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Elixir 1978

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FOREWORD

'Being the Editor-in-Chief is no easy task' – perhaps this has become a favour saying. But few will appreciate this feeling, I guess, except the editor himself. Taking up this job has however been a challenge to me and there are many such challenges we medical students must face and overcome by virtue of our medical knowledge and altruistic heart throughout our work.

Deeply indebted as I to all those who have, in any way, contributed to the publishment of this issue of Elixir, I cannot possibly acknowledge the long list of names of those who have helped but it is my wish that they would understand that as would-be doctors we help others neither for laurels nor for our own benefit.

Nevertheless, I must take this opportunity to thank – the advisers for their indispensable guidance and my colleagues for their unyielding endeavour. Without their help, the publishment of this issue of Elixir could not have been completed.

CHIEF EDITOR
ELIXIR

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FROM THE DEAN

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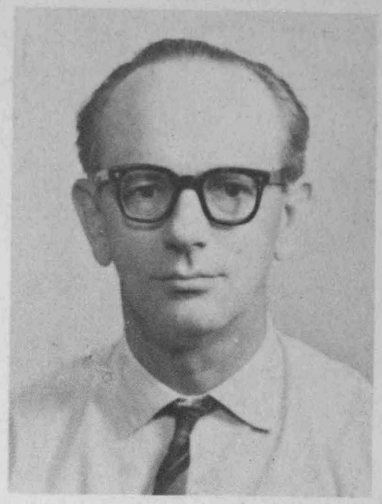
MESSAGE FROM THE DEAN



The editor of Elixir, when he asked me to write this forward, mentioned two subjects which might be of interest to the readers – future plans for the Medical Faculty or my views on the advantages (or disadvantages) of students engaging in activities outside the narrow confines of the present course aimed at passing the M.B., B.S. examination. Although it would be quite easy to say something about the implementation of the new curriculum, the visible beginnings of the new dental school or the impact on us of the gestation of the new medical school at the Chinese University, I thought it would be better to try to give some of my impressions, after five years in Hong Kong, on the effect of extra-curricula activities on the lives and work of students.

There is not much point in repeating the trite remark about "You come to the University to be 'Educated' " or "You learn more outside formal teaching and reading". More useful would be the more practical repercussions.

The object of the course is to take in young men and women fresh from school and to turn them into good doctors or at least into people with the potentialities of becoming good doctors.

Primary and secondary education have already lasted long enough. Tertiary should be completed in the shortest reasonable time. It is only too easy to list subjects that medical students should learn about as undergraduates – but one's working life is finite. It is also necessary to consider how to do this within the scope of the present curriculum, or something like it. Perhaps in ten years we may have a revolutionary new curriculum but that is of only theoretical interest to to-day's students.

It is dangerous to try to make recommendations that will be applicable to every one. All men (and presumably women) may (or may not) be born equal but it is quite certain that by the time they reach 1st year medicine they are not equal, even though they have been through a fairly similar educational machine and have been selected by a process which takes most account of academic success in an examination at the end of secondary schooling. The individual must make his own mind up about what he can or cannot do.

There are some students who pass their examinations with the greatest of ease, not merely by memory work but by showing their ability to extract essentials, think logically and be aware of what is going in the world outside. This does not interfere with their ability to take part in extra-curricula activities (some times those of the less socially important type). One of the most successful students I have ever met also had the reputation of being the best mahjong player in his year. Even this group seems to vary greatly in the amount and type of outside activities.

The middle group of students is probably the largest. They get through their examinations without too much trouble but many use a technique that can only make the educationalist shadder. They take a reasonable interest in the parts of the course that catch their imagination . . . Learn up the notes just before the examination . . . Identify a question that has some relation to the memorized material . . . Do not read the question too carefully as it may confuse them . . . Reproduce the notes in the examinations and then either due to the compassion (or in spite of the frustration of the examiner) pass the examination – and not retain too much of the material as it may interfere with the similar process required to pass the next examination.

I personally can take a superior attitude to this group as I, when a student was, and still am quite incapable of memorizing a mass of facts in a short time – I was forced to work fairly steadily over a long period. This large group – if they really exist outside my imagination – have plenty of time for extra curricular activities but in fits and starts determined not by the lunar but by the University

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Calendar. We all strive to find and advise a more sensible way of working but as we have selected as our students those who have reached eminence in school examination it is not easy.

The last group is a much smaller one and consists of those who do have real difficulties. This group I get to know quite well as some of them fail their examinations. There are a few who have genuine difficulties of various types who need counselling advice. Quite a number who in conversation seem to be just or more well informed and understanding about the subject than their more successful colleagues, have lost or never had an ability to face examinations. There may be a third group who have failed because they have spent too much time on other activities. But one must reach the conclusion that they are very small and that most would benefit by wider interests and could participate in them without damage to their progress through the course and with much benefit to their development as individuals.

What activities? This brings up the other half of the subject. For all the groups we must consider what students do with their spare time.

These activities cover a very wide range from those aimed at making a helpful contirbution to the life of other members of the community to the purely escapist "Wine, women and song" — No one would argue with relaxation along this lines though, being tone deaf, I am not very enthusiastic about song. Clearly the keyword is moderation.

Are there any activities that the old can usefully recommend to the young with any hope of being taken seriously?

Many students have outside interests and I am continuously surprised at the fields covered. Lady fencers at the Asian Games. — Disc-jockeys on the local radio station — writing and producing modern Cantonese Drama — writing "Health hints" in the Chinese newspapers.

Medical students should be interested in current affairs both in Hong Kong and in general, as the health of the people of Hong Kong depends so much on what is going on in other countries. We are very fortunate to have Newspapers and Weekly reviews of a high standard here — though I can only speak personally of those in the English Language. Of course they need to be read with the critical mind that we hope we have developed in the University. Especially with regard to figures and the results of surveys. I have consistently failed to convince students that statistics are not just a numbers game but are also an aid to critical reading.

Of course we must not be surprised if, when we advise students to take an interest in current affairs, they do follow ones advice — even if they do not reach the same conclusion as to what we think is a reasonable solution to a current problem.

The most recent example was the Precious Blood affair. I found it so complex a problem that I thought it better to keep my mouth shut, but it would be ridiculous to try to stifle student opinion on the subject of attempts to improve school education — something of which they have had recent experience. May be others do try to "manipulate" them; better to rely on their good sense than adopt the "father knows best" attitude.

A second field of activities are "student affairs". Quite a number of students take part according to a dubious system popularized by the bloodthirstly and incompetent Athenians in the fifth century B.C. It seems that no one has yet thought of a better one. They play a very useful part in the day to day running of the University. They learn sooner than others how unreasonable many people can be. Of course there are extremes. Some do spend too much time on student affairs and become addicted to them; there are, around the world, aging so-called student politicians, long after they should have left the University and gone out into the real world. Others would like to be active and might be effective in student affairs but do not have the knack of getting elected.

Rather the same position occurs in sport. Some people have better powers of physical coordination than others. There can be no doubt of the benefit of sports to those that are quite good at them. There are undoubtedly some who enjoy sports but are so incompetent that they are unlikely to find any team in which they can become regular and welcome members. Eventually they can play golf with a high handicap — but not as students in Hong Kong.

Some people who always miskick a football are quite good at scraping the strings of a violin or similar pastimes. The so called world of culture gives another opportunity to the students with some talents to enjoy themselves with like-minded colleagues and even opera gives some a pleasant and valuable break from their studies. Do not forget that there are plenty of books for those who prefer to relax by themselves. Medical students may find something interesting in the main library of the University; it is conceivable that the history student might find relaxation amongst books on biochemistry, though I doubt it.

All these activities are very much for and with students. I have been frequently surprised to find how many students take part in activities connected with helping those in trouble in the community. Sometimes these are organised as student groups, often they are individuals who spend a considerable amount of their spare time with people in need.

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Have we answered the original question? Should students take part in extra-curricular activities? As usual we have not produced much of a solution. There are reasonably wide opportunities. In moderation (under ayar of the detestable ancient Greeks) I think that a broadened outlook from such activities must be of advantage even from the point of view of academic success, but more important it makes life in the University enjoyable rather than a grind. It can be overdone. The student senator may be a member of the football team, edit Caduceus, spend two nights a week singing in a chorus, donate a pint of blood once a month and play Mahjong in his spare time (though I usually meet the bridge players). Some of these people also gain distinctions but more have long oral examination for other reasons.

Some seem to do nothing but learn soon-to-out-of-date textbooks. Unfortunately all my impressions are based on biased samples. I have not the slightest idea what most students do in their spare time. No harm in asking your elders and (?) betters for their advice, but it is really up to you to decide what to do.

Professor colbourne
Dean, Faculty of Medicine

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Examiner	:	For inoperable carcinoma of prostrate, what can you give?
Student	:	Stilboestrol.
Examiner	:	What dosage?
Student	:	(Having forgotten the dosage, but not giving up) Do you refer to the preparation in oil or in water?
Examiner	:	(A bit weak in this part of Pharmocology, but not being in the mood to show it) . . In oil, of course.
Student	:	(Seizing his obvious chance of escape) Sir, this is the first time I have heard of stilboestrol being prepared in oil.
Examiner	:	. . . .

In a viva, a certain candidate was asked by the External Examiner the significance of a straight skin crease running right across the palm. The highly strung student hesitated and stammered,

"Such condition is found in Mongols, sir?"

The gentleman frowned, looked at his own palm and finally thundered,

"Look here, you, I've got the same sort of skin crease myself!" The poor fellow was taken a back but then his eyes twinkled and he nursed,

"Well, sir, they say that it is also found in very intelligent individuals!"

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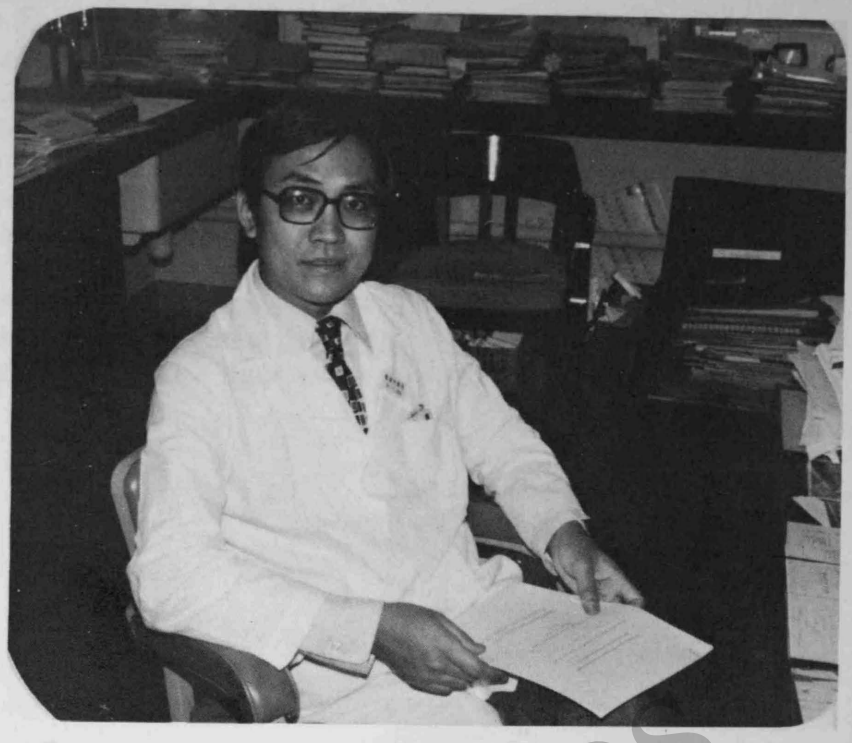
PRESIDENTIAL ADDRESS

A DOCTOR'S ROLE



On the left, the staff of Aesculepius – the son of Apollo and Coronis – the Greek god of healing and medicine. On the right, the magic wand (Caduceus) of Mercury who was the Greek god of luck, wealth and dreams, of commerce and the market. It is up to you to choose your own emblem.

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Dear Students, Colleagues, Ladies & Gentlemen: I take this opportunity to congratulate the outgoing executive committee for their efforts in making the past year of the Medical Society a very successful one. It has been a pleasure for me to be involved in the many student activities throughout the year. I must now take on the awesome task of delivering the Presidential address.

Since the Address comes at the end of one's tenure of office, it might be assumed that the talk would be of a reflective nature, on events of the past year and perhaps aspirations for the future; while the contents and directives of the adress need not be taken seriously by the succeeding committee.

I have chosen the title "A Doctor's Role" after reflecting on the purpose of the Medical School and the Medical Society – that is, to prepare you to fulfil the role of doctor. While it is obviously important, a doctor's role is seldom discussed in the medical curriculum. This evening I would attempt to discuss the various aspects of this role I can only hope to show glimpses of what you have let yourselves in for as a doctor. The views expressed must, of necessity, contain my own personal bias and should not be taken to represent a consensus of the medical profession.

I shall consider the various aspects of a doctor's role which are shown in Table I. *The most important role is to the patient* where we aim to allay suffering, to restore health and to prevent disease. Figure I shows the crest of the Royal College of Physicians (London), where the hand of the physician with divine guidance from above and the poppy plant (shown below), alleviate the patients' sufferings. How are going to achieve these goals? I propose to discuss this in more detail under the headings shown in Table II. I cannot overemphasize that we should diligently and continuously improve our professional skill and understand the scientific basis of medicine, otherwise, we would be no better than quacks and charlatans. Many students complained that the basic sciences they leaned before they enter the Faculty and during the Preclinical years were not relevent to the Clinical subjects. Little do they realize that these are the years that train them for the scientific approach and provide them with the scientific basis on which we built our practice. Although in the present state, medicine "consists of a few well-lit islands of scientific certitude, surrounded by a boundless ocean of shadowy uncertainty and ignorance", these "well-lit" scientific bases shall be our springboard for advance and our bearing when we get lost in the "uncertain ocean" of clinical enigmas. In view of continuous progress in clinical medicine, we must be prepared to be a perpetual student or we shall be a disservice to the patient. George Pickering, when speaking on the necessity of continuous education for doctors, might have exaggerated when he said, "If a doctor, who graduated 10 years ago, had not referred to the journals or new editions of textbook, he will be worse than a layman". Nonetheless, this self-learning and continuous life-time education should be an inbuilt quality of doctors.

Next, I would like to consider our attitude to patients or the doctor-patient relationship. A doctor is generally considered to be an ethical and moral person. The broad principles of medical ethics as depicted in the Hippocratic oath – i.e., the health of my patient will be my first consideration; I will respect the secretes confided in me; I will maintain the utmost respect of human life – are usually accepted and carried out by members of the profession. But what about the finer qualities of heart and head, which William Osler referred to? "A physician may possess the science of Harvey and the art of Syndenham, and yet there may be lacking in him those finer qualities of heart and head which count for so much in life": William Osler. Can we define and teach this aspect of medical ethics? I would like to quote from a dialogue of Plato, when "Meno asked Socrates: Can virtues be taught? Socrates: What is virtue? One must have this clear in his view before he can answer this question". Can we define what these qualities are? It is suggested that sensitivity and humanity may be taught by indirect means, so to speak, rubbed off from teachers to students. This assumes that the teachers have these qualities to start with and the students are exposed frequently enough to the teacher's behaviour in front of patients. Both of these assumptions are probably not true in the current medical education system. Medical ethics should be *shown* to students and how this can be achieved requires further delineation.

Another aspect we must bear in mind is that "the illness of the patient is our concern". This means more than the biologic disturbance we can detect, which constitute the disease process, but also includes the psycholgical and sociological effects of disease. It is true that we will meet malingerers during our practice; but we must not develop the attitude that, what we cannot measure or detect objectively, does not exist; and the patient's illness is not true. This defence of ignorance is well exemplified by the statements "There is nothing the matter with you" or "It's all in your mind" Many a time, I have encountered patient with serious illnesses, with little outward signs, who have been dismissed by doctors as "neurotics". Additionally, we must accept that after completion of a medical course, for that matter, after many years of medical practice, we are still lacking in many aspects of diagnosis and treatment of illnesses. Acceptance of this fact, would make us seek genuinely for advice from the best help available by consultation. And even with consultants, the important attitude is honesty with your patients, because the age of doctors as magicians or witch-doctors have passed. With humility and honesty we should admit our ignorance in many illnesses that inflict mankind.

Some may suggest that doctors should be sympathetic to the patient's feelings. I agree with Charles Aring who said that doctors should develop empathy instead of sympathy. Because to be the healer and adviser to patients, it is much more useful to have both an appreciation of the patient's feeling, and an awareness of one's separateness from it – which is the meaning of empathy; and not to be so involved emotionally as not to be able to help th patient who is suffering.

