious because many of the animals



Fig. 2 Winter feeding in Western Alberta. This is heavy snow country and cattle are fed six months of the year. Taken in December feeding time. (Photograph—Canadian Cattlemen)

came from the same farms. The bleeding disorder occurred during winter months in animals fed with musty clover hay or silage of poor quality. Sometimes haemorrhages occurred spontaneously but were often associated with operative procedures like dehorning and castration (Fig. 1). Affected calves were occasionally delivered by cows which appeared healthy. All these cases were noted in Alberta, Montana and Wisconsin, where climatic conditions necessitated winter feeding of cattle for long periods (Fig. 2). The disorder was firmly linked to spoiled clover hay or silage and, although it occurred in outbreaks it was not transmissible. At this time less was known about blood coagulation than today, and several clotting factors had not been identified. Nevertheless, in 1922 it was recognised that prothrombin was deficient in affected cattle.

In 1933 Link started work on the biochemistry of spoiled clover at the University of Wisconsin which led eventually to the isolation and synthesis of dicoumarol. He was handicapped by the absence of a convenient test for measuring the biological effects of spoiled clover, although he devised a bio-assay using rabbits. Work in this field was greatly facilitated by Quick's invention in 1936 of the one-stage prothrombin time. In this simple and ingenious test he added tissue extract in the form of rabbit brain to plasma, recalcified, and determined the time to clot formation. In the light of current knowledge prolongation of this time was an index of prothrombin deficiency. It was shown by Quick, Owren and others to depend on other factors too.

The prothrombin time was found to be prolonged in sweet clover liscasc, and in the haemorrhagic disease of chicks produced by deficiency of vitamin K recently discovered by Dam. Vitamin K corrected the blood deficiency in sweet clover disease. Clinical application of the prothrombin time showed it to be prolonged in haemorrhagic disease of the newborn and in the bleeding of obstructive jaundice.

In 1939 Link isolated and synthesised dicoumarol, 3, 3'-methylenebis (4-hydroxycoumarin). It was first synthesised by Anschütz in 1903 but its biological properties were not suspected. Dicoumarol is not present in fresh sweet clover but is derived from coumarin by changes occurring when sweet clover is spoiled by faulty curing and becomes musty. Coumarin is also responsible for the bitter taste of sweet clover, and is found in the seed envelope of some plants as a germination inhibitor.

The first clinical trials of dicoumarol as an anticoagulant drug were reported in 1941. Dosage was controlled by means of Quick's prothrombin time test, but in the early days there was a good deal of trouble with bleeding until the cumulative effect of the drug was appreciated.

Phenindione (dindevan, etc.), 2-phenyl-1, 3-indanedione, was introduced in 1948 and has



become widely used. Side effects have been reported rather frequently but this may be due to the very wide use of phenindione. There are a number of other indanediones available.

Also in 1948, Link introduced warfarin, 3-(*a*-acetylbenzyl)-4-hydroxycoumarin, which had been synthesised in his laboratory by Ikawafi as a rat poison. Its name is derived from Wisconsin Alumni Research Foundation which supported Link's research. It has great merit as a rat poison and is used throughout the world. The rat, being an intelligent and suspicious animal, usually consumes a small amount of food or poison bait and waits to see what happens. This practice protects it from a fatal exposure to any distasteful or irritant poison. Warfarin, being tasteless and not a gastric irritant, and needing several days to produce a haemorrhagic effect, is disarmingly successful as a rodenticide.

Warfarin was first used clinically as an anticoagulant in 1953, and achieved some fame in 1955 when it was given to President Eisenhower for his coronary thrombosis. It is now popular, and it is a good anticoagulant with few side-effects. Warfarin sodium is the only soluble oral anticoagulant and the only one of this type which can be given parenterally. There are at least twelve coumarin and indanedione compounds in clinical use and all differ slightly.

#### Arvin:

A few clinical trials of this new anticoagulant have been reported. It is an enzyme produced from venom of the Malayan pit viper, *Agkistrodon rhodostoma*. This followed the observation by Reid and others in 1963 that survivors of bites by this snake had incoagulable blood for some days, but did not bleed spontaneously. Arvin is the substance which remains after venom is treated to remove its neurotoxic and vasculotoxic components, and it may be injected intravenously with small risk of reaction.

In a suitable intravenous dose arvin destroys fibrinogen faster than it can be formed. This renders the blood incoagulable without affecting platelets or other clotting factors. It must be carefully controlled by laboratory tests, and may be quickly neutralised if necessary by injection of anti-venom. Resistance to the drug may develop after a time. There is also some apprehension about disposal of the patient's fibrinogen. The development of arvin has, and will contribute to our knowledge of blood coagulation. It is too early yet to know whether it will find a place in clinical medicine.

## the medical aspects of anticoagulant treatment

\*

### John Hamer

Anticoagulant treatment can reduce the tendency to thrombosis in the venous and arterial systems and within the heart. It cannot be relied on to eliminate thrombosis completely even when used in the best possible way, and there is an appreciable risk of haemorrhage if the treatment is excessive or there is an unexpected source of bleeding. These complications of management have led to anticoagulant treatment falling into disrepute, but there is clearly a place for these drugs in the treatment of various types of thrombotic disease.

#### Venous thrombosis

Anticoagulant treatment is helpful in preventing repeated venous thrombosis, and is particularly useful in patients with repeated pulmonary embolism from thrombosis in the veins of the leg. Many venous thromboses are associated with local inflammatory changes, and under these circumstances anticoagulant treatment is of little help. Venous thrombosis secondary to subtle changes in the coagulation mechanism after operation or cardiac infarction, or associated with prolonged rest in bed, may be prevented by anticoagulant treatment, and in these patients the coumarin drugs and related compounds such as dindavan are usually used. However, in many cases the need for anticoagulant treatment is avoided by getting the patient up at an early stage in the illness so that muscle activity can increase the flow of blood in the susceptible veins.

Recurrent pulmonary embolism from minor

venous thromboses is becoming a frequent problem in young women, sometimes provoked by changes in hormonal balance produced by oral contraceptives. The repeated blockage of part of the pulmonary circulation may lead to pulmonary hypertension and heart failure. Long-term anticoagulant treatment can help to prevent further thrombosis and embolism in these patients, and allow shrinkage and organisation of the emboli in the pulmonary arteries with very great improvement. Anticoagulant treatment will not help the disappearance of the emboli in the lungs, but if the thrombus is not an old one the natural tendency to resolution is considerable.

#### Cardiac infarction

The possible uses of anticoagulant treatment in cardiac infarction must be considered in three stages of the disease. In the acute stage there is a risk of further extension of the coronary thrombosis which is causing the infarction. Immediate anticoagulant treatment may help to prevent this extension, and is best provided by an intravenous heparin drip. This is preferred to repeated injections as there is a "rebound" tendency to hypercoagulability a few hours after each dose. Another possible disadvantage is that the clearing effect of heparin on blood fats may release an excess of fatty acids into the blood stream and so produce a deleterious alteration in the metabolic processes in the heart muscle. Heparin has been thought to relieve the pain of cardiac infarction but a recent controlled trial failed to demonstrate an effect.

Heparin treatment is seen at its best in the management of acute coronary insufficiency, where there are recurrent prolonged episodes of cardiac pain at rest. An intravenous heparin drip will often relieve the symptoms, and sometimes pain returns as soon as the infusion is stopped. Analogy suggests that a beneficial effect might occur in cardiac infarction, and although haemorrhagic complications may occur, the treatment is usually managed without difficulty.

After the first few days of cardiac infarction the risk of venous thrombosis and embolism becomes considerable. These complications are usually avoided by an early increase in activity and unless there is serious shock the patient can be allowed out of bed for some time each day from the beginning of the illness. Movement sufficient to prevent venous thrombosis can be encouraged in the second week, and some walking is permissible in the uncomplicated case by the third week. Anticoagulant treatment to pre-

vent venous thrombosis should be considered if the risk is unusually great, as in obesity, or if early activity is prevented by shock or other complications.

Thrombosis on the inner wall of the left ventricle where the endocardium is damaged may give rise to systemic embolism, and this complication will be minimised by anticoagulant treatment. The possible advantages of anticoagulants must be balanced against the disadvantages. These include haemorrhage from excessive treatment or local abnormalities, or the production of haemopericardium by bleeding from the epicardial surface of the infarct. If diffuse pericarditis is present, anticoagulant treatment should not be given as the risk of a fatal bleed into the pericardial sac is very great. Local pericarditis is an essential feature of any transmural infarct, and there is always some risk of this complication, although it is unusual after the first few days.

Long-term anticoagulant treatment has been suggested in the management of the survivors of cardiac infarction in an effort to prevent further coronary thrombosis. Some trials have demonstrated a favourable effect, in a reduced incidence of further attacks, over several years, but the benefit is small. The management of anticoagulant treatment for long periods needs careful attention, and the patient must be co-operative and intelligent if serious haemorrhages are to be avoided. Sudden changes in liver function, from alcoholic excess or acute hepatitis, can produce an increased action of the coumarin drugs leading to serious bleeding. Peptic ulcer or hiatus hernia may lead to haemorrhage with conventional doses, and haematuria is frequent if there is urinary tract infection. Bleeding from anticoagulant treatment may be helpful at times in giving early evidence of a gastric or bronchial carcinoma, and a period of anticoagulant treatment has been proposed as a screening test for these conditions. However, the risk of haemorrhagic complications over a long period is so great that it is hard to justify anticoagulant therapy unless a very great advantage can be offered; this is not the case in coronary artery disease.

#### Mitral valve disease

The combination of mitral stenosis and atrial fibrillation allows the formation of thrombi in the inert left atrium and may be followed by systemic arterial embolism. In the lifetime of a patient with mitral stenosis the period of risk of embolism is a long one, and a large proportion of older patients give a story of previous minor strokes or other incidents. An appreci-



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able number are hemiplegic or have lost a leg as a result of embolism. Under these circumstances the benefits of anticoagulant treatment outweigh the risks and all patients with mitral stenosis and atrial fibrillation should have this treatment. In mitral incompetence, and after mitral valvotomy, the incidence of embolism is less, but still appreciable, and anticoagulant treatment should still be considered. The treatment is effective in reducing the frequency of embolism, but cannot prevent it entirely. It is humiliating to hear that a left atrial thrombus has been found at operation after a long period of preliminary anticoagulant treatment, but we still have this experience at times.

Patients with pulmonary hypertension in mitral stenosis are particularly liable to systemic venous thrombosis and embolism with further damage to the pulmonary vascular bed. In these cases anticoagulant treatment has a double advantage, and may be continued up to the time of operation.

#### After valve replacement

The introduction of the Starr-Edwards ball-valve prosthesis has allowed the successful surgical correction of many patients with severe mitral or aortic valve disease. The metal cage of the prosthesis offers a site for thrombi to form, and systemic embolism or complete thrombotic occlusion of the prosthesis was a frequent early experience in these patients. Long-term anticoagulant treatment has very greatly reduced this risk, and it is our practice to begin treatment with warfarin a few days after operation and to continue indefinitely.

Various attempts to improve the prosthesis so that thrombosis does not occur have been unsuccessful, but eventually the greater use of homograft valves may make the problem less. However, the greater ease of insertion of the artificial prosthesis makes it the best valve to use in the elderly or sick patient at present. Embolic incidents are now unusual, and this satisfactory state of affairs relies on careful control of the treatment to ensure that the dose is adequate and not excessive.

Many impressions of the effectiveness or the complication rate of anticoagulants are based on poorly-managed treatment. We are fortunate at this hospital in having a special clinic where meticulous attention is given to the details of anticoagulant control, and the wide availability of standard techniques throughout the country makes the situation in Britain much more favourable for the use of anticoagulant drugs than it is in many other countries, in America and Europe.

an  
approach  
to  
anticoagulation  
and  
vascular  
disease



Alan Edwards

It is now over 30 years since anticoagulation was first used in the treatment of intravascular thrombosis, yet there is still a considerable area of doubt, disagreement and confusion about the proper place for this form of therapy. Increasing knowledge of the complex mechanisms of both clotting and thrombolysis has made the subject more complicated by providing the clinician with two other classes of therapeutic agents for use in the thromboembolic problem, viz thrombolytics and antiplatelet aggregation agents.

Much of the difficulty in the past has been the detection of the incidence and extent of thromboembolic episodes and the lack therefore of reliable methods for assessing the effect of treatment on the natural history of the disease. Recent reports have shown that there is very little correlation between clinical signs in deep venous thrombosis of the legs and demonstrable vessel occlusion (Kakkar and Flanc, 1968), so that many of the conclusions drawn from studies based on these parameters



alone must now be accepted with reserve. However, since the recent popularisation of angiography of the leg veins (Browse *et al.*, 1967) and pulmonary tree (Sasahara *et al.*, 1964), and the use of isotopically labelled fibrinogens for detecting thrombosis in the leg veins (Hobbs and Davies 1960) and the use of macro aggregated serum albumin to demonstrate pulmonary perfusion (Sabiston and Wagner, 1965), the situation has now changed. Precise diagnosis can be made and the effect of treatment monitored so that it is to be expected that there will be major and comprehensive advance in this field in the very near future.

Sevitt (1962), drew attention to the fact that the injured, and especially those with leg fracture, were specially at risk from deep venous thrombosis and pulmonary embolisation. Surprisingly, however, recent work has shown that over a third of simple straightforward operations are accompanied by demonstrable thrombosis of the leg veins and it is anticipated that similar figures will soon be available for the effect of the decubitus of "medical" hospitalization. Already there is awareness of the increase of thrombotic episodes associated with certain medications, e.g. "the pill" (Thomson and Poller, 1965) or suppression of lactation with oestrogens, and one suspects that this is also a rapidly expanding area of knowledge. There

will soon therefore be increasing pressure on the clinician towards prophylaxis in the treatment of thromboembolic disease especially in the at risk groups, e.g. a woman over 35 who has had a caesarian section has her chances of a pulmonary embolus increased tenfold if she then has her lactation suppressed with oestrogens (Jeffcoate *et al.*, 1968).

Some attempts at rationalization may be made if the circulatory system be considered as a closed circuit in which a self sealing mechanism based on thrombosis is nicely balanced against a scavenger thrombolytic system as suggested by Fearnley (1965). Virchow's triad, which related thrombosis to the three factors of blood composition, blood flow and vessel wall has been expressed by Jacques (1966) as the formula.

$$(\text{Platelets} + \text{Coagulation}) \times \text{Vessel Wall}$$

$$\text{Blood Flow} = \text{Constant}$$

It is important that platelet and coagulative factors are to be considered separately as this may have therapeutic significance. Vessel wall factors are interesting, for as Astrup (1966) has shown, arterial and especially aortic intima has high thromboplastic and low fibrinolytic activity. Veins by contrast have low thrombo-

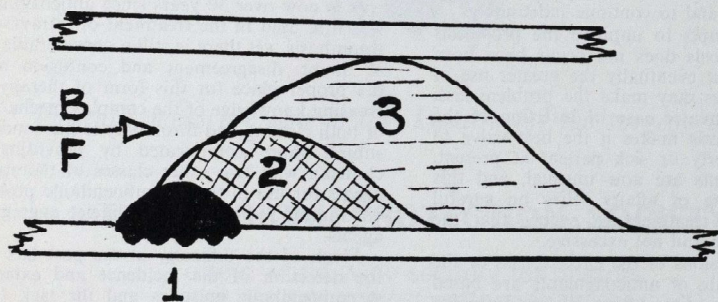


Fig 1. SCHEME OF THROMBOSIS

1. Platelet Aggregate. 2. Propagating Thrombus.
3. Occluding Thrombus. BF - Blood Flow

plastic and high fibrinolytic activity. Veins in the arm contain considerably more fibrinolytic activators than leg veins (Nilsson, 1967) which may explain the relative rarity of venous occlusion in the upper limb. Furthermore, the differences in behaviour between intravenous and intra-arterial thrombosis may find some explanation in the differences in distribution of these tissue activators, although the impacting pressure of the blood within the vessel lumen may also be relevant.

Thrombosis in any vessel, however, may be considered in three phases, see figure 1. A platelet aggregate (1) forms at the site of intimal damage (which may in itself be caused by platelet emboli). This phase depends upon platelet factors and recently interest has been taken in substances that have antiplatelet coagulability activity. These include dipyridamole, prostaglandin E<sub>1</sub> and dextran, the last of which appears to be the best. The elegant technique of Laser induced endothelial trauma (Arfors *et al.*, 1968) now allows for an exciting and, I believe, potentially fruitful line of enquiry with this aspect of therapeutics.

The next phase (2) in thrombosis is that of the propagating thrombosis and depends upon coagulation factors of the circulating blood. It can be prevented by anticoagulation which in clinical practice is, for reason of speed, usually heparin. To remove an existing thrombus, however, plasmin is required and as long as blood is freely flowing along the vessel this is adsorbed selectively onto the fibrin in the clot. If treatment is started at this stage therefore it is usually sufficient to prevent propagation and allow for natural lysis.

The third phase is the development of the occluding thrombus which arrests the blood flow, clot propagates until blood flow is established from a branch. Thus only each end of the thrombus is exposed to the circulating fibrinolytic agents. Now differences between artery and vein are apparent (figure 2). In the artery there is little intimal thrombolytic activity and recanalisation is rare, since the circulating plasmin has little purchase. The immediate effect is to produce an acute ischaemia in the area of distribution of the artery. If collateral circulation is inadequate then distal necrosis will occur. Thus in coronary thrombosis or cerebral artery obstruction there is little to be gained from attempting thrombolysis for, even if successful, the vital distal tissues are already lost. Treatment should therefore be directed towards the minimising of consecutive thrombosis and establishment of collateral vessels by

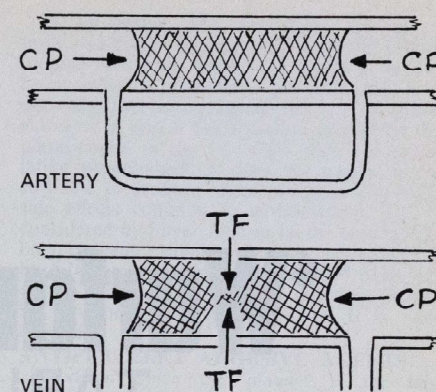


Fig.2. Comparison fibrinolysis in artery and vein  
CP — Circulating Plasmin  
TF — Tissue Fibrinolysis

the use of anticoagulation. In the veins a different situation pertains for the intraluminal thrombus is exposed to tissue thrombolytic activators from the intima as well as the circulating plasmin at each end of the thrombus. Thus recanalisation is the rule in small and medium veins, but with the sequel of the destruction of valvular competence. The effect of venous occlusion is also different for here an outflow obstruction is produced. In the limb this will cause the relatively minor problem of oedema and swelling. In the pulmonary arteries, however, obstruction is similar to the venous situation in that outflow obstruction with right ventricular embarrassment is the dominant effect and rapid lysis of the obstruction is very desirable.

#### Therapeutic Agents Available for Treatment of Thromboembolic Disease

##### 1. ANTICOAGULANTS

(a) **Heparin** was discovered by a medical student (J. McLean) at Johns Hopkins in 1916. It acts at two points in the clotting cycle, viz. it prevents conversion of prothrombin to thrombin and interferes with the action of thrombin on fibrinogen. It may be reversed with protamine sulphate mgm for mgm. Its onset of action is rapid and it is usually given on an intravenous infusion 200 mgm (20,000 units) 12 hourly after a loading dose of 50 mgm. Administration by a constant infusion pump gives less variation (Handley, 1967). The aim of the therapy is to maintain the whole blood clotting time about x3 normal (>15 min.). Regionalisation can



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be achieved in thrombosis of the legs by infusing at lower dosage into a foot vein (Catchpole, 1968). Following phlebotomy, heparin is infused directly into the cleared segment via a catheter in a branch vein in half doses.

(b) **Coumarin and Indandione Group.** These compounds all prevent the formation of clotting factors mainly VII and II (prothrombin) but also IX and X from Vit. K. in the liver. The best known are Phenindione and Warfarin.

Their great advantage is that they may be taken orally, their disadvantage is their slowness of action. They are controlled by estimation of prothrombin time which is usually kept at 20-30% or ratio 1.7-2.5 in respect of normal. They may be reversed with Vit. K.

(c) **Arvin.** This enzyme, extracted from the Malayan pit viper venom, selectively destroys fibrinogen and is reported as being clinically very safe. Administered intravenously it is usually given as a loading dose of 80 units over 15 mins, followed by 80 units over 6 hours, and thereafter a maintenance dose of 40-80 units every 6 hours. Therapy is controlled to produce a plasma fibrinogen level of less than 50 mgm/100 ml.

### 2. THROMBOLYTIC AGENTS

Ten years ago Johnson and McCarty demonstrated that substances which activate the fibrinolytic system of the blood will dissolve thrombus in peripheral veins. Since then two main agents have become established in thrombolytic therapy.

(a) **Streptokinase** has been most extensively used. Since it is devised from the streptococcus, sufficient must be given to overcome the activity of antibodies and inhibitors present in the patient's serum, presumably due to previous streptococcal infections. Verstraete *et. al.*, (1966), recommended a loading dose of 1,250,000 units in less than 30 minutes and 100,000 units/hour for 3 days. This drug is extremely expensive. A dose regime of 750,000 units load and 80,000 unit/hour would be adequate for 93% of the population. Ideally if possible the schedule should be monitored for high plasma activator level and a low circulating plasminogen level (below 5% of normal). Not many centres are able to be so precise and therefore arbitrary dosage regimes are used. Most workers use concomitant steroids to minimise allergic response. At effective dosage level there is a fairly high incidence of complications including haemorrhage, pyrexia and breathlessness (Kakkar *et. al.*, 1969). The antidote is an antiplasmin like aminocaproic acid or aminomethyl cyclohexane carboxylic acid.

(b) **Urokinase.** The fibrinolytic activity of urine was first noted by MacFarlane and Pilling in 1947 which has since been found to be due to an activator of plasminogen-urokinase. It is non-toxic and non-antigenic and is a gel phase activator in that it has a greater affinity for the plasminogen in the thrombus than the circulating plasminogen. It does not appear to be so liable to produce haemorrhage or the other side effects common to streptokinase, and is considered by Silver 1968 to be the best thrombolytic agent available. Dosage recommended by Silver is a loading dose of 2,000 units per pound body weight and then this dose hourly by infusion pump for 10. hours. It is very expensive.

### ANTIPLATELET ADHESIVE AGENTS

**Dextran.** Since the platelet is the key originator of thrombosis, it is natural that attention has recently been directed towards the possibility of using substances that will reduce platelet adhesiveness. Of those investigated, dextran appears to be the most promising and is both dose and molecular weight dependent, (Dhall *et. al.*, 1967; Arfors *et. al.*, 1968). It may well be that the pre-operative administration (it takes 7 hours for dextran to have its effect) of some simple substance like dextran will have a profound prophylactic effect on post-operative thromboembolic complication, and it is along these lines that future work may well be directed.

### TREATMENT OF PERIPHERAL ARTERIAL OCCLUSION

#### 1. Coronary Disease.

There have been hundreds of papers on the value of anticoagulant therapy in the treatment of coronary and cerebrovascular occlusion with great conflict in conclusions. This subject has recently been reviewed by Lyon and DeGraff (1969). The Co-operative Study of the American Heart Association, the Working Party of the British Medical Research Council and the Veterans Administration Co-operative Study all indicate marginal improvement in the mortality figures of men less than 55 years old, although a careful study from Denmark (Hilden *et. al.*, 1961) failed to support this. More recently a report from Oslo has indicated that anticoagulation for one year also reduced mortality in women. (Borchgrevink *et. al.*, 1968).

It may be that the demonstration by Fearnley (1967) and others of decreased fibrinolytic activity in coronary patients might suggest the value of long term thrombolytic therapy. He advocates the use of Phenformin 50 mgm. b. d. and ethloestrenol 8-16 mgm. daily and claims



a sustained increase in plasminogen activator in 80% of the recipient patients.

### 2. Cerebral Vascular Disease.

According to Lyon and DeGraff (1969) there is no place for anticoagulant therapy in the established cerebral vascular accident although in the slowly progressing stroke they are less dogmatic. Impressive results are obtained however in the treatment of recurrent attacks of cerebral ischaemia where supra aortic arterial reconstruction is not for some reason possible.

### 3. Peripheral Arterial Emboli.

Anticoagulation has a definite place in those conditions prone to embolisation, e.g. mitral valvular disease with multiple emboli, valve prosthesis and therapeutic switches from atrial fibrillation to sinus rhythm.

### 4. Peripheral Arterial Occlusion.

Verstraete *et al.*, (1963) reported that 78% of his patients treated by Streptokinase have dissolution of their arterial clots if treated within 72 hours of thrombosis. However since amputation of toes and minor debridements have to be done most surgeons would prefer the quicker and surer methods offered by surgery (Fogarty *et al.*, 1963). If the thrombus is soft enough to be dissolved it can probably be much more neatly removed by the balloon catheter. Heparin does play a part however in preventing consecutive thrombosis and should be given as soon as the diagnosis of major arterial occlusion is made and while operative facilities are being prepared. There is no place now for the 2 hour heparin trial that used to be advocated in the earlier days of vascular surgery. In chronic arterial insufficiency more is probably to be obtained by encouraging fibrinolysis by regular exercise, diet and cessation of smoking. In the young arteriosclerotic with poor vessels and early rest pain I have seen remarkable improvements on a prolonged course of anticoagulants but this is difficult to dissociate from the natural history of the disease. It has not been the practice on the Surgical Unit to anticoagulate peripheral vascular reconstructions post-operatively.

### TREATMENT OF DEEP VENOUS THROMBOSIS

The aim of treatment is two fold. The first and most important is to prevent pulmonary embolus and the second is to promote limb drainage. Large veins like the I.V.C. and iliacs do not appear to recanalise, even on rigorous treatment. (Browse, *et al.*, 1968). Thus the heavy swollen leg associated with occlusion of the ilio femoral segment is best treated if seen within 72 hours of onset by phlebotomy. A

catheter left in the femoral vein is then used to drip in heparin at the rate of 10,000 units 12 hourly to prevent rethrombosis on the damaged intima. It also allows for repeated phlebograms to be performed. Figure 3 is such a phlebogram taken 24 hours after operation in a 60 year old man with a 4 day history of venous thrombosis and demonstrates incomplete removal of the thrombus adherent to the vein wall. Figure 4 shows a repeat venogram after 2 doses of 98,000 units of Urokinase—a very small dose by most standards—and shows that much of the residual clot has been lysed. His subsequent recovery was uneventful and he had no sequelae from his thrombosis. He thus illustrates the ideal treatment regime for a thrombosed large vein, viz. reconstruction of blood flow surgically, maintenance of blood flow with anticoagulation, so that residual or added (Urokinase) thrombolytics can remove residual clot. This man also had the protection of an I.V.C. plication.