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A DOCTOR'S ROLE

(1) DOCTOR & PATIENT
AIMS: TO ALLAY SUFFERING
TO RESTORE HEALTH
TO PREVENT DISEASE

(II) DOCTOR & COMMUNITY
1. PUBLIC HEALTH & PREVENTIVE MEDICINE
2. PROBLEMS OF LOYALTY
3. MEDICAL-CARE SYSTEM

(III) HOSPITAL CARE & RESEARCH

(IV) DOCTOR & TEACHING

TABLE I

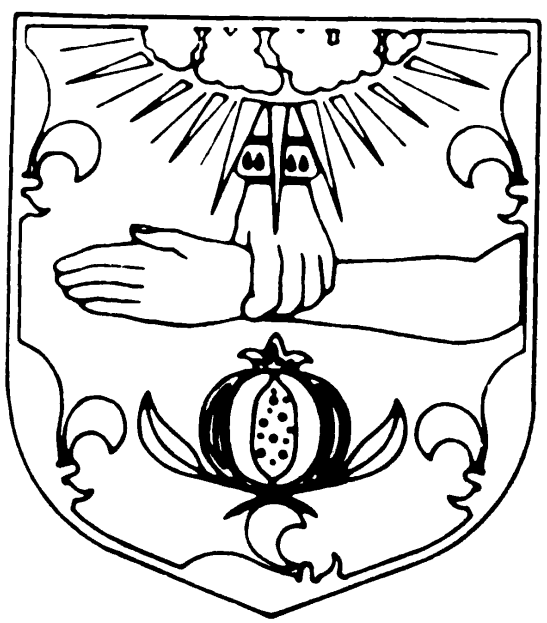


FIG. 1

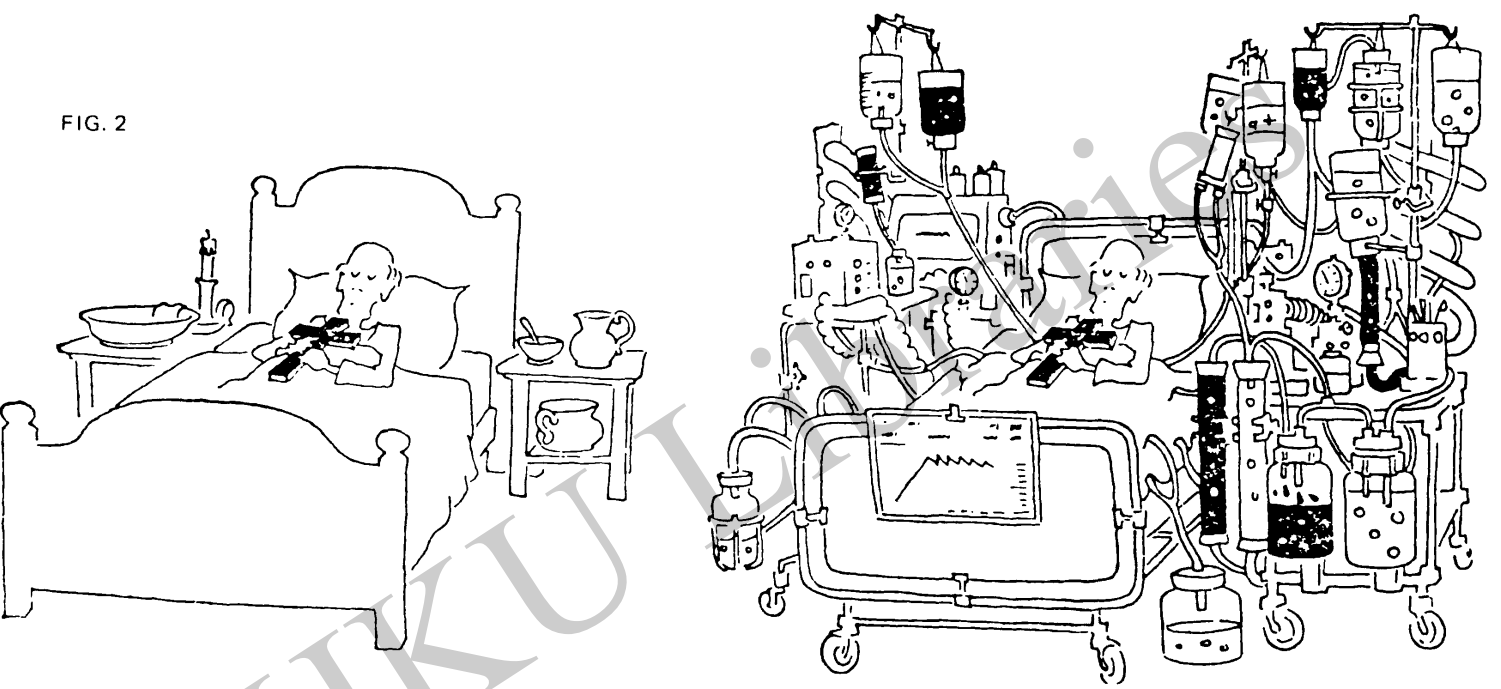
(I) DOCTOR & PATIENT
1. Professional Skill (Art)
2. Scientific Approach (Science)
3. Continued Education
4. Attitude: Medical Ethics
Illness versus Disease
Sympathy & Empathy
Doctor & Death

TABLE II

The last attitude I would like to mention is Doctor and the Dying. Death is often taken by the doctor as a failure of his effort, and no one likes to watch one's own failure. In fact, not uncommonly doctors either desert their dying patients or overreacted by trying to maintain life with undue means (or the "how-dare-you-die-on-me" syndrome). We should accept that there are many disease processes we cannot revert and that death is a natural phenomenon – the surest thing in life is death. Also to remember that our primary duty is to allay suffering not to prolong life unduly. In caring for the dying, one might quote Samuel F. Feder – who said "I don't have any idea how to help a person to die, but I am sure we can do much to help a person to live until the time of death – such living entails dignity, respect and humanity". In planning for terminal care, we must, firstly, evolved primarily patient-oriented standards. A policy that "patients must be told their diagnosis" is as insensitive as "patients must not be told". The correct policy would be that the patients should have every opportunity to find out *as much as* they want to know, *when* they want to know it and *as often as* they want to return to the subject, through discussion with the doctor-in-charge. While extension of life will be a continued goal, remission of symptoms, especially pain, should take priority. Lastly, while death on demand may not be optional, patient's wishes should be respected, e.g. to die at home as desired, and visiting hours made flexible and normal hospital practices modified to enable patients to spend their last days meaningfully. Figure 2 shows two drawings which express some of the sentiments that I have just discussed in the care of the dying. The right one shows the obviously undue measures employed.

In conclusion I would suggest that the right attitude to patients is echoed in the plea by M. Lipkin: "Let us teach our young physicians how to care for the sick as distressed human beings rather than as nuisances attached to interesting disease".

FIG. 2



The *Second Role* of the Doctor is to the Community. Here I would stress that this role is only secondary in importance to the first – that is – our role to the patient. Public health and preventive medicine are well determined roles for the doctor. I need not discuss these further. I would like to take on the question of split loyality when the interest of the patient and that of the community are in conflict. In such situations we should always be on the side of the patient. As an example, I would only mention here the pre-employment examination of people. If one finds some abnormality, not uncommonly a heart murmur or abnormality in the urine, the decision, surely, for the doctor is whether the abnormality would jeopardize the working capacity of the person. If not, he should be employed and the abnormality dealt with accordingly. In practice, very often the doctor would turn the person away from employment and refer him or her to the Government or University Departments Clinics. This course of action is wrong!

As to the medical-care system in a community, this is a great concern for the profession. Besides considering how we are to be paid, the organisation of the medical service depends very much on the system in force. The medical-care system in Hong Kong may be approximately represented in Figure 3. While this offers a patient a free choice of self medication, herbalist and modern medicine, the main faults lie in the marked difference in the fees charged between the various government or subsidized clinics and the general practitioners and those between Government or University specialist care and private specialist care. This state of affairs while allowing the very poor to the very rich to get the "best care" available, in terms of professional skill, falls far short of the high quality care that our proesssion should be able to deliver. Not to mention that, very often, a person does not know where to go for medical care! Those who suffer most under such a system are the middle class – or the majority of people in an affluent society like Hong Kong. A better health-care system would be one with the question of pay removed from consideration and the profession so organized as to deliver comprehensive high quality care (Figure 4). Evidently within such system, the Government or some other organisations have to take on the responsibility of financing the health care of the community. George Bernard Shaw, in his preface to Doctor's Dilemma, offered one solution and that is to constitute the doctor a *civil servant* with a dignified living wage paid out of public funds. But would this be satisfactory to the patients or to the doctors? I would quickly leave this area as I can offer no satisfactory solution to this problem in Hong Kong.

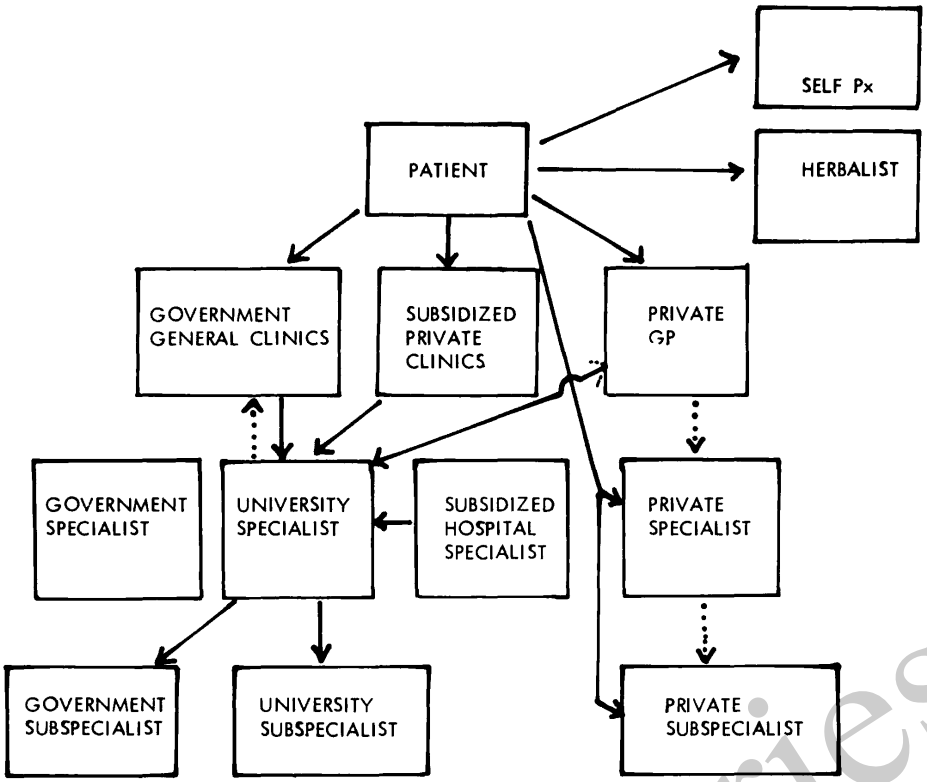


FIG. 3 MEDICAL CARE IN HONG KONG PRESENT SITUATION (1978)

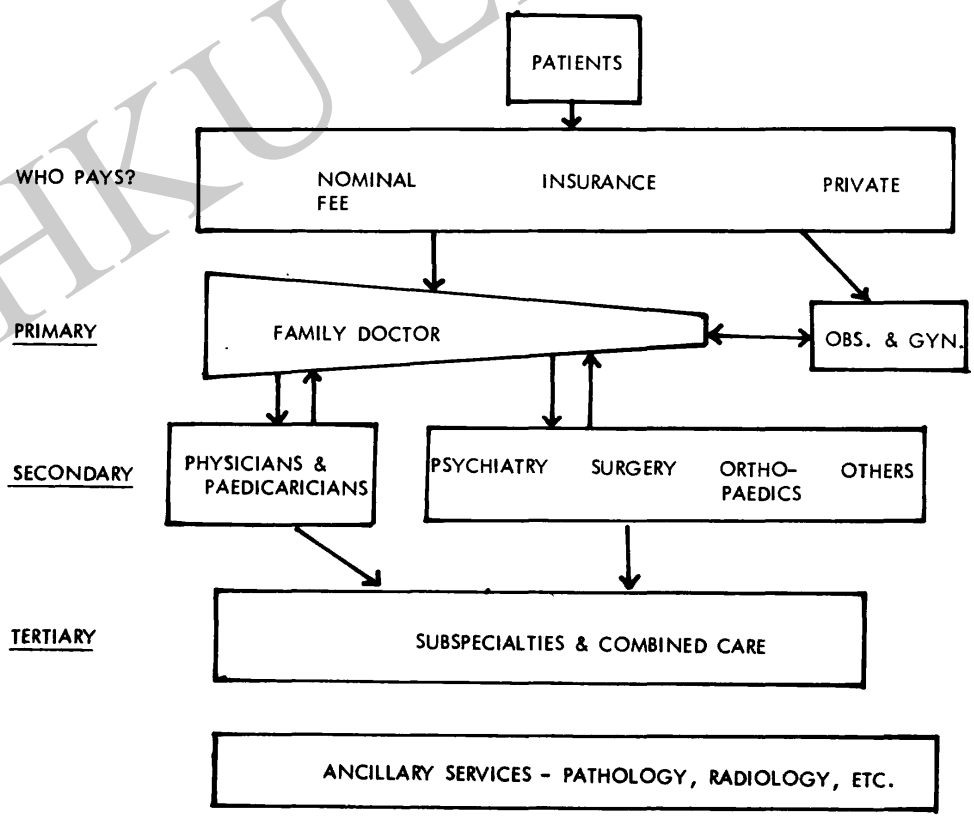


FIG. 4 HIGH QUALITY MEDICAL CARE

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Thirdly. Doctors and Reseach. There is no doubt as to the importance of carrying out well-planned clinical research both for the advancement of basic understanding of disease process as well as for the application of information, obtained from laboratory experiments and basic sciences, for the benefit of man. However, there are ethical issues that the doctor should consider carefully before embarking on this pursuit. I have quoted here the Declaration of Helsinki which is the code of ethics governing reseach in man (Figure 5). I am not going into a detailed analysis of the points raised except to point out that in such research, the doctor has the prime responsibility and his mission is to safeguard the health of the people. There should never be a feeling that the patients are used as "guinea-pigs" like those in the laboratories. In this context, I would like to widen the discussion to include patient-care in teaching hospitals where most clinical reseach are carried out. The main criticism of modern hospital care, esepcially in teaching hospitals, is that the care of the patient is under a "committee" – consisting of students, house officers, registrars, physicians and consultants – where the members of the committee are for the most part interested in the patient to the extent that his disease advanced their learning or their research opportunities. This is a grave, but unfortunately sometimes true, accusation. It is up to us as doctors or doctors-to-be to make our hospital "patient-oriented" and to put the need of the patient first in any case. We look forward "to the time when the ill will be treated as guests" and when patients in the teaching hospital, in William Osler's words, "are more carefully looked after, their disease more fully studied and fewer mistakes made".

Lastly, doctor and teaching. It is stated in the Hippocratic Oath that we vow to teach "by precept, lecture and every other mode of instruction . . . this art to . . . disciples bound by the rules of the profession". There should be no trade secret or any aspect of professional skill too difficult to impart to our students and junior colleagues. It is not my task to discuss the choice of teachers but to indicate that all of us should teach whenever the occasion arises and to impart our skills to those who wish to learn.

This evening, I have very quickly gone over many issues about the role of a doctor. They are *all* important. If I have succeeded in making some of you, who have just started the medical career see a greater task ahead of you than knowing your medical textbook, or some of us, who have graduated many years ago, to pause and think about "what we are doing" – this would have more than served my purpose.

Remember that whatever issues concerning medical practice, they might first be tested against the question "What they do *for* or *to* patients?" All of us must fall short of our ideal of service but to have acted ethically is its own reward.

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CODE OF ETHICS OF THE WORLD MEDICAL ASSOCIATION ON CLINICAL RESEARCH

(DECLARATION OF HELSINKI 1964/1975)

IT IS THE MISSION OF THE DOCTOR TO SAFEGUARD THE HEALTH OF THE PEOPLE.

BASIC PRINCIPLES ON CLINICAL RESEARCH.

1. SHOULD BE BASED ON LABORATORY AND ANIMAL EXPERIMENTS OR OTHER SCIENTIFICALLY ESTABLISHED FACTS.
2. UNDER THE SUPERVISION OF A MEDICAL MAN.
3. THE IMPORTANCE OF THE OBJECTIVE IS PROPORTIONAL TO THE INHERENT RISK TO THE SUBJECT.
4. WITH EVERY PROJECT, CAREFUL ASSESSMENT OF INHERENT RISKS SHOULD BE COMPARED WITH FORESEEABLE BENEFITS TO THE SUBJECT OR TO OTHERS. (ETHICAL COMMITTEE)

FIG. 5

CHOOSE YOUR EMBLEM

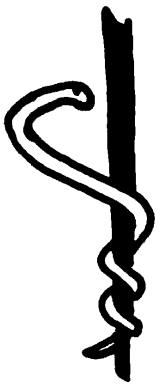

FIG. 6

THE STAFF OF ASKLEPIOS (AESCULEPIUS)

ASKLEPIOS, The son of Apollo and Coronis, was the Greek God of healing and medicine.

THE MAGIC WAND (CADUCEUS) OF HERMES (MERCURY)

HERMES was the Greek God of Luck, Wealth and Dreams, of Commerce and the Market.

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To end my address, I am showing you two emblems, both are used to represent our profession (Figure 6). I wonder whether some students of Greek mythology had deliberately introduced this discrepancy to remind us of our role. On the left, the staff of Aesculepius – the son of Apollo & Coronis – the Greek God of healing and medicine. On the right, the magic wand (Caduceus) of Mercury who was the Greek God of luck, wealth and dreams, of commerce and the market. It is up to you to choose your own *emblem.*

Thank you for your attention.

Dr. T.K. Chan
President, Medical Society

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2. **William Osler:**
   Counsels and Ideals. Oxford. Henry Forwde, 1906.
3. **Charles D. Aring:**
   The Understanding Physician. Wayne State University Press, Detroit, 1971.

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Extract From Gazette

Dr. Vivian N.Y. Chan, Lecturer in Medicine, attended the Eighth European Thyroid Association Meeting held in Lyons from September 26 to 30, 1977, and presented a paper entitled "The biphasic pattern of TSH and TSH releases following low-dose infusion of TRH in euthyroid subjects and patients with thyroid dysfunction". She also attended workshop and teaching courses on clinical and basic thyroidology at Lyons.

Dr. E.C. Chew, Lecturer in Anatomy, attended the Thirty-fifth Meeting of the Electron Miscroscopy Society of America held in Boston from August 22 to 26, 1977. He also attended the Third Asian Cancer Conference held in Manila from September 26 to 30, 1977.

Dr. A. Koo, Lecturer in Physiology, has been elected a member of the Microcirculatory Society of the United States.

Dr. A.K.Y. Lee, Senior Lecturer in Medicine, attended the Third International Congress of Immunology held in Sydney from July 3 to 7, 1977, and presented a paper entitled "Clinical use of Levamisole in systemic lupus erythematosus". Subsequently he visited the Virus Laboratory of Fairfield Hospital in Melbourne and gave a seminar on "Vertical transmission of hepatitis B virus".

Professor F. P. Lisowski visited and read papers at the Institute of Vertebrate Palaeontology and Paleoanthropology in Peking, and the Universities of Melbourne, Flinders and Tasmania from July to August 1977. He also attended the Twelfth Annual Meeting of the Scoliosis Research Society held in Hong Kong from October 24 to 27, 1977.

Dr. W.D. Low, Senior Lecturer in Anatomy, attended the Twelfth Annual Meeting of the Scoliosis Research Society held in Hong Kong from October 24 to 27, 1977.

Dr. So Luk Kan, Lecturer in Obstetrics and Gynaecology, has been admitted as a Member of the Royal College of Obstetricians and Gynaecologists.

Dr. K.F. Shortridge, Reader in Microbiology, visited a number of laboratories in the United Kingdom and United States, including the National Institute for Biological Standards and Control, London; the World Health Organization Centre for the Ecology of Influenza Viruses in Animals at St. Jude Children's Reasearch Hospital of Memphis; the WHO Centre for Reference and Research on Influenza, Centre for Disease Control, Atlanta; and the Plum Island Animal Disease Centre of the United States Department of Agriculture in Long Island, in connection with influenza research. He also gave seminars on influenza virus surveillance at the University College Hospital Medical School of the University of London and St. Jude Children's Research Hospital at Memphis.

Dr. S.C. Tso, Reader in Medicine, attended the Third Asian Cancer Conference sponsored by Carlo Erba Farmitalia (Hong Kong) Limited and held in Manila from September 26 to 30, 1977, and presented two joint papers entitled 'Doxorubicin in the treatment of hepatocellular carcinoma' (with Professor D. Todd), and 'Ten years of acute leukaemia in Hong Kong' (with Dr. T.K. Chan and Professor D. Todd). He also served as chairman for the international sessions on 'Leukaemia' and 'Liver cancer', and was a Panel discussant.

Dr P.Y.D. Wong, Lecturer in Physiology, attended the Twenty-seventh International Congress of Physiological Sciences held in Paris from July 18 to 23, 1977, and presented a paper entitled 'Transport processes in perfused cauda epididymis of rats'. He also participated in the Round Table discussion on 'Testis-cell relationship'.

Dr. Vivian Taam Wong, Lecturer in Obstetrics and Gynaecology, has been admitted as a Member of the Royal College of Physicians.

Dr. Y.C. Wong, Senior Lecturer in Anatomy, attended the Ninetieth Session of the American Association of Anatomists held in Detroit from May 1 to 5, 1977; the Twentieth Annual Meeting of the Canadian Federation of Biological Societies held in Calgary from June 21 to 24, 1977; and the Twelfth Annual Meeting of the Scoliosis Research Society held in Hong Kong from October 24 to 27, 1977. He has also been elected a member of the Canadian Association of Anatomists, and was appointed as Research Associate in Anatomy at the University of Chicago from April 1 to August 31, 1977.

Dr. D.T.W. Yew, Lecturer in Anatomy, attended the Fourth Congress of the European Anatomists held in Basel from August 29 to September 2, 1977.

Professor Rosie T.T. Young attended a World Health Organization meeting of investigators on the multinational study of vascular disease in diabetics held in Geneva from October 3 to 7, 1977, and presented a paper entitled 'The vascular complications of Chinese diabetic subjects in a two-year study'.

Dr. F. C. Y. Cheng, Reader in Surgery, attended the Thirty-third Annual Convention of the Philippine College of Surgeons held in Manila from December 14 to 17, 1977, and presented a paper entitled 'Peritoneoscopy'. He also served as a panelist in the Plenary Session on 'Portal Hypertension' and spoke on 'The experience of shunting operations for portal hypertension in cirrhosis of the liver in Hong Kong'.

Dr. P. H. Chow, Lecturer in Anatomy, has been awarded a Margaret Dickie International Fellowship by the American Association of University Women to undertake training in

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cell culture techniques in the Roscoe Jackson Memorial Laboratory at Bar Harbour, Maine, during her study leave from February to August, 1978.

Professor C. T. Huang attended the Symposium on Infection Control jointly organized by the Hong Kong Association of Hospital Administrators, the Hong Kong Nurses Association and ICI Pharmaceutical Division held in Hong Kong on November 13, 1977, and gave a lecture entitled 'Salmonellosis in Hong Kong.

Dr. A. Koo, Lecturer in Physiology, attended the Fifth Asia Pacific Congress on Diseases of the Chest held in Manila from November 6 to 10, 1977, and presented a joint paper (with T. F. Tse and D. Y. C. Yu) entitled 'Observation on microvascular circulation in cardiogenic shock in rats'.

Dr. S. K. Lam, Senior Lecturer in Medicine, attended the meetings of the British Society of Gastroenterology and the British Society of Digestive Endoscopy held in York, United Kingdom, from September 21 to 24, 1977, and presented a joint paper (with K. P. Wong, P. K. W. Chan, H. Ngan and G. B. Ong) entitled 'Endoscopic retrograde cholangiography in recurrent pyogenic cholangitis'.

Dr. J. C. Y. Leong, Senior Lecturer in Orthopaedic Surgery, attended by invitation a combined conference of the Philippine Orthopaedic Association of Spine Surgeons, the Philippine Orthopaedic Association, the Philippine Orthopaedic and Trauma Research Society, and the Philippine Rheumatism Association held in Manila from December 18 to 21, 1977, and presented two papers entitled 'Spinal deformities associated with neurofibromatosis' and 'Surgical correction of ankylosing spondylitis'.

Dr. P. C. Leung, Honorary Research Associate in the Department of Pharmacology, attended the Second Congress of the Asian Pacific Section of the International Confederation for Plastic and Reconstructive Surgery held in Tokyo in August 1977 and presented a joint paper (with P. C. Chung) entitled 'Observations on rejoined microvessels and a preliminary study on the effect of two commonly-used local agents'.

Dr. T. T. Loh, Lecturer in Physiology, attended the American Haematology Society meeting held at San Diego from December 3 to 6, 1977, and presented a paper entitled 'Studies on the binding of transferrin to human placental microvillous membrane' at a special 'Iron Group' meeting.

Dr. S. F. Pang, Lecturer in Physiology, attended the 1977 Meeting of the American Society of Zoologists held in Toronto from December 27 to 30, 1977, and presented a paper entitled 'Persistence of pineal and serum melatonin rhythms in the pineal-transplanted chicken'.

Professor D. Todd attended the National Conference on the Lymphomas and the Leukaemias held by the American Cancer Society and National Cancer Institute in New York City from September 29 to October 1, 1977. During his long leave in September and October 1977 he also visited a number of American medical schools. Professor Todd has also been appointed an Unofficial Justice of the Peace.

Dr. P. Y. D. Wong, Lecturer in Physiology, has been awarded a Royal Society Bursary to visit laboratories in England during his forthcoming long leave from April 1 to September 15, 1978.

Dr. Vivian Chan, Lecturer in Medicine, attended the Sixth Asia and Oceania Congress of Endocrinology held in Singapore from January 22 to 27, 1978 and delivered three papers entitled 'Prolactin (PRL) release following prolonged low dose infusion of Thyrotrophin-Releasing Hormone (TRH)', 'Pituitary-thyroid function following myocardial function and 'Thyroid function in patients with enzymatic goitres due to organification defects'.

Dr. F. C. Y. Cheng, Reader in Surgery, has been elected a Fellow of the Association of Surgeons of Great Britain and Ireland and admitted as a member of the Societe Internationale De Chirurgie.

Dr. Louise Y. Y. Fong, Lecturer in Biochemistry, was awarded a travel grant by the Hong Kong Anti-Cancer Society to attend the Thirty-first Annual Symposium on Fundamental Cancer Research held in Houston, Texas, from March 1 to 3, 1978.

Dr. T. K. Choi, Lecturer in Surgery, has completed the Certifying Examination of the American Board of Surgery.

Professor M. J. Colbourne acted as external examiner in Social Medicine and Public Health for the third M.B., B.S. examination of the University of Singapore, in the period from March 28 to April 6, 1977. In connection with the World Health Organization, he undertook a short-term consultantship on 'Malaria Research in the Western Pacific' and visited Australia, Japan, Malaysia, Singapore and Manila during August 1977 (he returned to Manila on December 19 and 20 to report to Geneva on the consultantship); attended by invitation an 'External Review Meeting on Applied Research on Malaria' held in Geneva from December 5 to 7, 1977; participated in the workshop on 'S.E. Asia Regional Programme for Applied Research on Malaria Control' held in New Delhi from March 14 to 17, 1978; and has been nominated to the Steering Committee of the Scientific Working Group (SWG) on Applied Field Research in Malaria (MALFIEL) of the Special Programme for Research and Training in Tropical Diseases (TDR). Professor Colbourne also attended the Second Symposium on Epidemiology and Cancer Registries in the Pacific Basin held in Maui, Hawaii, from January 16 to 20, 1978, and presented a paper on 'Lung cancer in Hong Kong'.

Dr. J. C. Y. Leong, Senior Lecturer in Orthopaedic Surgery, has been nominated as the University's representative on the Working Party on the Comprehensive Review of the Workman's Compensation Ordinance.

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Dr. Z. Lett, Lecturer in Surgery, has been nominated by the Council of the Association of Anaesthetists of Great Britain and Ireland for the award of the Pask Certificate of Honour for his 'distinguished services to anaesthesia in Hong Kong'.

Dr. P. Nandi, Lecturer in Surgery, attneded the biennial scientific meeting of the Association of Surgeons of Southeast Asia held in Hong Kong in September 1977 and presented two papers entitled 'Surgery of isolated patent ductus arteriosus – review of 181 cases' and 'Open heart surgery and post-operative cardiac tamponade'. He also attended the Fifth Asia Congress on Diseases of the Chest held in Manila in November 1977 and presented two papers entitled 'Surgery of aortic valve disease in Hong Kong Chinese' and 'Primary mediastinal tumours – review of 61 cases'.

Dr. K. F. Shortridge, Reader in Microbiology, attended as an invited participant a combined World Health Organization/National Institutes of Health International Workship on 'The Ecology of Influenza Viruses' held at the John E. Fogarty International Centre for Advanced Study in Health Sciences, National Institutes of Health, Maryland, on February 13 and 14, 1978. He also visited the Pacific Research Section, National Institute of Allergy and Infectious Diseases, Honolulu, in connection with virus research.

Dr. C. S. Teng, Lecturer in Medicine, attended the Sixth Asia and Oceania Congress of Endocrinology and Workshop on Endemic Goitre and Thyroid Testing held in Singapore from January 22 to 30, 1978, and presented a joint paper (with R. T. T. Young and C. C. L. Wang) entitled 'Treatment of diabetic coma with low dose intramuscular insulin' at the confernece.

Dr. P. Y. D. Wong, Lecturer in Physiology, attended by invitation the Fifth Annual Workshop on the Testis held at Geilo, Norway, from April 2 to 5, and the International Symposium on the Surface Properties of Spermatozoa at Woods Hole, Massachusetts, from May 2 to 5, 1978. At the invitation of the World Health Organization, he also attended the Consultation Meeting on the strategy for research on sperm maturation and epididymal physiology held at Woods Hole, Masschusetts, on May 6 and 7, 1978.

Professor Rosie T. T. Young attended the Sixth Asia and Oceania Congress of Endocrinology held in Singapore from January 22 to 27, 1978. She was co-chariman for the scientifice sessions on Diabetes Mellitus and Thyroid Biochemistry. She was invited to give two papers in the Symposia on 'Thyrotoxic periodic paralysis' and 'Epidemiology of diabetes mellitus'.

Dr. P. Y. Chau, Lecturer in Microbiology, visited the Department of Microbiology and Immunology of the University of Adelaide from January 23 to April 22, 1978, with a World Health Organization Exchange of Research Workers Grant.

Dr. F. C. Y. Cheng, Reader in Surgery, attended the Sixth World Congress of Gastroenterology and the Fourth World Congress of Digestive Endoscopy held in Madrid from June 1 to 9, 1978, and presented three papers entitled 'Laparoscopy and needle biopsy in primary hepatoma' (with N. W. Lee and G. B. Ong); 'Spleno-renal shunt in the treatment of portal hypertension in post-necrotic cirrhosis' (with S. K. Lam and G. B. Ong); and 'Quadruple chemotherapy in the treatment of advanced gastrointestinal carcinoma' (with C. M. Lee and G. B. Ong). He presided over a session on 'Laparoscopy and Paediatric Endoscopy', and also attended, as a Councillor representing Hong Kong in the Asian-Pacific Zone, the Council meeting of the World Organization for Digestive Endoscopy.

Dr. K. K. Yeung, Senior Lecturer in Obstetrics and Gynaecology, visited the Kandang Kerbau Hospital of Singapore as an examiner in the M.R.C.O.G. Part II Examination held in Singapore on April 10 and 11, 1978.

Dr. A. M. C. Au, Clinical Pathologist in the Department of Pathology, has been elected a Fellow of the Royal Society of Health.

Dr. H. C. Ho, Honorary Lecturer in Surgery, delivered the first del Regato Foundation Lecture on June 1, 1977, at the Hahnemann Medical College, Philadelphia, and received a gold medal for the occasion.

Dr. J. C. C. Hwang, Reader in Physiology, has been appointed Visiting Professor at the National Institute of Physiological Sciences and National Centre for Biological Sciences of Japan from July to December 1978. He has also been awarded a Senior Scientist Fellowship by the Japan Society for the Promotion of Science to enable him to be attached to the Department of Physiology, Tokyo Medical and Dental University. Dr. Hwang served as a local adviser on the UNESCO Consultation Meeting on Medicinal Plant Research in Southeast Asia held from April 20 to 22, 1978. He was also invited by the World Health Organization to serve as an adviser to the Task Force Workshop on Indigenous Plants for Fertility Regulation held at the Chinese University of Hong Kong from April 24 to 28, 1978.

Dr. K. C. Lam, Senior Lecturer in Medicine, attended the Sixth World Congress of Gastroenterology organized by the World Organization of Gastroenterology in Madrid, Spain, from June 5 to 9, 1978, and was president of a session on gastric pathophysiology. He also attended the Fifth Falk Symposium on Bile Salts organized by Dr. Falk and Company in Freiburg, Germany, from June 12 to 14, 1978. He participated in a Round Table Discussion on medical dissolution of gallstones during the Symposium.

Dr. S. K. Lam, Senior Lecturer in Medicine, attended the Fourth World Congress of Digestive Endoscopy and the Sixth World Congress of Gstroenterology held in Madrid from June 1 to 9, 1978, and presented three papers entitled 'Recurrent

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pyogenic cholangitis. A study by endoscopic retrograde cholangiography' (with K. P. Wong, P. K. W. Chan, H. Ngan and G. B. Ong); 'Treatment of duodenal ulcer with antacid and sulpiride. A double blind controlled study' (with K. C. Lam and C. L. Lai); and 'Gastiric acid and gastrin secretion in Chinese and Scots – normals and patients with duodenal ulcer' (with W. Sircus, P. K. W. Chan and G. B. Ong). He also chaired a quadrennial conference.

Professor H. K. Ma has been appointed an Unofficial Justice of the Peace.

Professor D. Todd visited Sydney Hospital as Norman Paul Visiting Professor for this year from March 19 to April 14, 1978. During the visit, he spoke on the clinical problems of aplastic anaemia at a Symposium on that disease held by the Sydney Hospital Post-graduate Affairs Committee, and was guest speaker at a refesher course for general practitioners entitled 'Haematology 1978'. He also gave four formal lectures on 'Malignant lymphoma', 'Primary hepatocellular carcinoma', 'Aplastic anaemia'. and 'Thalassaemia'. He visited the Tamworth Base Hospital at Tamworth, lectured on 'Chronic hepatitis'. and spoke at grand rounds and conducted registrar teaching sessions. From April 15 to 19, 1978, he was invited to visit the Department of Medicine, St. Vincent's Hospital, University of Melbourne; the cardiology unit at the Royal Melbourne Hospital; the Howard Florey Institute of Physiology and Medicine, University of Melbourne; and the Department of Medicine, Alfred Hospital, Monash University. He was guest speaker at grand rounds and registrars' rounds, and delivered a lecture entitled 'The thalassaemia syndromes'.

COUNCIL

Appointments

Geoffrey Leslie Howe, T. D., M.D.S. (Durham), F.D.S.R.C.S. (England), F.F.D.R.C.S. (Ireland), appointed Professor of Oral Surgery and Oral Medicine and Dean of Dental Studies from July 1, 1978.

Pro-Vice-Chancellor

Professor D. Todd has been appointed Pro-Vice-Chancellor for a period of three years from August 7, 1978, in succession to Professor A. C. M. C. Yau.

Emeritus Professors

The title of Emeritus Professor has been conferred upon the following from their respective dates of retirement:

Professor A. R. Hodgson, Professor of Orthopaedic Surgery from 1961 to 1975, from June 30, 1975, and Professor C. T. Huang, Professor of Microbiology from 1968.

Inter-University Council Visitor

The following visited the University under the Inter-University Council Visitors Scheme:

Dr. G. Clough, M. R. C. Laboratory Animals Centre, Medical Research Council Laboratories, from April 6 to 26, 1978, to advise the University on the equipping and commissioning of the Animal House and of the animal holding facilities in the dental teaching hospital; and to provide advice and information to the users committee of the proposed central animal breeding unit.

Professor W. J. Moore, Department of Anatomy of the School of Medicine, University of Leeds, from February 10 to March 2, 1978, to advise on the pre-clinical dental curriculum.

Donations, grants and gifts

Astra Pharmaceuticals: provision of a passage and hotel accommodation for Dr. D. Y. C. Yu, Reader in Medicine, to enable him to attend the Fifth Asia Pacific Congress on Diseases of the Chest held in Manila from November 6 to 10, 1977.

Mr. J. Y. L. Cheung: HK$28,500 to the Department of Medicine for the purchase of a Dye Thermal Dilution Cardiac Output Computer, Model DTCCO-07.

May and Baker Limited: assistance in defraying the expenses incurred by Dr. T. F. Tse, Lecturer in Medicine, in respect of his attendance at the Second ASEAN Federation of Cardiology Congress held in Manila from October 19 to 22, 1977.

The World Health Organization: a grant of US$6,000 to the Department of Pathology in respect of the research on the Histological Classification of Liver, Biliary Tract and Pancreas: a grant of US$10,000 to Dr. P. Y. D. Wong, Lecturer in Physiology, to research on the effect of drugs on fluid reabsorption in the rat epididymis; and a grant of US$9,000 to the Department of Physiology for the purpose of 'Investigations into the effects of drugs on fluid reabsorption in the epididymis of rats' – project 76076 – Task Force on Methods for the Regulation of Male Fertility.

Professor F. T. Hoaglund, University of Vermont: US$100 to Professor A. C. M. C. Yau to buy drawing materials and to pay an artist to illustrate various surgical procedures for Professor Yau's book on spinal surgery.

Ciba-Geigy (Hong Kong) Limited: HK$5,000 to the Department of Biochemistry to assist in the funding of a research project on aspartate transaminase (GOT) isoenzymes.

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Dyechem Trading Company (Hong Kong) Limited: provision of passages and hotel accommodation for Dr. C. S. Teng, Lecturer in Medicine, in respect of his visit to Singapore to attend the Sixth Asia and Oceania Congress of Endocrinology from January 22 to 30, 1978.

Mr. T. Y. Kong: HK$20,000 to cover expenses in respect of the Fifth Kong Tak Yan Visiting Professorship in Surgery.

The Royal Society Commonwealth Bursary: £1,200 to Dr. P. Y. D. Wong, Lecturer in Physiology, to visit laboratories in England during his leave from April 1 to September 15, 1978.

The Sandoz Pharmaceuticals Limited: provision of passages and hotel accommodation for Professor R. T. T. Young, Dr. C. C. L. Wang, and Dr. V. N. Y. Chan of the Department of Medicine in respect of their visit to Singapore to attend the Sixth Asia and Oceania Congress of Endocrinology from January 22 to 27, 1978.

World Health Organization Centre for the Ecology of Influenza Viruses in Animals, Memphis, U. S. A.: a contract valued at US$9,441 to Dr. K. F. Shortridge for the continuation of influenza virus surveillance studies in animals in 1978.

Mrs. Jenny Wu: HK$700 to the Department of Medicine to purchase books for the McFadzean Library.

Dr. R. Y. H. Yu: an IBM Selectric II typewriter to the Deaprtment of Medicine.

Mr. C. N. Lee: $2,000 for cardiological research in the Department of Medicine.

Les Laboratories Servier: $80,000 for a research project 'to compare in maturity-onset diabetics the effect of two oral hypoglycaemic agents (Diamicron and Daonil) on diabetic macroangiopathy and microangiopathy' in the Department of Medicine.

Mr. Eric Ko: a sum of $6,000, which was originally intended to be the fee for the medical service rendered by Dr. D. Y. C. Yu, Reader in Medicine, and which at Dr. Yu's request was donated to the Department of Medicine for cardio-respiratory research.

Wheelock Marden and Company Limited: a Blood Gas Analyser Model BMS_3 mk_{11} GMA_2 precision gas supply for cardiorespiratory studies in the Department of Medicine.

American Optical Corporation: provision of passages and boarding expenses for Dr. T. F. Tse of the Department of Medicine to attend the Training Course on Application and Use of AO Dyna-Gram Holter Monitoring System in Massachusetts, U.S.A., from March 31 to April 8, 1978.