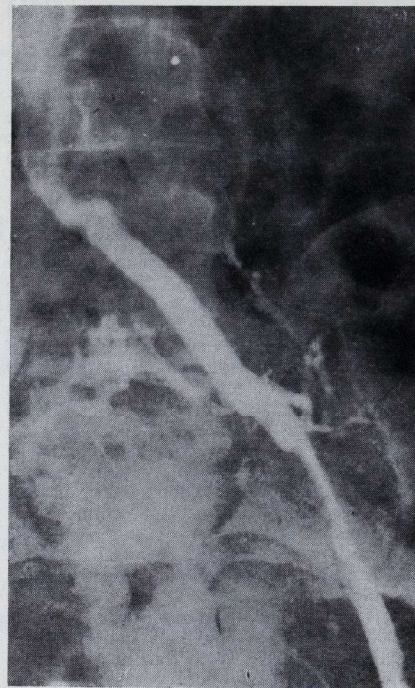


Fig. 3. venogram 24 hours post-op



Fig. 4. venogram after urokinase

Venous thrombosis distal to the common femoral, or non occluding thrombin not likely to break off and form emboli, is not a surgical problem. Until recently anticoagulants have been used in this situation but there is now a fair volume of evidence that recanalisation is slow and always accompanied by valve destruction. (Edwards & Edwards 1937, Linton & Hardy 1948).

Browse *et al.*, (1968) and Kakkar *et al.*, (1969a), have recently shown the superiority of Streptokinase infusion in restoration of vessel patency although in Kakkar's series at the price of a fair amount of complication, including haemorrhage, fever and allergy. Kakkar *et al.*, (1969b) also showed that valve function could be preserved if treatment of venous thrombosis was instituted within 36 hours of onset and that residual incomplete recanalisation is best treated by long term anticoagulation for 6-9 months.

Prophylaxis however should still be the main stay in the defence against venous thrombosis. Mobilisation, hydration, posture and supportive bandaging of legs all have their place in the management of the hospital patient. More specific measures for the surgical patient include preoperative anticoagulation or antiplatelet aggregation agents in at risk patients and stimulation of leg muscles intraoperatively. All these procedures being designed to increase the speed of blood flow in the legs and reduce coagulability.

### TREATMENT OF PULMONARY EMBOLI

There are four major classes of pulmonary emboli.

1. *Asymptomatic small embolus.*
2. *Classical type occluding a peripheral pulmonary artery with pain, haemoptysis and X-ray change.*
3. *Multiple minor emboli leading to cor pulmonale.*
4. *Massive embolisation in which two thirds or more of the pulmonary arteries are blocked by a major embolus leading to acute right ventricular failure. Without treatment three quarters of these will die, half of the fatalities within the first hour.*

The first and last of these groups probably do not qualify for consideration of thrombolysis; the first because the complications outweigh the advantages and the last since more dramatic and rapid surgical procedures are indicated.

The mortality from pulmonary embolism has been reduced by the use of heparin (Barrit and Jordan, 1960). However Barker and Priestley, (1942) showed that 30% of patients who had a pulmonary embolus had a second embolus which was fatal in 19%. How much these emboli are cumulative is not known, but it is generally assumed that they tend to lyse spontaneously in the lungs. This was elegantly demonstrated in dogs by Allison *et al.*, (1960) and in man by Fred *et al.*, (1966). However there is now considerable evidence that resolution does not always occur. (Goodman *et al.*, 1963, Hirsh *et al.*, 1967). Further heparin does not appear to accelerate thrombus lysis in the lungs. (Tow and Wagner, 1967).

Encouraging reports have been made on the use of Streptokinase in this condition when monitored angiographically, (Miller *et al.*, 1969, Hirsh *et al.*, 1968, and Browse and James, 1964) although the older emboli appear more resistant to this form of treatment. The Streptokinase may be given either directly via a catheter in the pulmonary artery or systemically.



but in either case the generalised increase in fibrinolytic titre will have the added advantage of lysing clot in the leg veins and so reducing the danger of further emboli. Dickie *et al.* (1967) have reported angiographic clearing of massive pulmonary emboli after treatment with Urokinase.

The mortality from pulmonary embolectomy remains at about 50% so that there may well be a place for aggressive thrombolytic therapy even in the situation of massive embolus.

#### CONCLUSION

The treatment of thromboembolic disease is now complicated, rapidly developing and becoming of increasing importance. Simple anticoagulation is no longer considered adequate but therapy must be directed towards the prevention of the initiation of the thrombotic process, by treating platelet factors, and also by lification of existing thrombus by thrombolytic agents.

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#### LABORATORY CONTROL OF ANTICOAGULANT TREATMENT

With anticoagulant treatment one hopes to effectively reduce the coagulability of blood in the circulation, without producing an excessive effect so that bleeding occurs. In heparin therapy, with certain important exceptions, laboratory control is not usually required. When the coumarin and indanedione drugs are used the position is very different because the dose required varies quite widely from patient to patient. Knowledge of the particular anticoagulant used is essential and dosage must be controlled by frequent and reliable laboratory tests.

#### Arvin:

The only detectable abnormalities during treatment are diminution or absence of fibrinogen and an increase in fibrin degradation products. Laboratory control is affected by measuring the fibrinogen level, and observing the blood clot (if any) which is formed when a blood sample is incubated at 37°C. If treatment is effective the fibrinogen level would be very low and the blood clot would be minute or absent. As stressed elsewhere, this drug is undergoing trials and its future is undetermined.

#### Heparin:

Heparin has a complex and widespread action on blood coagulation which especially affects the ability of thrombin to convert fibrinogen to fibrin. Control may be monitored by measuring the whole blood coagulation time which should be prolonged to twice the pretreatment time. A recalcification time performed on citrated or oxalated plasma is more convenient, this also should be twice the pretreatment time. Another test is the thrombin time which is determined by adding a volume of thrombin solution to plasma and determining the clotting time. This test is very sensitive to traces of heparin, and may be used to control therapy when a prolongation of the thrombin time from three to four times the pretreatment level should be achieved. The test is also used routinely in cardiac surgery to exclude residual heparin after protamine has been given, in a dose calculated to neutralise any remaining heparin, at the end of extracorporeal circulation. Finally, the thrombin time may be used to assay plasma heparin levels. This is occasionally required during heparinisation for cardiac surgery. It is carried out by mixing various concentrations of protamine with the test plasma; the end point is in the tube containing free heparin and this shows a marked prolongation of the thrombin time. Some

authorities advocate that heparin should always be titrated before protamine is given because in excess it is itself an anticoagulant. In practice this is rarely done, except perhaps in paediatric surgery.

Generally, laboratory control of heparin therapy is not necessary. It is usually of only a few days duration, but if it is prolonged beyond this time some laboratory control is desirable as accumulation may occur. A high proportion of heparin is excreted unmetabolised in the urine so special care is required with renal impairment.

#### Coumarins and indanediones:

These compounds, in contrast to heparin, have no anticoagulant action in-vitro. Only after oral ingestion and absorption do they cause a reduction in synthesis of factors II (prothrombin), VII, IX and X by the liver. Speed and duration of action are variable but generally depend on the half-line in the circulation, thus factor VII is most rapidly depleted, followed by IX, X and II.

The "prothrombin time" introduced by Quick in 1936 has been used to control anticoagulant treatment since it started. In this test brain extract is added to citrated or oxalated plasma in a water bath at 37°C, the mixture is then re-calcified by addition of calcium chloride and the clotting time determined. This is the prothrombin time and is normally 12-14 seconds. There is some difference of opinion on the optimum therapeutic range for anticoagulant treatment, usually a prothrombin time of 2-2½ times the normal control time (i.e. 26-32 seconds) is recommended. With a suitable loading dose of anticoagulant this can often be achieved in 36 hours. Spontaneous bleeding is uncommon with a prothrombin time of less than 40 seconds. This test is easily and rapidly performed and is inexpensive. It is especially sensitive to factors VII and X, and to a lesser extent II. It is insensitive to factor IX and therefore does not measure all the factors involved in this treatment. Results with different brain extracts are not always closely comparable and attempts are being made to correct this. Despite its limitations, very many people still consider this the best test available.

Recently "Thrombotest" (Owren) has been introduced, and adopted in a number of laboratories. It can be used with capillary or venous blood, and is said to be sensitive to factor IX, as well as II, VII and X. Thrombotest is more expensive and time consuming than Quick's prothrombin time which it has



not displaced. Another method is the prothrombin proconvertin (P and P) test devised by Owren and Aas. It is sensitive to factors II, VII and X, and not IX. This is a good method but rather slow and not widely used except in special situations. Despite their limitations, satisfactory and safe anticoagulant control may be managed with any of these tests if properly and consistently performed. That this is by no means always achieved, as will be seen from Table 1, is probably due to other causes.

**Table 1.** Control status of 753 out-patients attending the Anticoagulant Clinic January-March, 1969

PT Ratio	Percent
1.0 - 1.5	11.0
1.5 - 2.0	35.0
2.0 - 2.5	42.0
2.5 - 3.0	4.0
3.0 -	2.0
Misc. (New cases, etc.)	6.0

PT Ratio is the patient's prothrombin time (PT) divided by normal control PT

#### Other factors affecting control:

In hospital one can be reasonably certain that a prescribed dose of anticoagulant is taken; but in out-patient practice this is not so, and many patients must sometimes forget a dose although this is rarely acknowledged. Misunderstandings over dosage, and other communication failures are regrettably common.

Coumarins and indandiones interfere with the role of vitamin K in synthesis of factors II, IX and X by the liver. Anything which interferes with the intake or absorption of vitamin K or its metabolism in the liver, will disturb the response to these drugs. In the post-operative period, on returning home from hospital, and in illness associated with fever or gastro-intestinal upset there is often increased and unpredictable susceptibility to anticoagulants. If vitamin K is given by mouth or intravenously the prothrombin time will return to normal in 12-36 hours, and bleeding will stop within a few hours.

Phenylbutazone should not be given to patients on oral anticoagulants because it displaces the drug from its plasma albumin binding site and may cause a serious overdose. Chlorpropamide, salicylates and chlorfibrate are known to potentiate anticoagulant drugs, whereas barbiturates have the opposite effect by stimulating their metabolism and disposal.

## Book Reviews

**"The Nervous System"** by Peter Nathan, London, Penguin Books, 1969, pp. 391, 10s.

In the introduction, Nathan refers to this paper-back as a book on Neurology, organised in such a way that any single chapter could be read on its own, or left out. He has succeeded, any chapter could be left out—any! I think it was John Holt who likened school-children to persons crossing open country in one-man tanks, having only a narrow slit through which to see the environment. Thus when jolted off course, they know not where they are going, where they are, or where they have come from. This was an experience I had many times whilst reading this book. The jolts off course came from the many, and oft fascinating accounts of the works of the ethologists. The course would seem to be an accurate, but largely pedestrian account of the structure and function of the human nervous system, so far as we know it. This is not to claim that the anatomy and physiology of the human nervous system cannot be popularised without dramatic behavioural examples, for this volume contains a lucid and interesting account of hypotheses concerning the neural basis of learning. However, a paucity of human behavioural examples and of accounts of current research at the frontiers of neurological knowledge, might leave the reader with the incorrect impression that Neurology is a surgical-laboratory science, remote from the rough and tumble of every-day life.

Without doubt, the low spot of the book is Chapter 12, which purports to be an account of Needs, Desires and Emotions, but which scarcely contains a reference to human beings. The last seven chapters present a competent and reasonably integrated picture of the activity of the cerebral cortex and adjacent subcortical structures.

In summary, I doubt if this book has much to offer the serious student of Neurology and its related disciplines, while for the general reader its lack of overall integration seems likely to confuse.

J. E. DRINKWATER

#### Lectures in Medicine," 2nd Edition,

by C. W. H. Havard, Staples Press, 1969.

This is an exciting book which covers a variety of subjects. It provides authoritative reviews of topics as diverse as inborn errors of metabolism and medical statistics; the management of cardiac arrest and an account of computer-assisted medicine. A book of this size could not hope to cover the syllabus. What it does, quite admirably, is supplement the usual clinical course with reviews on such topics as radioactive isotopes in medicine and medical aspects of transplantation, which might not otherwise be dealt with. Anyone with an interest in the growing points of medicine should read this book and then sympathise with the author on the task that he has set himself. Within a year a second revised edition has appeared with several new chapters. Although three of these are by specialist authors, it is going to be difficult to keep this production as fresh and stimulating as it is at present. I found it difficult to put this book down.

J. S. MALPAS

#### "A Short Textbook of Chemical Pathology"

(Second edition—first published as Essentials of Chemical Pathology) by Professor D. N. Baron, published by English Universities Press Ltd., 22s. paperback, 35s. hardback.

The second edition of Professor Baron's book is a marked improvement on the first edition written more than ten years ago. There is no doubt that it provides the student with all the information required for success in the final chemical pathology examinations. In addition, it supplies much information of value in medicine and surgery.

The twelve chapters cover such diverse topics as acid-base balance, lipid metabolism and clinical enzymology. Unfortunately, this very diversity and the number of facts contained make it read, in parts, like a catalogue and necessitate a superficial approach. Certain sections would be much better left out. For example, interest is lost by reading within a single paragraph, some isolated facts about the Hand-Schuller-Christian syndrome, Niemann-Pick's disease, Gaucher's disease, infantile amaurotic idiocy and gargolism.

My personal view is that teaching in chemical pathology should endeavour to convey to the student the close links which exist between the pre-clinical and clinical subjects and how knowledge obtained in the basic sciences has application to clinical practice. Professor

Baron's book is less satisfactory in this respect than that written by Professor Grey. To some extent the two books are complementary, the one being somewhat dull and factual, the other more interesting, but containing less information.

J. LANDON

**"Ulysses,"** by James Joyce, published by Penguin Books, price 10s.

Ulysses—an anti-hero in an age before anti-heroes, his wanderings around Dublin: stopping, looking, talking, listening, hearing, with time for a drink and a gas in this Roman city.

At once, autobiographical, a philosophical essay and a simple tale; Ulysses expresses life in a language that has yet to be surpassed. Stylistically complex, an amalgam of narration, recount and anecdote, characters appear out of Dubliners, Stephen Hero and No. 7 Eccles Street, Dublin. Who is talking to whom is at times difficult to decide, indeed sometimes to know who is talking at all; the characters already have their identity before they appear, Joyce did not find it necessary to make clear who they are or even why they are there in the first place. Who's MacHugh?—the man that had to extend "elocutionary arms from frayed stained shirtcuffs" to speak on "The Grandeur That Was Rome." The Jews in the wilderness and on the mountaintop said: *It is meet to be here. Let us build an altar to Jehovah.* The Roman, like the Englishman who follows in his footsteps, brought to every new shore on which he set his foot (on our shore he never set it) only his cloacal obsession. He gazed about him in his toga and he said: *It is meet to be here. Let us construct a water closet.* Joyce was aware that to meet a man in a bar, hear him, is enough; maybe he buys his round or maybe he waits for someone else's, before he walks out.

Throughout it all walks the figure of Bloom, an Irish Jew, thinking, always talking, being abused, abusing in his turn; sometimes it is he who is Joyce, sometimes Stephen Dedalus; but Bloom the unlikely archetype Greek hero is the camera recording the life of the city.

Bloom of the new Bloomusalem, the unfaithful wife is at one and the same time, the hero and the butt of the tale; in the Circe episode, where the goddess finds her reincarnation as a brothel madam, the Cap deeries (With saturnine spleen) "... Jewgreek is greekjew. Extremes meet." Bloom is Ulysses.

JIM DRYNAN



# BARBECUE BALL '69



roger lambert  
reports

It first started about three months ago with the arduous but necessary back-room tasks that such an occasion demands. For the more inquisitive, a visit to the gymnasium four weeks ago would have revealed the beginnings of the feverish and artistic work that goes into the preparations of the props and decorations. For many, the first signs that anything untoward was happening at Charterhouse was the arrival of the marquee and drays loaded with beer barrels. But for most, the first signs of fruition of many hours of hard work was on entering the gates of the College on the evening of the Ball.

This year the whole Ball was increased in size, numbers being 1,000 against 700 in previous years: this reflects the Wine Committee's desire to make the entertainment more interesting and varied and to be able to invite as many people as possible to this major event in the College calendar. This they seemed to have achieved as everything was bigger and better than before.

The decor was as usual of a high standard, particular note being made of the Magic Roundabout in the Abernethian Room. Colin Brookbank's creative skill with Dougal and Zeberdee to mention but two, was worthy of every credit.

Musical entertainment was good with both Mario Fiorentini and the Octopus, alias the Cortinas, making return appearances to the Ball. My favourite was however, the Alan Eleden jazz Band who understandably always had a large following.

Jeremy Taylor, T.V. personality and writer of the West End play "Mrs. Wilson's Diary", was the cabaret artiste and he gave one of the



## servicing wenches

best cabaret performances I have seen, being just colourful enough to amuse all present. Not unlike Lance Percival in his style, he gave a varied programme of songs including, "I was a human once but I'm not sure now", a skit on organ transplantation, and a very amusing ditty about General de Gaulle and his "two little words". He also went to some lengths to clear up the Basil d'Oliveira affair and to explain the South African position. He ended to a great applause and was eventually persuaded to return for a further number.

The inclusion of the Drama Society's Victorian Melodrama in the programme was a splendid idea and was much enjoyed, the dialogue providing many double meanings for the more broad-minded members of the audience. Bonita Wylie gave her usual five star performance and sterling work was done by the musi-



cians and the men behind the scenes.

Another colourful attraction was the girls dressed in the costumes used in the film *Oliver*. Between great activity behind the bars, they served delicious barbecue and another Wine Committee brain-wave, that tasty breakfast in the early dawn.

The large Meteorological balloon hanging from the trees above the lawn which incidentally did not manage to stay the course in its

## champagne flows

original state, just about summed up the opinions of the occasion—a really Great Ball.

Mark Navin tells me that the Barbecue Ball would not be possible but for the great amount of work done by non Wine Committee people, and he would like to extend his thanks to all who helped in the preparations and the less pleasant task of clearing up afterwards.



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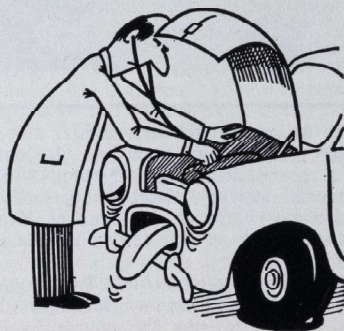
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## a Sunday afternoon in Hampstead

by  
Roger Clayton

One hundred years ago today Hampstead was a village about seven miles from London, it was becoming unfashionable as a spa.

I was sitting with my feet up, gulping down the coffee and after stumping out the cigarette, I thought—that's lunch rounded off very nicely. Someone was looking in the "Radio Times" to see what was this afternoon's television film. I looked outside, it was cloudy but not raining, so I furnished myself with coat and umbrella and went for a walk.

On my way up the hill, I met a young girl with her Sunday papers in one arm leading an Afghan hound by the other. I didn't notice her bell-bottomed trousers but the three chaps across the road did. I marched up the hill—it was getting steeper, to my right was a Metropolitan Water trough, I didn't see any horses. There are two water troughs near Smithfield Market; that's more appropriate—I thought.

I veered left on my way up the hill and began to realise why Hampstead is like Montmartre—where was I? Well Walk, Well Way, Well Road—I was lost. Then I knew where I was—at *The Well*. I'd never seen it before—but there it was staring at me. H. G. Wells had lived in this area—and Max Beerholm had said, "Hampstead hasn't yet been spoilt. I stayed at Jack Straw's Castle some years ago." I left *The Well* and walked up Well Passage—Jack Straw's Castle was still there overlooking the pond on the top of the hill.

I sat down and looked at the pond. A model yacht was amiably being guided across by sticks; the two men with sticks just watched the yacht and followed it. Whilst I was sitting, three boys excitedly rushed up to the pond and revved up their battery charged boats which roared across the pond bumping into the sides.

I got up and followed the sign which said, "to Frognal". I never got to Frognal but learnt that Galsworthy had lived near The Admiral's House. Did he write his Saga there? I climbed down some steps and was in Heath Street. Pausing at the zebra crossing, I was allowed to cross by a learner driver to the hooting of impatient drivers behind.

I opened the door and wandered into Hampstead 8444. I sized a window table and put my spectacles and umbrella down. The table

was mine. I sat back, looked around and asked for some coffee. I managed to get some cream on the top of the coffee after stirring the sugar first. Last time I was sitting at this table, Dudley Moore was chatting to two girls—this time a French mother and her daughter were having tea and gazing at the pictures on the wall. A delightful creature with beautiful legs meandered around the tables and seduced me into having a monstrous chocolate eclair. As I hacked at my cake, two girls opposite were presented with coffee and white and brown sugar. They were confused so the waitress made the cocktail. I lit a Black and White cigarette and inhaled when the girls first sipped their coffee. The man at the next window was practising his boxing with the two empty Jeroboam champagne bottles on the shelf. The window had steamed up. I finished my second coffee, paid the bill and as I closed the door behind me the potted piano music stopped.

The sports cars in Heath Street were accelerating up the hill—one had a long wooden plank sticking out of a window. Someone somewhere is doing up the flat. Rounding the corner by the tube station—I didn't buy a paper, I'd read mine. Walking down the High Street, crowds had gathered outside the sports shop, reading the private ads. I passed on and looked at a book called "The Rockingham Porcelain". It was substantially reduced in price and thus caught my eye. So the Marquis collected porcelain when he was afflicted with hefty affairs of state. He probably collected many more after his retirement.

Further down the hill I turned left into Pond Street, opposite the church. The Roebuck Hotel is now just a pub serving hot and cold sandwiches. The Classic cinema is showing "2001. A Space Odyssey" all next week. I saw it in Cinerama in Soho, ages ago. The antique shop still has those wretched chairs in the window—more temptation next week when I go out to collect my shoes from the cobblers next door.

A white T.R.6 with two scarfed girls inside was ranging around the village when I turned into the drive. I sank into a chair in front of the television set.

I didn't score a hit in "Going for a Song", furniture isn't my subject. Arthur Negus presided as usual and knew everything. I was invited to guess the value of a Britannia silver tumbler cup—but declined. It just wasn't going to be my day—it began to pour with rain. The yacht is probably still sailing on the pond at the top of the hill.



## Corsica

by  
Fiona Hardy

It all began when, with a hint of spring in the air, and a growing phobia for London, our thoughts swung towards the idea of an early summer holiday. We both wanted to go to the Mediterranean. Jane was adamant that we should go to Italy, and I was equally determined to go to Spain, so after much argument and many cups of strong coffee, the Atlas was eventually brought out. This revealed the answer to our problems. There in the Mediterranean, midway between Spain, France and Italy, lay Corsica.

Corsica is an Island only 114 miles long, and 52 miles wide, but possessing 600 miles of coastline. The West coast is perhaps the most beautiful, where there are large sandy bays, each one with its fishing village, and often Foreign Legion garrison. Where the rocks meet the sea, these bays are broken up into smaller ones, where one can be completely undisturbed, and hidden. Between the bays the mountains rise up, and their red rocks plunge into the sea below. So tortuous in fact is the coastline, that most of the communication between coastal villages is by boat, rather than by the roads.

The East Coast is a flat, lush plain, and was once cultivated by the Romans until they had to abandon it because of malaria. Within recent years, however, the mosquitos have been eradicated and many holiday villages are springing up. These coastal resorts, like those on the West coast, are well equipped for tourists. As well as bathing, one can sail, ride, fish, waterski, and visit the night clubs.

On the Southern tip of Corsica is Bonifacio. This is a fortress city, built by the Genoese in the 13th Century on a high limestone promontory overlooking Sardinia. To enter the old part of the city, one still has to go through a narrow gateway guarded by massive nail studded doors. The houses are built of yellow stone, and some overhang the precipitous rocks facing the straights. It is a fascinating place, and on a hot day one is given an impression that even the sanitation is still medieval!

The centre of Corsica is mountainous, and is renowned for its rock climbing and hunting facilities. Corte is the old capital and is set high in the mountains. The oldest part of the city is perched on a pinnacle of rock in a mountain-fringed plateau.

Corsica is called a land of contrasts, and this is brought home to one when in the Niolo. To reach the Niolo, in the centre of Corsica, one travels up from the coast through spectacular mountain passes, and cool pine forest, to come on to a beautiful plateau of pasture land, and chestnut trees, ringed by yet higher mountains. One of these is Monte Cinto, the highest in the island, and is 9,020 ft. high. It is well known by mountaineers, and is best climbed from Calacuccia, a sheep farming town. It was here that we watched a shepherd bringing in his flocks, and for the first time saw literally the separating of the sheep from the goats.

We visited Corsica in the late Spring, before the influx of tourists had begun, and stayed for some days in a small fishing village called Galeria, five miles from the main road. The surrounding hills were covered with maquis, and in the morning the delicious smell given off by these herbal bushes pervaded the rooms. We would get up early to go for a bathe, and then come back ravenous for a large breakfast. One morning we were met by some fishermen, and experienced the famous Corsican hospitality when they insisted on giving us brandy before we returned to the hotel.

Corsica has a long history, the oldest monuments dating from the 3rd millennium B.C. The Greeks, Romans, Vandals and Arabs have all visited the island. Genoa, Pisa and Aragon have fought for control of it. The Genoese ruled for about 300 years when rebellion broke out in 1729. In 1755 Pasquale Paoli organised Corsica into an independent democratic state, then 14 years later, Corsica was taken over by France and Paoli fled to England. After the French Revolution he returned, and for a short time governed the island under British protection. Someone once remarked that had Napoleon been born at this time, the whole of the Western world would have been British. However, by then he was already powerful in France, and in 1796, he forced the British to evacuate the island. It was during one of these sieges that Nelson lost an eye. Since then, Corsica has been an integral part of France, although the islanders still speak their own language. The fought bravely during the last two world wars, and now with the eradication of malaria, and the blossoming tourist industry, the country is prospering.