G. D. Searle and Company: $5,000 to support Professor T. R. C. Boyde's project on aspartate transaminase (GOT) isoenzymes.

Mr. T. S. Kwok: $690,000 for cardiorespiratory research in the Department of Medicine.

The World Health Organization: US$ 11,280 to enable Dr. C. C. L. Wang, Lecturer in Medicine, to receive research training at the University of California, San Diego, and the University of Washington, Seattle, on new techniques in relation to reproductive endocrinology with special emphasis on reproduction, and further training in male contraception and reproductive endocrinology.

Dr. R. Y. H. Yu: $5,000 for immunology research in the Department of Medicine.

Carlo Erba Farmitalia (Hong Kong) Limited: a passage, registration expenses and hotel accommodation for Dr. S. C. Tso, Reader in Medicine, in respect of his visit to Manila to attend the Third Asian Cancer Conference held from September 26 to 30, 1977.

International Agency for Research on Cancer: US$500 for the Case-Control Study of Lung Cancer in Chinese in Hong Kong by the Department of Community Medicine.

International Development Research Centre: a grant of C$8,475 for the Thromboembolic Disease (Hong Kong) Project, to be carried out by the Department of Community Medicine.

The Lee Foundation: HK$1,500 to assist Dr. E. C. Chew, Lecturer in Anatomy, to attend the Third Asian Cancer Conference in Manila.

The Lions Club: HK$100,00 to the Faculty of Medicine to set up a fund for Visiting Professors in Internal Medicine.

The World Health Organization: two grants of the value of US$10,000 and US$7,447 to Dr. P. Y. D. Wong, Lecturer in Physiology, to carry out researches on the effect of drugs on fluid reabsorption in the rat epididymis, and the transport of ions across sperm membranes, respectively.

Dr. Raymond K. W. Yang: HK$1,500 to extend the award of the Raymond Yang Medical Bursary for three years from 1977-78.

Change of titles

The titles of the Medical Students Centre and of the Warden of the Medical Students Centre have been changed to the Clinical Students' Residence and the Master of the Clinical Students' Residence respectively.

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Appointments

Chan Kong Kiong, M.B., B.S. (London), F.R.C.S. (England), M.R.C.O.G., appointed Lecturer in Obstetrics and Gynaecology from October 1, 1977.

Cheung King On, M.B., Ch.B., D.C.H. (Glasgow), M.R.C.P. (United Kingdom), appointed Temporary Lecturer in Medicine from October 1, 1977, to June 30, 1978.

Choi Tat Kuen, B.S., M.D. (Illinois), appointed Lecturer in Surgery from November 13, 1977.

Chun Siu Yeung, M.B., B.S. (Hong Kong), appointed Lecturer in Orthopaedic Surgery from January 1, 1978.

Stanley Im Wang Kit, B.Sc., Ph.D. (Melbourne), appointed Lecturer in Microbiology from October 24, 1977.

Ng Wing Chung, M.B., B.S. (Hong Kong), appointed Temporary Lecturer in Medicine for one year from October 1, 1977.

Tang Fai, M.Sc. (Hong Kong), Ph.D. (Hull), Assistant Lecturer, appointed Lecturer in Physiology from September 1, 1977.

Wan Ching Cheong, Dip. Med. (South China Medical College), appointed Clinical Pathologist in the Department of Pathology from September 1, 1977.

Wong Chi Ming, M.B., B. Chir. (London), M.A. (Cambridge), M.R.C.P. (United Kingdom), appointed Temporary Lecturer in Medicine from September 1, 1977, to August 31, 1978.

Brian Michael Jones, M.Sc., Ph.D. (Wales), appointed Hospital Immunologist in the Department of Pathology from February 1, 1978.

Chan Chi Wing, M.B., B.S. (Hong Kong), M.R.C. Path. (United Kingdom), Lecturer, appointed Senior Lecturer in Pathology from November 1, 1977.

(Mrs.) Faith Ho Wat Chi Suk, M.B., B.S. (Hong Kong), D. Obst. R.S.O.G., M.R.C. Path., Lecturer in Pathology, appointed Senior Clinical Pathologist in the Department of Pathology from November 1, 1977.

Htut Saing, M.B., B.S. (Rangoon), F.R.C.S. (Edinburgh), F.A.A.P., appointed Senior Lecturer in Surgery from as soon as possible.

Kong Chi Tai, M.B., B.S. (Hong Kong), appointed Temporary Lecturer in Psychiatry from November 28, 1977 to September 30, 1978.

Dr. Ray Richard Lycette, M.B., Ch.B., (New Zealand), M.D. (Otago); F.R.C.P. (Aust.), F.R.C. Path, appointed Clinical Pathologist in the Department of Pathology from March 1, 1978.

Geoffrey Leslie Howe, T.D., M.D.S. (Durham), F.D.S.R.C.S. (England), F.F.D.R.C.S. (Ireland), appointed Professor of Oral Surgery and Oral Medicine and Dean of Dental Studies from July 1, 1978.

Peter John Preston, O.B.E., F.R.C.P. (London), D.T.M.& H., D.C.H., appointed Director of Postgraduate Medical Education from June 1978.

Cecil Edward Renson, B.D.S., Ph.D. (London), L.D.S., Dip.D.P.H. (Royal College of Surgeons of England), appointed Professor of Conservative Dentistry from as soon as possible.

Chan Tai Kwong, M.B., B.S. (Hong Kong), F.R.C.P. (Edinburgh and London), Senior Lecturer, appointed Reader in Medicine from April 1, 1978.

Chiu Hak Fai, M.B., B.S. (Hong Kong), M.Sc. (Toronto), R.C.P.C., appointed Senior Lecturer in Pathology from September 1, 1978.

Jan William Lodewijk Kleevens, M.D., D.T.M. & H. (Amsterdam), D.P.H. (Singapore), appointed Senior Lecturer in Community Medicine from as soon as possible.

(Mrs.) Chow Li Wai Lang, Dip. Med. (Lingnan), appointed Clinical Bacteriologist in the Hospital Pathology Services of the Department of Microbiology from February 22, 1978.

Fok Tai Fai, M.B., B.S. (Hong Kong), appointed Lecturer in Paediatrics from May 12, 1978.

Ignatius Kung Tak Min, M.B., B.S. (Hong Kong), Clinical Pathologist, appointed Lecturer in Pathology from March 1, 1978.

Roxy Lo Ngok Sing, M.B., B.S. (Hong Kong), appointed Lecturer in Paediatrics from July 1, 1978.

Lawrence Tang Chang Hung, M.B., B.S. (Hong Kong), appointed Lecturer in Obstetrics and Gynaecology from as soon as possible.

Yeung Yee Guide, B.Sc., M.Phil. (Hong Kong), Assistant Lecturer, appointed Lecturer in Biochemistry from April 1, 1978.

John Leeds Anderson, M.A. (Aberdeen), appointed Lecturer in Community Medicine from September 1, 1978.

(Mrs.) Flora Marion Baber, M.B., Ch.B. (Manchester), D.C.H. (London), M.R.C.P. (Edinburgh), Honorary Clinical Lecturer, appointed Lecturer in Paediatrics from September 15, 1978.

John Hoong Boey, B.A. (Princeton), M.D. (Harvard), L.R.C.P. (London), M.R.C.S. (England), appointed Lecturer in Surgery from July 17, 1978.

George Chan Tze Chung, M.B., B.S. (Hong Kong), appointed Clinical Pathologist in the Hospital Pathology Services of the Department of Pathology from July 3, 1978.

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William Hui Kin Kong, M.B., B.S. (Hong Kong), appointed Lecturer in Medicine from July 13, 1978.

Jarley Koo, M.B., Ch.B. (Sheffield), M.Sc. (Alberta), F.R.C.S. (Canada and Edinburgh), appointed Lecturer in Surgery from July 1, 1978.

Lau Sum Ping, M.D. (Munich), D.C.H., M.R.C.S. (London), M.R.C.P. (United Kingdom), appointed Lecturer in Paediatrics from July 3, 1978.

Anna Lok Suk Fong, M.B., B.S. (Hong Kong), appointed Temporary Lecturer in Medicine for one year from October 1, 1978.

(Miss) O Wai Sum, B.Sc., M.Phil. (Hong Kong), Ph.D. (Edinburgh), appointed Lecturer in Anatomy from July 21, 1978.

Paul Poon Wai Fung, B.Sc. (Chinese University of Hong Kong), M.Phil. (Hong Kong), appointed Assistant Lecturer in Physiology from October 1, 1978.

Wong Chi Ming, M.B., B.Chir., M.A. (Cambridge), M.R.C.P. (United Kingdom), reappointed Temporary Lecturer in Medicine from September 1, 1978 to August 31, 1979.

So Kwok Fai, B.A. (Northeastern), Ph.D. (Massachusetts Institute of Technology), appointed Lecturer in Anatomy from July 17, 1978.

Edmund Woo Kin Wai, M.B., B.S. (Hong Kong), appointed Lecturer in Medicine from July 1, 1978.

Visiting Professors

Professor Puig la Calle, M.D., F.A.C.S., Head of the Surgical Department and Professor of Surgery of the Autonomous University, Barcelona, Spain, appointed the Fifth Kong Tak Yan Visiting Professor in Surgery during his visit in February 1978.

Professor Leo Eckmann, M.D., Chairman of the Department of Surgery at the University of Berne, appointed Honorary Professor during his visit from December 17 to 24, 1977.

Dr. D.R. Gunn, M.B., Ch.B. (Edinburgh), M.Ch.Orth. (Liverpool), F.R.C.S.E., D.Sc. (Hon.) (Singapore), Clinical Professor of Orthopaedics in the School of Medicine at the University of Washington, appointed M. B. Lee Visiting Professor during his visit in November 1977.

Professor C.E. Oxnard, B.Sc., M.B., Ch.B., Ph.D., D.Sc. (Birmingham), appointed Honorary Professor in Anatomy during his visit from November 1 to 15, 1977.

Professor R. Schmid, M.D., Ph.D., F.A.C.P., Professor of Medicine at the University of California at San Francisco, appointed K. P. Stephen Chang Visiting Professor from November 19 to December 15, 1978.

Professor S. Bengmark, Professor of Surgery at the University of Lund, appointed the Sixth Kong Tak Yan Visiting Professor in Surgery from December 18 to 23, 1978.

Professor D. H. Gray, M.B., Ch.M., M.Med.Sc. (Otago), F.R.A.C.S., Sir William Stevenson Professor of Orthopaedic Surgery at the University of Auckland, appointed M. B. Lee Visiting Professor for the duration of his visit in June 1978.

Resignations

Dr. W.C. Chan, Reader in Pathology, from June 30, 1977.

Dr. J. C. K. Pang, Lecturer in Obstetrics and Gynaecology, from September 30, 1977.

Dr. J. K. C. Tsui, Lecturer in Medicine, from November 10, 1977.

Dr. T. K. W. Ng, Senior Lecturer in Community Medicine, from April 30, 1978.

Dr. K. H. Wai, Lecturer in Paediatrics, from March 6, 1978.

Dr. R. R. Du, Temporary Lecturer in Anatomy, from March 15, 1978.

Dr. P. K. W. Chan, Lecturer in Surgery, from April 30, 1978.

Dr. C. T. Kong, Temporary Lecturer in Psychiatry, from May 6, 1978.

Dr. H. M. H. Ip, Lecturer in Paediatics, from May 11, 1978.

Dr. K. O. Leung, Lecturer in Surgery, from May 31, 1978.

Dr. S. K. Yip, Senior Lecturer in Obstetrics and Gynaecology, from August 7, 1978.

Dr. E. C. H. Leong, Reader in Surgery, from August 16, 1978.

Retirement

Professor C. T. Huang, Professor of Microbiology, on June 30, 1978.

Dr. K. M. Li, Senior Lecturer in Physiology, on June 30, 1978.

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Election of Dean

Professor M. J. Colbourne, has been elected Dean of the Faculty of Medicine for a period of three years from April 24, 1978.

Appointment of Sub-Dean

Professor R. T. T. Young has been appointed as Sub-Dean of the Faculty of Medicine from May 1, 1978 to April 23, 1981.

SENATE

External Examiners

The following have been appointed External Examiners:

Professor O. P. Gray, Professor of Child Health at the Welsh National School of Medicine of the University of Wales, in paediatrics for the Final M.B., B.S. Examination to be held in February 1978.

Professor Khoo Oon Teik, Chairman of the Department of Medicine at the University of Singapore, in medicine for the Final M.B., B.S. Examination to be held in May 1978.

Professor J. E. Scott, Department of Medical Biochemistry at the University of Manchester, in biochemistry for the M.B., B.S. and B.Sc. degrees for three academic years from 1977-78.

Professor S. S. Ratnam, Department of Obstetrics and Gynaecology at the University of Singapore, in obstetrics and gynaecology for the Final M.B., B.S. Examination in May 1979.

Professor P. B. Herdson, Professor of Pathology at the University of Auckland School of Medicine, in pathology for three academic years from 1978-79.

Professor D. Rowley, Head of the Department of Microbiology and Immunology at Adelaide University, in microbiology for three academic years from 1978-79.

Professor D. G. Penington, Dean of the Faculty of Medicine at the University of Melbourne, in medicine for the Final M.B., B.S. Examination in May 1979.

Committees

The Committee on Higher Degrees and Research Grants will be disbanded from July 1, 1978, and in its place three committees set up: Committee on Study Leave (a Council committee), and Committee on Higher Degrees and Committee on Research and Conference Grants (Senate committees).

Donations, grants and gifts

Ampex Ferrotec Limited: An MCM808 16k x 8 Memory Module, an MCM8080 Test Fixture and an RG Off-line Tester to the Department of Electrical Engineering.

An anonymous donor: HK$4,000 to Professor P. C. Sushama, non-visiting External Examiner in Field Work for the B.Soc.Sc. and M.S.W. curricula for the years 1977-78 and

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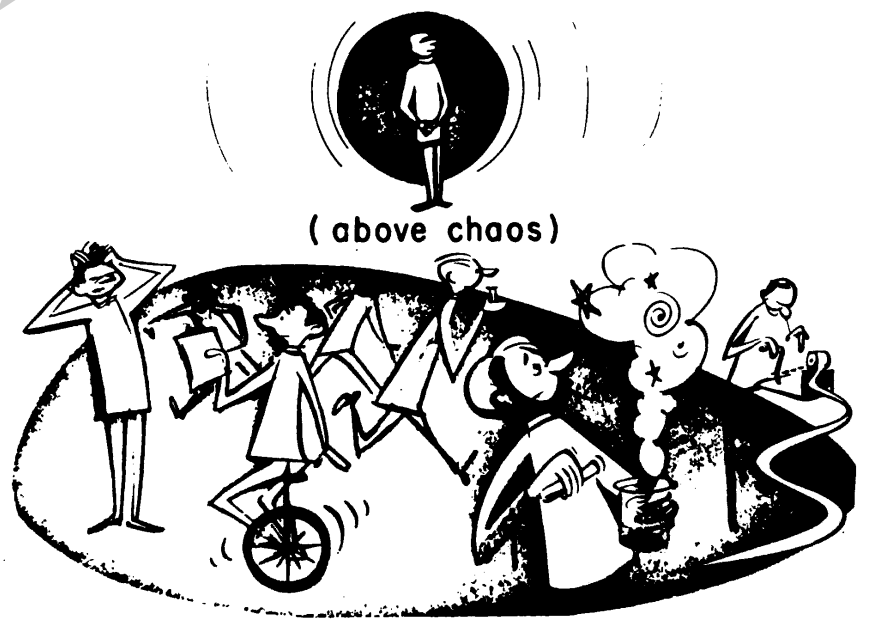
THE TRUE INVESTIGATOR



PROFESSOR SIR LINDSAY TASMAN RIDE
C.B.E. (Mil.), E.D., M.A., D.M. (Oxford), Hon. L.L. D. (Melbourne, London, Toronto, Hong Kong), Hon. R.A.M.

On Monday, October 17, 1977, Sir Lindsay Ride, Emeritus Professor, fifth Vice-Chancellor of the University of Hong Kong, and ex-Commandant of the Volunteers, died just one week following his seventy-ninth birthday, after a protracted and wasting illness that brought great grief to his family and his friends.

He was, if ever there was, a Hong Kong man. Next year he would have been able to celebrate a close connection lasting fifty years.

As a young man of thirty he came to the Chair of Physiology at the University of Hong Kong in succession to Dr. H. G. Earle, who moved to Shanghai to head the new Lester Research Institute; his qualification was an education in Melbourne and, in that elite company of Rhodes Scholars, at New College, Oxford, where he was a prize pupil and then promising junior colleague of the renowned physiologist Sherrington and at the same time acquired a 'blue' (which, curiosly, was his nickname at that time) for prowess in rowing. His clinical training was at Guy's Hospital in London. And in 1936, Oxford awarded him the degree of Docotr of Medicine, for his work in genetics. Periods as Dean of the Medical Faculty gave him a more general interest in medical education, and in 1937 he delivered historical lectures in Hong Kong and in Shanghai in celebration of fifty years of medical education in Hong Kong – it was this interest which produced in 1965 shortly after his retirement an invitation from the Taiwan Medical Association to deliver a Sun Yat-sen centenary lecture on Dr. Sun's medical education in Canton and Hong Kong.

Of his textbook on genetics and the clinician, intended to be published in 1939, the entire edition was bombed out of existence in the air-raids on London. He was taken prisoner at the surrender of Hong Kong to the Japanese, but soon after escaped from Shamshuipo Camp to seek free refuge in the interior of China, where he organized the British Army Aid Group (the BAAG), devoted to assisting in escapes from Hong Kong.

He revelled in variety and contrived an ample quorum of it. His special talent was keeping his balance in the crowded life his need for variety brought to him, and it was this talent above all which the honours accorded to him, military, civil, and academic, proclaimed. His acquaintances, and certainly those friends who knew him familiarly as 'Doc', will all have unusual events or tales in his crowded life to recall. His Vice-Chancellor's lodge was a Mecca for visiting musicians and scholars, where a guest was practically certain of breakfast with a Haldane or a Kentner, if not with both. His technical grasp of cricket was as revealing as were his explorations of dream-sequences. And when his students cheered him on to run the hundred yard staff dash, he was already advancing in years and wearing braces.

His gusto for living frequently revealed itself in war-time China in the form of dogged audacity, and he was widely known among Chinese generals and politicians as the Smiling Tiger. The stomach of the late Bishop Hall still quivered, twenty years after, with remembered fear, at the thought of Ride's unwillingness to let the very last train leave Kweilin before the advancing Japanese troops – 'he appeared to enjoy risking being captured a second time, while he encouraged the Chinese defenders in front of the city'. This doggedness of the spirit has been most evident in his last years, as he has struggled to defend his body against the deprivations of age and sickness.