It is a country that caters for all tastes, and I would recommend it to anyone who is thinking of a holiday, especially in Spring when the maquis is in flower, or in Autumn when the fruit is ripe.

## Norwegian food

Robin Rayner

"Et bord til 3 ved vinduet ved Lyngenfjord"—

The summer of 1967 was the wettest one in northern Norway since meteorological readings were first taken there in 1879 and on my twenty-first birthday I was camped with two friends in a remote valley there in pouring rain. The weather was so bad as to severely limit our mountaineering—our main reason for being two hundreds or so miles inside the Arctic Circle—but the holiday was still a most enjoyable one as the Norwegians are so friendly, the scenery is so magnificent (when not obscured by low cloud) and the food is so good.

It was my second visit to Norway and, remembering how much I had liked the few Norwegian meals I had eaten on the first trip, I had decided some time before leaving England that I would stand my companions a meal to mark my birthday. Upon returning to the civilization of our base—a caretaker's flat in a boarding school—I concocted a menu, with the help of a phrase book, and took it to the local bakery/restaurant/guest house where we usually bought our bread. A young girl there had difficulty in disguising her (albeit good-natured) mirth on reading my instructions, which included a request for a table by a window overlooking the water, but her mother was very helpful and understanding and she promptly furnished me with a very reasonable estimate.

On the appointed evening we presented ourselves at Braeck's Gjestgiveri, Lyngseidet, looking remarkably smart for itinerant student mountaineers. After three weeks of catering for ourselves it was very pleasant to sit down with the knowledge that crockery and cutlery used for one course would not have to be washed for use in the next. And a sparkling white table cloth served to emphasize the (comparative) luxury of the occasion.

The soup appeared to be made from peas, and not fish as requested, and it had slices of hard-boiled egg in it. There was a peculiar salty tang to it and it was enjoyable if a little unusual.

The second course had not been ordered at all but was delicious: large salmon steaks baked in their juices and served with lettuce, cucumber, tomatoes and boiled potatoes. This dish must have necessitated the change of soup.

At this stage in the meal the large woman who owned the establishment came and delivered a little oration in very rapid Norwegian. We thought she mentioned potatoes and she seemed relieved when we nodded and smiled at what we took to be the crucial points.

Her *pièce de resistance* was the "Dyrestek med Grønnsaker" I had asked for. She served this herself although the girl was entrusted with the rest of the meal. The reindeer steak had been finely chopped and cooked in a rich gravy and tasted rather like any other steak—I do not know what I expected it to taste like. It was decorated with canned sliced peaches, macaroni, lettuce, cabbage and tomatoes, and was served with boiled potatoes.

We had heard mention of cloudberry and had read of them but we had not found any on the mountain sides. (We later discovered that they grow only in the very far north of Norway and Russia, further north than Lyngseidet). They are really delightful but almost indescribable. In colour they are an orange-yellow and in shape they are a little like raspberries. The flavour is exquisite and quite unlike any other fruit I have tasted. *Multer* is the Norwegian name—and they are best eaten with cream (*fløte*).

Pots of coffee arrived for my friends and tea for me and we drank these whilst rounding off the meal with the *Smørgåsbord* (cold table). There were several kinds of bread—wheat, rye (*knäkkebrød*) and *flatbrød*.

There was the ubiquitous *Gjetost*. The genuine *Gjetost* we had (identified by the word "Ekte" on its cellophane wrapping) is made from goats' milk whey to which has been added caramelised lactose, or a little brown sugar, and fats. Most *Gjetost* contains mainly cows' milk. It tastes rather sweet, is caramel-coloured and tends to stick to one's teeth but is otherwise delicious and completely different from every other cheese in the world. There were various spread cheeses as well as the very fine *Norwegian blue*—more like Roquefort than Danish blue, of pleasing appearance and now available in Supermarkets in this country—and the bland *Jarlsberg* and *Norwegian Tilsit*.



The herring was, as usual, in abundance—as anchovies, *gaffelbitte* (literally “fork-pieces”) and *sild*—and there were also sardines and shelled prawns. Salami and other sliced sausage, salad vegetables, apples, oranges, apricot jam and cranberry sauce completed the selection.

So ended a memorable meal.

On the coastal steamers—the *Hurtigruten*—the best value in food is undoubtedly the evening meal in the second class dining room; indeed this was the one meal a day we could afford, and we relied on bread and cheese (once, and once only, we tried *Nokkelost*—caraway cheese!) and water for the rest of the day. It starts with a warm dish—usually meat balls, fish balls or rather bony lamb chops with potatoes—and you have one or two helpings of this, serving yourself.

Then you get down to the serious business of devouring as many plates of the cold fare as you wish in the hour and a quarter of eating time available to you. The charge for this feast was ten shillings and threepence in 1967, including the customary 10 per cent. service charge. The selection was similar to that at Lyngseidet but had a few extra items such as slices of ham, brisket and liver sausage.

A favourite was chunks of raw herring soaked in a mixture of wine vinegar, olive oil and onion rings. This tastes really delicious as the fish is so fresh. Another fish dish consisted of mackerel which had been treated in the same way but with chopped dill in place of the onion and had then been removed from the liquid before being neatly sliced into segments on the serving plate—the fish looks intact until the first person cuts from it. It tastes superb. A Norwegian student told us that the older Norwegians will not eat mackerel: the fish is reputed to feed on dead bodies at the bottom of the sea, and a lot of Germans were drowned off Norway in the last war. (There is still much anti-German feeling in the country, and up north I was twice mistaken for a German because of my fair hair and beard and despite the Union Flag on my anorak pouch).

Tea is usually served with the *smørgåsbord* though some people drink lager. There are no “pubs” in Norway and licensing laws are very strict, as they are in the whole of Scandinavia; off-licences are a state-owned monopoly (*Vinmonopol*) in Norway. A driver should not drink within six hours of reaching his destination as he may be required during this period to give a blood sample to the Norwegian police.

*Brun Lapskaus* is the cheapest meat dish available—both in restaurants and in tins; it

is a tasty beef hot-pot, similar to Tiroler G’Roestl but without the caraway seeds.

*Smørbrod*—the open sandwich—is universal in Scandinavia. It consists of a slice of bread, wheat or rye, about 2in. by 4in., thickly spread with butter and covered or piled high (depending on cost) with cheese, fish, meat, sliced egg and salad garnishing in many combinations. Every café and the snack bar on every Norwegian ferry sells *smørbrod* and the latter and the innumerable kiosks at ferry terminals and in towns also sell Frankfurter sausages (*Polser*) and bread rolls.

I read somewhere that there are about two dozen named varieties of potatoes on sale in Oslo during the year and good cooks seek them out and save them for use in certain recipes. Except in the larger towns vegetables are both scarce and expensive and there is but little variety; tinned peas and carrots are available but they too are costly.

Fruit is regarded as a luxury and is sold in kiosks with tobacco and confectionery. Tinned sliced peaches “of irregular shape and quality” are the least expensive canned fruit. *Kompott* is popular and may be bought in packets; after stewing for some time you are left with fruit soup—the packet contains only minute fragments of dried fruit.

Norwegians are very fond of cakes. Perhaps the best known is *Blotkake*, a gâteau in three layers: sponge, cream and chopped almonds or walnuts, sponge, cream and nuts and sponge again. The top and sides are then carefully covered with almond paste. (The only inebriated Norwegian I have met—and he had a very good reason for being in such a state—bought us two pieces each in a cafe in Oslo.)

Norwegian fruit cake is very good, too. *Jordbaerkake* being especially delicious. The layers are sponge, cream, mashed strawberries, cream, sponge, cream, mash, cream, and sponge. Whole strawberries and cream cover the top.

*Lefser* and *Flatbrød* are made from the same mixture. Three parts by weight of warm drained boiled potatoes are mashed and one part of sifted rye flour is added. They are kneaded together into a smooth paste and are then left covered for twelve hours. The mixture is then rolled into wafer thin circular pieces designed to fit a large frying pan. *Flatbrød* is prepared by baking them over moderate heat, turning frequently; on cooling they become crisp. For *Lefser* they are dished up whilst still soft. Half of each one is spread with a mixture of creamed

butter and sour cream, this is sprinkled lightly with caster sugar and then the other half is folded over. *Lefser* is traditionally cut into small triangles for serving and it tastes remarkably good.

Preserves are expensive. *Appelsin* (orange marmalade in cardboard cartons is the cheapest. Norwegian jam (*syltetoj*) is rather runny; cranberry (*Tyttebaer*) is by far the best.

People planning to camp or to go Youth Hostelling in Norway might find the following notes on food costs and availability of some use:

In the summer shops close at 4 p.m. in the north and in parts of the south.

Bread, butter, cheese, milk and sugar—same price as here. Milk in waxed cardboard cartons (*Helmelk*) is best. Skimmed milk in brown bottles is cheaper but does not keep. Brown bread is more filling than white and keeps longer. In some parts they only have frozen bread so buy well in advance.

All cereals are available in supermarkets; more expensive except for puffed wheat (*Gaut*

*Corn*) which is very cheap. Tea and coffee are costly.

Meat is expensive; whale is cheapest. Fresh fish cheap but often not available in shops in the north—frozen cod fillets here cost as much as in England. Eggs are expensive.

*Potetmos* is potato flakes; *potetmel* is starch; beware!

Narvik youth hostel is renowned for its cuisine—*Smørgåsbord* for breakfast after porridge! Harstad also good. Supper at the Oslo hostel has finished by 5 p.m.

The hot water in Norwegian (and Swedish) trains is almost boiling—it makes passable instant coffee and tea-bag tea.

The Norwegian Food Centre at 166 Brompton Road, S.W.3. (telephone 01-584 6479) offers a very good *smørgåsbord* in the evening for 25s., as well as other meals during the day. The centre does not sell tinned food but Norwegian Suppliers (London) Ltd., 63 Pepys Road, S.E.14. (telephone 01-639 2405) carries on a postal trade in such items.

There is also a Norwegian restaurant at 84 Brewer Street, W.1.



I'M SUPPOSED TO GIVE YOU YOUR LUNCH!



## The Royal Haemophilia

by  
A. J. Newman Taylor

*"In sorrow shalt thou bring forth children"*  
(The Book of Genesis).

The birth of Queen Victoria's eighth child, Prince Leopold, was the focus of considerable public attention: at the confinement the Queen used chloroform—the anaesthetic introduced only six years earlier (previously) by James Simpson in Edinburgh in 1847. This was the first occasion that anaesthesia had been used in a royal confinement, and it was administered by the first specialist anaesthetist, John Snow; but it was the cause of considerable public controversy. Following the first demonstration of successful anaesthesia by James Morton at the Massachusetts General Hospital in 1846, surgeons the world over took advantage of this great discovery. However, when James Simpson, an obstetrician, introduced the use of anaesthesia into his midwifery practice it was greeted with cries of protest from the Church and from godly laymen. Painless childbirth was regarded as defiance of the Curse of Eve: "In sorrow shalt thou bring forth children".

From the outset it was realised that Leopold was a sickly child. Soon it was appreciated that he had an unusual tendency to bleed even from the most trivial injuries, and a diagnosis of haemophilia was made early in his life. There followed a bitter controversy which occupied the Church and the Press as to the extent to which Leopold's haemophilia was the result of his mother's defiance of the Scriptures. *"This awful disease, the worst I know"* (Queen Victoria).

Haemophilia and its characteristic pattern of inheritance had, however, been known for centuries. In the Egypt of the Pharaohs a woman was forbidden to bear further children if her first born son bled to death from a minor injury. In the Second Century A.D. the Jews decided that boys need not be circumcised if two older brothers had died from blood loss following the operation. More significantly they added that the sons of their sisters were also exempted. They apparently appreciated the most characteristic feature of the disease's genetics: its appearance almost solely in males and its carriage by females who were themselves unaffected.

This pattern of inheritance was described by several physicians in the early Nineteenth Century, more than thirty years before Leopold's birth, of whom the most notable was John Nasse, a professor of medicine in Bonn. However it was not until Mendel's Laws were fully appreciated and chromosomal behaviour understood that any real progress in the genetics of the disease was achieved.

As is well known the disease is caused by a recessive genetic defect situated on the X chromosome. In females with a second normal (dominant) X chromosome, the defect will not manifest itself; but, assuming she marries a non haemophiliac, half of her sons will be affected and half of her daughters will be "carriers". Again, in the next generation there

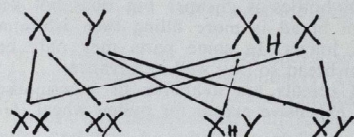


Diagram 1. Offspring of carrier

female and unaffected male.

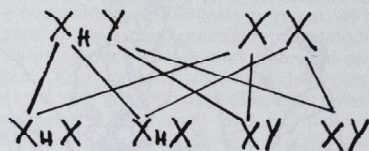


Diagram 2. Offspring of affected

male and non-carrier female.

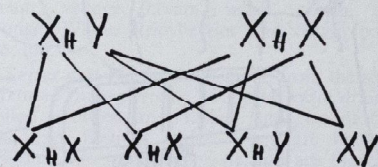


Diagram 3. Offspring of affected

male and carrier female.

Patterns of inheritance in

haemophilia.



Queen Victoria and members of her family

will be a fifty per cent chance that the sons of the carriers will be affected and that the daughters will be carriers. (see diag. 1.)

If, however, a male haemophiliac should have children—until recently a rare occurrence because of the mortality of the disease—the pattern of inheritance is different. (see diag. 2.) The sons will receive only the father's Y chromosome and will therefore all be unaffected. The daughters will, however, all receive their father's defective X chromosomes and will therefore all be carriers.

In the rare event of an affected male marrying a carrier female a third pattern is found. (see diag. 3.). Of the daughters, one will be a carrier and the other will be affected (the only circumstances in which this can occur). Of the sons, one will inherit the disease, while the other will be unaffected and have completely normal offspring (in this respect).

*"This disease is not in our family"* (Queen Victoria).

Queen Victoria's reaction to the discovery that her son had haemophilia was one of bewilderment. She protested that "this disease is not in our family", and until then it had not appeared. It is only possible to assume that a spontaneous mutation had occurred either in her own genetic material, or that passed on to her by her parents. Had the mutation occurred only in the genetic material passed on to Leopold, then the disease would have appeared only in his descendants. However, of the nine children of Victoria (see diags. 4.) only five are known to have escaped the disease or carrying it, (a very good approximation to the anticipated one out of two in so small a number), showing the defect to have arisen from Victoria herself, or before.



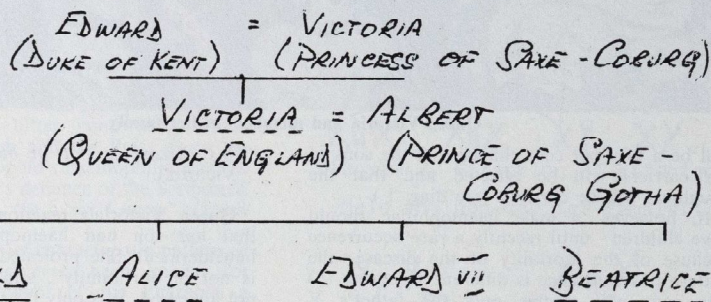
The medical history of Leopold is well documented, two accounts of the state of his health appearing in the B.M.J. of the day. He suffered from repeated episodes of bleeding throughout his life and appears, not unnaturally, to have been overprotected by his mother. At the age of twenty-six Leopold was asked by Disraeli to represent England at the opening of the first Australian Exposition in Sydney. Using the royal third person the Queen, replying to Disraeli, wrote that "She cannot bring herself to consent to send her very delicate son who has been *four or five times at death's door* (Queen's italics) and who is *never hardly a few months without being laid up*, to a great *distance* to a climate to which he is a stranger and to expose him to dangers which he may not be able to avert. Even if he did not suffer, the terrible anxiety which the Queen would undergo would unfit her for her duties at home and might undermine her health!" Equally naturally Leopold resented his mother's attempts to shelter him, and at twenty-nine married the German Princess Helen of Waldeck. She bore him a daughter, Alice, a carrier. However, during Helen's second pregnancy, Leopold fell, and following a minor head injury died of a cerebral haemorrhage. The second child was a son, and therefore

exempt from the disease.

All of Leopold's five sisters were potential carriers, but only two, Alice and Beatrice, have been shown to have transmitted the mutant gene to their offspring. Alice, Victoria's third child, married Louis IV, Grand Duke of Hesse, and of her seven children, one son was afflicted and two of her daughters were carriers. The son, Frederick, died at the age of three after falling through an open window in his mother's bedroom. He fell twenty feet, and although he suffered no bone injury, died the same day from cerebral haemorrhage.

The elder of Alice's two carrier daughters, Irene, married her cousin, Prince Henry of Prussia. They had three sons, the eldest, Prince Waldemar, died at the age of fifty-six, the longest surviving haemophilic of Victoria's offspring. The second son, Prince Henry, died at the age of four, his life being concealed apparently for political reasons. The third son, Sigismund, escaped the disease, as naturally have his children and grand children.

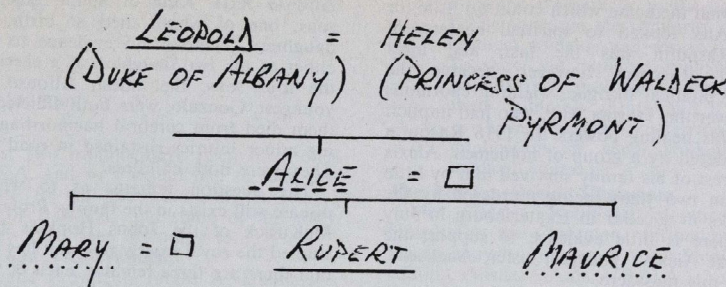
Alice's second carrier daughter, Alice—known as Alix—married Nicholas II of Russia, then the Tsarevitch. She had four daughters consecutively; her fifth child, the prayed for son, Alexis, heir to the throne of Russia, proved to be a haemophilic Turning from



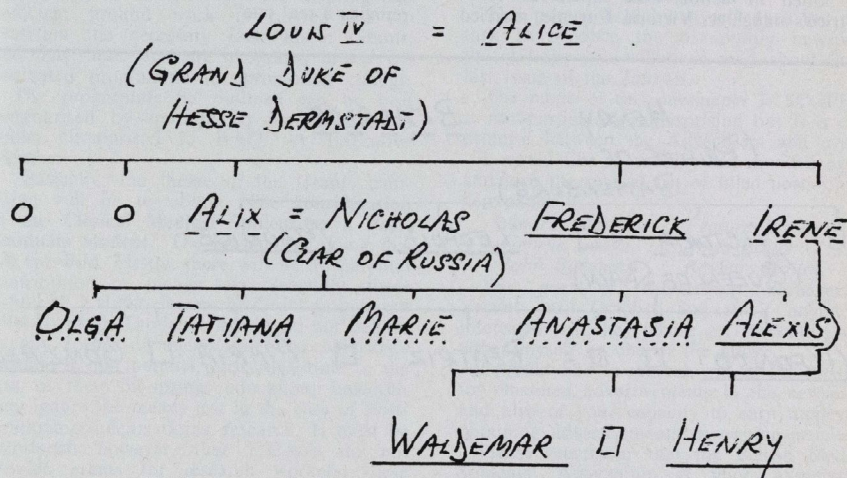
NOTATION

- KNOWN HAEMOPHILIAC
- KNOWN CARRIER
- ..... SUSPECTED CARRIER

Queen Victoria's parents and her immediate offspring, the three known affected children and Edward VII from whom the present Royal Family is descended



The offspring of Victoria's son Leopold.



The offspring of Victoria's daughter Alice, including the children of Alix and Czar Nicholas of Russia.

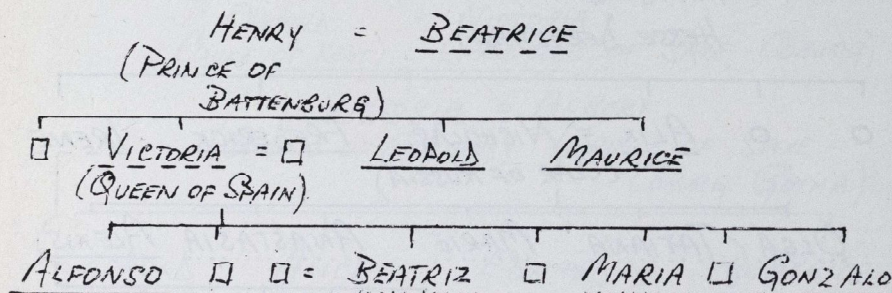


conventional medicine which could do little for Alexis, Alix looked to spiritual healers, of whom Rasputin was the last, and most successful. Rasputin, however, became the centre of political intrigue, wielding enormous powers over the Tsarina Alix, who had implicit faith in his healing powers. In 1916 Rasputin was murdered by a group of noblemen. Alexis and the rest of his family survived him by little more than two years, being murdered by the Bolsheviks in a cellar in Ekaterinburg in July 1918. There is little evidence to support the claim that Alexis's youngest sister, Anastasia, survived this massacre.

Beatrice, Queen Victoria's last child, also proved to be a carrier. She married Prince Henry of Battenburg, and had four children, three sons, two of whom were afflicted, and a daughter who was a carrier. During World War I, the family moved to England, and at the urging of King George V, the family changed its name from Battenburg to the more English Mountbatten. Both of Beatrice's afflicted sons, despite their disability, served in World War I. The elder, Leopold, died following surgery in 1922, at the age of 33, while his brother Maurice was killed in action near Ypres in 1914. Beatrice's daughter, Victoria Eugenie, married

Alfonso XIII, King of Spain. She bore five sons, one of whom died at birth, and two daughters. There is no evidence to date that either of the two daughters is a carrier, but of the four sons, the eldest, Alfonso, and the youngest, Gonzalo, were both afflicted. Both of them died from cerebral haemorrhage, following minor injuries sustained in road accidents. They were both childless.

The question remains as to whether the disease still exists in the family. Professor V. A. McKusick of the Johns Hopkins University, studied the royal family tree and has concluded that there are three females, each of whom has a fifty per cent chance of being a carrier. Two of these are the sisters of Alfonso and Gonzalo. Both are married with unaffected sons, but the possibility exists that their daughters might be carriers. The other possible carrier is Lady Mary Abel Smith, a descendant of Prince Leopold. Her son was unaffected, as are her daughters' sons. There would seem reasonable grounds for believing that the mutant gene has finally become extinct. However, as Professor McKusick concludes: "The prospect that haemophilia will reappear among some of Queen Victoria's distant male descendants remains a real one".



The offspring of Victoria's daughter Beatrice, including the children of Victoria, Queen of Spain.

## B.M.S.A.

report by

David A. Stringer

The last two months have been busy ones for B.M.S.A. and so I would like to take this opportunity to tell you about the Executive members of B.M.S.A. and some of the work which they have been attending to.

### President and Vice-President:

This year's President, James A. Dunbar, is from Dundee and has spent a lot of time recently travelling between the three regions and co-ordinating Regional policy. In this he has been helped by this year's Vice-President, Miss Alison Hill, from Guy's Hospital. She has also been connected with the Family Planning Association as well as many other functioning bodies, e.g. the Royal College of General Practitioners. Both of these organisations are keen to inform students about their activities.

### Grants and Welfare:

Clive Wulwik, from Bristol, is ensuring that sufficient ground work is carried out to ascertain the necessary facts about Grants, and that these facts are integrated into a co-ordinated programme for promoting change.

The programme he outlined can be best summarised by quoting an extract from a leaflet circularised to B.M.S. A Executive Member.

"Basically, the theme of the Grants campaign will be to obtain 'The consideration of the Clinical Medical Student as a Post-Graduate Student.' The reasons for doing this are two-fold. Firstly, there will be no parental contribution or means test. Secondly, there would be a slight rise on the Grant to between £500 to £550. Though I myself do not believe in any forms of means test, the Ministry's attitude is that parents must contribute to the cost of their off-springs education; however, they ignore the means test in the case of Post-Graduate students doing research. It must be mentioned however, that L.E.A.'s do not provide grants for research workers, these coming from the S.R.C. or M.R.C., etc. However, the Government, through its representation on these bodies, and by contributing money to them, tacitly recognises the independence of the research student from his parents. The aim of the grants campaign will thus be three-fold.

1. To enlist sympathetic public opinion.
2. To demonstrate the similarity of clinical medical students and research students.
3. To show the hardship involved for the parents in a prolonged contribution to their children's grants, and if possible, to show this to be a deterring factor in application of some students for a medical course."

### The London Region Chairman:

Mr. Charles Robinson of the London Hospital is the Chairman of London Region. He is actively concerned with Medical Education, Visual Aids (B.M.A.), A.S.M.E., Services Liaison, and Beer, etc. Medical Education is a large part of his work and he is, at the moment, assimilating the facts obtained from a survey which covered every medical school in the United Kingdom.

He and I have to produce a film which is to be shown to sixth formers in order to give them an idea of what medicine and medical education entails. It is hoped that this will guide them in their choice of careers so that if they decide to study medicine, then they will know what it entails.

### The Director of Publications:

This post is held by myself. It is my main task to produce the bi-monthly newspaper that I hope you will have read about in the last issue of the *Journal*.

The name of this newspaper is SCOPE. It is not particularly enterprising but is a compromise between the Advertisers and myself.

I would like to modify last month's article and give the revised list of filled posts on the newspaper:

Andrew Fletcher : Features Editor  
George Lodge : News Editor  
John Burman : Reviews Editor

The post of Advertising Manager is vacant until October and so if anyone is interested will they please get in contact with either myself or one of the above.

I would like to remind you of the facilities for classified advertisements in the newspaper and also of your capacity to earn money by obtaining advertisements or writing articles.

Please remember that the British Medical Students' Association is your Association. Therefore, I hope that you will all take an active part in it. I would be delighted to answer questions if you are interested in any aspect of B.M.S.A. and if you have any grievances or suggestions I would like to hear them.

DAVID A. STRINGER.





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## Sports News

### CRICKET CLUB

The season opened in April with bright prospects. The majority of last year's eleven remained and some promising new talent was evident. What's more, the weather seemed favourable.