We got news of the Japanese capitulation, in Kunming where we sat expecting it, and hardly pausing to celebrate he prepared to leave for Hong Kong. At Kunming airport, I bade him and a small group of officers Godspeed, full of confidence and the expectation that he would arrive in good time to receive the surrender himself and set about the task of assembling the new forces of law and order – and so he would, had his American aircraft not been directed to Canton, where the news of the the cessation of hostilities had not yet penetrated. He was back in Kunming the next day. The effects are well-documented, of the chaotic conditions of Hong Kong during those few days between capitulation and the arrival of Admiral Harcourt and his fleet: they might have been avoided if Ride's purpose had succeeded. His exploits were rewarded with the C.B.E., in the military division of that order.

Back in Hong Kong soon after Harcourt's landing, he devoted his energies to the rehabilitation of returning refugees, until the University could be re-opened. He was then in 1949 appointed to succeed Dr. Duncan Sloss as Vice-Chancellor of the University of Hong Kong, and became the longest-serving incumbent in the office, retiring in 1964.

His tenure spanned the period in which the foundations for a large University were laid. The sheer quantity in that time of his achievements at its head will ensure for him a secure position among the great Commonwealth University administrators, to which the honorary degrees of LL.D. conferred on him by the Universities of Toronto, London, Melbourne, and Hong Kong bore testimony. The student body increased threefold, the income tenfold; he added to the estate twenty-two buildings – including the first phase of Robert Black College, of which he was immensely pround – and, for Hong Kong, large tracts of land; he resuscitated the civil and mechanical engineering curricula and started the school of architecture; he instituted the health service, the University press, extramural studies, and Convocation; during three intense year, 1955-58, he hammered out a new constitution bringing the University squarely into the modern world. And the climax of an administrative career

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came in 1961, with the Golden Jubilee, when he steered the University through a gruelling year of celebrations, which started with a meeting of the heads of Commonwealth Universities, of which he was chairman, included a congress of six learned symposia, the preparation of a volume of essays on the University's history, to which he contributed two himself, a large ceremonial reception of addresses from Universities round the world, and the conferment of twenty-four honorary degrees at four special congregations, at the last of which one was conferred upon Princess Alexandra, who visited for the purpose. The announcement of his Knighthood came from London in the New Year's Honours which followed.

His prominence in Hong Kong's musical life, in particular as president and conductor of the Hong Kong Singers for many years, brought him election as an Honorary Royal Academician of Music.

His marriage in 1954 to Miss Violet May Witchell, of an old established local family, strengthened his ties with Hong Kong. For this 'happy choice' Poet Blunden produced a set of verses, of which one celebrated her new husband's many-sided talents:

Soprano, alto, tenor, bass, your training
Must show in song for your choirmaster now;
Batsmen and bowlers, it's not always raining:
Up with your caps to him who taught you how.
Each student of quick wit and fair persuasion,
Salute your chief on such an eloquent occasion.

One of his chief interest has been in the lives and work of protestant missionaries in the Far East. His publications include works on James Legge and Rober Morrison, and it was his study of Morrison that led him into a monumental survey of the Protestant Cemetery in Macau, on which he worked for many years but which still remains in manuscript. Similarly, a projected history of the BAAG has not yet been completed for publication. I hope there may be found those who will help to bring these important works before the public.

He is survived by his wife, who has cared for him during his wasting years with consummate sympathy and fortitude, and by two sons and two daughters of a previous marriage. They have the profound sympathy of a whole host of friends in Hong Kong and in academic, medical, military, and musical circles everywhere.

B.M.

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GEOFFREY LESLIE HOWE, T.D., M.D.S. (Durham), M.R.C.S. (England), L.R.C.P. (London), F.D.S. R.C.S. (England), F.F.D. R.C.S. (Ireland)

Professor G.L. Howe has been appointed Dean of Dental Studies and Professor of Oral Surgery and Oral Medicine from July 1, 1978.

Professor Howe was educated at the Royal Dental Hospital of London School of Dental Surgery, and the Middlesex Hospital Medical School. After holding house appointments, he served in the Army (1946 to 1949) and the Territorial Army and T.A.V.R. from 1950 to October 1975, when he was appointed Honorary Colonel Commandant of the Royal Army Dental Corps. In recognition of his service he was awarded Territorial Decorations in 1962 and 1975, and was appointed Officer (Brother) of the Most Venerable Order of the Hospital of St. John of Jerusalem in November 1975.

A leading figure in dentistry in the United Kingdom, Professor Howe has worked in various hospitals and universities in England, and was Professor of Oral Surgery in the University of Durham and Newcastle-upon-Tyen from 1959 to 1967. He has been Professor of Oral Surgery since 1967 and Dean since 1973 of the Royal Dental Hospital of London School of Dental Surgery (University of London), and since 1976 has been Chairman of the Dental Academic Advisory Committee which advises the University of Hong Kong on the establishment of its dental school. Professor Howe is therefore well-informed about the situation in Hong Kong, and brings to his post extensive teaching, clinical, research and administrative experience.

Professor Howe is the author of three textbooks and has published widely in professional journals, particularly on clinical studies into the role of surgery in relation to orthodontics and prosthetics. His service on various professional bodies and committees include Presidency of the Dental Liaison Committee of the European Economic Community, Chairmanship of the Council of the British Dental Association, and Membership of the Board of Faculty of Dental Surgery and the Council of the Royal College of Surgeons of England.

HUANG CHI TO, M.B. (Lingnan) Ph.D. (Leeds); F.R.C.Path.

Professor Huang Chi To retires in June 1978 from the first Chair of Microbiology in our University. He was born and bred on the Island and it has been the centre of his career and the recurrent point of return from his work and experiences abroad. Professor Huang's student days began in Lingnan University. When Canton fell during the War he had to complete his medical studies by returning home, where our University opened its doors to Lingnan.

Professor Huang's next task was to learn the several disciplines that comprise Mrcrobiology. A year after his graduation in Medicine in 1942 he became assistant in parasitology to Professor H. Y. Chen in Chung Cheng Medical College, later supervising the diagnostic bacteriology and vaccine production of the Kiangsi Provincial Pathological Institute. At the end of the war Professor Huang rejoined Lingnan University in Canton to teach bacteriology and parasitology. In 1948 he went to Harvard Medical School to work in virology under Professor M.D. Eaton.

Professor Huang joined this University first as an Assistant Lecturer in Bacteriology in 1949. Professor P.C. Hou was then in process of organizing the reconstituted Department of Pathology and Bacteriology and Professor Huang was given a free hand in organizing the teaching and clinical commitment in bacteriology. In 1957 he went abroad again with further scholarships, this time to Leeds to study the classification of the *Clostridia* under Professor Oakley; this work was the subject of his Ph.D. thesis. Seven years later he carried out further studies on this subject at Kanazawa University in Japan. His many published works record his contributions to other aspects of microbiology also, such as the genera of *Proteus and Salmonella.*

For those who might think a study of intestinal pathogens somewhat removed from daily life, Professor Huang's inaugural lecture in 1968 was an eye-opener. The audience was regaled with a remarkable survey of the world's eating habits and mistakes packed with drama as well as science. It could have come only from a bacteriologist who is also a gourmet; and as a gourmet Professor Huang has many admirers and followers.

Microbiology emerged as a fully-fledged department of the University with only a small fanfare but with a confident enthusiasm which was rapidly justified under Professor Huang's leadership. Roles and responsibilities in the now separate subjects of microbiology and pathology were defined and assigned in a most agreeable and practical manner. Using the enhanced freedom of action that departmental status confers, Professor Huang moved steadily to build up academic studies in virology in his department to an international level.

At the same time, the Department's commitment to the laboratory service of the Queen Mary Hospital was revitalized. The expansion of the hospital and increasing sophistication in hospital clinical microbiology called for a new look. Professor Huang was deeply involved in the planning and commissioning of the hospital Clinical Pathology Building which was opened officially in 1974 though functioning earlier. It happily embodies, as far as was practical, his ideas of how hospital microbiology should be accommodated. A resultant increase in the space available for practical and tutorial classes for students has enabled Professor Huang to develop those teaching methods on which he lays much stress.

Secure in his plans for microbiology and in the wholehearted support of the staff which he had attracted, trained and encouraged, Professor Huang turned to more general aspects of the University's work when he became Pro-Vice-Chancellor in 1971.

Of the many committees which he then chaired or attended, perhaps the most note-worthy for the future was the Senate Working Party on Student Membership of University Bodies. In this administrative role he displayed a sincerity of purpose and an integrity of character which shines through the practicalities of his committee work.

An earlier edition of the *Gazette* has recorded the death over a year ago of his wife and colleague, Dr. S. T. Huang-Chan. This sad event terminated a partnership which was a wonderful source of happiness and contentment to Professor Huang. He is a strong family man.

Like many others with memories of past sojourns in China, Professor Huang has profited from the renewed possibilities of travel over the border. To those of us who are more accustomed to hear him sternly classifying the *Clostridia,* it comes as a delight to perceive that there is an artist, and a bit of historian too, behind the camera which he carries on his travels there. We wish him in his retirement many more happy journeys, at least on those occasions when the Hong Kong soccer programme has little to offer to a devoted spectator.

J.B.G.

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FRANCIS CHANG KWANG SO, M.Sc. (St. John's) Ph.D. (Cornell)

Emeritus Professor Francis Chang Kwang So died in Tauranga, New Zealand, on April 12, 1978, He was born in Kutien in Fukien, China, on September 15, 1906, fourth in a family which eventually grew to eight sons and two daughters. The fact that the Chang siblings produced a bishop, two professors, a doctor, an engineer, a matron and a school teacher but only one businessman may be of interest to environmentalists and geneticists.

Francis Chang received his primary education in Kutien and proceeded to Trinity College, Fuchow, where, at the age of fourteen, he was first exposed to the English language. It is apparent that he fell in love with the language because the accurate use of words and the pursuit of a better phrase characterized his approach to verbal and written communications throughout his life. Many a time have I been invited into his office to listen to him read, with relish, passages from both classical and contemporary works on the subject of anatomy. In 1926 he went to St. John's University, Shanghai, and remained there as student and teacher for the next twenty-three years. In 1935 he was awarded a China Medical Board Fellowship to visit the United States and spent the succeeding two years at Cornell from which he received a doctorate in invertebrate zoology in 1937.

On returning to Shanghai, he somehow found time to correspond with a young lady in New Zealand whom he had never met. His eloquence must have served him well for after a few letters, Dr. Kathleen Pi agreed to meet him in Hong Kong where they were married in St. John's Cathedral. His short honeymoon at Cheung Chau was one of his fondest memories of the few peaceful years his generation has had. On the horizon was the storm that was to break in the north and to spread death and destruction over the greater part of China.

Professor Chang was a demanding teacher. I first met him in 1940, when, as a premedical student, I took his course in invertebrate zoology and learned the meaning of the word discipline. Having grown to maturity during the difficult days of revolutionary China and being fully aware of the sacrifices our parents had made to get us to where we were, he could not understand how we could fail to appreciate the remarkable opportunities that were before us. Having committed his own life to the pursuit and dissemination of knowledge, he expected us to pursue our studies with the same singleness of mind. After spending what appeared to us to be an inordinate proportion of our time on worms and insects and having received the necessary approbation from Professor Chang, many of us were somewhat dismayed to find that he had transferred to the Medical School and was to be our Professor of Gross Anatomy. But we knew what was excepted of us and we managed to survive. Generations of medical students at St. John's and at this University have approached the course in anatomy with fear and trepidation, but those who passed could look back with pride at having satisfied a strict taskmaster.

Professor Chang left China in 1950 for a lectureship in anatomy at the University of Malaya and came to this University in August 1955, as Professor of Anatomy. His initial concern was to upgrade the teaching of anatomy through the creation of a comprehensive museum of prosected specimens. This became the major project for all members of the department for a number of years until in 1959, he felt that sufficient progress had been made to warrent a slowing down of the work. It was at this time that he became interested in the growth and development of Chinese children in Hong Kong. After a small pilot study, conducted with the late Dr. S. T. Huang-Chan, he plunged into the project with his usual disregard for the apparent problems involved. In four years he gathered data from 15,420 boys and 14,123 girls on a vast array of anthropometric measurements and observations that enabled him to delineate, in three socio-economic groups, patterns of skeletal and sexual maturation, dentition, and distribution of subcutaneous fat, as well as growth patterns of the limbs, trunk and head. In addition to numerous papers published in learned journals on the subject of his studies, Professor Chang, in the remarkble time of two months before his retirement in 1969, compiled a three-volume monograph entitled *Growth and Development of Chinese Children and Youth in Hong Kong.* In this work he brought together all his findings in the form of hundreds of tables and figures supplemented by detailed discussion. It is indeed a treasure-trove of information and hard data which is much used as a source-book.

To Professor Chang retirement meant a change of address but not a change in the pattern of his activities. He made frequent visits to the libraries of the universities in Dunedin and Sydney and corresponded copiously with his many friends all over the world. He maintained a close interest in all his former students. Those who had the privilege of visiting him and Auntie Kay in Tauranga were pleasantly surprised to find that he had with him a filing cabinet of student cards, complete with photographs and up-to-date notes on their progress since leaving their course in anatomy. He was a frequent contributor to Elixir, the annual publication of the HKU Medical Students' Society. Indeed, the last letter this writer received from him was dated two days before his death and referred to a contribution to the 1978 edition of Elixir.

Professor Chang was an intensely religious man. While he did not impose his religion on others, he frequently quoted from the Bible, especially the Psalms. He took particular delight in 'I will praise thee, for I am fearfully and wonderfully made.' Those who knew him can attest to how wonderful he was as a friend and advisor. In expressing our sorrow at his departure from this life, and in extending our sympathy to his wife, I can do no better than to quote G.B.O. who wrote in 1969: 'Francis Chang will long be remembered in this University, and by those of his former students and colleagues who move on to other fields, for his contribution to the education of students, but above all he will be remembered by all who knew him for his unfailing courtesy and his willingness to give his time and efforts to help others – whether students or staff – to benefit from his experience and wisdom.'

A.C.L.H.

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CHAN TAI KWONG
M.B., B.S. (Hong Kong), F.R.C.P. (London and Edinburgh)

Dr. T. K. Chan, Senior Lecturer in Medicine, has been appointed Reader from April 1, 1978.

Dr. Chan graduated from the University of Hong Kong with the degrees of M.B., B.S. with Honours in 1961. His association with the University continued as staff member when he was appointed a Clinical Assistant in 1962. After two years, he became an Assistant Lecturer in Medicine, and was promoted to Lecturer and Senior Lecturer in 1966 and 1973 respectively. His attachments overseas began when he was awarded a Commonwealth Scholarship for two years from September 1965. He was attached to the Department of Medicine, Royal Infirmary, Glasgow, for the first year and then to the University College Hospital Medical School, London. His experience abroad was further widened when he was elected a China Medical Board Fellow and undertook training at the University of Rochester School of Medicine and Dentistry as a Visiting Assistant Professor in 1972.

Dr. Chan has extensive research interests in haematology. Working in collaboration with local and overseas researchers, his current research activities centre round the following five areas: G6PD deficiency; leukaemia; coagulation, fibrinolysis and platelet function; the sequestration function of the spleen; and red cell membrane structure and ion permeability. An author of several papers on G6PD, Dr. Chan is also the co-author of many articles published internationally. He was elected a Fellow of the Royal College of Physicians of Edinburgh in 1975 and of London in 1977. He is also a Fellow of the International Society of Haematology.

CECIL EDWARD RENSON
B.D.S., Ph.D. (London), D.D.P.H., L.D.S. R.C.S. (England)

Professor C.E. Renson has been appointed to the Chair of Conservative Dentistry from May 12, 1978.

Professor Renson graduated from the University of London (The London Hospital Medical College) and the Royal College of Surgeons of England with the degree of Bachelor of Dental Surgery and the diploma of Licentiate in Dental Surgery in 1957. After serving as a house surgeon, he was appointed to the teaching staff at the London Hospital, and for eight years combined general practice with the teaching of Conservative Dentistry on a part-time basis. In 1966 he became a full-time member of the staff and was promoted Senior Lecturer in 1967. His Doctorate of Philosophy (Faculty of Medicine) was awarded in 1971 and he became a Diplomate in Dental Public Health, Royal College of Surgeons of England in 1973. He was appointed Reader in Conservative Dentistry by the University of London in 1976. In 1977 Professor Renson was appointed to the Chair in Conservative Dentistry at the University of Edinburgh. He relinquished the Chair at Edinburgh on his appointment to the University of Hong Kong.

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OBITUARY

The University records with deep regret the deaths of:

Professor Francis Chang Kwang So, M.Sc., Ph.D., Professor of Anatomy from 1955 to 1969 and Emeritus Professor, on April 12, 1978.

Sir Lindsay Ride, C.B.E., E.D., LL.D., Hon. R.A.M., J.P., Emeritus Professor of Physiology and Vice-Chancellor from 1949 to 1964, on October 17, 1977.

WINNERS OF PRIZES AND MEDALS

JOHN ANDERSON GOLD MEDAL

LUI For Shing

PROXIME ACCESSIT

KWOK Chi Wai
WONG Kee Lam

CHAN KAI MING PRIZE

Mary IP Sau Man

C.P. FONG GOLD MEDAL IN MEDICINE

WONG Kee Lam

GORDON KING PRIZE IN OBSTETRICS & GYNAECOLOGY

Mary IP Sau Man

R.M. GIBSON MEMORIAL GOLD MEDAL IN PAEDIATRICS

Maurice LEUNG Ping

NESTA & JOHN GRAY MEDAL IN SURGERY

Arthur LEE Tat Tak

MUN GOLD MEDAL IN PSYCHIATRY

1977 – LEUNG Tung Lok

HO KAM TONG PRIZE IN COMMUNITY MEDICINE

LAM Jo Hing

LI SHU FAN MEDICAL FOUNDATION PRIZE IN PHARMACOLOGY

CHOW Wing Hing

C.P. FONG GOLD MEDAL IN PATHOLOGY

PUN Kin Kee

JANET McCLURE KILBORN PRIZE IN PHYSIOLOGY & BIOCHEMISTRY

Cindy LAM Lo Kuen

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LI SHU FAN MEDICAL FOUNDATION PRIZE IN PHYSIOLOGY

John CHAN Kwok Cheung

NG LI HING PRIZE IN ANATOMY

MAK Kong Ling

HO FOOK PRIZE

John CHAN Kwok Cheung

BELILIOS MEDICAL PRIZE – 4TH YEAR

CHOW WING HING

SOCIETY OF COMMUNITY MEDICINE PRIZE
(shared)

Group : CHAM Cho Lan, CHAN Hung Chiu
CHAN Siu Pun, CHAN Wing Tat
CHIU Lai Wah, HSU Yun Chiang
HUI Yin Fun, KO Chi Cheong,
KONG Chi Kwan, KONG Tak Kwan,
SHAM Man Kwong, WAN Chun Wai,
WU Ching Ying

HONG KONG COLLEGE OF GENRAL PRACTITIONERS PRIZE
(shared)

Group : CHIU Shui Wah, CHEUNG Kai Shuen
CHEUNG Ming Kuen, CHU So Shan,
CHUNG Kin Kwok, FUNG Ka Pak,
MOK Ying Hung, TUNG Kwong Kwong

HONG KONG MEDICAL ASSOCIATION PRIZE

Co-authors : Howard WING, Jr.
TSANG Ping Ham
WAI Yuk Chun
WONG Chung Kwong

WOO KAI FUNG PRIZE IN CLINICAL NEUROLOGY

Howard WING, Jr.