#### April 19th v. University College Hospital at Mill Hill

Won by 109 runs. Winning the toss, Bart's elected to bat until tea, when we declared at 195 for 5. D. Lindsell, opening in his first match for the hospital scored a confident 31; P. Furness, a varied 76 including one 6 and fourteen 4's; and D. Berstock a rapid 44.

#### April 26th v. London House at Chislehurst

Won by 109 runs. Again batting first, Bart's had a very useful opening partnership of 59 between Lindsell (29) and Purcell (89). Bart's declared at 185 for 6 and dismissed the opposition for 76.

#### April 30th v. University of Sussex at Chislehurst

Match drawn. Bart's scored 150 for 6 before tea; Furness getting 40, Purcell 27 and Reid 26. University of Sussex replied with 103 for 5; Lloyd taking 4 wickets for 28.

#### May 4th v. Southend at Chislehurst

Won by 7 wickets. Returning many years of hospitality, we entertained Southend at last at Chislehurst, and they declared at 170 for 7 at tea. Purcell found runs easy to come by and carried his bat for 75; Furness scored 57 and we reached the required score for the loss of only three wickets.

#### May 7th v. Royal Free Hospital at Enfield

Match drawn. A much depleted side allowed the Royal Free to reach 163; Rowland taking 5 for 51 and Berstock 5 for 32. Bart's then replied with 121 for 7 when time ran out. Reid scored 33 and Page 30.

#### May 11th v. Hampstead at Hampstead

Lost by 126 runs. As usual, the weather was dismal for this match, and some very loose bowling by Bart's allowed Hampstead to score 227 for 8 declared. Bart's struggled to 101, and unnecessarily were all out for this score. Too many wickets were needlessly thrown away, and only Furness (41) looked like offering any resistance. Although this is probably the toughest fixture of the

season, it is a pity not to have done better. The return match is at Chislehurst in July.

#### Saturday, May 17th v. Crishan at Crishall

Match abandoned. On a very overcast day, Bart's scored 170 for 5, before the rain finally came down to abandon the match. Purcell scored 49 and Firmin a very solid 52.

#### Sunday, May 18th v. Romany at Chislehurst

Match abandoned. Again the rain ruined this match. Bart's scoring 56 for 2.

#### Thursday, May 22nd—2nd round of the Inter-Hospital Cup v. Kings College Hospital at Dog Kennel Hill

Won by 5 wickets. Bart's had a bye in the first round and Kings walked over the Royal Dental Hospital. Due to the wet pitch, the game started at 12.00 and Kings had a good opening stand of 86, and then lost two quick wickets before lunch. After lunch, they offered less resistance, and Berstock (perhaps now somewhat fortified) bowled well to take 6 for 31. Bart's reached the total of 137 for 5 wickets; Furness scoring 42, and Firmin 33.

The 2nd XI, Junior Cup, v. Kings at Chislehurst was also won by two wickets. C. Varton and D. Husband somewhat strengthened the Bart's side, and the unusual yet welcome sights of D. Davits and K. Ross with cricket bats were seen; the former hitting the winning score.

#### Sunday, May 25th v. Woodpeckers at Chislehurst

Lost by 95 runs. The second defeat of the season took place on Whit Sunday against the Woodpeckers, a new fixture. The visitors winning the toss elected to bat and scored 173 for 5. Bart's were soon in trouble and were 2 for 2. Chapman (13) and Shepherd (20) temporarily stopped the rot, followed by Rowland (19) but the total of 78 was not very impressive.

At the same time, at Trottiscliffe, the annual entertainment was taking place, with some very strange cricketers performing. The home side scored 77, Lloyd taking five wickets and Berstock four. Bart's reached the total for the loss of five wickets; the final hit, a six from McIntyre, being instigated by the lower batsmen wishing to sample the ale!

#### Saturday, May 31st v. Streatham Wanderers at Chislehurst

Match drawn. On a drying wicket, with a very slow outfield, Bart's scored 204 for 4 declared. Purcell made 116, a notable feat and fine innings which



he soon regretted in the bar. Furness again just failed to reach 50 scoring 49. The opposition totalled 155 for 5—although the catches dropped allowed them many lives.

#### Sunday, June 1st v. Putney Eccentrics Tie.

This appears to be the first tie recorded in the history of Bart's cricket, and certainly was a very exciting match. Bart's batted first and reached 120—losing 8 wickets before lunch. However, as so often happened last season, the attitude that once we have the runs, the other side has to score them paid off. Good fielding and catching never allowed the Eccentrics to freely score. Barstock bowled well taking 6 wickets for 48 runs and Husband 4 wickets for 9 runs.

**At the time of going to Press, the club had just beaten Guy's (once again!) in the Semi-Final of the Inter-Hospitals Cup by 94 runs.**

JOHN SHEPHERD

#### RIFLE CLUB

The full bore season has met with mixed fortunes so far. Despite many people saying that they were interested in shooting, very few have actually managed to get down to Bisley, with any regularity. It seems that exams are taking a very heavy toll of our members this year.

#### Paffard Cup

The Paffard Cup is the University Inter-Collegiate Cup, and was held on Wednesday, May 7th. Bart's only entered one team this year and were placed 4th after an enjoyable afternoon's shoot in good conditions.

	200 yds.	500 yds.	TOTAL
C. I. V. Franklin ...	48	48	96
G. D. Tuckwell ...	44	46	90
P. J. Cillinra ...	43	44	89
A. O. C. Knight ...	48	48	96

Total 365

The winners were the London Hospital with an excellent score of 383.

#### University Championships

In the University Championships held on May 10th and 11th Bart's did very well.

In the long range at 900 and 1,000 yards Toni Knight won with 48 and 43 giving him 91 and Ian Franklin came second with 44 and 42 for a total of 86.

In the short-range on the Sunday the conditions were excellent and the scores were high. Ian Franklin scored 32, 34, 33 to finish fourth with 99. The first two places went to U.C. with 103 and 102.

By and large we have done quite well, but

it would be nice to see more people down at Bisley.

IAN FRANKLIN

#### HOCKEY CLUB REPORT

##### Easter Tour

Our third visit to the Guernsey Easter Hockey Festival proved to be as successful and enjoyable, both on and off the field, as the previous two.

Although not featuring so prominently with our off the field entertainment this year, we nevertheless made it abundantly clear to many inhabitants, that Bart's were back again—to no one more so than the manager of our hotel, who with his highly strung temperament, threatened eviction on one occasion.

As for the hockey, we played 6 games, winning 3, drawing 2 and losing 1: this brought us to third place in the table drawn from all the visiting and home teams. A commendable effort, and it was an effort.

Altogether a thoroughly successful three days and there are hopes that we shall be able to return next year.

Those who went:—

*D. Edmonson, C. Yates, D. Robinson, R. Barclay, S. Thompson, C. Reid, J. Tweedie, C. Van Heyningen, P. Doughty, D. Barber, A. Allan, J. Osmont, A. Weir.*

A full account of the A.G.M. and Dinner which was held on June 27th will appear in the next issue.

DAVID EDMONDSON

#### SAILING CLUB REPORT

##### Match v. Hampton Sailing Club, Saturday, April 19th

Team	
{ R. G. Chapman	
{ Miss J. Wulsworth-Bell	
{ B. Noble	
{ Miss S. Rowntree	
{ J. A. Durham	
{ Mrs. J. A. Durham	

Bart's enjoyed a very pleasant afternoon on the Thames in this friendly match with Hampton Sailing Club, sailing in 14 ft. Merlin Rockets. Conditions were very difficult, however, because the wind was never more than a gentle force 1 and for most of the time was completely absent. In addition a 2-3 knot current flows continually downstream, and therefore at times the beat upriver became a struggle to stop drifting fast downstream. Local knowledge was further put at a premium by the line of trees and bushes lining the banks of the river. Successful river sailing, particularly in light airs, demands special techniques of creeping along the bank looking under every

bush for a puff of wind, and the Bart's sailors were foreign to these conditions.

The start of the first race was delayed so that Noble, who had looked like drifting all the way to Blackfriars Bridge could paddle to the bank and tow himself upstream to the start. At the starting gun all six boats were drifting downstream in a complete calm, Chapman and one of the opposition were the first to pick up the wind whilst sitting in the middle of the river, and started up the first beat. The Hampton boat arrived at the windward mark first with Chapman close behind and this order was maintained to the finish. Durham had been in close attendance at one time, but when tacking to avoid an eight came aground on the bank and lost valuable time. The second Hampton boat came through, and despite the fact that Durham and Noble fought all the way home, they could not stop the third Hampton boat finishing 4th.

The second race followed a similar pattern. There was rather more wind at the start, and Chapman took an early lead by tacking up the middle of the river. However when the wind dropped two Hampton boats sailed through and reached the weather mark first. The other opposition boat was lying 4th with Noble and Durham 5th and 6th at the end of the first lap, when the wind finally completely died and the race finished by general consent.

#### F 3276

With the aid of a capital grant from the Students' Union, the Sailing Club has just taken delivery of a new Firefly (F 3276), as yet unnamed. This is a fibreglass model of the older wooden Fireflies, and whilst great care is necessary in the running and general maintenance of any boat, there is no longer the need for the complete strip-down and overhaul which should be carried out annually with wooden boats.

#### Regatta

The new date for the Sailing Club Regatta is Wednesday, July 9th. This is after both 1st and 2nd M.B. exams and so we are hoping for a large entry from all sections of the College. Races will be held for the Commodore's Cup, and there will be Ladies and Single-handed races. A nominal entry fee will be charged to cover costs, and any one wishing to enter should contact B. D. O'Farrell or R. G. Chapman in College Hall.

There will also be a dinner in the evening at a venue yet to be decided.

#### GOLF CLUB

##### April 3rd v. St. Thomas's Hospital at Chislehurst G.C.

Bart's "Extra Social B" Team lost splendidly but won convincingly in the bar. Result:—lost 0—3.

##### April 10th v. London Hospital at Royal Blackheath G.C.

For our first important match of the season we were under strength but enjoyed a good match against a strong London team. Stuart Davison played well to win, but the rest of us were rather out of practice. Result:—lost 1½—3½.

##### April 30th, Cup Match v. Royal Dental Hospital at Gerrard's Cross G.C.

In beautiful weather at this attractive course our opponents found themselves outclassed and we won 5—0 with no difficulty. Ken Ross, playing number one, was the only Bart's man down during the game, but he recovered well to win.

Results:— K. Ross won 4 and 3.  
S. Davison won 6 and 5.  
D. Richards won 7 and 6.  
C. Booth won 9 and 8.  
J. Laidlow won 6 and 5.

#### Golf Tour

##### May 2nd v. Colchester G.C.

This eighteen hole afternoon match provided an enjoyable prelude to the big matches to follow. The Colchester team was surprisingly weak and we had no difficulty in avenging our defeat of last year. The golf was not especially notable, except that of Laidlow and Griffiths; the former broke a club and the latter broke in half an "unbreakable" ball!

Four ball better match, results:—

S. Davison and D. Rickards won 4 and 3.  
H. Rutherford and R. Jukes won 5 and 4.  
C. Booth and N. Packer won 3 and 2.  
J. Griffiths and J. Laidlow lost 2 down.  
Bart's 3, Colchester 1.

##### May 3rd v. Ipswich Golf Club at Purdis Heath

This match was undoubtedly the highlight of the tour. In beautiful weather we played four-somes in the morning and four ball better ball matches in the afternoon. This year Ipswich were looking for a win and played a well balanced side against us. The result was a draw with every match finishing amidst great tension and very remarkably in halves with the last put on the last green.

In the morning foursomes Davison and Rickards played well for a 2 and 1 win. Our second win came in the third match where Packer and Booth contrived to win the most





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remarkable hole of the day with a par 4 on a 440 yards hole where they were never on either fairway or green till the ball finished in the hole after Packer had played a splendid recovery shot up over a 20 feet bank topped by 12 feet of wire netting.

In the afternoon Davison played a superb round of par 71, Booth scored a 77, and Rutherford and Griffiths staged a great recovery to halve their match when all seemed lost.

Results:— Morning Foursomes:—

Davison and Rickards won 2 and 1.  
Rutherford and Jukes lost 4 and 3.  
Booth and Packer won 2 and 1.  
Laidlow and Griffiths lost 4 and 3.

Afternoon Four balls:—

Davison and Rickards halved.  
Booth and Packer halved.  
Rutherford and Griffiths halved.  
Jukes and Laidlow halved.  
Barts 4, Ipswich 4.

### May 4th v. Woodbridge Golf Club

Another scorching day on this tricky heathland course ended with a satisfying win to finish off an excellent tour. Once again we played foursomes in the morning and four balls in the afternoon.

In the morning foursomes Davison and Rickards played an excellent round of 76 to win 2 and 1. Rutherford and Griffiths had a comfortable win, but Booth and Packer gained a hard earned half by sinking 30 foot and 15 foot puts on the last two greens. Jukes and Laidlow also had to work hard for a half.

In the afternoon Davison and Rickards, then Booth and Packer lost their unbeaten records but victory was ensured by the other two pairs. Jukes and Laidlow had a close game with each contributing one good half and so scraped home one up.

Results:— Morning Foursomes:—

Davison and Rickards won 2 and 1.  
Rutherford and Griffiths won 4 and 3.  
Booth and Griffiths halved.  
Jukes and Packer halved.

Afternoon Four balls:—

Davison and Rickards lost 2 and 1.  
Rutherford and Griffiths won 2 and 1.  
Booth and Griffiths lost 2 and 1.  
Jukes and Packer won 1 up.  
Bart's 5, Woodbridge 3.

### MEN'S TENNIS CLUB REPORT

We started the season with trials held on the College Hall Hard Courts. We were pleased to have several new players turn out and welcome them to the Club.

### Wednesday, April 30th

League Match v. King's College Hospital.  
Lost 5—4.

We were beaten five games to four by King's and the score reflects the evenness of the two teams. Several of the matches were decided in the third and final set.

### Saturday, May 3rd

University of London Cup—1st Round  
v. King's College  
Won 9—0.

King's College were unable to turn out their first six owing to a domestic misunderstanding. The result, though very satisfactory from a Bart's point of view, may thus be a little flattering. Stephen Grainger and Hugh Simpson, two new members of the team, had a very good game.

### Wednesday, May 14th

United Hospitals' Cup v. Guy's  
Won 6—1, match unfinished.

Nick Perry and John Corbin made a welcome entry to the first six and so we were able to turn out a very strong Cup side. Guy's too produced a strong team, so the result augurs well for the future.

Results:—

Bart's I (N. Perry and J. Corbin)  
v. Guy's I — WON  
v. Guy's II — WON  
v. Guy's III — WON  
Bart's II (C. G. F. Hunt and C. Higgins)  
v. Guy's III — WON  
v. Guy's II — LOST  
Bart's III (A. Dale and J. Wellingham)  
v. Guy's II — WON  
v. Guy's III — WON

### Wednesday, May 21st

University of London Cup—2nd Round  
v. Mary's Hospital  
Won 6½—2½.

We were able to turn out a near full strength team and had a good win against Mary's Hospital. They were a bit surprised, as they had beaten us 8—1 just a couple of weeks earlier when we had a somewhat depleted 1st VI. This victory put us into the semi-finals of the U.L. Cup. May the good luck continue!

Results:—

Bart's I (N. Perry and J. Corbin)  
v. Mary's I — Won 6-0, 6-1  
v. Mary's II — Won 6-2, 6-1  
v. Mary's III — Won 6-2, 6-2  
Bart's II (C. G. E. Hunt and C. Higgins)  
v. Mary's I — Lost 6-2, 4-6, 2-6  
v. Mary's II — Won 6-4, 6-2  
v. Mary's III — Won 6-0, 8-10, 6-1



Bart's III (V. Blanchette and J. Wellingham)  
 v. Mary's I — Lost 6-4, 4-6, 4-6  
 v. Mary's II Won 6-4, 6-4  
 v. Mary's III — Match unfinished  
 7-9, 9-7

V. S. BLANCHETTE

**ATHLETICS CLUB REPORT**  
**University of London Championships—**  
**April 26th**

Despite a downpour of rain in the morning, the afternoon of April 26th was perfect, allowing athletes to be free from hindrances of wind and rain. Unfortunate circumstances allowed only three of the expected Bart's athletes to compete; including the Captain, who managed to rick his back the morning of the Championships. But despite this small number Bart's managed to win three events, namely the 800 metres, the 1,500 metres, and the discus.

Robin Barrett won the 800 and 1,500 metres with no trouble. Paul Bebbington, who is one of Bart's most successful and reliable athletes, once again proved his superiority in the discus event. Richard Moody ran well, coming sixth in the final of the 1,500 metres.

I would like to make a plea to all of those people who do other sports during the Winter and would like to keep fit during the Summer. As you have read, the team has vacancies in every event and all of those people who are interested, would they please contact Tony Breeson if they want to compete this season, or sign their name and event on the list on the Athletic Club notice-board.

TONY BREESON

**Inter Hospitals**

**Stroll:**

**report**

**Robin Rayner**

May 17th, 1969 marked the return of the Inter Hospitals Stroll after an interval of three years. Instead of walking down the A23 in twenty-four hours or less, as in the past, the route this year followed the 29½ mile section of the Pilgrims' Way which runs from Compton Green (S.W. of Guildford) to Godstone, and in so doing crosses all but ¾ of the O.S.1" Sheet

170. The time limit was eleven hours, starting at nine o'clock in the morning.

Much of the Stroll was along tracks and footpaths (lamentably muddy in places) and this made for a safer and more peaceful journey than is possible on a traditional road-walk. The countryside was very attractive, and it is a pity that many walkers dropped litter along the way to advertise their passing.

Guinness and Bovril provided competitors with their respective brews at several points on the route. Bovril supplied sandwiches, too, and Guinness furnished each walker with a four-part route map. Because of the bad time-keeping of our coach company (Banfield's) Bart's walkers left the start almost an hour later than we had hoped and the thousand plus people ahead of us managed to consume our share of the fruit supplied by the Medical Sickness Society and of the butter scotch given away by Messrs. Callard and Bowser.

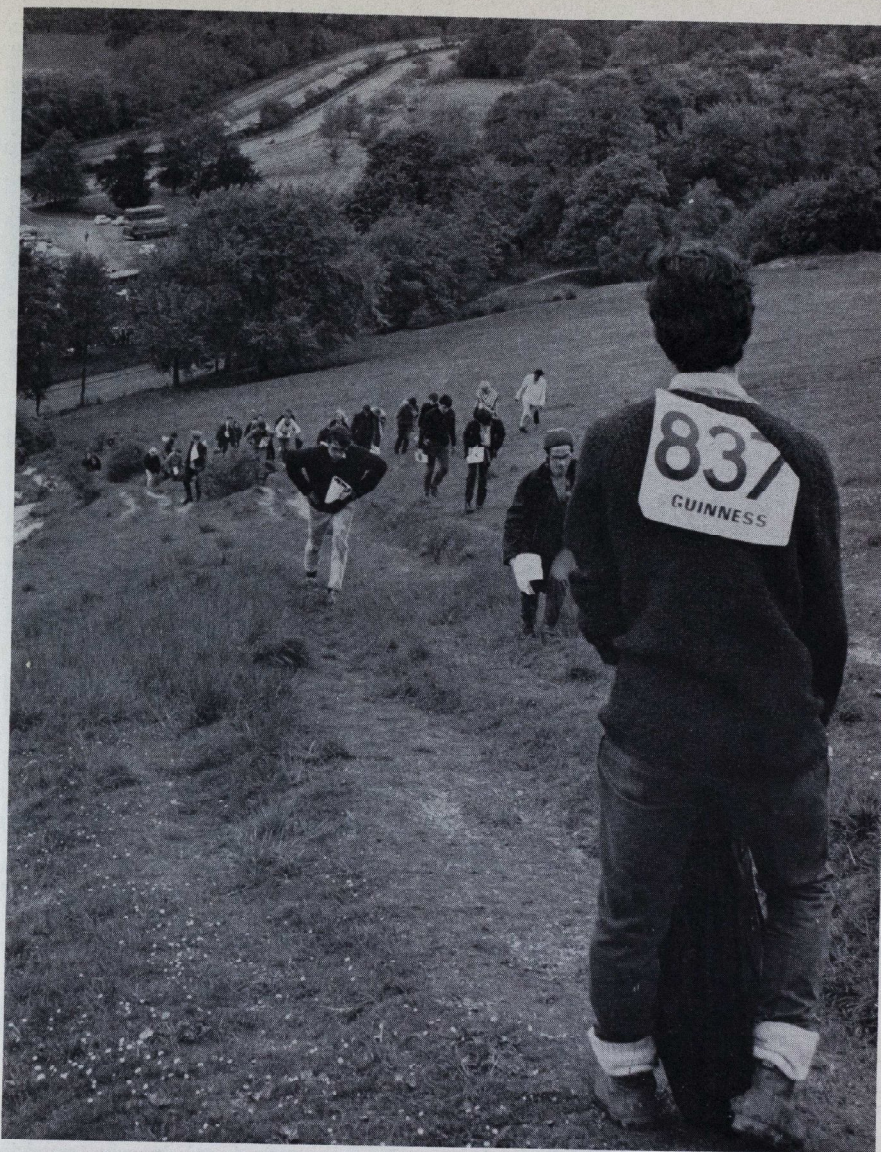
Heavy rain set in at seven o'clock, but until then the weather had been fairly good—cool, with light showers now and then.

The organisers were fortunate in receiving the co-operation of the Surrey Constabulary who controlled the traffic at all points where the route crossed a road, and the St. John Ambulance Brigade who treated the foot-weary at the finish.

**STATISTICS:** Out of the 6,258 undergraduates at the twelve London teaching hospitals, the Royal Veterinary College and the Royal Dental Hospital, 1,107 (17.7%) successfully completed the Stroll in the eleven hours allowed. About 1,400 started to walk. Out of the 658 students at Bart's, 95 filled in entry forms, 90 turned up on the day, and 73 (11.1%) were successful.

**COMMENTS:** This was a very poor response when one considers that 63.9% of the Westminster's students got there, and 56.7% of those from the Charing Cross. Most of the walkers I questioned on the coach coming back considered that this Stroll required as much stamina as did the Brighton one and represented quite a challenge to them. I hope that we will show our true worth next year.

**CONGRATULATIONS:** To Bart's on beating four other hospitals. To John Brookes, David Wainstead and Peter Munden on being the first three Bart's people to finish. To the aforementioned Brookes on being the second fastest competitor in 4 hrs. 20 mins., only ten minutes behind Booth of St. George's. And to the eight Bart's women who finished—look to it, men!



the long way up

photo: courtesy Guinness



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Saint Bartholomew's Hospital

## JOURNAL

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## journal staff

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## EDITORIAL

Peoples' attitudes to their environment are determined by the environment: if it is pleasant, suitable to their temperament and unobtrusive, they will care for it and protect it. Last month, the fountain was cleaned at Barts, at the same time, other stone restoration was carried out: but to any outsider, the effect must be of a clean fountain surrounded by dark and dismally stained buildings. It is time that all of Barts was clean.

The buildings that have survived the years are those which people have cared for, because they have been happy there and have had a certain regard for the walls that have surrounded them. Barts is worth preserving: its passing would be regretted by many, to protect it from outside, it would help to give more care to its walls and protect it from the grime.

Most establishments are an uneasy compromise between the requirements of progress and respect for their tradition. Now at Barts, there are the new finance offices and the new pathology block within the Hospital proper. At the moment they are not too obtrusive, not from any outstanding architectural merit but because they are lost among their surroundings. Once more changes are made, this alliance between the old and the unimpressive will become more and more uneasy and when that happens the question of what changes to make next, what to knock and what not to knock becomes more difficult.

Hospitals and laboratories are among the most difficult of buildings to design, a multitude of different claims are made on them by different groups, whose only common factor is their common interest. In general, those of the patient as regards air, lighting, sun and space are illmet in most hospitals. Projects and plans have been delayed at various committee stages, compromises and economies have been made; as a result, much building is outdated before it is even built. At the other extreme extensions are built to those hospitals which were originally workhouses, unbelievably, they are built in best period workhouse style.

To design a successful working interior for a hospital is one of the most testing problems a designer is ever faced with, ideally the closest co-operation is required between the designer and the prospective users. For the patient it must be comfortable since he may well be spending a long time in a debilitated state in such surroundings, he may bravely believe that all hospitals are the same but this is not so. The nursing staff require somewhere easy to run and keep clean in which to manage the patient. Whatever each gets will be determined by the money available. Cheapness is still the priority in design and in the short-term it is often more justifiable to make major alterations to existing structures, at no matter what inconvenience, rather than build afresh.

Most of our hospitals could be justifiably destroyed and rebuilt on the grounds that they are an eyesore, much the same can be said of the tenements around London, a lot of them built by charitable trusts. Good intentions will not necessarily ensure survival and there would be few regrets if a motorway route was projected through either, providing every one was suitably rehoused and the new hospital was as convenient as the old one.

Inconvenience is a powerful old reason for not doing anything; if it is great enough, there is delay, possibly the plans are shelved and, however, modifications and compromises will slip in. Sometimes if the plan is big enough it will go through anyway no matter what the opposition. The proposed motorway around London will involve the forced buying up and then destruction of peoples houses. As far as most of them go their destruction cannot be of anything more than in the public interest, this makes it no more easy to take if it should happen to be your house. To wake up and find a motorway, airport or just an old car, abandoned in the night, outside the door is a hazard of this age, things could be worse and it might be the Army moving in, no one despoils the land or leaves such a mess behind them as they do. Worse still, when they abandon a camp it is left in ruins, yet often they keep the land for no very good reason and nothing is ever done about these scars over the landscape.

It is becoming increasingly difficult for man to preserve his environment, the arguments against his preserving it are often good and are often reasonable. All the same, much change seems to be illconceived and inadequate and large scale plans are often whittled down to nothing and with them go the advantages they can bring. Man has landed on the moon, perhaps there with a fresh start he can control his environment, preserve what he would like to preserve and not construct the sort of communities which make the whole question of preservation a relevant one.

# HOUSE APPOINTMENTS

## JULY 1969

Consultant Staff	House Officers	Wards	
		Male	Female
SIR RONALD BODLEY SCOTT	Mr. J. A. Russell	Harvey	Luke
Dr. W. E. Gibb	Mr. D. G. Griffiths		
DR. G. W. HAYWARD	Mr. C. L. Gauci	Smithfield	Mary
Dr. H. Wykeham Balme	Mr. B. I. Rees		
DR. K. O. BLACK	Mr. P. E. Belchetz	Rahere	Colston
Dr. A. M. Dawson	Miss S. F. Pearsall		
DR. N. C. OSWALD	Mr. M. O. Savage	Dalziel	Annie Zunz
Dr. G. Hamilton Fairley	Mr. O. R. C. Smales		
PROFESSOR E. F. SCOWEN	Mr. D. Jefferson	Stanmore	Garrod
Dr. A. G. Spencer	Mr. D. B. Jackson		
MR. A. H. HUNT	Mr. B. G. H. Lamberty	Fleet Street	Harmsworth
Mr. Ian P. Todd	Mr. P. D. Fairclough		
MR. E. G. TUCKWELL	Mr. A. G. Barclay	Rees Mogg	Paget
Mr. M. A. Birnstingl	Mr. P. R. Jordon		
MR. D. F. ELLISON NASH	Mr. R. D. Winter	Waring	Abernethy
Mr. J. D. Griffiths	Mr. C. G. Swift		
MR. J. O. ROBINSON	Mr. I. B. M. Stephen	Bowlby	Heath Harrison
Mr. H. B. Ross	Mr. P. V. L. Curry		
PROFESSOR G. W. TAYLOR	Mr. J. P. D. Reckless	Percivall Pott	Lawrence
MR. I. McColl	Mr. I. D. Fraser		
DR. K. O. BLACK	Mr. P. South		
MR. J. O. ROBINSON	Mr. R. L. Brearley		
		CASUALTY HOUSE PHYSICIAN	
		CASUALTY HOUSE SURGEON	
<b>Department of Child Health</b>			
DR. A. W. FRANKLIN	Mr. J. S. Lilleyman		Lucas
Dr. P. J. N. Cox	Miss E. V. Elliott		Kenton
<b>Ear, Nose &amp; Throat Department</b>			
Mr. J. W. Cope	Mr. C. A. Grafton		Henry Butlin
Mr. R. F. McNab Jones	Mr. H. A. Bagshaw		
Mr. A. P. Fuller			
Mr. L. N. Dowie			
<b>Eye Department</b>			
MR. J. H. DOBREE	Miss E. B. Jones		Radcliffe
Mr. M. A. Bedford	Mr. R. A. F. Whitelocke		



**Department of Obstetrics & Gynaecology**

MR. D. B. FRASER	Mr. J. Barber	(O) Martha
Mr. Gordon L. Bourn	Mr. J. Bostock	(O) Elizabeth
Mr. David Williams	Mr. R. K. Davies	(G) Sandhurst
Mr. C. N. Hudson	Mr. I. McLellan	(G) Pitcairn

**Dental Department**

MR. J. D. CAMBROOK	*to be appointed	Fleet Street	Harmsworth
Mr. T. T. Schofield			
Mr. F. R. Coffin			
Mr. B. D. Markwell			

**Orthopaedic Department**

MR. J. N. ASTON	Mrs. J. A. Dixon	James Gibbs	Hogarth
Mr. C. W. S. F. Manning	Mr. G. O. Hopkins		Henry
Mr. A. W. F. Lettin	Mr. J. Thurlow		

**Department of Thoracic Surgery**

MR. O. S. TUBBS	Mr. J. Gawler		Vicary
Mr. I. M. Hill	Mr. J. A. Sills		

**Department of Neurological Surgery**

MR. J. E. A. O'CONNELL	Mr. E. D. Dorrell		W. G. Grace
Mr. R. Campbell Connolly	Mr. G. Danovitch		

**Skin Department & Special Treatment Centre**

DR. P. F. BORRIE	Mr. A. du Vivier	Smithfield	Mary
Dr. D. D. MUNTO			
Dr. C. S. NICOL		Rahere	Colston

**Departments of Neurology & Psychological Medicine**

DR. J. W. ALDREN TURNER	Mr. C. Davidson	Stanmore	Garrod
PROFESSOR W. L. LINFORD REES		Harvey	Luke
Dr. C. M. B. Pare			Radcliffe

**Department of Urology**

MR. J. E. A. WICKHAM	Mr. M. J. E. Gann	Dalziel	Annie Zunz
Mr. C. A. C. Charlton		Bowlby	Heath Harrison
		Waring	Abernethy

**PRIZEWINNERS, 1969**

Ann Christine Miller, Brackenburg Scholarship in Medicine.  
 Susan Fow Pearsall, Brackenburg Scholarship in Surgery; Walsham Prize; Prox. Access. Burrows Prize.  
 Peter Joseph Michael McKenna, Roxburgh Prize; Willett Medal; Prox. Access. Brackenburg Schol. in Surg.  
 Victor Frederick Larcher, Skynner Prize; Burrows Prize.  
 Ian Douglas Fraser, Sydney Scott Prize.  
 Richard Tadeusz Jolly, Matthews Duncan Prize.  
 William Robert Tingey, Prox. Access. Matthews Duncan Prize.

Ian McNeil Miller, Withers Prize in Ophthal.  
 Paul Vincent Langham Curry, Weitzman Prize.  
 Jacob Mackinnon, Wix Prize.  
 Ian Douglas Young, Harvey Prize.

L. HAWKINS.

**ANNOUNCEMENTS****Birth**

GARROD—On June 11, to Sallyanne (née Onslow-Free) and Dr. Anthony Garrod, a son, brother for Timothy and Catherine.

**Birthday Honours****O.B.E. (Military)**

Surgeon Commander George Anand Rurik Giri, M.A., L.M.S.S.A., D.P.H.

**O.B.E. (Civil)**

Charles William Bennett, M.R.C.S., L.R.C.P., F.R.A.C.S.

**Appointments**

Mr. C. N. Hudson, senior lecturer at St. Bartholomew's Hospital Medical College, has been appointed to a readership in obstetrics and gynaecology tenable at the College.

Mr. F. E. Weale, M.S., Ph.D.Lond., F.R.C.S., has been appointed consultant in general surgery to the Gravesend and North Kent Hospital.

**Changes of Address**

Dr. E. Colin-Jones has moved from 27 to 29 Mallory Road, Hove, Sussex, BN3 6TD.

M. Crosfill is now c/o Lewis Hospital, Stornoway, Isle of Lewis, Scotland.

Mr. and Mrs. H. H. Langston, to Queen's Cottage, Bournemouth Road, Lyndhurst, Hampshire, SO4 DP. Tel.: Lyndhurst 2446.

Brian J. Stoodly to 13 Baxendale, Whetstone, N.20. Tel.: 445 4440.

Mr. and Mrs. Ian P. Todd to 17 Heathgate, N.W.11. Tel.: 458 3004.

**Marriage**

The marriage took place at the University of Sussex of Miss Aneta Lane to Mr. Peter Bailey on Saturday, 21st June, 1969.

**Deaths**

ARULANANDOM—On February 21 at Bart's, Dr. Victor Ross Arulanandom, M.R.C.S., L.R.C.P., aged 54. Qualified 1941.

CANE—On June 8, Dr. Maurice Hereward Cane, B.A., M.A., M.R.C.S., L.R.C.P., aged 81. Qualified 1915.

HARRISON—On June 22, Dr. William Robert Eric Harrison, M.R.C.S., L.R.C.P. Qualified 1927.

**UNIVERSITY OF ABERDEEN****Blackwell Prize for English Essay**

Founded in 1793, in Marischal College, by Mrs. Barbara Blackwell widow of Thomas Blackwell, M.A., Marischal College, 1718; LL.D., King's College, 1752, eleventh Principal of Marischal College.

The value of the Prize, which is open to unrestricted competition, is £150 for the best English Essay on a prescribed subject and is awarded as far as possible every alternate year.

The next award will be made in 1971, and the subject of the Essay is:—

**Colonial Legacies and the Prospects of Developing Countries**

Candidates are advised that their Essays, which must be typewritten, should approximate

from 10,000 to 20,000 words and must be lodged with the Secretary to the University, Marischal College, Broad Street, Aberdeen, AB9 1AS, on or before 1st January, 1971. Each Essay must bear a motto only and be accompanied by a sealed envelope bearing the same motto and containing the full name and address of the writer.

The successful Essays are preserved in the University Library.

# Letters to the Editor

18th June, 1969

Dear Sir,

**Item: Doctor, Standard British Education, Method of**

On the morning on which I received the June issue of the *Journal* containing your Editorial on Medical Education, I conducted my weekly tutorial at 9.15 a.m.

The subject that morning was the emergency treatment of respiratory and cardiac failure, which I think that you must agree is an important enough topic. The talk was illustrated with slides which I had spent some time arranging before eating a hurried breakfast and leaving home for work at 7.45 a.m.

Out of the eleven students on the course that month only three attended.

Students may feel frustrated—so, at times, do teachers!

If, in these mercenary days, anyone should be tempted to say, "Well, he gets paid for it," it is germane to point out that because of some rather curious regulations, whole-time N.H.S. consultants in this Hospital are denied even the small fees for teaching and lecturing to students which are paid to their part-time colleagues.

Yours, etc.,

T. B. Boulton,

Department of Anaesthesia.

Dear Sir,

The article by Mr. John Howkins about extra-mural infiltrators makes no mention of either Sir Bernard Spilsbury or Mr. Cedric Lance-Roberts, both of whom brought lustre to the name of Barts.

The former made an international name for



himself in Forensic Medicine while the latter, who was an out-patient physician in the gynaec department, was recognised as a most brilliant teacher. In fact I regarded my success in the Matthews Duncan to be due to Lane-Roberts and Wilfred Shaw more than either of the senior consultants mentioned in the article.

Your sincerely,

Dr. R. W. Windle,  
62 Wilbury Road,  
Hove, Sussex.  
18th June, 1969

#### Cancer and Social Class

Dear Sir,

It has been statistically proved that Cancer is more prevalent in Social classes IV and V than in I and II. It has been suggested that the reasons for this are Lack of Hygiene, Early Marriage, Promiscuity, etc. In my opinion this is nonsense.

I don't believe that dirt (misplaced matter) is even a factor in Cancer Aetiology, and all Cancers are due to a combination of several factors.

I suggest that all these "reasons" are symptoms of a "Hormone Pattern".

I doubt if the absence of smegma in circumcised husbands influences the rate of Cancer of the Cervix in Jewish women.

It is largely a matter of "Hormone Pattern" which is such an important function in Cancer Aetiology. Certain "Hormone Patterns" produce Nuns. We are all slaves of our own hormones.

I wonder if, in the wonderful experiment carried out in Guernsey by the Imperial Cancer Research Fund on Hormones and Breast Cancer, there are sufficient class IV to V to produce suggestive figures.

I shall be greatly obliged if some of your readers can suggest lines of research to prove or disprove this theory.

Your sincerely,

Malcolm Donaldson,  
Honorary Director,  
Cancer Information  
Association,  
6 Queen Street,  
Oxford, OX1 1BR.

19th June, 1969

Dear Sir,

I see from a short and not very flattering notice in the *Lancet* (i-473) that Reginald Hilton, M.D., F.R.C.P., died on February 13th. (Incidentally I feel sure that this obituary would

have been much to his taste). I can find no reference to his death in the *B.M.J.*

No-one who was a medical student at Bart's during the short time that Reggie Hilton was Assistant Director on the Medical Professorial Unit in the early thirties, will ever forget him. His vivid and eccentric personality, lightning fast and penetrating intelligence, had the impact of a snowball in the face. Although I never met him outside the hospital and indeed was never a clerk of Professor Fraser's unit, how well I remember him! There were no airs or graces about him, he treated us as equals. Sitting across a chair in medical out-patients he would auscultate a chest with one bare rubber tube connected to the chest piece stuffed into his left ear while he gesticulated expansively with his right hand and discoursed on the musical quality of cardiac murmurs their causation and significance, with inimitable verve. His enthusiasm was infectious, he made medicine terribly exciting. I am sure he had it in him to be one of the very few great clinical teachers.

He could not reconcile the exhibition of the various placebos, symptomatic and traditional treatments, we used in those days, with his scientific rectitude. He was a therapeutic nihilist, intolerant of woolly thinking, incapable of evasion and quite regardless of his own interests if it was a question of placating those able to influence his future. He was faithful to what he believed to be the truth even to his own detriment. No doubt he made many enemies and perhaps for that reason his career did not reach the heights his abilities foreshadowed.

He made an enormous impression on me from the slightest and shortest of contacts.

Yours sincerely,

W. S. Haynes, M.A., M.D.,  
Perth Chest Clinic,  
17 Murray Street,  
Perth, W.A. 6000.  
23rd June, 1969

1st July, 1969.

Dear Sir,

As the sole remaining Bart's man in the district, I am sending you this obituary notice. Always a man of action, he died the way he would have liked, quickly. His death will be mourned by very many people both here, in Australia and in Britain.

Yours sincerely,

Roland Lucas.

**After completing an operation at Wairoa Hospital, and on his way to perform another at Cook Hospital, a well-known Napier surgeon, Dr. Reginald Henshall Bettington, died when his car ran off the road near the foot of the Whararata Hill, about 20 miles from Gisborne, yesterday. (24.6.69).**

Dr. Bettington's car left the road, broke through a fence and fell about 100 feet before finishing upside down on the Gisborne-Napier railway line.

The car, with Dr. Bettington's body inside it, was found by a railway surfaceman making a routine check of the line.

Dr. Bettington, who was 69, was born in New South Wales and educated at King's College, Sydney, and later at Oxford University and *St. Bartholomew's Hospital, London*.

He gained his Bachelor of Medicine and Bachelor of Chir. degrees at Oxford in 1926 and four years later was appointed a Fellow of the Royal Australian College of Surgeons.

#### Served at Tobruk

In 1938 Dr. Bettington received his L.R.C.P. and M.R.C.S., also gaining a Diploma in Laryngology and Otology.

During the Second World War he served with the Australian Medical Corps in the Ninth Division in the Middle East, including Tobruk, from 1939 to 1943. From 1943 to 1945 he served in New Guinea.

Following the war, Dr. Bettington was a consultant ear, nose and throat surgeon to the Concord Repatriation Hospital and Sydney hospitals from 1945 to 1951.

He came to Napier in 1951 and since then had practised in conjunction with Dr. B. H. R. Hill.

#### Visiting Specialist

Dr. Bettington was a visiting specialist to the Napier, Wairoa, Cook and Opatiki Hospitals until the time of his death.

He was also a member of the Hawke's Bay Hospital Board from 1953 until 1968 when he did not seek re-election.

Dr. Bettington had an outstanding sporting career. He was the youngest ever cricket blue at King's College, being only 13 years of age at the time. At Oxford University he had the rare distinction of being a triple blue—in cricket, golf and rugby.

He was captain of the Oxford cricket team, which at that time included Lord Cobham, later Governor-General of New Zealand. Dr. Bettington formed a close friendship with Lord

Cobham, and during his Vice-Regal term in New Zealand Lord Cobham often stayed with Dr. Bettington in Napier.

#### Captained N.S.W.

After returning to Australia from Oxford, Dr. Bettington was appointed captain of the New South Wales cricket team and was a member of the New South Wales golf team.

In 1932 he was a member of an Australian cricket eleven which played against the late Arthur Gilligan's M.C.C. team. He also represented Australia at golf in the same year.

Dr. Bettington continued his golfing interest when he came to Napier, being captain of the Napier Golf Club from 1953 to 1955. He was the club's vice-president at the time of his death.

He was also a member of the Hawke's Bay Eagles Golfing Society, being a former past president. He retained his membership of the Royal Sydney Golf Club and until recently was a member of the Royal and Ancient Golf Society, England.

Dr. Bettington took a keen interest in coaching young people at golf and cricket. He had a reputation of always being ready to coach youth in either of these sports.

#### Racing Enthusiast

Throughout his life he also maintained a keen interest in horse racing. He was a member of the Napier Park Racing Club, being elected to the committee in 1952 and holding office as vice-president from 1960.

Dr. Bettington owned several horses in partnership with the late Sir Frank Packer, of Australia, and Mr. G. Wood, Hastings.

He bred all the progeny from the well-known mare Belleamber. The most famous of these was Musketeer, which he sold. Others included Fair Diana, Beau Tirage and Hostage.

Dr. Bettington was also vice-president of the Napier branch of the National Party and a member of the Napier Returned Services Association and the Hawke's Bay Poverty Bay Club.

He is survived by his wife—the former Miss Marion Lowry, a daughter of the late Mr. T. H. Lowry—and a daughter, Mrs. Gordon Thomas, of Patoka.

A memorial service was held for Dr. Bettington at St. John's Cathedral, Napier at 2.30 p.m. on the 26th June, 1969.

(From the "*Daily Telegraph*" of 25th June, 1969, Napier, New Zealand.)



## JUNIOR REGISTRARS IN SURGERY

APPLICATIONS ARE INVITED for five appointments of JUNIOR REGISTRARS IN SURGERY, as under:—

- 2 posts : six months General Surgery/six months Special Department\*
- 1 post : six months Emergency & Accident/six months General Surgery
- 1 post : six months Neurological Surgery/six months General Surgery

Applicants should state for which post they wish to apply and give a second choice.

The posts are tenable from 1st December, 1969, and the Salary Scale are those of a Senior House Officer in the National Health Service.

Applications, with the names of two referees, should reach the undersigned by Monday, 15th September, 1969. (Application forms are available from the Medical Staff Office).

Further information may be obtained from the Professor of Surgery or from Miss M. Turner in the Medical Staff Office.

J. W. GOODY,  
Clerk to the Governors.

\*Urology  
Orthopaedics  
Thoracic Surgery

## SENIOR HOUSE OFFICIALS EMERGENCY & ACCIDENT DEPARTMENT

APPLICATIONS ARE ALSO INVITED for the post of SENIOR HOUSE OFFICER in the EMERGENCY & ACCIDENT DEPARTMENT. The post is for six months only and dates from 1st December, 1969.

Applications should also reach the Clerk to the Governors by Monday, 15th September, 1969, and forms are available from the Medical Staff Office.

## St. Bartholomew's Hospital Students' Union

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Extracts from the Minutes of the Council  
Meeting held in the Students' Union Office,  
Charterhouse Square, on Monday, 19th May,  
1969, at 4.30 p.m.

---

### Present :

Mr. R. Page (in the Chair)  
C. Hunt (Financial Secretary)  
Mark Britton (Hon. Secretary)  
N. Houghton (Vice-Pres. Clubs' Union)  
P. Cottrell  
G. Hyde (Chairman—Wine Committee)  
R. Rayner (The Journal)  
P. Millard  
Miss P. Watkins  
C. Grafton  
G. Lodge  
A. R. J. Wall  
D. A. Berstock

### MATTERS ARISING

(a) **Hospital Refectory** : Mr. Page told us that Mr. Morris was still negotiating with the Hospital Governors regarding the closure of the Refectory and also for the proposed use of the Nurses' Dining Hall by the students.

(b) **Journal** : Mr. Rayner reported that due to the increased subscription from the Students' Union, the *Journal* would certainly break even this year. A large sum of money was expected from the Governors; advertising charges had had to be raised slightly, but subscriptions and the distribution of the *Journal* would remain the same as it was six months ago.

(c) **Gymnasium** : Mr. Hyde pointed out that the artificial roof of the Gymnasium keeps collapsing and is continuously being repaired and he proposed that this artificial roof should be removed. Mr. Grafton stated that the Gymnasium was wholly inadequate and agreed with Mr. Hyde that the artificial roof should not constantly have to be repaired, but he did not agree that it should be pulled down. He asked the Students' Union Secretary to find out from Mr. Morris what was the likelihood of new

facilities being available in the near future. In the meantime something should be done about the extremely dirty floor. This point is to be raised with Mr. Spalding. Mr. Page remarked that the clearing out of the concrete shed near the car park had not been done. If this was done, it would prevent the Gym from becoming a dumping ground for odd bits and pieces. Mr. Lodge said he would arrange with the Drama Society to clear out the shed.  
(d) **Crucible Society** : Mr. Lodge stated that the Crucible Club no longer wished to apply for membership of the Students' Union.

### N.U.S.

Mr. Britton mentioned that he had received information from the N.U.S. about their activities, and having read this through, he made the observation that the main advantage of joining was to enjoy their travel facilities. As far as he could see, they offered little else. The cost of the Union joining the N.U.S. would be approximately £175 per annum, based upon 5/- per capita. Miss Watkins stated that she had attempted to find out how many students were, or had been, members of the N.U.S. This amounted to approximately 80 students. Mr. Page proposed those present should vote upon the proposal to join the N.U.S. Voting was as follows :

FOR : Nil; AGAINST : 11; ABSTENTIONS : 2  
Mr. Britton then suggested that due to the huge amount of correspondence received from travel agents, the Union might set up a new post of Travel Representative, who might deal with all the enquiries and investigate concessions available for students. Mr. Hyde seconded this. Voting :—

FOR : 11; AGAINST : 2  
Mr. Wall agreed to act as temporary Travel Representative until an election was possible.



### PROVISION OF HOT DRINKS MACHINE, etc. in COLLEGE HALL

Mr. Lodge stated that he had investigated the possibility of providing such a machine, but had come to the conclusion that it was not financially viable. Then the question arose of a Milk Machine being provided. Mr. Cottrell said he had spoken to the Bursar concerning this matter. This too did not seem to be economically possible. However, Mr. Lodge said he would write to some of the Dairy Companies and also see Mr. Nixon concerning this matter.

### PROPS LOST AFTER THE POT-POURRI

Mr. Lodge raised the matter of two lost wigs following the Pot-Pourri last year. Mr. Hunt said that he had seen the two people responsible and they were arranging the matter with Mr. Bert Broe.

### CAR PARKING

Mr. Britton mentioned that several complaints had been made recently about the chaos in the lower car park and this seemed to stem from the fact that too many car parking permits had been issued but now that the Finalists had qualified, the situation should be eased. He then invited those present to put forward some constructive suggestions as to how car parking should be arranged in the following year. No suggestions were forthcoming.

Mr. Page said that plans were going ahead to build a permanent cover for motor-cycles and cycles in the College grounds.

### ANY OTHER BUSINESS

**Election of Journal Representative:** Due to the qualification of Miss E. Macdonald, it was necessary to elect a new *Journal* Representative. Paul Millard was proposed by Mr. Hunt and seconded by Mr. Page. This was carried unanimously.

**Percy:** Percy has been removed by members of King's College Hospital about three months ago. Mr. Page proposed that efforts should be made to find him and get him back. It was mentioned that Trevor Hancock would be willing to organise this.

**Pilgrim's Walk:** Mr. Rayner was asked to give a brief summary of the success of this venture, which he duly did and then Mr. Page, having thanked Mr. Rayner for his good organisation, suggested that he might find a successor to continue his work next year.

**Stationery:** Mr. Lodge asked if the Assistant Secretary would make available writing paper headed:—

Abernethian Room.

St. Bartholomew's Hospital,  
London, E.C.1.

Mr. Lodge pointed out that at present this private notepaper was embossed and he wondered, in view of the cost, if a plain paper could be provided as well in future.

**Damage:** Mr. Grafton pointed out that far too much damage was being done in College Hall and soon we would be living in a pig-sty. Could the Union put up a notice deploring the present situation. Mr. Page agreed that this should be done and also suggested that Mr. Hunt might see Mr. Spalding regarding the strengthening of some pieces of furniture which continuously seemed to be disintegrating.

### St. Bartholomew's Hospital Art Society Exhibition

An Exhibition of Paintings of the Art Society will be shown in October, the actual date to be announced.

The Paintings will represent work done by members of the Society which includes Nurses, Students, Lay staff from various departments within the hospital, physiotherapy and radio-therapy staff.

We hope to display the paintings in Gloucester Hall and as many people will attend as possible.

Admission will be 1/-, the price of the catalogue.

Your support will be most welcome.

### WATCH FOR OPENING DATE

SECRETARY, *Art Society*.

# Student Nurses' Association News

Shelagh Wynne

Whew! Boy, was it hot! I was suffocating. I do wish those girls wouldn't stand so close! The disc jockey's voice announced the next blaring record and my poor ears longed for a rest. Flowers have rather sensitive hearing, you know. My barrow was very comfortable and the nicest decorated one of the five in the Hall. I was made by Jane Wright and I heard her say to Sheila Doling and the rest of Theatre C that Mr. Butler had arranged for the barrows.

Over the way, a table laden with hamburgers, hot dogs, crisps and free cornet ice creams was almost completely hidden from my view by people's legs. I understood that Mr. O'Malley had procured it all (not the legs). The empty College Hall beer barrels are certainly piling up. Does Mr. Rigby have enough—he couldn't be wrong!

The sound of giggling reached my ears, "Isn't Marcus Navin just too much—with the money." Someone brushed past selling sixpenny raffle tickets for a gaily decorated basket of fruit and a bottle of wine.

Now they are dancing and—oops,—some boy almost crushed me again. I don't really believe what I'm seeing now but yes, one barrow has been taken—those devilish students! . . . Oh! there goes another! What nerve!

Two boys are asking Su Dermit when the next dance will be, but I can't hear her reply. It is now after midnight and this marvellous dance is over, Liz Hartell is dismantling me and taking me to her room.

About a week passes and Jinny Marks comes to see my new owner. I eavesdrop (as usual). Costs of the dance were £17 16s. 7d., and a lovely profit of £48. That's flower power!

## Christmas Card

The Journal is producing a new Christmas card this year which will be available throughout the Hospital.

The illustration will be a coloured print from the Hogarth wall painting on the staircase in the Great Hall.

A black and white photograph of this print is reproduced on page 323 of this Journal, the cards themselves should be on view around the Hospital and in the Library towards the end of August.

The card will cost 1/-, overprinting of names and addresses can be arranged at a cost of approximately 30/- per order, this can only be done if the orders are received before the end of August.

All enquiries and orders should be addressed to the Art Editor, St. Bartholomew's Hospital Journal, St. Bartholomew's Hospital, West Smithfield, London, E.C.1, and clearly marked "Christmas card".

All orders must be accompanied by a remittance before they can be dealt with.