CONGRADULATIONS!

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Elixir Loan Fund

Balance Sheet at November 30, 1978

Load Fund balance b/f			**Loans receivable**		
Loans outstanding at December 1, 1977	$ 74,015.00		Loans outstanding December 1, 1977		$ 74,015.00
Cash	26,925.19	$ 100,940.19	Less: Loans repaid during year		20,550.00
					53,465.00
			Add: 28 new loans granted in year		26,050.00
					79,515.00
Surplus of income over expenditure		4,262.43	**Cash**		
		105,202.62	Medical Society's Account	$ 3,950.00	
			Fixed Deposit with Jardine Fleming maturing at January 22, 1979	21,737.62	25,687.62
		$ 105,202.62			$ 105,202.62

Statement of Account for the period December 1, 1977 to November 30, 1978

Payment for Petty Cash for stationery and postage expenses	$ 100.00	Bank interest received	$ 209.43
		Subscrition form Associate Members	600.00
		Donations	1,680.00
Surplus of income over expenditure	4,262.43	Transer form Central Fund, Medical Society	1,873.00
	$ 4,362.43		$ 4,362.43

January 20, 1979.

propared by Mok Ka Ming (sd.)
Chairman, Administrative Board
Elixir Loan Fund, Medical Society
HKUSU Session 77-78.

God heals, and the doctor takes the fee
— BENJAMIN FRANKLIN

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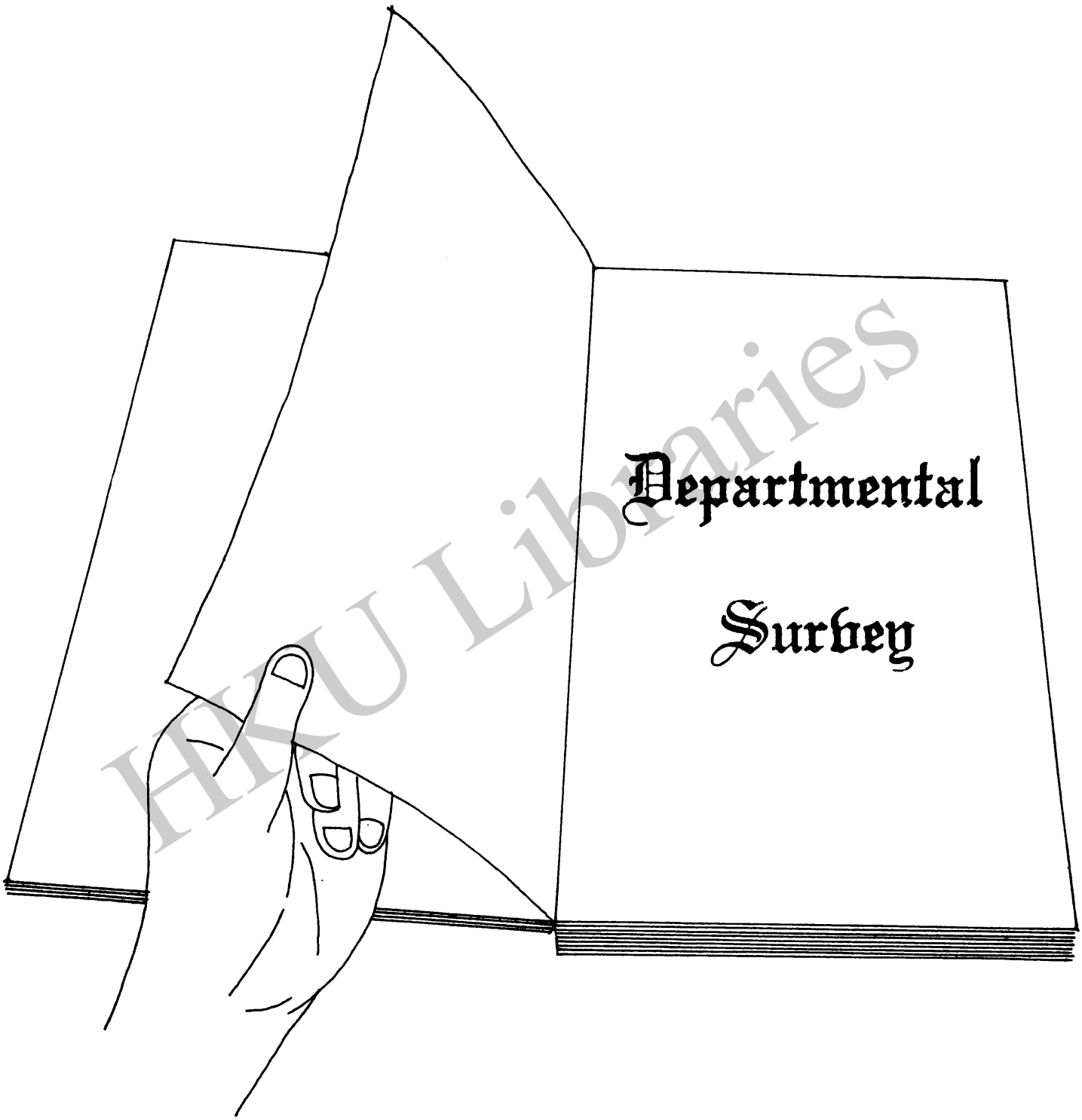

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DEPARTMENT OF PAEDIATRICS

HKU Libraries

Department of Paediatrics

THE DEPARTMENT OF PAEDIATRICS

The Chair of Paediatrics in the University of Hong Kong was a remarkably late development. The Department of Paediatrics was an even later development. In fact, when the first Professor in the person of C. Elaine Field was appointed in 1962 she ranked only as a member of the staff of the University Department of Medicine unitl 1966. This was hardly an auspicious start to a new department, and all the more surprising when the large child population of Hong Kong is considered. Indeed, it may be questioned whether the Department of Paediatrics has even today completely overcome the handicaps under which it was born. In spite of these handicaps, however, Professor Field's time in the Chair from 1962-1971 saw some outstanding advances in patient-care, paediatric teaching and research. Her studies on the growth and development of Hong Kong children formed the basis for her book "Growing up in Hong Kong" which was published by the Hong Kong University Press in 1972. This will for many years ahead form a yardstick against which to measure future progress in child health in the Colony. The infant mortality rate fell from 36.8 to 17.7 per 1000 live births between 1962 and 1971. Today most of the senior paediatricians in Hong Kong — whether in the University, Government service or private practice — owe much to their early training under Professor Field. Her contribution to Child Health in the community was quite exceptional in its breadth, and there are some who think it has never been adequately recognized outside paediatric circles.

Professor Field was succeeded by G.M. Kneebone who occupied the Chair from 1971-1975. During Professor Kneebone's time the present Department was opened in the New Clinical Building in 1972 and for the first time paediatrics had a base suitably equipped for teaching and research with its own laboratories, seminar room, library, lecturer's offices etc. There was also some increase in the staff of the Department although it never reached a level which was adequate for its heavy service and teaching commitments so that research has had to be carried on under difficulties. Unfortunately, the resignation of Professor Kneebone on his return to Australia in 1975 was followed by a period during which the Department had no professorial head until the arrival from the U.K. of Professor J.H. Hutchison in Septmeber, 1977. Inevitably this had an unsettling effect upon the Department although it continued to provide a high standard of teaching and patient-care under the acting headship of Dr. W.Y. Lui.

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The Department is again characterized by high morale and increasing involvement in research e.g. screening for inborn errors of metabolism and congenital hypothyroidism, a study of the inhibition of fibrinolysis in malignant disease, the development of protocols for the detection of handicapped children, investigation of the aetiology of "idiopathic" neonatal jaundice. Its staff is composed largely of young Lecturers with keen enthusiasm for their training as paediatricians; this training will be rounded off by periods of study overseas as funds and departmental duties permit. During the past year several eminent British and American paediatricians have visited the Department, including the President-elect of the British Paediatric Assoiation, and both staff and students have heard them lecture on their particular fields of research.

The Department of Paediatrics carries a heavy load of undergraduate and postgraduate teaching. In addition to its involvement in anatomy teaching, and in the courses of systematic lectures to third and fourth year students, the Department receives students in groups of 30 every 10 weeks for their period of paediatric clerkship; it also accepts responsibility for teaching neonatology to students during their obstetric clerkship in Tsan Yuk Hospital.

Medical schools have sometimes been hesitant to define the objectives of their curricula, but the Department of Paediatrics has declared its objectives to be:

1. To describe the processes of normal growth and development (physical, intellectual, emotional and social), and the deviations therefrom which may result from heredity, illness, malnutrition etc.

2. To teach the basic facts about the common and important disease of infancy and childhood, principally by practical instruction in the wards and out-patient clinics, and to expose students to paediatric practice at its best.

3. To give students a measure of clinical responsibility under qualified supervision by requiring them to take clinical histories and make clinical examinations which they record in the hospital case-notes. In this way they acquire experience of interviewing anxious and often frightened parents, and of examining ill and often fractious children. They better appreciate also the emphasis made by all clinical teachers that the practice of good medicine is inseparable from accurate clinical records.

4. To impress upon students the importance of social and environmental factors in the causation of disease by requiring them to visit the homes of sick children in small groups, each accompanied by a member of staff. After discussion of the cases with a medical social worker and a community nurse, and following one or more home visits, each group presents its findings followed by discussion at the weekly medico-social case conferences. This exercise is carried out in close cooperation with the staff of the Department of Community Medicine.

5. To introduce students to paediatric practice outside the hospital setting by arranging for them to spend a half-day (in pairs) with an experienced practitioner in his own consulting rooms where the spectrum of diseases will be different from that of the necessarily selected patients in the hospital.

6. To emphasise the importance of prevention and the techniques of developmental screening which are applicable to all children in the community.

Yet another objective should be to demonstrate the optimal hospital environment, both for in-patients and out-patients, to which emotionally vulnerable children should only be exposed. Such an environment demands custom built facilities, to include mother-child rooms, play areas and play leaders in the wards, receptionists and play areas in out-patient departments, educational toys, rooms for nursing mothers etc. Unfortunately, this objective cannot be achieved because, while the medical equipment is good, the paediatric wards and out-patient facilities in Hong Kong fall far short of the modern requirements now recognized to be necessary for sick children.

None the less, Hong Kong university students of medicine graduate with a sound grounding in preventive and curative paediatrics and with a fully developed awareness of the importance of a child's social and home environment for his optimal growth and development. In the Department of Paediatrics they will meet a friendly and enthusiastic staff.

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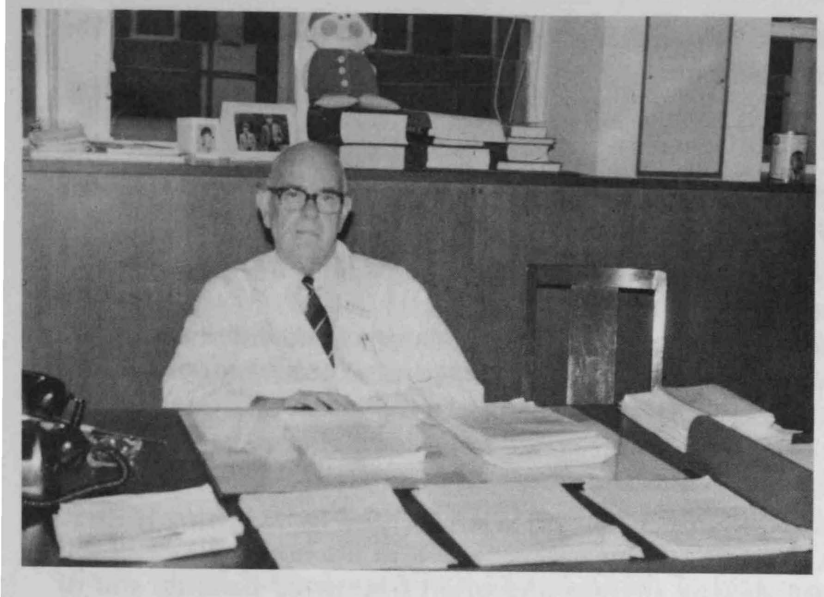

PROFESSOR JAMES HOLMES HUTCHISON

**M.D. (Glascow), F.R.C.P. (London)
F.R.C.P. (GLascow), F.R.C.P. (Edinburgh),
F.R.S.E., F.A.C.P. (Hon.),
C.B.E.**

With over 40 years' teaching experience, both undergraduate and postgraduate, Prof. Hutchison came to Hong Kong in Sept. 1977 and was appointed the Chair of the Department of Paediatrics. Before that, he was the Samson Gemmell Professor of Child Health, University of Glascow, which was also the medical school where he was educated and obtained the degree of M.B., Ch.B. with Commendation in 1934.

Born in Rangoon of Burma in 1912, where his father worked as an engineer, Professor Hutchison went back to Scotland for his studies when he was eight years old. After graduation, he worked in the West Infirmary and Royal Hospital for Sick Children, Glascow, and St. Luke's Hospital, Bradford as House Officer and Registrar appointments, and in 1937, he started his teaching career. During World War II, he joined the Royal Army Medical Corps, first as a Major and then a Lieut-Colonel. He served in the British Expeditionary Force which brought him to France, and later to Algeria, Italy and Austria. After the war, he was awarded a military O.B.E., and then he resumed his teaching career.

Professor Hutchison had been the President of various British Paediatrics Associations and other professional organisations, including the Royal College of Physicians and Surgeon of Glascow, the British Paediatric Association and the Association of Physicians of Great Britain and Ireland. He was chairman of several medical advisory committees and the Dean of the Faculty of Medicine in the University of Glascow as well. In addition, he is frequently examiner in M.R.C.P. exam. of all three British Royal Colleges. In 1971, he was honoured C.B.E. (civil) for his contribution and services in various medical and health bodies in the U.K.

Professor Hutchison said that the standard of medical students in H.K.U. was quite good, but the ward condition was not so satisfactory. He thought that students should be more community-orientated and involved in community research, and that it was important in these days to give medical undergraduates greater exposure to the paediatrics of primary care and to the effects of the child's environment on his health state. He commented that there was a great need in H.K. for a modern children's hospital or unit provided with the necessary equipment and specialised staff.

Professor Hutchison is married with one son and one daughter who are now living in U.K. He used to be very keen on golf when he was in the U.K. During his leisure time, which is very little indeed, he likes to take a walk in the New Territories with his wife.

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Dr. W.Y. Lui M.B., B.S. (H.K.),
D.C.H. (London).
F.R.C.P. (Edin.)

Dr. Lui graduated from this university in 1963 and joined the Paediatrics Department in 1964. From 1967 to 1969, Dr. Lui went to England and the United States where she worked in several medical institues. She then returned to the Depatment as lecturer. In 1974, she was awarded a China Medical Board Scholarship and went to the United States for one year as paediatric neurologist. She became senior lecturer in 1976 and during the period 1975 to 1977 Dr. Lui was appointed the Head of the Paediatrics Department.

Dr. Lui's main field of interest is paediatric neurology. Her recent research is on the difference between the Chinese and the other children in neurological and perceptual developments.

In Dr. Lui's opinion, the medical students of recent years are more social-concerned and more mature. She strongly objects to spoon-feeding and encourages feed-back from the students. She believes that mutual participation and mutual respect are essential and benificial to both teaching and learning.

Dr. Lui is happily married with one son. She feels that looking after her own son is a great pleasure. Her interests also include music, especially classical music.

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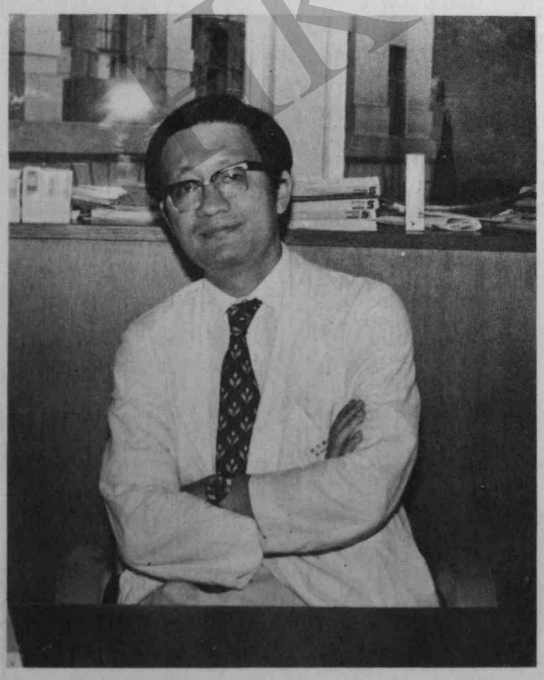

Dr. M.P. Yuen M.D. (Sask.);
F.R.C.P. (Can.)
Dip. Am. Board.

Dr. Yuen studied in Canada ever since his secondary school and obtained his M.D. degree in 1964 in the University of Saskatchewan. He came back to Hong Kong in 1974 and joined the Paediatrics Department as lecturer in 1978. His main academic interests are haematology and oncology.

Dr. Yuen comments that the clinical materials here are rich and the students are more hard working than the Canadian medical students. However, he feels that the time devoted to paediatrics in our curriculum is inadequate and the teacher – student ratio too low. He also remarked that the standard of the Paediatrics Unit here is as high as those in Canada.

Being a good tennis player, Dr. Yuen represents the Queen Mary Hospital in tennis tournaments. In his spare time, he volunteers to work in a clinic in Kowloon Bay Temporary Housing Area.

Dr. Anita M.C. Li
B.A. (Erskine), M.B., B.S. (H.K.),
D.C.H.(London), M.R.C.P. (Edin.)

Dr. Li graduated from this university in 1962 and then she had been doing Medicine, Obstetrics, Paediatrics and Pathology. In 1967, Dr. Li went to U.K. for examination and worked in a paediatric hospital there.

Dr. Li came back in 1970 and joined the Department of Paediatrics as a lecturer. She is now conducting a survey on neonatal jaundice. Besides that, she has quite a heavy load in both teaching and working in the hospital. Sometimes, she gives lectures in Extramural courses.

Dr. Li has one son and two daughters.

'Medical students should attend more extracurricular activities and they should arrange their time wisely.' Dr. Li thinks that medical students here are less sociable than other countries such as U.S.A. She also thinks that students generally quite enjoy their paediatrics clerkship.

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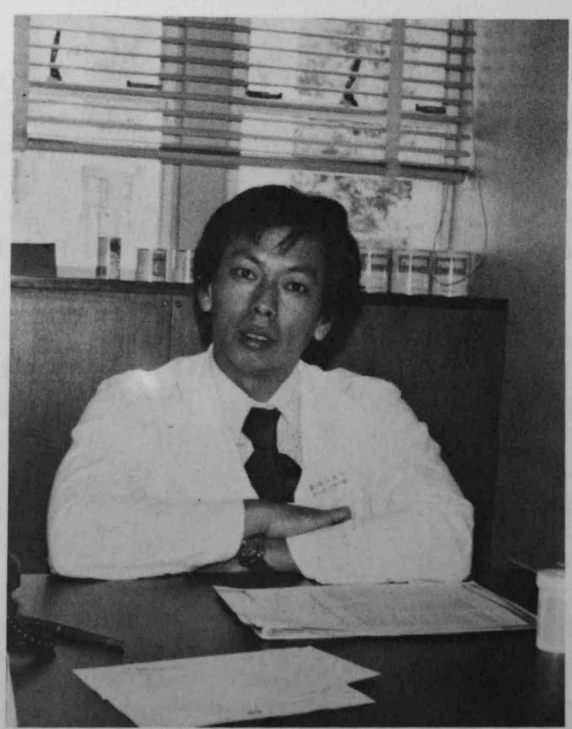
Dr. S.P. Lau **M.D. (Munich)**
M.R.C.P. (UK); M.R.C.S.(Lond.);
L.R.C.P.; D.C.H.