## A Tale of Murder

Jim Drynan

It was a chance remark in a letter from South Africa that aroused my interest in this macabre tale, the central character Thurtell being a distant relative of the first editor. At Thurtell's trial, Mr. Justice Park, in his charge to the Grand Jury, described the murder as appearing "to have been one of a very dreadful kind and committed under circumstances of horrible atrocity by some person or other", such was the case which was to arouse public curiosity and indignation as have few others and be the first major trial to be fully reported in the newspapers and broadsides of the day. As such, it was to mark the end of the old Tudor procedure of trial by inquisition.

The tale unfolds . . .  
to the air—"There's nae luck about the hoose."

*They asked him down from London town  
A-shooting for to go,  
But little did the gem'man think  
As they would shoot him too.  
So Ruthven went, from Bow Street sent,  
Searching the country over,  
Until he pitched into Joe Hunt,  
John Thurtell and Bill Probert.  
His throat they cut from ear to ear,  
His brain they punched in;  
His name was Mr. William Weare,  
Wot lived in Lyon's Inn.*

—from the Ballad composed by William Webb, Acrobat and Linkboy.

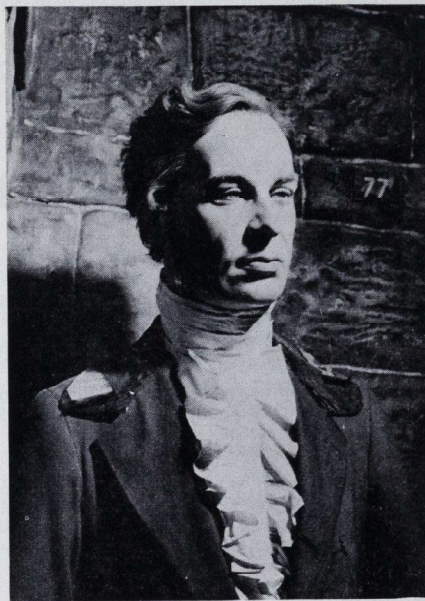
John Thurtell was born the 21st of December, 1794, the son of a wealthy Norwich merchant; his early life is not well documented but in 1809 he was commissioned as a 2nd Lieutenant of Marines from which he resigned after an undistinguished career in June 1814. He set up in business as a merchant of bombasine in Norwich. His business failed after a scandal in which he failed to pay his creditors and Thurtell was forced to move to London, accompanied by one Mary Dodson, his mistress and later nominal barmaid in the Black Boy tavern, Long Acre, which he took over on his arrival. The licence was soon to be suspended; since this was 1821, we can be assured that it took quite a deal of riot, disorder and dissipation before such action was taken.

Thurtell's early association with the pugilistic fancy became more intimate; his first promotion was back in Norwich between Ned Flatnose

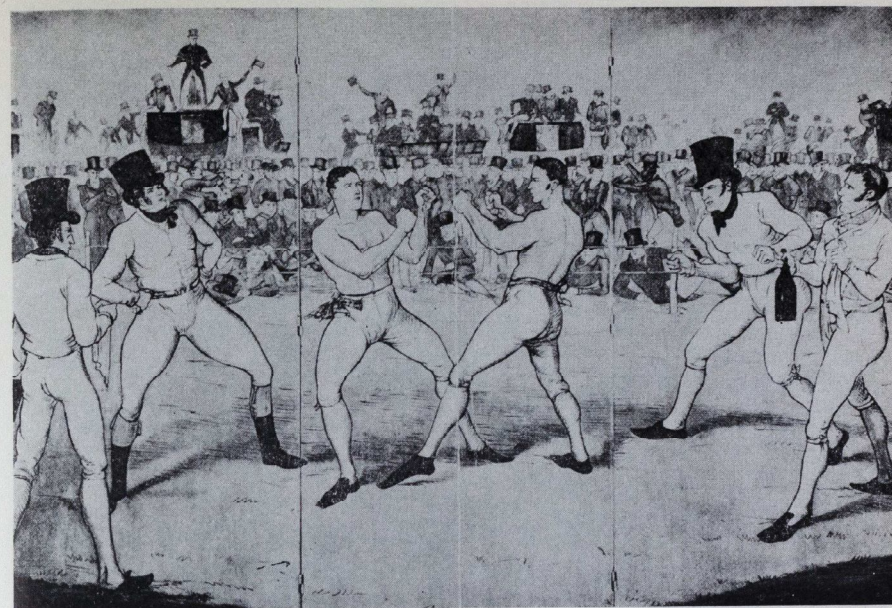
and Tom Oliver. Accounts of the fight differ but there is certainly more than a suggestion that it was fixed and that Thurtell was one of the chief beneficiaries.

After heavy losses gambling Thurtell recouped himself from a share of a 600 guinea bet made on the second fight between Jack Randall and Martin the Baker the "Master of the Rolls". Opinion differs as to whether the fight was fixed or not but it ended with Martin falling against one of the stakes and staying out for half an hour. Thurtell had acted as second to Martin in this encounter, although described as an amateur.

Thurtell's last encounter with the fancy was the contest arranged between Hickman the Gasman and Bill Neat on 11th of December, 1821 at Hungerford Downs. On this trip he was accompanied in the coach by William Hazlitt, yet another who was to respond to a chance acquaintance by putting to paper his recollections. Those too of the sports writers of the day deserve at least a mention; their style, if maintained today, would serve to enliven what are all too often quite dreary accounts.



Thurtell in Madam Tussaud's



Fight between Jack Randall and Martin the Baker at Crawley Downs.

"Round 7—Still Hickman seemed lively, but he was floored in a pig's whisper by a hit that drew his cork in profusion."—this seemed to foretell the result of the contest for in round 10—"Neat . . . received a nobber and returned one, two hard, which floored 'Gas' rudely."

It is suggested that just as the favourite lost this encounter so did Thurtell lose his money and that henceforth he resolved to quit the prize ring. Hazlitt was of the opinion that Thurtell knew that the fight was fixed from their conversation in the coach, probably Thurtell had been crossed himself for the general opinion was that "Gas" had fought as well as he could.

Thurtell's next venture was an insurance swindle along with his brother Tom. They managed to acquire a warehouse in Watling Street and using some valid and some forged invoices to guarantee stock by December 1822 they purported to own stock to the value of £2,000. In January of the following year the premises were completely gutted by fire. The County Fire Office, who had insured the premises, not unnaturally, took the view that

they were not liable for the loss. Accordingly, Tom Thurtell took out a writ against the company and the case appeared in due course before Mr. Justice Park at the Guildhall. John Thurtell was to make a second appearance before this judge later in his career, however, on this occasion Park was to find for the plaintiff, more because of a grievance between himself and Mr. Serjeant Taddy who represented the Fire Office than on the merits of the Thurtell's case. Indeed, the Fire Office immediately instigated counter-proceedings on the grounds that they had conspired to defraud the office; they also attempted to obtain a new trial for the new term.

Meanwhile, John had received none of the £1,900 awarded by the judge and had to resort to further ends to obtain funds. This was especially necessary, since neither of the brothers could find the bail for their impending prosecution by the Fire Office and had found it expedient to move lodging once again, this time to the Coach and Horses in Conduit Street.

Thurtell renewed his acquaintance with





### The Conspiritors

Weare at this juncture, an event which was to prove the undoing of the latter. They had originally met in the Brown Bear and had been concerned in prize fight fixing and other ventures in the career of John Thurtell. Weare was an ex-waiter at the Globe, who had amassed savings of £2,000 from rooking less discriminating men than himself at various gambling pursuits, he did, however, have a very natural ability at billiards. John Payne Collier knew him, "having played hundreds of games of billiards with him. He was a regular blackleg, and was content to do business in a small way if he could get no larger prey." Whether or not the business he did with Thurtell in relieving him of a sum over a game in Rexworthy's saloon was in a big or a small way is not clear, it seems not unlikely that his subsequent murder was motivated purely by the £2,000 which Weare always carried on his person, especially when Thurtell's current financial position is considered.

Weare was fond of shooting and had announced to Rexworthy that he and Thurtell

were going into Hertfordshire for a few days on the 23rd of October, this was the day before his murder. On the 24th Thurtell and Weare set out together followed by Probert and Hunt in another gig. The circumstances of Weare's murder can only be pieced together from the subsequent examination of Thurtell and the others accused, it is enough that Weare never reached Probert's cottage.

*A flinty-hearted gambler, a robber by profession and by practice, reeking from the midnight stews of rapine and fraud, and panting for new victims to his nefarious arts, is hurried "in the blossom of his sin" into the presence of his Maker;*

*No reckoning made, but sent to his account, With all his imperfections on his head, by the hand of his companion and friend.*

Thurtell arrived at Probert's cottage at about 9 o'clock that evening; it is curious that Thurtell and the others were to go to so few steps to cover up the crime they had committed, the witnesses called at the trial were able to amply testify as to the events of that evening and the



### The Murder

course of the murder was easily reconstructed.

The shot fired at Weare was overheard by Philip Smith a local farmer: a man named Freeman passed Gill's Hill lane around 8 o'clock on the evening of the murder and observed two men in the lane at that time with a gig; the next morning, John Hetherington and William Hunt, two labourers at work in the lane saw two men searching in the hedgerow, Hunt asked whether they had lost anything and received the reply that one of them had been thrown out of his gig the evening before. Hunt returned to the lane after his breakfast reasoning that he might find some money there, instead he found a knife covered with blood. All this he delivered to Mr. Nicholls his employer. Nicholls was to see Probert at his house on the Sunday and at that time said to Probert "What the devil manoeuvres were you at last Friday evening?" Despite the bloody knife, the ground covered with blood and the story of the shot he still did not associate the events with a murder.

The next day Hunt found a blood-covered pistol in the same hedge and gave it to Nicholls,

who then wrote to Mr. Mason the Coroner and told him that he suspected a murder had been committed. The information was laid before the Bow Street magistrates at 4 o'clock on Tuesday the 28th. Thomas Ruthven, a Bow Street runner was then despatched to take John Thurtell, his brother Tom, Joseph Hunt and William Probert into custody. Tom Thurtell and Probert were caught at Aldenham and lodged in St. Albans gaol that evening. Before 6 o'clock the next morning he had taken Hunt, at his lodging, No. 19 King Street, Golden Square, and Thurtell at the Coach and Horses, Conduit Street. Ruthven found a pistol, the pair of that found in the hedge, in Thurtell's possession, also a bloody waist-coat and top-coat; several of Weare's possessions were found in the lodgings of Hunt.

The inquest was held at the Artichoke Inn, Elstree on the morning of Friday the 31st before Benj. Rook, Esq., Coroner. During the inquest Joe Hunt made a confession, giving the full details of the events of the murder, including the statements that whilst at the cottage







place of execution, and that you be hanged by the neck till you be dead; and may God of His infinite mercy have compassion on both your souls.

Not least remarkable of Thurtell's trial was the amount of coverage it received in the Press, "every Evening Paper had its reporters down and to facilitate the publication of the proceedings on the same day, each had engaged from four to six horses which were employed in carrying expresses. The Morning Papers also had their expresses for carrying up the reports at a later hour in the evening; and it was calculated that there were not less than one hundred horses placed on the road for this purpose." It was stated that the High Sheriff and Under-Sheriff had done "everything in their power" to "assist the views of the different reporters"; and that "the gentlemen who were engaged in these duties had every reason to feel grateful for the politeness with which they were treated." Not so to Mr. Justice Park, who in his charge to the Grand Jury on the 4th, said, "The publication of evidence is, upon the whole, however, more favourable to the accused than to the prosecutor, because it gives the accused the benefit which the law of England never contemplated, namely an opportunity of knowing beforehand the points which may be brought in evidence against him on his trial. Whether this may be beneficial to one of the parties, or disadvantageous to either or both of them, I will not pretend to decide, but I am quite satisfied that such a procedure is highly blameable."

Whatever the views of Mr. Justice Park, full newspaper coverage of trials had come to stay. On the other hand, the many broadside accounts of the murder were frequently highly coloured and misleading and could have done little to enhance Thurtell in the public eye but this does not necessarily imply that it damaged his legal case; his counsel Mr. Chitty did however, take action against the production of a melodrama at the Surrey Theatre, which under the title of *The Gamblers* described the murder of Weare, and he obtained a ruling against it on the 19th of November.

After the judgement Thurtell, still displaying remarkable restraint passed a few remarks to persons in court before being returned to the gaol. Their exists a misunderstanding over the design of the gallows on which Thurtell was hung; some claim that he designed them himself. This is not the case, what had happened was that Thurtell in conversation with Mr. Wilson, the Governor of the gaol, had

remarked, "Why, I understand that when you round (hang) people here, you put them in a tumbler (cart), and send them out of the world with a Gee-up, gee-ho, and I suppose my ears will be saluted with a smack of the whip; but this is rather an old fashioned and ungentlemanly way of finishing a man." Accordingly the magistrates left instructions for a new gallows to be built, which remained in use for over 50 years, until the demolition of the gaol when they were acquired by Madame Tussaud and Sons. For a time, Thurtell was exhibited with them in the Chamber of Horrors but has since been removed, although the gallows remain. They are described in a catalogue of 1878 as "a perfect piece of destructive ingenuity, and its construction, to be properly understood, should be attentively examined. The temporary platform, with the falling leaf or drop, upon which the wretched culprit, with the fatal noose round his neck, is compelled to stand, is supported only by oiled bolts, which being instantaneously removed, launches, in an instant, the wretched being into eternity."

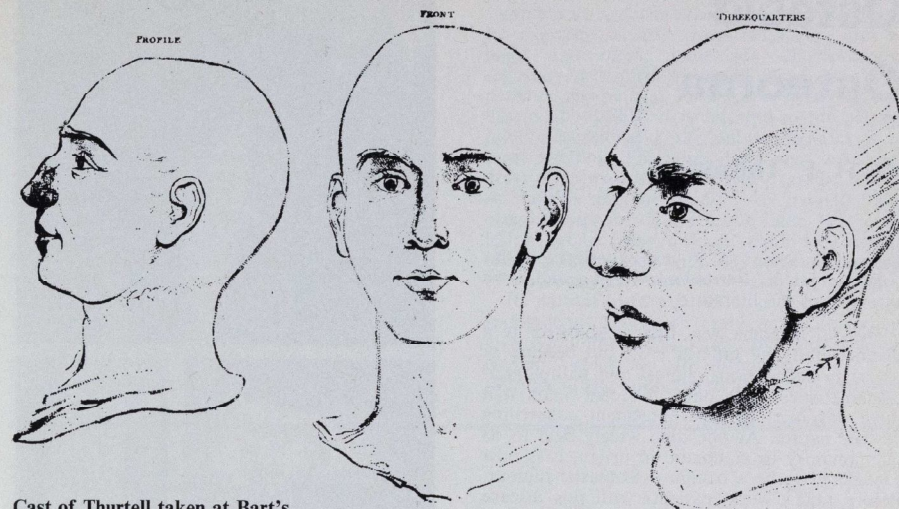
Thurtell, presumably had his doubts about the efficacy of the contrivance, for on the scaffold he inquired, "Do you think, Mr. Wilson, I have got enough fall?" Mr. Wilson replied, "I think you have, Sir. Yes quite enough." At his last moments Thurtell behaved with the greatest of composure and restraint, "his features, as well as they could be discerned appeared to remain unmoved, his hands, which were extremely prominent, continued perfectly steady, and were not affected by the slightest tremulous motion."

"Exactly at two minutes past twelve the Under-Sheriff with his wand, gave the dreadful signal—the drop suddenly and silently fell—and JOHN THURTELL WAS LAUNCHED INTO ETERNITY."

The body was then removed from the scaffold, friends of Thurtell and Thurtell himself had requested that the body be taken to Norwich for burial, the sentence had, however, prescribed that it be dissected by the surgeons and it was accordingly delivered to the surgeon of the gaol, Mr. Colbeck, who undertook the preliminary dissection to comply with the requirements of the law. The same evening it was despatched to London and lodged in St. Bartholomew's Hospital. Ironically, the corpse was transported in yet another gig to London and a finger was cut off on the way, there was a current belief in a hanged man's touch as a cure for wens.

The corpse was placed in a small room next to the Anatomy Theatre but was subsequently

AN EXACT REPRESENTATION OF JOHN THURTELL.



Cast of Thurtell taken at Bart's

removed to the Theatre itself such were the number of observers who wished to be present. A pretence was made of limiting admission to members of the Faculty, the password adopted was whether or not the visitor could answer a question in Anatomy. It seems that this was an unsuccessful manoeuvre, since thousands visited the body as it lay in the Hospital. The dissection was carried out by Abernethy and other eminent surgeons, the cadaver remaining for some weeks on view. Physiognomists and phrenologists argued over the dead man's character, a cast was taken of his features, a thing which Thurtell had expressly refused; Sir Thomas Lawrence had attempted to do this whilst Thurtell was lodging in Hertford Gaol, the illustration shown was portrayed from the cast.

The public's appetite for the macabre was appeased by reports in the *Times* and *Morning Chronicle* over the progress of the dissection, the last was on the 21st of February 1834, but still Thurtell continued to sustain the interest and curiosity of the population. Scott on his variorum visits felt obliged to visit the scene of the crime, Lytton wrote about him in Pelham, for long Gill's Hill was to remain a

place of curiosity visited by many, and the ballads composed for the occasion were to remain in the folklore of children's song long after Thurtell himself was forgotten.

*Upon the gallows tree he hung,  
Suspended by the neck.*

*This fatal story we have sung  
Foul murder for to check.*

William Webb

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Acknowledgements

- The author would like to thank the following: Miss M. G. Borchers for her valuable suggestions and help.
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# Osteoid Osteoma

W. H. F. Thomson

Osteoid Osteoma—A 20-year experience of this condition at St. Bartholomew's Hospital, with a review of the literature

Osteoid osteoma was first established as a distinct entity by Jaffe in 1935<sup>1</sup> but because of its rarity and curious clinical and pathological characteristics, it is only in recent years that there has been general agreement concerning its true nature. At one time widely held to be inflammatory or traumatic in origin, it is now considered to be a benign osteoblastic tumour. Before Jaffe's work, patients with this disease were usually diagnosed as suffering from a bone abscess or a sclerosing non-suppurative osteomyelitis, such as that described by Garre.<sup>2</sup>

Osteoid osteomas are small, measuring 1-2 cms. in their greatest diameter. Microscopically, they are seen to consist of osteoid and trabeculae of newly formed osseous tissue in a vascular osteoblastic stroma, the tumour being well demarcated from the surrounding bone. They may occur in the cortex or medulla and

Fig. 2

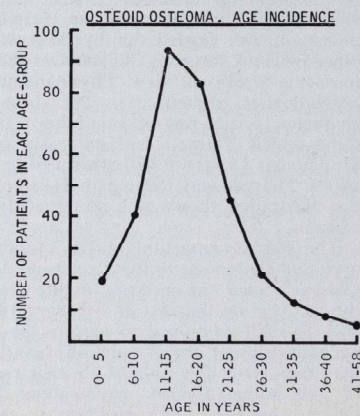
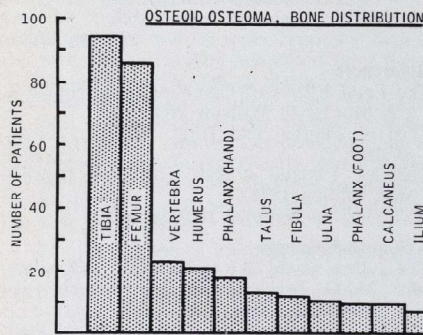
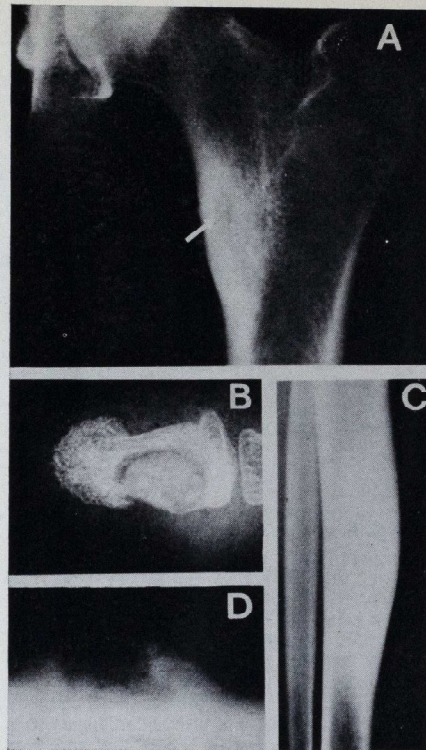


Fig. 1. Graphs demonstrating Age Incidence and Bone Distribution in 227 and 330 patients respectively, with osteoid osteoma. Derived from 3 series in the literature, (5, 6, 9).

have been described in almost every bone in the body, although showing a marked predilection for the femur and tibia, (fig. 1).

A regular feature is the zone of reactive bone sclerosis which surrounds an osteoid osteoma. Since the tumour in its earlier stages is radiolucent, a characteristic radiographic appearance is produced, (fig. IIa). The sclerotic ring may be inconspicuous, as in our patient with an osteoid osteoma of the terminal phalanx, (fig. IIb) or it may be so extensive (fig. IIc) that tomograms are required before the tumour nidus itself can be seen. Symptoms may be experienced for some months before a radiological abnormality is detectable. After a certain time, an osteoid osteoma will become sclerotic and radio-opaque.

Osteoid osteoma occurs mainly in the 2nd and 3rd decades of life (fig. 1) and affects males twice as frequently as females. It never

occurs in the elderly. The predominant symptom is a constant aching pain unaffected by exercise, usually worse with rest and at night and often, some say diagnostically, relieved by aspirin in small doses. In most patients the pain is localised over the lesion, but in about 30% it is referred to the nearest joint. Occasionally, the only complaint is of local swelling. The commonest sign is tenderness, often exquisite, localised over the lesion. A limp is present in 50% of patients with osteoid osteoma of the lower limb. When the lesion occurs near a joint, there may be an effusion in the joint with limitation of its range of movement and wasting of associated muscles.

Its natural history is variable. Some undergo spontaneous resolution early on, while others give symptoms for years. In time, however, all osteoid osteomas will disappear.<sup>1, 3, 5, 10.</sup> Because of the unpredictability of the condition

## Table of Case Analysis

Patient No.	Age	Sex	Site of lesion	Symptoms	Signs	Antecedent trauma	Pre-operative diagnosis	Histology
(1)	26	(F)	tibia	pain	tender swelling	no information	"P.I.D."	Positive
(2)	12	(F)	femur	pain	flexion deformity of hip	"doubtful"	"irritable hip" ? T.B.	Positive
(3)	26	(F)	tibia	pain	nil	no information	"varicose veins"	Not available
(4)	19	(M)	tibia	pain	tender swelling	none	osteoid osteoma	Negative
(5)	15	(M)	tibia	pain	tender swelling	none	osteoid osteoma	Negative
(6)	13	(M)	tibia	swelling	non-tender swelling	swelling came up after kick on shin	osteoid osteoma	Positive
(7)	23	(M)	humerus	pain	wasting and tenderness	no information	"osteitis"	Positive
(8)	19	(M)	fibula	pain	tender	no information	"stress fracture"	Positive
(9)	12	(M)	terminal phalanx	pain	swollen tender finger tip	Crush injury 8/12 before onset of swelling	"enchondroma"	Positive
(10)	14	(M)	femur	pain in knee	nil	no information	"chondromalacia patellae with functional overlay"	Positive
(11)	18	(M)	femur	pain	pain on hip movement	pain started after ski-ing accident	Uncertain	Positive
(12)	49	(M)	femur	pain	tenderness	cricket ball injury months before	"Brodie's abscess"	Positive
(13)	31	(F)	tibia	pain	tender lump	nil	"chronic osteomyelitis"	Positive
(14)	24	(M)	tibia	pain	tender	nil	"P.I.D." "neuritis" "periostitis"	Positive
(15)	21	(F)	femur	pain	tender	nil	osteoid osteoma	Positive
(16)	32	(F)	radius	pain	tender	nil	? "cervical rib" ? "psychiatric"	Positive



and the severity and persistence of symptoms, treatment is advisable. Complete surgical excision of the tumour is curative but partial

### Results

In the table below is set out an analysis of the case notes of 16 patients with a diagnosis of osteoid osteoma, seen at St. Bartholomew's Hospital between 1948 and 1968. In 13 patients the diagnosis was proven histologically and in the remaining three, the clinical and radiological evidence was sufficient to justify their inclusion in this series.

### Discussion

Osteoid osteoma is an uncommon condition. Our series of 16 patients with this disease was collected from records dating back 20 years. Similarly Fowles<sup>2</sup> found 11 cases in the Bristol Bone Tumour Register and these were taken from the records of 7 different hospitals over a period of 10 years. Unfamiliarity with the condition contributes to delay in diagnosis, but in addition various pitfalls may mislead the clinician. Firstly, because the pain is sometimes referred to a nearby joint, that joint may be thought to be the source of the trouble. An x-ray of the joint may miss out the site of the osteoid osteoma and confusion will ensue. This problem occurred with one patient (10) in this study, with an osteoid osteoma in the lower part of the femoral shaft. Here, an incorrect diagnosis of chondromalacia patellae was made at first. Similarly, when an osteoid osteoma co-exists with another pathological process, its symptoms may be wrongly attributed to the other disease. Another patient (3) was referred to the Surgical Out-Patient Department with a diagnosis of varicose veins. She complained of pain in the leg and on examination, varicose veins were seen to be present. However, an x-ray revealed an osteoid osteoma of the tibia.

In the controversy over the nature of osteoid osteoma, the degree of pain experienced has been considered to argue against its being a benign neoplasm. The explanation, however, probably lies in its vascularity in association with the rigid nature of its bony confines. In support of this Golding<sup>5</sup> described the case of a patient suffering from an osteoid osteoma of the metacarpal in whom the pain was com-

pletely relieved by inflating to arterial blood pressure a sphygmomanometer cuff around the ipse-lateral arm. One of our patients (6) presented with a painless, non-tender swelling of the right shin which proved to be a sub-periosteal osteoid osteoma (fig. IId). The fact that the tumour was incompletely surrounded by bone, probably accounted for its being pain-free.

The aetiology of osteoid osteoma remains obscure. There was a history of trauma in four of our patients although in two of these it had ante-dated symptoms by many months. Jaffe, with his unsurpassed experience of this condition, considers that trauma does not play a part in its pathogenesis<sup>8</sup>.

### Summary

Data from 16 patients with osteoid osteoma have been tabulated and various points of interest have been discussed.