Dr. Lau finished his secondary shcool in Piu Ching Middle School, where he obtained his schoolarship to University of Munich for his M.D. degree. He had his post-graduate training in U.K., and worked in the children hospital south of London before returning to H.K. in 1978.

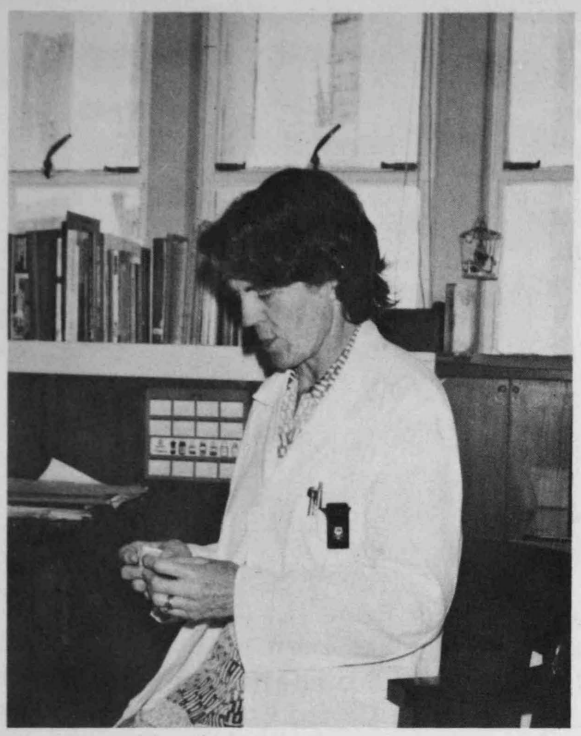
Dr. Lau thinks that medical students in HKU have good factual knowledge and clinical techniques, but he also feels that they tend to be less friendly and considerate to the patients. Dr. Lau hopes that with the introduction of Behavioral science course, future medical students will become aware of the emotions of the patients, and be more closely involved with them, rather than treating them merely as case-works.

Regarding the practice of medicine in Hong Kong Dr. Lau thinks that the medical expenses is far too inadequate as compared with oversea countries as U.K. or Europe.

Dr. Lau is happily married, and in his spare time, he enjoys classical music, especially German music.



Dr. Flora M.Baber M.B.Ch.B. (Manc.,)
M.R.C.P. (Edin.); D.C.H.(Lon.).



After obtaining her qualifications in U.K., Dr. Baber worked as a houseman in U.S.A. she then participated in a research project of children malnutrition in Uganda, and also worked as lecturer in Makere Medical School in E. Africa before joining the Dept., of Paediatrics in 1962.

Dr. Baber witnesses the expansion and transformation of the Dept. of Paediatrics for the past sixteen years, and commented that the Dept. is always under a happy and friendly atmosphere.

Dr. Baber feels that medical students here are hardworking, but often encounters language difficulty. She thinks that this drawback, together with the fear of examination results in their learning by heart facts which are quite meaningless to them, and this, in fact will interferewith the development of a mature judgement which is very important in medicine.

Dr. Baber's husband is a judge of the Supreme Court, which explains why she had travelled so widely. According to Dr. Baber, their 3 children (1 boy and 2 girls) are ideal control for her longitudinal study.

Dr. Baber's intersts include music, arts, as well as knitting, sewing etc. Unfortunately, she was forced to give up violin as she could hardly find time for practising.

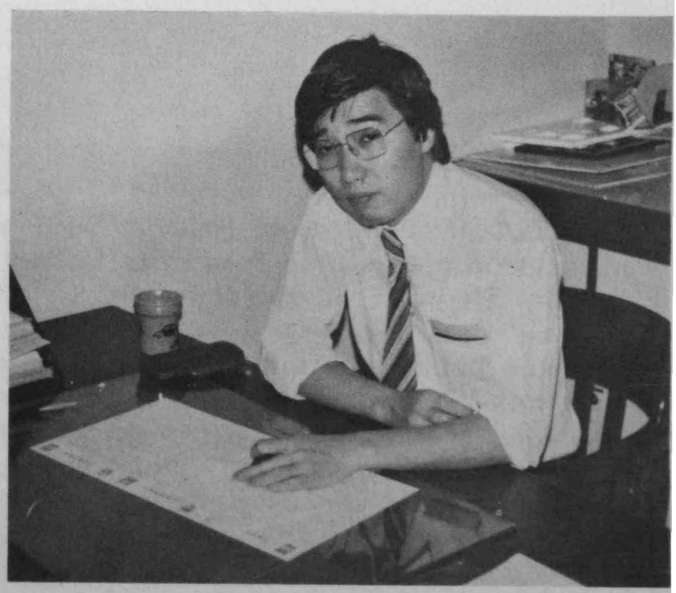
Dr. Y.S. Ko **M.B., B.S. (N.S.W.),**
Ms. of Medicine-Paed (Singapore).

Dr. Ko had lived in Australia for over ten years, and spent his secondary as well as university life there. At present, he is taking the first of his two years' clinical training in U.K.

Dr. Ko thinks that students here are quite different from those overseas in that they work harder, but talk less, and are more diciplined. However, he also feels that local students are less involved in extracurricular activities, and they tend to be short-sighted, aiming only at passing the MB examinations, without considering further, such as taking professional training.

Dr. Ko stresses that good human relationship of doctors with patients is very important. Hence he feels that the change of medical students coming from restricted social background to a mixture of social classes is better for the medical field.

Dr. Ko is father of 3 daughters; and in his leisure, he enjoys tennis, motor-racing, and surfing.



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Dr. Olivia K.W. Chow
M.B., B.S. (H.K.)

Dr. Chow is one of the few students who graduate with an honour degree. With great affection for children, she joined the department of Paediatrics virtually immediately after she graduated. Being a previous editor of Elixir and St. Johnian, she thinks that medical students can take life more easily during their 2nd and 3rd years and should enjoy hall life as much as possible. This is especially true when seeing that doctors are expected to behave in a certain way. At leisure, she enjoys swimming, reading and music appreciation.

Dr. Roxy N.S. Lo.
M.B., B.S. (H.K.)

Dr. Lo graduated from H.K.U. in 1974 and before entering university, he had been a student of D.B.S. and King's College. After graduated, he spent his housemanship in O & G department in United Christian Hospital and then paediatrics Department of in Queen Mary Hospital. He joined the department as lecturer in July 1978. He had particular interest in paediatrics, especially cardiology.

Dr. Lo advised us not to spend too much time on books nor go into great details. He said medical students should enjoy themselves when they have time for they will be too busy after graduation. Dr. Lo was an active student during his studies and he had been the general secretary of medical society. He said that medical students now are more friendly and easier to get along.

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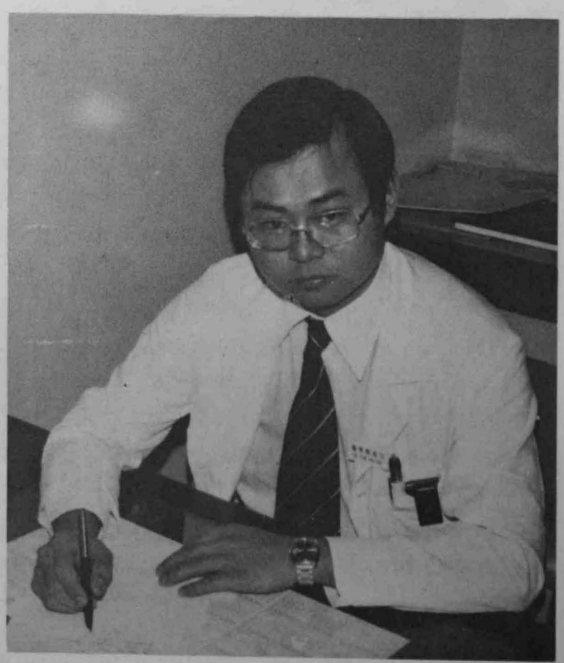
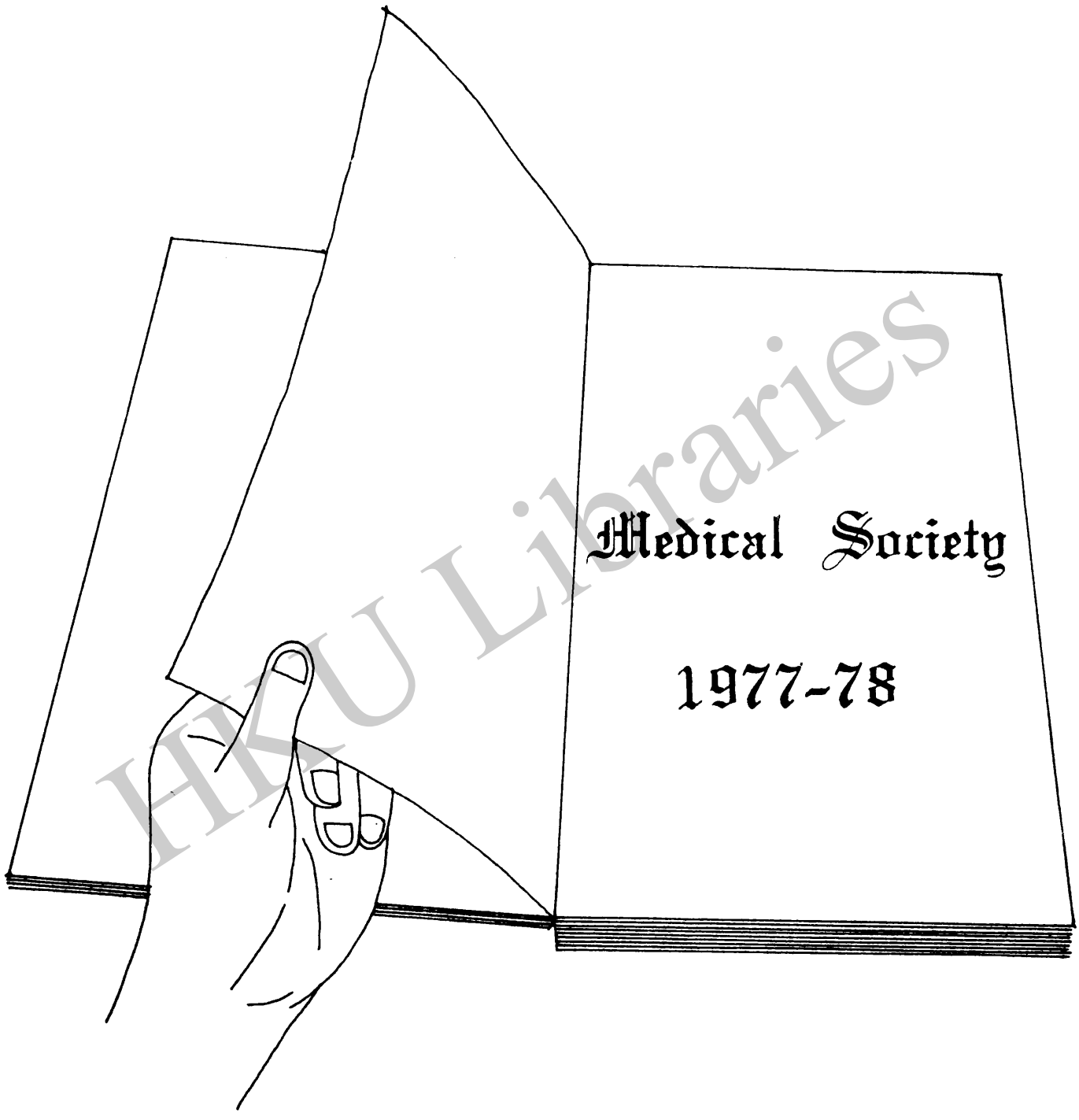
Dr. T.F. Fok **M.B., B.S. (H.K.)**



Dr. Fok graduated from HKU in 1975 and then he worked as an intern in the Paediatrics Unit of the Queen Elizabeth's Hospital and the University Surgical Unit. He joined the department as a lecturer in May, 1978. He commented that medical students are becoming more diligent but still lack initiative. He suggested that 10 weeks exposure to the subject may not be adequate for most students in spite of their profound interest. At present, Dr. Fok is performing a research on thyroid screening of Hypothyroidism. His pet sports is hockey, lacrosse, cricket and football. However, after being a lecturer, he devotes most of his time in studying. Dr. Fok is married and is planning for further studies in U.K.



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THE EXECUTIVE COMMITTEE

FROM THE CHAIRMAN

三百六十多天的日子在「團結院內同學，認識將來責任」底旗幟下又再溜走了。

回顧過去一年，在不斷的嘗試和探索中，醫學院內頗能保持一個活潑、蓬勃的氣氛。固然在路向的尋求，工作的策畫，合作各常備委員會，班會間的協調方面仍有著不少需要改進的地方，但各方面都作了新的努力，嘗試了新的突破，也有更多的同學要求對社會更多的關注、認識、參與。同學在實習醫生事件、金禧事件中積極的投入，對艇戶問題，弱智兒童的關心，啓思，健康委員會的專題研習等，一切都顯示同學不願意宥於醫療界，而要求一個更完全的大學教育。

今年學生會幹事會內包括了兩名醫科同學，所以雖然醫學會還沒有基礎和學生會建立十分緊密的聯絡，也能保持著一定的聯繫，加上一些經常活動在大學本部的同學，醫學院還不致和其他院系太大的脫節，特別在大學醫務處，學生會大樓等事件裏，醫學院同學也份演著肯定的角式。

院內方面，除了新年舞會、週年舞會、遊河等，「醫學生節」是一項新嘗試，其中的音樂晚會及兄弟之夜，都帶來了預期外的成功。今年在「中山醫學院專業團」外也試辦了一個南京、上海、蘇州、杭州、北京五地旅行團，參加的同學十分踴躍。另外認中籌委也帶動同學參加了今年中國團的專題研究展出。

「烟酒與健康」是今年健康展覽的主題，再次吸引了約二萬名市民參觀。其他服務性的活動，比較有系統的除了瑪麗灣女童院外，特別值得一提的是八二同學自己籌劃的「健康的大澳」計劃和「老人服務計劃」，表現著同學的熱誠、理想和主動。

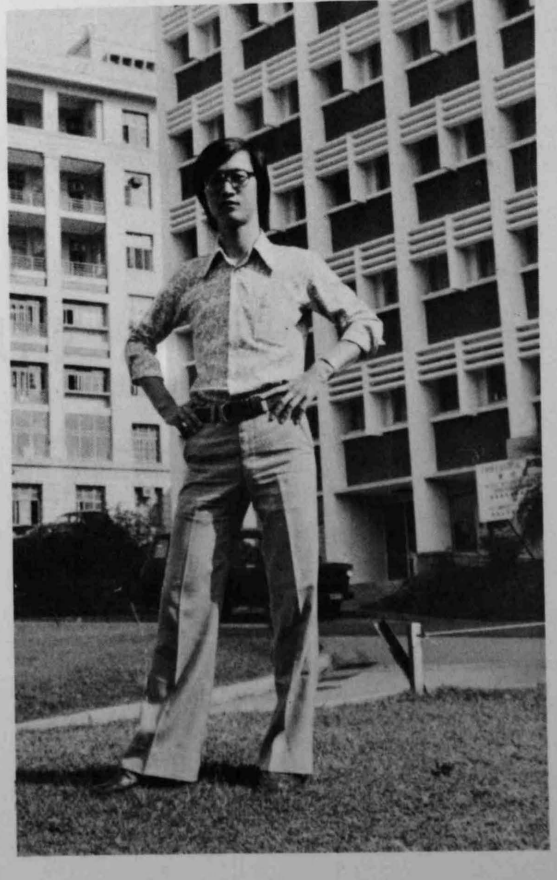
體育方面醫學院今年也是輝煌的一年。院了保有院際田徑冠軍，院際水運冠軍外，在各運動員的努力更重奪玫瑰杯。誰說醫學生是「能醫不自醫」的孱弱書生呢！

今年的籌款活動——電影首映禮和週年舞會都十分成功，替醫學會帶來了充裕的經費，也給 Elixir Loaw Fund帶來一筆進帳。所以今年是醫學會財政上較輕鬆的一年。

在不斷的嘗試和實踐當中醫學會是一天天長大了。可預見的她還有很多等待著改進。只有靠同學同心協力把她辦得更好，她才能更加團結起同學，携手齊邁進，並肩爲人羣。我們期待著這一天。

最後我要向所有關心和給予醫學會支持的老師們致謝，並祝今屆年刊編輯同人出版成功。

莫嘉明七八年十一月



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The dignity of a physician requires that he should look healthy, and as plump nature intended him to be; for the common crowd consider those who are not of this excellent bodily condition to be unable to take care of themselves – HIPPOCRATES

WORDS FROM SPORTS SECRETARY (1977-78)

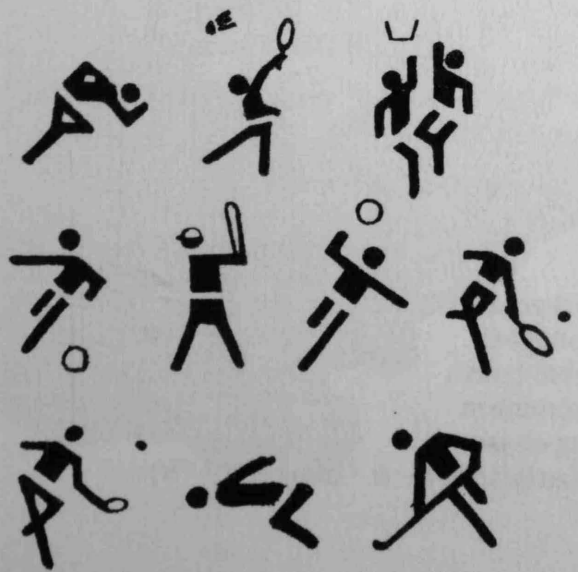
Looking back, last year's work was not that satisfactory. I took the post from December, 1977 onwards and very soon settled down with an inspiring mood to re-capture the 'OMEGA ROSE BOWL'. We did after a long enduring struggle, faithfully supported by many of our students. It seems the winning of the 'BOWL' is the utmost importance of the job. To me, it's not. The name "MEDIC 1978 had been engrayed on the OMEGA ROSE BOWL, and has become historical. But has victory strengthened the togetherness and harmony within our Faculty which has a population of over 700. Over the years, this might have been totally forgotten as our predeccessor had been the 'title-holder' for seven consecutive years. The glory overshadowed some of the very basic essence of a well-tuned society. I tried and I hoped that through sports, many of us would find a sense of belonging to the Medical Society, which is our reflection in the university campus & beyond. My insight failed as I gradually found only a small, sector of the student population was involved. Upon seeing this, I could say 'Thank you, the Omega Rose Bowl was with us this year.