### Acknowledgements

I would like to thank the Department of Medical Illustration at St. Bartholomew's Hospital for their help in the preparation of this paper.

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## Bronchial Carcinoma Metastatic to the Tongue

Douglas MacMillan M.B.B.S.

tumours of the Ear, Nose and Throat region, came across eight cases of lingual metastasis described in the literature of the past sixty years.

Carcinoma of the bronchus is an extremely common tumour and its protean manifestations are well known (Joseph, 1965). The commonest sites of metastasis found by Galluzi and Payne (1955) in an analysis of 741 autopsies for bronchial carcinoma were liver, adrenal, and brain. They also found secondary deposits in kidney, bone, spleen, thyroid and ovary.

Metastasis of bronchial carcinoma to the tongue is extremely rare. A study of the literature of the past fifty years revealed only two published cases. In 1926 Grove and Kramer described a case in a forty-four year old man (case 19 in their series) and in 1938 Fitzwilliam published an account of a case of carcinoma of bronchus with a secondary deposit in the tongue. This patient was a fifty-eight year old man and the case is mentioned by Friedmann and Osborne in their paper of 1965. A further case is described below.

### Case Report

A seventy-six year old man was referred to the out-patients department of St. Bartholomew's Hospital, London, in October 1967 complaining of haemoptysis, weight loss and anorexia. He had been a chronic bronchitic for some years and had previously been a heavy cigarette smoker. In 1959 and 1961 he had had basal cell lesions removed from his forehead and in 1966 he had a course of radiotherapy for a recurrence of the tumour. In 1964 he underwent a laparotomy for diverticulitis. He was a mild diabetic, controlled on Chlorpropamide, 100 mgm. per day. A chest radiograph taken at the time of presentation showed a prominent right hilum and shadowing of both upper zones. The possibility of active tuberculosis was considered, but rejected after tomography had been performed. The sputum was examined cytologically and cells from a well-differentiated squamous cell carcinoma were found.

In February 1968 the patient noticed a swelling on the left side of his tongue. The swelling was painless but interfered with mastication. The patient attended a dental surgeon who recommended adjustment of the dentures.

Carcinoma of the tongue is an uncommon primary tumour accounting for 4.08% of 14,182 cases of carcinoma (Harnett, 1952) and secondary deposits in that organ are very rare. Willis (1952) found only one secondary deposit in the tongue (from a carcinoma of pharynx) in his series of 500 cancer autopsies, and Abrams, Spiro and Goldstein found only one lingual metastasis (from a carcinoma of the oesophagus) in 1,000 consecutive cancer autopsies. Weitzner, Hertel and Albuquerque (1968) comment on the rarity of secondary carcinoma of the tongue and describe a case of carcinoma of the stomach with lingual metastasis. Friedmann and Osborne (1965) in a review of metastatic



In April 1968 the patient suffered an attack of right upper lobe pneumonia, and when this had resolved, X-rays revealed no significant change in the hilar or apical shadowing. In August, however, an increase in the right apical swelling was noticed on the X-ray, together with two new shadows in the left lung field. These were considered to be metastases from a right sided bronchial carcinoma.

In September 1968 the patient attended the Ear, Nose and Throat department complaining of an increase in the swelling in his tongue and of pain in the left ear. On examination there was a hard mass 3 cm. by 1 cm. on the left side of the anterior part of the tongue. The mucosa was not ulcerated and the mobility of the tongue was unimpaired. There was no cervical lymphadenopathy and the left ear was normal on clinical examination.

A biopsy of the lingual lesion was performed (Mr. J. W. Cope) and the sections were reported on as follows: "The section shows a deposit of poorly differentiated carcinoma in the tongue muscle. Although the appearances suggest that this is probably of squamous origin it does not appear to be arising from the tongue epithelium and is almost certainly a metastasis from the bronchial tumour". (Dr. A. G. Stansfeld). A course of palliative radiotherapy was given and this resulted in considerable shrinkage of the mass.

The patient later complained of pain in the left side of his chest, and an X-ray taken in October 1968 showed erosion of the left fourth and fifth ribs, together with enlargement of the intrapulmonary metastases.

The patient's condition gradually deteriorated and he died at home early in 1969. An autopsy was not performed.

### Summary

Lingual metastasis from carcinoma of the bronchus is extremely rare, two cases having been described in the past fifty years. A further case is presented.

### Acknowledgement

My thanks are due to Mr. J. W. Cope, F.R.C.S., Surgeon-in-Charge of the Ear, Nose and Throat Department, St. Bartholomew's Hospital, London, for his permission to publish this case.

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## Chronic Inflammation

by

W. G. Spector



The essential similarity between different examples of acute inflammation is easy to grasp since the basic changes in the microcirculation and its contents are demonstrable whatever the cause of injury. On the other hand there is no obvious unity in the various manifestations of chronic inflammation although reason would suggest that a common basis exists. Fortunately recent work in this field should make chronic inflammation easier to understand, an important object in view of the frequency and gravity of chronic inflammatory disease in man.

### Definition

Chronic inflammation means a local reaction to injury of prolonged duration but because it is usually recognized by its histopathological features, it can also be defined in terms of these features, which consist essentially of an infiltration of the affected tissues by certain cell types known generically as chronic inflammatory cells. I will return to these later, but first we should distinguish between two broad types, namely banal and granulomatous chronic inflammation. This distinction was made by the American pathologist Forbus. The term, banal,

includes such conditions as chronic cholecystitis, chronic pyelonephritis, where there is merely a nondescript infiltration with chronic inflammatory cells showing no particular architecture or arrangement. Most of these diseases represent recurrent episodes of acute inflammation sometimes of low intensity, sometimes with incomplete resolution between attacks. At times when the disease is active, the tissues contain both neutrophils and chronic inflammatory cells representing the full flood of inflammatory exudation. As the reaction subsides exudation of cells ceases, the polymorphonuclear neutrophils die and disappear, but the chronic inflammatory cells may remain, stranded as it were by the receding tide.

Granulomatous chronic inflammation: the naming of this group is of historical interest only, but it contains important diseases such as tuberculosis, leprosy, sarcoidosis, syphilis and rheumatoid arthritis and many others. Since one of the most puzzling features of these diseases is the multiplicity of cell types they contain, I will start with these.

### Cell types of chronic granulomatous inflammation

(1) **The macrophage and its derivatives:** The macrophage (large phagocyte) is a large cell with a round, oval or slightly indented nucleus and abundant cytoplasm containing many phagocytic vacuoles. It is known by other names, e.g. histiocyte, mononuclear phagocyte, but "macrophage" is now becoming generally accepted.

The second cell of granulomatous inflammation is the *epithelioid cell*. This is irregular or oval in shape with abundant foamy cytoplasm fusing imperceptibly with that of its neighbour. It is non-phagocytic or poorly phagocytic. The third cell type is the *giant cell* with many nuclei sharing a common cytoplasm. The nuclei may be evenly dispersed through the cell ("foreign body" type) or arranged at the periphery (Langhan's or tuberculous type). Too much has been made of this distinction in the past.

*Monocytes* have been withdrawn from the blood, cultured in vitro and observed to change into classical macrophages within a day. The macrophages in their turn become typical epithelioid cells, taking 3 or 4 days to do so. The epithelioid cells then fuse to become typical giant cells by 10-14 days, the attribution



of cell types being made by rigorous electron microscopic criteria. The main point of this experiment is that it establishes that giant cells and epithelioid cells are simply derivations of macrophages.

(2) **The lymphoid series:** The macrophage series is easily recognised by functional (i.e. phagocytic) and structural characteristics. Chronic inflammatory lesions also commonly contain small round cells with scanty cytoplasm and deep staining round nuclei. Not long ago all these cells would have been designated lymphocytes, but now it is not so simple because some small round cells are probably primitive bone marrow cells and those that are of lymphoid origin, vary greatly in their function and life history. However taking all such cells in inflammatory lesions to be lymphocytes, they can be regarded as a separate population from the macrophages. Their main derivative is the *plasma cell*, the antibody synthesising cell with eccentric nucleus and massive endoplasmic reticulum that features prominently in some granulomatous conditions such as syphilis.

(3) **The fibroblast:** This cell is seen wherever attempts at tissue repair are in progress. It is elongated or fusiform with an oval nucleus. The cytoplasm is busy synthesising collagen.

(4) **The endothelial cell:** This is another elongated cell forming part of the wall of small vessels.

#### The origin of chronic inflammatory cells

(1) **The macrophage and its derivatives:** I have already described the tissue culture experiments in which blood monocytes turned into macrophages. In the living animal the various white cells of the blood have been differentially labelled with isotopic thymidine which labels the nucleus and colloidal carbon which is taken up by the cytoplasm of phagocytes. Inflammation was then produced and it was found that the macrophages of the lesion had the same proportion of labelled members as did the monocytes of the blood. Other blood cells, e.g. lymphocytes, differed greatly in their labelling characteristics from the macrophages that appeared in the tissues.

To confirm the origin from the bone marrow cells, the marrow and lymphoid tissue of rats were destroyed by heavy X-irradiation. Some animals received a therapeutic injection of marrow cells, some of lymph node cells and

some of thymus cells. A chronic inflammatory lesion was then induced in all rats. Only those that received bone marrow cells developed a typical chronic inflammatory response with macrophages, epithelioid cells, etc. Lymph node and thymus cells failed to enter the site of injury.

(2) **The lymphocyte:** Lesions induced by dead tubercle bacilli in mineral oil are characterised by foci of lymphocytes. Irradiation experiments as described above show that these cells too may originate from bone marrow cells. Once they are established however, lymphocytes can be demonstrated to enter the lesions, possibly recirculating in the same way as they do through normal lymph nodes.

(3) **The fibroblast:** When an experimental wound is produced in a skin site subjected to enough X-irradiation to destroy the mitotic potential of the local connective tissue cells there is no invasion by fibroblasts although the bone marrow and lymphoid systems are undamaged. This shows that fibroblasts unlike macrophages and lymphocytes which come from the circulation are derived from the proliferation of local cells, probably "resting" fibroblasts.

(4) **Endothelial cells:** Vascular endothelium behaves in the same fashion as fibroblasts indicating that the appearance of new endothelium in wounds and inflammation is due to proliferation of the local surviving endothelial population.

#### Summary of cell origins

These experiments show that macrophages, epithelioid cells and giant cells are derived by migration of circulating cells of bone marrow origin. These macrophage precursors are almost entirely monocytes, but some possibly resemble lymphocytes, in spite of their marrow origin. Lymphocytes also migrate from the circulation and are of bone marrow, lymph node and possibly thymic origin. Eosinophils (another feature of granulomata) and neutrophils are of marrow origin and migrate through vessels in the usual way. Monocytes enter granulomata by insinuating pseudopodia between endothelial cells and lymphocytes probably follow the same route although they enter lymph nodes by being phagocytosed by endothelium. Monocytes do not become macrophages until they have entered the inflamed tissues and "settled down" for a day or so.

#### How a chronic inflammatory lesion persists

There are three possible mechanisms for this; sustained emigration of monocytes etc., from the blood, mitotic division of macrophages etc.; prolonged survival of macrophages etc. Evidence is now available that all three mechanisms operate.

Sustained emigration is demonstrated by transfusing leucocytes labelled with isotopic thymidine into an animal suffering from a chronic inflammatory lesion. The cells enter the area of damage from the circulation and by simple calculation it is possible to show that up to 250,000 macrophage precursors may enter the focus every 24 hours. There is still controversy as to whether or not a specific chemotactic factor for monocytes exists or whether other mechanisms determine the relative proportion of polymorphs and monocytes emigrating from the blood. Proliferation of macrophages and epithelioid cells can be demonstrated in a number of ways, but especially by observing the cells to incorporate isotopic thymidine into their nuclei, this being an index of DNA synthesis prior to mitosis. The nuclei of giant cells were thought not to synthesise DNA and divide, but we have recently obtained evidence that after the cells are some weeks old this does occur. Longevity of individual macrophages too has been shown by observing that macrophages labelled before their entry to the granuloma are demonstrable in the lesion 4-8 weeks later under circumstances that preclude the label being transferred from one cell to another. These three mechanisms for maintaining the size of the inflammatory lesion are counterbalanced by cell death and loss, especially by drainage to the local lymph nodes.

#### The reason why inflammation becomes chronic

An inflammatory reaction normally subsides when the injurious stimulus ceases or is destroyed. It is to be expected therefore that the converse would be true. With the aid of radioactive labels it has now been possible to show that persistence of irritant within macrophage cytoplasm is always associated with chronic inflammation. Two questions remain; why the irritant resists destruction, and the cause of the different cellular patterns of various types of granuloma.

When the irritant is a foreign body such as talc, it is obvious that the macrophage, rich as

it is in enzyme content, is unable to digest the phagocytosed particles. In the case of microorganisms however the explanation is less clear because these are composed of naturally-occurring chemical groups that should be susceptible to the macrophage's battery of lysosomal enzymes. This phenomenon awaits explanation. Preliminary evidence suggests that whereas "acutely inflammatory" organisms e.g. staphylococci are totally destroyed within macrophages, "granulogenic" organisms, e.g. B. pertussis vaccine cease to be broken down after 2-3 days and remain intact within the macrophage cytoplasm. There are several possible explanations of this curious behaviour and all are under investigation.

The characteristic histology of granulomatous inflammatory lesions depends on the nature of the irritant. Relatively non-toxic, non-degradable, non-antigenic irritants cause "foreign body" reactions of macrophages (many of which are long-lived) and giant cells formed by the fusion of macrophages. Irritants which are toxic either in themselves or because they induce delayed type hypersensitivity (e.g. tubercle bacilli) cause lesions in which the macrophages proliferate and die rapidly and in which epithelioid cells are prominent as well as giant cells and some lymphocytes. Granulomata due to poorly degradable antigen capable of stimulating humoral antibody (e.g. treponema pallidum) contain macrophages and also many lymphocytes and plasma cells, these latter cells being closely connected with antibody synthesis. Where the stimulus for continued emigration remains active the granuloma may contain many neutrophils or eosinophils and the latter may be prominent in some hypersensitivity states including those due to parasites. Where there has been much tissue destruction, e.g. in syphilis or tuberculosis, fibroblasts and collagen will be in evidence. The caseation (non-liquefied necrosis) of these diseases is thought to be due to delayed hypersensitivity, the sensitised lymphocytes possibly releasing cytotoxic factors.

#### Hypersensitivity and chronic inflammation

It is probably true to say that delayed i.e. cell mediated hypersensitivity is associated with some types of granuloma, augments the severity of the lesion, but is not in itself a cause of granuloma formation which lies basically in the failure to destroy the original irritant. The relationship of delayed hypersensitivity to



chronic inflammation is often difficult for students to grasp. Unfortunately this relationship is obscure even to experts. The most likely explanation of the frequent association of granulomatous inflammation with delayed hypersensitivity is that for reasons we do not understand the type of irritant or antigen that causes a granuloma is also the type that induces the particular form of immunological response known as delayed hypersensitivity.

Part of the confusion arises from the fact that the delayed hypersensitivity is by definition a cause of transient inflammation such as the tuberculin reaction. To prove that delayed hypersensitivity were a cause of granulomatous inflammation as opposed to an associated phenomenon it would be necessary to induce a granuloma by injection of suitably sensitised lymphocytes, i.e. passive or adaptive transfer. In spite of many efforts this has not been achieved for a true granuloma although relatively persistent banal inflammation e.g. experimental allergic encephalomyelitis has been induced by these means. In summary although delayed hypersensitivity may be the cause of certain auto-allergic inflammation, transient or moderately persistent it appears to be only an associated phenomenon if not the result of chronic granulomatous inflammation. In the latter instance however, its presence may contribute to local tissue damage as in tuberculosis. Finally the connection between granulomata and delayed hypersensitivity is rendered even more obscure by the loss of cutaneous hypersensitivity of the delayed type that may occur in some granulomatous conditions, e.g. leprosy or sarcoidosis. This reversed relationship seems to underline the conclusion that delayed hypersensitivity is not the cause *per se* of granulomatous inflammation but its cause and mechanism is a matter for conjecture.

There is one experimental situation in which prior sensitisation converts a transient, acute inflammation into a chronic form. This is achieved by injecting a soluble protein into the knee joints of rabbits previously sensitised to the protein. The mechanism of this phenomenon is uncertain, but it appears to have little connection with delayed hypersensitivity. It may be that an excess of antibody fixes to the antigen forming a complex that cannot easily be removed. Thus once again we return to the central concept that chronic inflammatory disease is failure to adapt, to the presence of an irritant that cannot readily be destroyed by the body's defences.

## Barts: A sheaf of gleanings

### G. F. Bennet (an ex-patient)

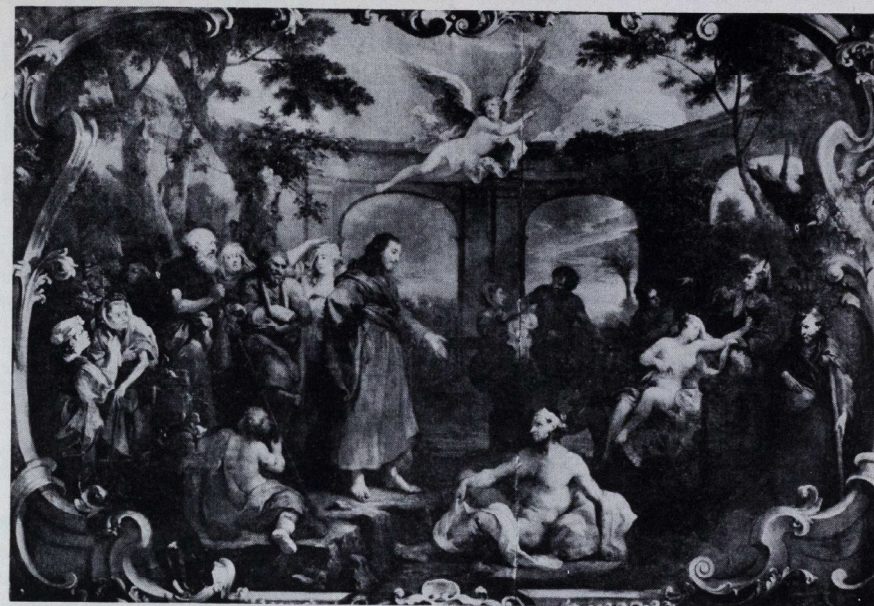
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Bartholomew in Hebrew obliquely means *friend*, a singularly befitting epithet to the soul of that medieval institution the Hospital of St. Bartholomew, also known as the Royal Hospital of St. Bartholomew (valid but snobbish), Bart's Hospital (tautological), but in common parlance, Bart's to its multitude of patients, ex-patients, friends and well-wishers.

#### The Beginning

Well over eight hundred years ago, when Parliament as we know it had not been conceived, and all power was vested in the King; when the Smithfield of to-day was known as "Smoothfield"—a derelict waste land described as "a dank and fenny place"—a courtier-cum-cleric of King Henry I named Rahere, sought and obtained from the Sovereign this very plot of land and built thereon the Priory Church and hospital, in honour of St. Bartholomew, to fulfil a vow and for the comfort and care of the sick poor. The year A.D. 1123.

Erelong Rahere the Prior and his good works gained further Royal approbation, and in 1133 King Henry I by Royal Charter proclaimed the Priory and the hospital to be under the King's protection. Successive Monarchs followed this precedent, for records indicate that, in 1223 and again in 1224, Henry III gave the hospital "Our gift one old oak from the forest of Windsor . . . to the hospital patients for their hearth". In 1326 Edward II granted the hospital the gift of two vacant plots of land in Smithfield. Thus the Priory and the hospital owned and administered by the Church, flourished for well nigh four centuries.



Hogarth. Wall Painting in The Great Hall. "The Pool at Bethesda".

#### Reformation and after

The Priory Church was suppressed in 1539 at the Dissolution of the Monasteries by the turbulent Tudor, Henry VIII, and it was feared that the hospital would suffer the same fate, but the persistent petitioning of the Mayor and Commonality of the City (the hospital was now in secular hands), caused the King to relent and finally in December 1546 by Letters Patent Henry gave to the Mayor, the Citizens of London and their successors for ever "the late hospital of St. Bartholomew". The following year a fortnight before his death, the King granted to the hospital a list of properties, outlining at the same time the obligations that went with it. The hospital was thus refounded, and these documents remained the basis of the constitution of this institution, until the National Health Service Act of 1946.

In 1548 the hospital had three surgeons, all members of the newly formed Company of Barber-Surgeons just eight years ago. There is no evidence of any physician being appointed until 1562, although the College of Physicians had been in existence since 1518. Specialisation was slowly developing and had forerunners foreshadowing things to come, e.g. the Department of Dermatology (1867), had been anticipated it would seem, by Elizabeth Hall, when in 1554 she first treated "scald heads" and received 3s. for every one cured. Likewise the Orthopaedic Department (1870), had for its pioneer John Isard "Surgeon and bone-setter" as early as 1596; and the nucleus of the present day Ophthalmic Department was born of the particular interest shown in diseases of the eye, by an assistant surgeon, John Freke, way back in 1727. Dental treatment was in evidence in 1837, but it was not until 1866 that a formal



lectureship in dentistry was established. Though the hospital had women helpers from early times, it was only by 1818 that a regular nursing staff was formed, and more than sixty years had to go by before the School of Nursing was started. When the first medical student was admitted is not known, though a formal recognition of a Medical School is recorded in 1791, and was known as the Medical School of St. Bartholomew's Hospital from 1830. This private enterprise was incorporated by Royal Charter in 1921 as "The Medical College of St. Bartholomew's Hospital", and to-day is a constituent College of the University of London.

#### Famous Clinicians

It was the great William Osler who said that it is not the "pride, pomp and circumstance" that bring honour to an institution, but the men who have laboured in its service along the thorny road through toil and thus climbed like stars to their appointed height. Such men Bart's have been immensely fortunate in having since its early days.

Among its famous physicians we have the renowned Dr. William Harvey, discoverer of the circulation of the blood. He was appointed to Bart's in 1609 and served there till 1643.

The great Percivall Pott was surgeon at Bart's from 1749 to 1787. His name is still associated with "Pott's Fracture" and "Pott's disease of the Spine". John Abernethy was another surgeon of repute, but his fame rests more on the merits of the tradition he established in medical teaching, thus laying the foundation stone of Bart's Medical College. James Paget is another great name in the long list of surgeons at Bart's and his name is inscribed in medical literature and connoted with Paget's abscess, disease, etc. Such greatness has been a tradition with Bart's and those that have followed in the footsteps of these men have endeavoured throughout the years to ensure that its reputation has kept in pace with its progress in the medical field.

Hence, the same urgent awareness, for the same cause, for the same humane reasons, is evident in modern Bart's, which though built of new brick and mortar, has the uniqueness of being the only medieval hospital that is still standing on the very sod it was first planted eight hundred years ago!

## Favourite Quotations

Yvonne Hibbott A.L.A.

*"I would have every man write what he knowes, and no more."*

Michel de Montaigne (1533-1592)  
Essais, Vol. 1, Ch. 30

*"Be comforted. Ideals are not for attainment, but for pursuit."*

Lord Moynihan (1865-1936)

*"Insensibly he formed the most delightful habit of reading: he did not know that thus he was providing himself with a refuge from all the distress of life; he did not know either that he was creating for himself an unreal world which would make the real world of every day a source of bitter disappointment."*

Somerset Maugham (1874-1965)  
Of Human Bondage, Ch. 9

*"The Devil's boots don't creak."*

SCOTTISH PROVERB

*"Paris hath my hart from my infancie: whereof it hath befaene me as of excellent things: the more other faire and stately citties I have seene since, the more hir beautie hath powre and doth still usurpingly gaine my affection . . . I love hir so tenderly, that even hir spots, hir blemishes and hir wartes are deare unto me."*

Michel de Montaigne (1533-1592)  
Essais, Vol. 3, Ch. 9

(From the translation by John Florio, 1603)

*"Health and good estate of body are above all gold, and a strong body above infinite wealth."*

Ecclesiasticus (Apocrypha), XXX, 15  
A Medical "Prayer"

*"From inability to let well alone;  
From too much zeal for the new  
and contempt for what is old;  
From putting knowledge before wisdom,  
Science before art, and cleverness before  
common sense;  
From treating patients as cases,  
And from making the cure of the disease  
more grievous than the endurance of the  
same,  
Good Lord, deliver us."*

Sir Robert Hutchison (1871-1960)

## Exhibition of Rare Books

Yvonne Hibbott A.L.A.

The current exhibition in the gallery of the Medical College Library is entitled "Library 'Treasures'" and shows ten of the rare books belonging to the Library. The exhibition will be changed frequently within the next few months to enable readers to see some of the old books which, because of their value, are normally kept under lock and key.

The following works are included in the present exhibition:—

Andreas Vesalius (1514-1564)

*De humani corporis fabrica*

2nd edn., Basle, 1555

*De humani corporis fabrica* (the fabric of the human body) has been called "The greatest medical work ever printed." The first edition appeared in 1543 and marked the foundation of medicine as science. At the time of writing the book Vesalius was professor of anatomy at Padua University where his revolutionary scientific approach to anatomy was a sharp contrast to the previous blind following of Aristotle and Galen.

Vesalius carefully supervised the drawings made from his dissections. The magnificent illustrations of bones and muscles are believed to be the work of Johan Stephan van Calcar, a pupil of Titian. The wooden blocks from which the illustrations were printed were still in existence until the last war, when they were destroyed in Munich.

The title-page shows Vesalius carrying out a dissection surrounded by students, attendants and members of the lay public.

Thomas Willis (1621-1675)

*Opera omnia*

Amsterdam, 1682

This collected work of the writings of Thomas Willis includes *Pathologiae cerebri* and the famous *Cerebri anatomie nervorumque descriptio et usus*. The latter work contains an accurate account of the nervous system and a particularly fine illustration shows the "circle of Willis". Many of the drawings were the work



Andreas Vesalius (1514-1564)

*De humani corporis fabrica*

2nd edn., Basle, 1555

of Sir Christopher Wren, who was a student under Willis at Oxford.

Marcello Malpighi (1628-1694)

*De renibus, in Opera omnia*

Leyden, 1687

Malpighi, often called the founder of histology, here describes the uriniferous tubules (the "Malpighian bodies") as observed through the microscope: "Nec subsistit hic renum in extrema superficie discontinuata compages, nam de recenti ablata membrana, dum adhuc mollis est renum substantia, rotunda quaedam & brevissima corpora ad instar exiguorum vermium circumvoluta observantur . . ." [Nor does this discontinuous structure of the kidney stop with the external surface, for when the capsule has been recently torn off, while the kidney



substance is still soft, certain very small round bodies, like a coil of small worms, are observed . . . ]

**Edward Tyson (1650-1708)**

*Orang-outang, sive homo sylvestris: or, the anatomy of a pygmy compared with that of a monkey, an ape, and a man . . .*

London, 1699

This book, the first major work on comparative morphology, is said to have initiated the "missing-link" theory. At the end of the lengthy title appears the sentence—"Wherein it will appear that they are all either apes or monkeys, and not men as formerly pretended."

The book is well illustrated with copper-plate engravings by Van der Gucht from the drawings of William Cowper.

**Edward Jenner (1749-1823)**

*An inquiry into the causes and effects of the variolae vaccinae . . . known by the name of cow pox*

London, 1798

Jenner describes his first vaccination experiment in which he vaccinated a boy named James Phipps with lymph taken from the cow-pox vesicles on the hand of Sarah Nelmes, a dairymaid:—

"The more accurately to observe the progress of the infection, I selected a healthy boy, about eight years old, for the purpose of inoculation for the Cox Pox. The matter was taken from a sore on the hand of a dairymaid, who was infected by her master's cows, and it was inserted, on the 14th of May, 1796, into the arm of the boy by means of two superficial incisions, barely penetrating the cutis, each about half an inch long."

On July 1st Jenner inoculated James with smallpox matter but the boy did not develop the disease.

The book contains a fine coloured plate of the hand of Sarah Nelmes showing the cow-pox vesicles.

**Thomas Addison (1793-1860)**

*On the constitutional and local effects of disease of the supra-renal capsules*

London, 1855

In this classic, which is one of the most important works on clinical medicine, Addison describes pernicious anaemia and disease of the supra-renal capsules. Eleven case histories are recorded with the same number of coloured plates.

It was Armand Trousseau who first proposed to call the supra-renal syndrome "Addison's disease", by which it has since been known.

# Books Reviewed

**Review of Immunology in Clinical Medicine (J. L. Turk)** Heinemann 42/-

The dramatic image of the desperate author hawking his manuscript unsuccessfully from one publisher's office to another has no counterpart in modern medicine. On the contrary, it is the publishers who eagerly canvass prospective authors of textbooks or even specialised monographs. The enthusiasm of publishers for manuscripts is seen at its strongest when an immunologist proposes to produce a short account of the subject for the benefit of medical students. This is a clear case of unfulfilled demand, since immunology is fashionable, apparently important and favoured by examiners, while the existing texts, although admirable, are lengthy and erudite. The need is to produce an account of the subject that is accurate, up-to-date, concise, comprehensive, easily understood and well and interestingly written. The subject itself is amorphous, impossible even to define, improperly named, complicated and full of uncertainties, misapprehensions, inconsistencies and sheer ignorance. It is plain therefore that the task is no easy one.

Nevertheless Dr. Turk who is a distinguished research worker in this field, has made a serious attempt that deserves analysis. The need that an author faces in a situation such as this is not only to have a complete grasp of his subject, but also to put himself in the place of the student in order to see what needs to be communicated and how best to do so.

This need can only be met by an effort of the imagination comparable to that of a novelist attempting to get inside the skin of the characters he is creating. The point is that unlike other basic medical sciences, immunology presents no existing conceptual framework

to undergraduates. The first task of an author must therefore be to provide such a framework.

This book starts promisingly, but in Chapter II we are quickly in the world of tissue hypersensitivity whereas immunology as a defence against infection is not considered until Chapter IV and receives only 12 pages out of 219. It would seem to me that this is not the order or emphasis that would come naturally to a student of medicine, but in this I may be mistaken.

In tackling the problem of how to make a textbook short, an author must choose between condensation and omission. Dr. Turk has in the main plumped for condensation so that his book is remarkably comprehensive. This virtue however is inevitably accompanied by certain undesirable consequences. For the sake of completeness some subjects are included that cannot possibly be explained in the space available. Another dire consequence is the temptation to use line drawings to facilitate the understanding of difficult concepts. The book contains many ingenious examples of this art, but they seem to me to be complicated and elaborate and some of the figures seem to make their subject harder to understand, rather than easier. The third consequence is the inability to give the reader much of an idea as to how a particular conclusion or statement of fact has been arrived at, since there is no space to do so. It is of course unfair to criticise the author for this unavoidable shortcoming. Nevertheless it does place a great premium on memory as opposed to education when compared with for example the beauty and irony that delights the reader in the introductory chapter of Humphrey and White's textbook. Finally, there is the necessity to adopt a very dense style of exposition that does less than justice to Dr. Turk's normal flow of lucid prose.

This volume is up-to-date and generally accurate and will be a useful addition to my library. How far it will help students other than as a quick source of actual reference, I find it hard to judge. If however it does become a best-seller, it will, unlike most short textbooks, have scientific respectability and integrity.

W. G. Spector

**"Gynaecological and Obstetrical Anatomy: Descriptive and Applied"** (fourth edition) by

C. F. V. Smout, F. Jacoby and E. W. Lillie,

published by H. K. Lewis & Co. Ltd, price £4 10s. 0d., pp. 430, 182 illus.

There is a place for a textbook of anatomy related to Obstetrics and Gynaecology. The basic knowledge is of value to the undergraduate in trying to understand the mechanics of disorders such as prolapse, and in attaching some meaning to the information gained from bi-manual pelvic examination. At the microscopic level the boundaries between anatomy and physiology are blurred, and physiological aspects have to be emphasised. In such a clinical subject the basic science only becomes intelligible and useful if it is applied. For instance variations in labour can be related to anatomical features in the pelvis, and the natural history of cervical cancer can be related to the topographical anatomy and to the lymphatic drainage.

This is the fourth edition of Smout's Anatomy and the author states that in retirement he has been pressed to produce another edition with the help of a practising obstetrician. This assistance has not, however, proved sufficient to instil new ideas into the book, without which no progress can be made. It is precisely because obstetricians need to glean information from allied disciplines, that such a book should have an up to date anatomical background. The majority of the references are some twenty years old. Views on anatomy and physiology of pelvic organs, particularly the bladder and rectum have evolved considerably during this time, but little account is taken of these views in spite of the fact that modern surgical treatment may be based on them. These omissions are so grave that this book can no longer be recommended for M.R.C.O.G. candidates. It remains, however, a book that may well be consulted by undergraduates who wish to revive their coarse anatomy during their relevant clinical study.

The sections on the more detailed anatomy of the endometrium and ovary, together with the physiology are very different. These are clear, well written and well supported.

C. N. Hudson.

**Food Resources Conventional and Novel** by

N. W. Pirie. Published by Penguin Books Ltd. Price 5/-.

Many factors have contributed to the



dramatic increase in the population in the last three hundred years. Principal among them is the decrease in the proportion of children dying before reaching reproductive age brought about by advances in medicine and the improvement in hygiene. Though there are no accurate records of the death rates in childhood in the sixteenth century, it is clear that between 50 and 70% died before the age of fifteen in this country. The figure is now below 5%. The present rate of increase in population differs from one country to another, and from one community to another within the same country, but for the whole world the rate is about 1.7% per year. There is little doubt that the rate of food production *could* keep pace with this rate of increase for a century or two, but this will require research that governments seem loth to finance.

In this book N. W. Pirie, head of the Biochemistry Department at Rothamstead Experimental Station, examines how starvation might be eliminated as a cause of death, and malnutrition as a cause of ill health, and points out the many problems that are going to be encountered in this endeavour. He shows first what can be done by an extension of the principles of agriculture already in use. However, this will need research on a scale that no-one is willing to finance. Though the royalties of this book are all being donated to Oxfam, Pirie points out that spending money on importing food to the starving areas is strictly a temporary measure, and the money would ultimately be of greater use if it were spent on developing means whereby the starving areas could produce their own food. He shows that the principle adopted by many of the developing countries of producing crops for sale abroad is basically unsound.

As protein is the dietary factor most difficult to supply in adequate quantity and quality the rest of the book is taken up with a discussion of the most efficient methods of producing it. The approach here is practical, with as much interest in how to get people to eat the new proteins as how to produce them.

This is a very well informed account of the subject, and should make interesting reading for anyone in the habit of contributing to charities such as Oxfam.

R.S.H.P.

**Augustine to Galileo**, by A. C. Crombie. Published by Penguin Books in two volumes. Price 15/- each.

There is a period in the history of science that many of its recorders gloss quickly over. It extends from the fall of the Roman Empire, when all the writings of the Greek and Latin philosophers fell into obscurity, till the seventeenth century, when scientists started asking the same kind of questions, and trying to answer them in the same way as we do now. It is these dark ages of science in the western world that Dr. Crombie illuminates in these two books.

He shows first how the scientific writings of the Greeks were kept alive in the latin west by the encyclopaedists, such as Pliny, Boethius, and Isidore of Seville. Then how scholars in the universities led by Grosseteste "rediscovered" the philosophies of the ancient world, partly directly from the Greek, and partly *via* Arabic sources.

The rest of the first volume is taken up with a detailed account of the medieval picture of nature. Though this was largely based on the theories of Aristotle, these were not taught or studied without criticism of the validity of their content, and a number of important original contributions were made. Because the questions these medieval scientists asked in their search for truth were so different from those asked today, they arrived at some theories which now sound incredible. Though the author's style is very detached, painting about as colourful a picture of these times as a grammarian might of the contents of Homer's *Odyssey*, he shows how these incredible theories could gain credence in their own times.

This story is continued in the second volume with the change in the attitude of late medieval scientists, and the growth of the scientific method. A wave of literary criticism then swept over Europe, abusing not only the style of the medieval scientist, but also the contents of their works. The book closes on more familiar ground, with an examination of the origins and nature of the seventeenth century scientific revolution.

This is probably the fullest and most accurate account of this period of history in the popular press. I feel, however, that this accuracy has been gained at the expense of colour.

RICHARD PUMPHREY

## HITCH-HIKING IN FRANCE

Margaret Lightfoot

"A hitch hiking holiday in France"—its interesting to note the reaction of people when one tells them that was our holiday of last summer! Expressions range from shock to disgust to mere resignation—"the youth of today!"

Nevertheless this type of holiday although it has its own specific risks—but which holiday doesn't?—was not only cheap but enjoyable and interesting.

We set off from London not knowing exactly where we were going. That's half the joy—one can go where one pleases, when one pleases and can cover as little or as much ground as desired; in fact the outcome of the holiday is entirely dependent on the mood of the moment.

As regards what to take, we learnt by bitter experience. It is of course ideal if you acquire a rucksack. At the time we didn't possess one between us. Thus we gaily started off from Gloucester House with two cases and one large army bag between us. On reaching the G.P.O. headquarters exhaustion set in and we sat down and emptied our bags of all that we thought we didn't need. Anoraks went, all books followed (except maps) much to my disgust—but my friend was adamant. "French newspapers will be stimulating" was the comment.

Considerably enlightened, but still not comfortable we set off again, reached Southampton, crossed to Cherbourg and made our way to St. Malo where we deposited even more of our belongings! Thus we discovered you can exist for two weeks on one pair of trousers, one pair of shorts, one thick sweater, one pair of flip-flops, two shirts and one bathing-costume! The bare essentials quite literally, although later on we did have to replace our two anoraks, for sometimes the French weather rather reminds you of England!

We youth hostelled, which is fascinating in itself. The main idea that we evolved was to travel down the west coast from youth hostel to youth hostel and if we found a place that appealed, then we would stay.

Different standards of youth hostels are encountered but one is informed beforehand via the youth hostel handbook of what to expect in the way of facilities. Whatever the facilities, most important is the hostel's cleanliness and one becomes astutely aware of this whilst travelling around. The real gem to be found in France are "English loos" and after

any amount of time in coping with holes in the ground, to come across the "English" variety is sheer luxury. Some Hostels provide showers; some just have a long water trough with running water. The kitchens are also important; cutlery, cooking apparatus and china are all provided and again it's the cleanliness that counts.

The standard of each Youth Hostel, for the hostel with few amenities can have as good a standard as that with all amenities, ultimately depends on the *Mère-Aub* or *Père-Aub* i.e. the wardens. We went to one where the *Mère-Aub* was young and had no discipline and as a result the place was filthy. On the other hand at another there was a married couple acting as summer wardens and they delegated short jobs to do each morning to each hosteller and they insisted on cleanliness. The result was perfect.

The cost per night ranges from four to six francs. Food is not provided but one can live cheaply if one buys wisely. We bought French bread, butter and jam for breakfast (always remember to take numerous plastic containers on a nomadic holiday—invaluable!); fresh fruit and chocolate for lunch (usually on the beach) and a fully cooked meal at night. In fact the whole holiday including channel fares cost about £20 for two weeks.

Hitching itself was fun. On the whole it took longer to get lifts in France than in England but once acquired the French were very obliging and almost invariably went out of their way to take you where you wanted. One hair-raising ride was with a French nurse and somehow we managed to get behind a car full of French soldiers. Notices began to appear at the back window shouting at us "Le Champagne—STOP!" We couldn't resist replying and so there began a "note session" with notes being passed between the cars, the two abreast racing along at 70 miles per hour! Thank goodness for the straight French roads.

In the end we travelled right down the French coast. Mont St. Michel-St. Mado-Les Sable d'Orlonne-La Rochelle-Royan-Cap Ferret. Our general impressions were of attractive places but too many tourists. We wanted somewhere quiet and uncommercialised, and this we found at Cap Ferret. Here we discovered a vast Atlantic seaboard, a huge expanse of sand dunes, a rough sea and sun. This we stayed.

It is here we met a mini bus load of young people who gave us a lift back to St. Malo. From St. Malo we started to hitch hike and got a lift straight to Hyde Park Corner!—a fitting end to a good holiday.



# British Medical Students' Association News

David Stringer

The Executive Meeting of B.M.S.A. was held during the last month, but unfortunately was not early enough to be included in this report. Next month's article will include any policy, which is decided upon at this meeting and which is of interest to you. I shall, therefore, not go into details of any policies which will come under discussion at this meeting and so must apologise if this report is short.

## Hospitality to foreign medical students in London:

Regularly throughout the year foreign medical students arrive for clerkships, etc. in the United Kingdom. Of these the majority arrive in the summer and a large number of these stay in London. They are always keen to meet other medical students especially if this includes a social event of some sort, e.g. the traditional propping up of some bar.

I should be very grateful if any of you who are interested in meeting medical students from abroad, could give me your names and telephone numbers. I will then get in contact with you when I hear of any foreign students who are at a loose end.

Very occasionally one might wish to bed down on a floor for the night and so please tell me if you are willing to do this.

N.B. A number of these students are females. **B.M.A. and J.H.D.A.**

The British Medical Association has come in for a lot of criticism from medical students and from junior hospital doctors—and mainly from the latter. The main complaints which have been raised against them are that they are:

- (i) non-representative
- and (ii) have done nothing for the junior hospital doctors.

There is some truth on the first complaint but how much is there in the second complaint? It must be remembered that the British Medical

Association is NOT a negotiating body as such—but neither is the Junior Hospital Doctors Association.

The negotiating bodies are smaller and in the past have been made up of members of the B.M.A. because the vast majority of doctors were members of the B.M.A. These members of the negotiating bodies were mainly senior members of B.M.A. as they were deemed to have the greatest experience in such matters. However, the conditions under which the junior hospital doctors were working were considered by these doctors to be very bad. Hence a group of them form the Junior Hospital Doctors Association. This Association helped conditions to improve by being radical (i.e. suggesting that the junior hospital doctors should strike) and causing other bodies to champion their cause.

Later on their members gained a majority on the Junior Hospital's Staff Group Council, which further helped their campaign.

The J.H.D.A. was formed at a time ripe for improvement of the conditions under which their members worked. This is one of the main reasons why it succeeded in starting the improvements. However, some people are beginning to turn against it. This is because they publish misleading facts occasionally, e.g. J.H.D.A. said that it had the support of 15,000 British Medical Students behind it; there are only approximately 13,500 in Great Britain. J.H.D.A. had said this because B.M.S.A. had agreed to support the J.H.D.A. only when their policies were mutual. J.H.D.A. immediately assumed that everything that J.H.D.A. decided upon would be supported by B.M.S.A. That is a big assumption!

I have tried to give as unbiased an account as possible but apologise if I have overstated either case. I wrote this to give you some ideas of the two Associations and to help you to draw your own conclusions.

## Scope

I have had NO articles from any Bart's person so far and would be grateful for some. Remember you will be paid for it if it is published.

I would like to thank Roger Packham and Ken Norman for offers to help on the advertising side.

In December there will be a four page travel supplement and you can obtain commission on any advertisement you obtain for it. In the first October issue there will be a free classified advertisement column—so please submit them along with a letter for the "Letters to the Editor" section.

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- \* Reprints received and herewith gratefully acknowledged. Please address this material to the Librarian.



# SPORTS NEWS



## ATHLETIC CLUB

### Bart's v. Lloyds Bank

A fine evening greeted a team of four Bart's athletes at Lloyds Bank ground. The first event was the Men's 100 yards, in which Tony Breeson came third. A blatant false start by two of the Lloyds' men was not recalled by the Starter because of a so-called jammed gun. However, since this was a friendly match, no formal complaint was made. Although it was known that John Brooks was coming, the Mile was run despite attempts by the Captain to change the order of events. The Mile was won by a guest runner, with a poor time of 4 mins. 30 secs.

Guy Routh, a new team member, came third in the High Jump.

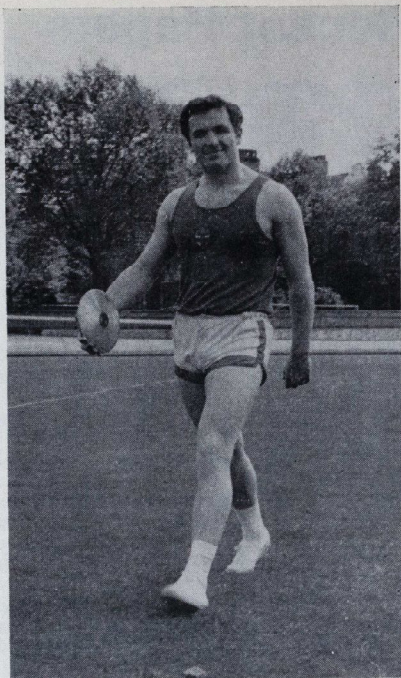
Bart's managed to get revenge, thanks mainly to John Brooks in the Medley Relay, the order of running being:—

Bob Furness ...	100 yards
Guy Routh ...	100 yards
Tony Breeson ...	220 yards
John Brooks ...	880 yards

By the time John Brooks received the baton, Bart's were 30 yards down from the Lloyd's man. A beautifully timed race allowed John to win by a comfortable 20-yard lead.

### U.H. Championships

Bart's had a poor entry for the U.H. Championships this year—2nd M.B. taking its usual toll. Richard Moody ran well in the 880 yards. Paul Taylor came third in the 440 yards, Guy Ralph managed to get into the final of the high-jump, John Brooks came second in the mile but managed to gain revenge over the winner of the event by winning the steeple-chase. It was a great pity that Bart's could not



Paul Bebbington limbering up – Paul has consistently thrown well for London University this season.

produce a tug-of-war team. We won this event last year and this year we had two byes and so reached the final. To make matters worse Guy's were the winners this year simply because no other Medical School could produce a full team.

### Westminster Bank Sports Day

Bart's produced a team of four to run in the medley relay; the order was as follows:—

880 yards ...	John Brooks
220 yards ...	Paul Taylor
220 yards ...	Chris Kelly
440 yards ...	Richard Moody

We were easily beaten into second place by L.A.C. Brooks later ran in the steeple-chase as an invitation runner. We all thoroughly enjoyed a splendid afternoon with a substantial tea, a brass band and a very well organised sports day.

Tony Breeson



Taylor, Breeson and Ralph – proudly displaying their new team vests.

## CANOE CLUB

Now that we have a large number of regular paddlers it was decided to get things a little more organised, so we had a meeting on the 19th June. Steve Watt agreed to being elected as secretary and Jenny Roberts came as Nurses Representative. We discussed the role of the club at Bart's and came to the conclusion that it was mainly that of getting people interested in paddling a wide range of boats and that it was better they should begin in the more stable types. However we are very pleased that John Albert has been chosen to represent Britain in the World Championships this summer. John paddles C1 that is a Canadian canoe as

opposed to the more common K.I. or Kayak. and has a hard training programme ahead of him. We wish him every success. Ultimately canoeing is a sport—one of the fastest growing ones in the country—and the real pleasure lies in paddling skilfully in good boats. Steve is putting the finishing touches to the new club K.I. which should be ready for anyone who wants to learn to paddle during the summer months. There are a large number of us going down on Wednesday afternoons and all are welcome—transport can sometimes be arranged and there is always a train. On July 11th a party of us are going down to Cornwall to do some surfing—interested people should contact Peter Durrey.

A. Huskisson

## CRICKET CLUB REPORT

### Semi-final of the Inter Hospital's Cup v. Guy's Hospital. Result: Won.

As reported at the end of last month's edition Bart's beat Guy's at Honor Oak Park on Thursday, 29th May.

Batting first, Bart's soon lost Purcell in the first over. Furness joined Lindsell, and together

they pushed the score to 33, when the latter was well caught off Crafts for 26. He was replaced by Reid, who played some solid looking shots before being bowled by Pearson for 18. Firmin, the next batsman, although scoring slowly, looked very safe and allowed Furness to score the runs till he was caught off Clair for a very useful 42. Rowland made a brief appearance and at lunch Bart's were 125 for 5.



After lunch Berstock and Firmin scored well till Firmin was unnecessarily run out for 42. Leach and Lloyd's wickets fell cheaply soon afterwards and Bart's were 167 for 8. Sloane joined Berstock and they passed the 200 mark. Edmondson's contribution of 8 enabled the score of 219 to be reached, before Sloane was caught off Goodhart for 29.

Guy's looked set and determined to make the necessary runs, but were shocked after 20 minutes to have Gillham removed by Edmondson. An early change of bowling, and Lloyd replaced Berstock. Bowling well the Guy's batsmen still tried to him around the ground, but Sloane's stumping gave Bart's the useful wicket of Goodhart. Rowland now came on, and bowled well, and little more resistance was offered by the opposition batsmen. Rowland bowled fifteen overs and took four wickets for four runs; he had the batsmen in serious trouble with many unplayable balls.

#### Score card :-

##### Bart's—

Purcell, ct. b. Crafts ...	...	0
Lindsell, ct. b. Crafts ...	...	26
Furness, ct. b. Clark ...	...	42
Reid, b. Pearson ...	...	18
Firmin, run out ...	...	46
Rowland, ct. b. Crafts ...	...	4
Berstock, ct. b. Goodhart ...	...	30
Leach, b. Pearson ...	...	0
Lloyd, ct. b. Goodhart ...	...	7
Sloane, ct. b. Goodhart ...	...	29
Edmondson, not out ...	...	8
Extras ...	...	9
Total ...	...	219

##### Guy's—125 all out

Edmondson ...	20	11	42	1
Berstock ...	15	6	24	2
Lloyd ...	21	9	41	3
Rowland ...	16	13	4	4

##### Sun., 8th June v. Blackheath. Won by 155 runs.

On the Rectory county ground at Blackheath. Bart's played very well indeed against one of the strongest sides on the fixture list. Batting first, Bart's scored 230, Furness scoring a fine 57, and Husband a very aggressive 57. This included two sixes, one of which was lost beyond the car park, and six fours.

Blackheath were soon in trouble with Edmondson's pace, and at tea were 30 for 3. They only reached 75, mainly due to tight bowling and good fielding.

##### Sat., 14th June v. Avery Hill. Lost by 105.

A poor performance by Bart's batting, which only produced 82 in reply to Avery Hill's 187.

##### Junior Cup match v. Guy's. Won by 30 runs.

Bart's batted first and reached 103, Mees scoring 32 and Husband 20. Davis and Husband bowled well, taking four and five wickets respectively. Guy's were all out for 73.

##### Sun., 15th June v. Horlicks. Won by 7 wickets.

Horlicks were bowled out by Vartan (6 for 8) and Husband (4 for 15) for only 36 runs. Bart's reached this score for the loss of only three wickets, before lunch.

##### Wed., 20th June v. U.C.H. Lost by 34 runs.

U.C.H. scored 177 for 7 declared, and Bart's were bowled out for 143, Reid scoring 43. Having beaten them easily on in the season, this result was rather unexpected.

##### Sun., 1st June v. Putney Eccentrics. Matched tied.

This is the first recorded tie in the history of Bart's cricket. Batting first, Bart's scratched around for 120 runs on the best wicket to that date at Chislehurst during the season.

Berstock and Husband bowled very well and the last man was well caught by the captain off Husband at silly mid off.

Berstock 6 for 48; Husband 4 for 9.

##### Cambridge May week tour

Although only two of the three matches were played and the weather made the other two matches rather unpleasant, the other aspects of the tour were suitably enjoyed by all—except one or two Cambridge inhabitants.

The match against Trinity was rained off; the match against Christ's was lost by 6 wickets.

Tour party: D. Berstock, J. Shepherd, D. Edmondson, E. Lloyd, D. Lindsell, R. Firmin, D. Sloane, K. Jones, P. Rhys Evans, J. Gower and R. Page.

##### Sun., 22nd June v. U.C.S. Old Boys. Lost by 1 wicket.

Batting first, Bart's scored 221 for 6 declared. Furness making 75, and Lindsell 77: their partnership of 107 was very spectacular.

However, U.C.S. scored very fast and on the last ball of the match just scraped home.

##### Weds., 25th June v. City of London Police.

Won by 81 runs.

Bart's batted first and against the tightest bowling faced all season scored 120 very slow runs. Edmondson at last found his true pace, and bowled well, taking 5 wickets for 18 runs. Smith and Rhys Evans took the other wickets and the Police only managed to score 39.

##### Sun., 29th June v. Orpington Hospital. Won by 85 runs.

On a very poor pitch, Bart's scored 141 runs, to which Orpington replied with 56 only.

P. H. Rhys Evans



## Saint Bartholomew's Hospital

# JOURNAL

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