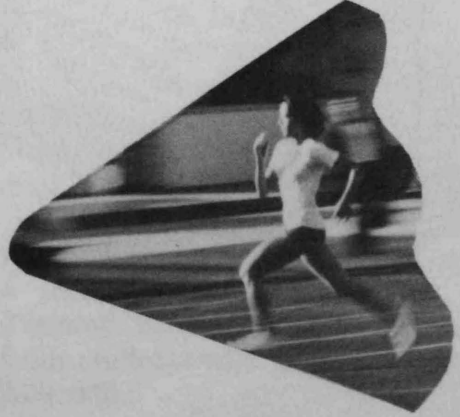
Consequently, this led me to the thought of paying more attention to the intra-facutly sports which four classes would be involved. Possibly, a better understanding between classes would entrance the atmosphere of the Medical Society. The series of matches was played under a very cheerful and enjoyable atmosphere, but has it served the purpose!

After having been indulging myself in sports activity, I think I am entitled to make a comment on the avialability of sports faculty in HKU. It is appalling and is like doing a man's work with kid's playing things. There are times when students wanted to use them, they were closed for maintenance and other reasons. But guess what's the efficiency, the pitch was just as barren as a desert after a month's reopening from vacation, the clay was peeling off from the wall of the Squash Court after a whole vacation's close for repair and the 'hot' water shower in the men's changing room ran like a dripe etc. The sports centre is too small to cater over 6000 students of which frequent users reduced to an optimal figure of a few hundreds. Non-grequent users are very often discouraged to make use of the facilities, as they are very often taken up by intra-university matches and sports clubs usage. The extended period of opening only facilities those living nearby of whom many are the frequent users during the day. I believe there are students who have gone there only in the P.E. sessions.

My last words here would be 'There is a lot more in sports than just winning'.

Tsang Tat Ming





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SPORTS

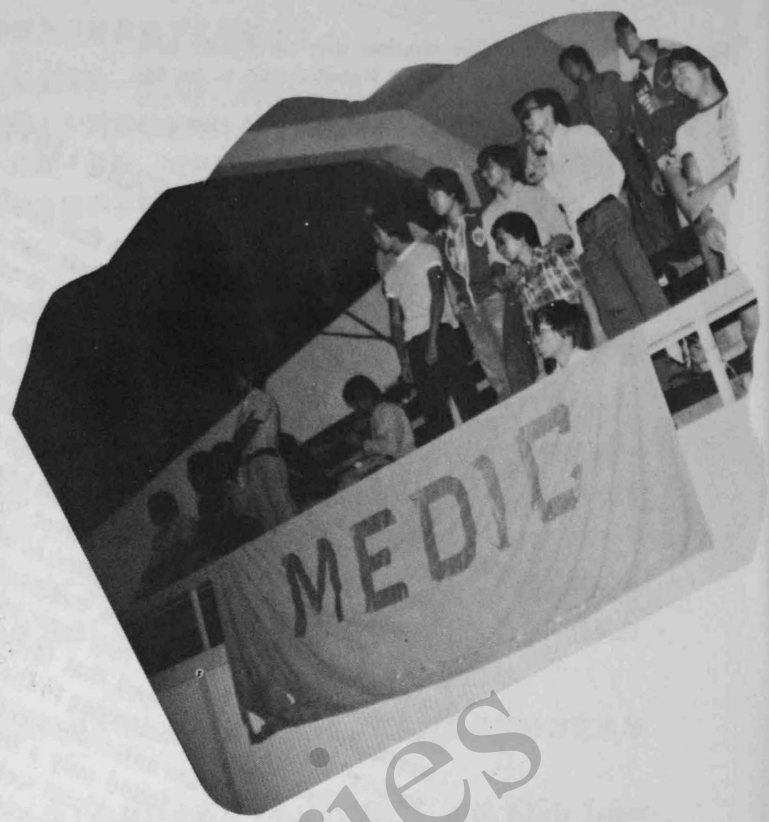
A. Interfaculty Competition 1977-78

We won the 'Omega Rose Bowl' back this year, the trophy which we had previously hold continuously for seven years, except the last two years (75-76, 76-77)

We are the inter-faculty overall champion, out of the 12 games, we came:–

1st	in	Aquatic Athletic Lacrosse Softball Table-tennis Tennis
2nd	in	Hockey Soccer
3rd	in	Squash
4th	in	Volleyball
6th	in	Basketball

* As for badminton, we had withdrawn for the reason of the club mishandling of the match Medic Vs Eng. This is also to protest the seemingly (act of sportsmanship in some of the intra-university matches.



B. Inter-year Games

Among the competing trophies

Dr. Frank Cheng Shield – overall class champion
Prof. Gibson Cup – inter-year X-country
Dr. John Lanton Shield – tennis champion
Dr. T.K. Chan Prize – men's champion
Dr. H.Y.C. Liu Prize – ladies' champion

The last two were donated this year. Their donation would be a further encouragement on our Medic Sports.

The inter-year competition was held between 10th of April to 5th of May. Prize presentation was on the day of the last event – X coutry run.

We had
Dr. T.K. Chan (Medicine)
Dr. Frank Cheng (Surgery)
Dr. S.F. Pang (Physiol)
Dr. H.C. Ho (Path.)
Dr. S. Dai (Pharm.)

Who came to present various prizes & Trophies for us.

Results were of follows:–

Ladies

	Champion	1st runners-up
Basketball	2nd	1st
Volleyball	4th	2nd
Table-tennis	4th	3rd
Badminton	4th	2nd
Tug-of-war	2nd	3rd

Champion 4th & 2nd (1977-78)

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Men

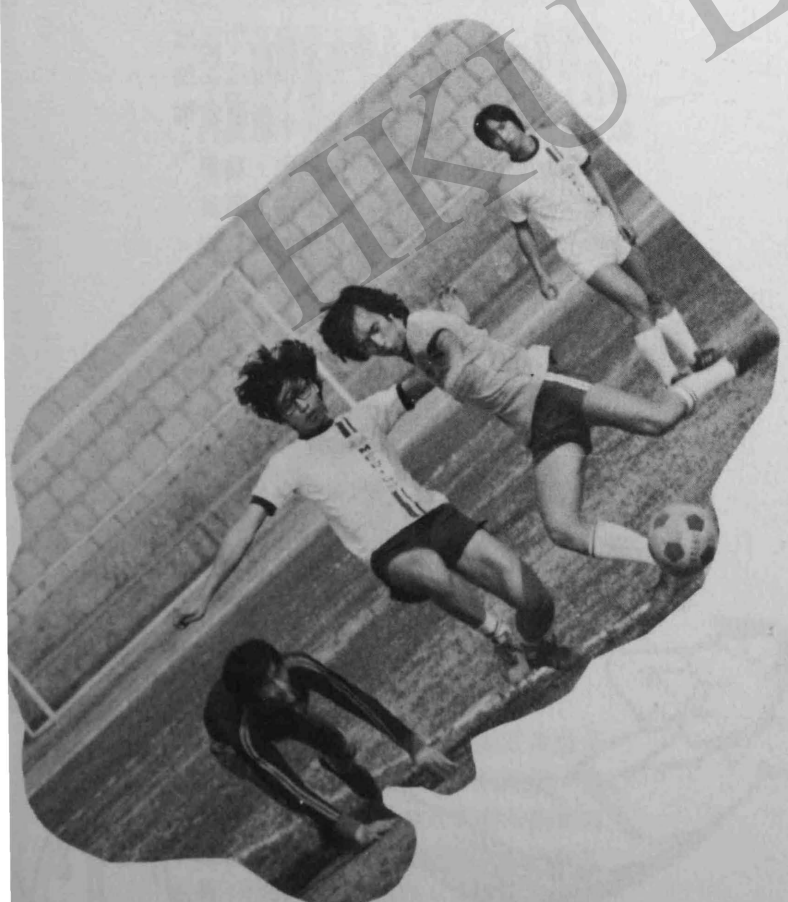
Badminton	4th	3rd
Basketball	1st	3rd
Hockey	4th	3rd
Lacrosse	3rd	1st
Soccer	1st	4th
Softball	4th	3rd
Squash	4th	1st
Table-tennis	3rd	4th
Tennis	3rd	1st
Tug-on-war	4th	1st
Volleyball	2nd	1st
X-country	2nd	4th

Champion : 4th (77-78)

Class Champion:–
Ladies : 4th & 2nd Co-champion
Men : 4th

Aquatic Meet (held on October 1977)
Champion : 3rd
1st runners-up : 2nd

Inter-year overall class-champion : 4th (77-78)



Apart from the election of sportsman & sportswoman, a new award was made to the 'Most Valuable Player' in each of the faculty team.

Sportsman : Mr. Ho Kin Fun (4th)
Sportswoman : Miss. Chu Yun Chun (4th)

Most Valuable Players: –

Aquatic	:	Wendy Lau (Miss)	(3rd)
		Ip Man Ho	(5th)
Athletic	:	Iris Lau (Miss)	(1st)
		Daniel Lee	(4th)
Badminton	:	Robert Fong	(5th)
Basketball	:	Yeung Ka Cheung	(5th)
Football	:	Allen Wong	(5th)
Hocket	:	Tsang Wing Chiu	(5th)
Lacrosse	:	Ip Yan Ming	(5th)
Softball	:	Samuel Choi	(4th)
Squash	:	Hung Cheung Kin	(4th)
Table Tennis	:	Cheng Chi Sing	(3rd)
Tennis	:	Kenneth Lam	(3rd)
Volleyball	:	Chan Chau Sing	(5th)

Finally, sports prgramme from S.A. Sports Clubs was reported promptly back to the Faculty. Training courses attracted quite a number of our students who would like to improve on their skill.

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啟思啊啟思！

你是怎樣搞的？

夫啓思也者，乃典形學生報紙也。其別於一般學生報紙者，惟其風格清新，態度嚴謹，冶學術，文化於一爐。更甚者，報導詳實，版面高雅也。次如編者之的麼了呢，詩人墨客的鑫斯、螞蚱和氤氳的溥露，無不令人閱後寧靜舒泰，恨怨開解。又如文武廟內香火之盛，鏗鏘廊內聲韻之勝，更豈是一般市井小報之所能遠及？諸公若同：人辦報我辦報，爲何我們的啓思，遐邇聞名，聲望是這麼的高？細細讀下去，則道理甚明。

學生報紙，平常比較商營報紙，大有不同之處，曰經費無籌也，曰人手不敷也，曰技藝不精也，曰口齒不靈也，曰時間不足也，曰版式潰亂也，曰稿件稀微也，曰多方施壓也，曰考試測驗，外內相交煎也。然啓思自混沌初開以來，甚鮮見受上列因素所困惑，其中精緻之處，本爲不傳之秘，現雖公諸於世，然個別看法之精要，則仍需英明領袖當面授議，方能了解通透。

原來每年十月上下，各啓思編委上任之後即召集各路人人馬，其中有老柴（去屆的編委們），中柴（略知一二的，稍有浸淫的），及青柴（未緣涉獵，但有日日學習，天天向上精神，及尚年青，體力如初升旭日者）。這時候，閉上門，大家齊齊把會開。諸君注意，門雖閉，但未上鎖，會議日期地點，例必公佈，並歡迎民衆參加。曰問：開的是啥會？編委會議是也。

編委會議中之特色，是口部進出平衡。夫口沫之既出，則自有採補輸入之必要。輸入之原料，多由委員同人加工，務求衞保健，資金方面，則由各人科斂，不損人民涓滴，由英明領袖當家作主者，則鮮有之。

編委會議之作用大矣，簡單道來，則爲啓思決策之機制也。政策中包括一年的計劃，辦報的方針，特寫、專題的內容。又會訂下各柴的職責，服務的範圍；把各青柴，積極鍛燒爲中柴，再升華爲老柴——柴之極品矣。鍛柴時，常加通材訓練，不論編輯，研究，校對，設計，貼版，出外拋頭露面，明查暗訪能之技倆，無不視爲必修要目。故一經擢爲老柴之輩，無不三頭六臂（而中柴只約二頭四臂，餘類推）。

啓思政策的結果，人民可見於各專題之成立，職位如總務、宣傳、聯絡、福利、新聞、校聞的新設、文藝版之加入。此外如飯堂前的新聞版，近來的一些問卷及分析等，皆是有目共睹，有名有實，毋庸置辯。

於是政策發出，各柴奔走造訪、約稿後，則必有稿件之投入。稿（一名字紙、一般市井小報老編常置於字紙簍內，啓思的則珍藏在唯一的書桌內，啓思保密，密密實實。）件一經上達，面世之機會異常樂觀。故諸君如曾致稿投校內別報，受了欺負，或欲投稿而對取錄失欲信心：歡迎你們走進啓思的懷抱。

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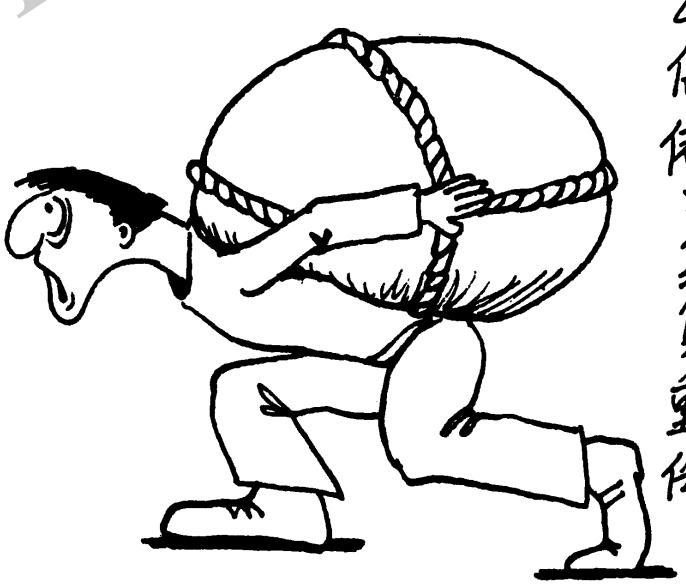
目見來稿充足，老編們殷渴的面上，無不喜形於色。把每篇稿件，反覆細嚼多次後，便要設法找出錯別字，不通順之處，加以改正（啓思來稿水準偏高，錯別字不容易找）。如有來稿字體潦草，或英文稿沒有打字，老編們則需連夜開工，抄的抄，打的打，忙個不亦樂乎，無他，因此類來稿若取之照排，則後果非常人所能理解也。老編們又爲取

悅廣大讀者的眼睛，常加入其吸引力之副題，段題等，使繁忙之人氏，只看題目便知曉文章之大義。時人來稿時，常中英並用，拋名辭，洒術語，故老編要責之，乃是決定一文究是中是西（以便放於中文或西文版），決定後，便匆忙把不必須的異種文字，翻譯過來。如有譯後難懂，或不完全達意者，則保留之。

老編並非萬能，但鑒於表示博學，及免遭人白眼，故需頻頻進行研究。研究也者，褒稱也，內容包括參考文献（實例：如不懂其中文字寫法，可從英漢辭典中，以同義的英文字找出該中文字來，絕也，非老友不傳）。其他有不通，不詳之處，又得四方打探，問道於高名，一切一切，在此不表。接着，在未多與公仔佬及排字廠前，再圈圈點點，及註明某處須要着重、注意，以示威信。

關於報導性的文章，領袖經常指示各柴四出調查，以察秋毫，明實僞，蓋啓思對時下刋物有意無意間頻常誤導的手段最爲反感，而英明領袖，亦以勇於求眞，作爲一生之抱負。另方面，對人事上之稱謂（如某某委員長，何許組織，什麼博士），亦不能輕加疏漏，而招致日後之責難，甚至招下禍根。法律方面，更萬萬不可觸怒朝廷，引起封報拿人之弊。故措辭須婉轉幽雅，指責務含糊撲朔，再貼一道「作者意見，不代表各柴意見」之靈笑，以作後路。最後，適當加上各式致意，鳴謝，文章介紹、評論、注析、按語等，以表示各柴功力深厚，欣賞水平高，看得頭頭是道，說的面面俱圓。

公仔佬（官式名稱爲視覺效果設計編輯），生活清苦，既無老編之聲望，手藝兒常遭羣柴的批評。一般來說，公仔部各柴（有時爲單柴）應苦學印刷知識，簡單而設計，及勤練認識各歟中西文術字，與裝圖技術，保證滿足羣柴需要（如釘補文章間空白的地方）。又必須服務快速，上午來，下午起。凡設計文題，版頭插圖，採用照片，文章整體形狀配置，皆須勞神。（君不見本年啓思新招牌？）至於文章橫直排法，採用字體歟式大小，及細節如套色方法，網底法，圍邊法，反白法等，更不用詳言。爲求版面美觀，圖案、照片的書籍資料又必須搜羅，必要時需要拿出私己，以平息衆怒。公仔佬又應具伸縮本領，



在最困難環境，最貧乏條件下，多快好省地完成作業。

公仔佬可慰者，乃可決定全報之版面風格。風格者，大至一頁之安排，小至標點之運用，無所不包，所謂縮龍成本，盈於六合，是個好東西。明眼人或已察覺啓思的文章，不論中英，大都改作橫排（除文藝作品外）。文章內部，常見■●△的符號，大都是公仔佬做的手脚，其他細節，不煩讀者，只傳弟子。

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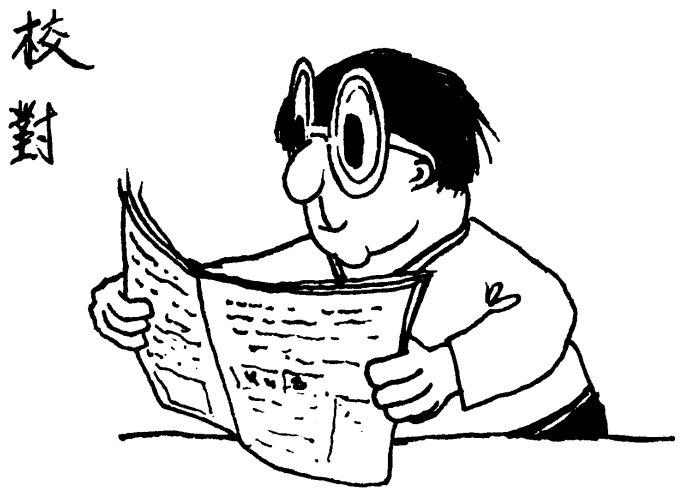
於是文章交往排版、校對。君莫啓思文章用字間有誤植，蓋來稿諸君，其中興之所至，行文如行雲流水，對稿之各柴，於排字房中，約莫於十五、六箋茶時份後，早已頭重如鉛，忠奸莫辨。



一切辦好，把排出的文章，每篇試印一次，是謂打稿。打稿紙運回啓思總部，便展開貼版工作，把文章剪裁，放入適當版位，改正行列中的位置錯誤，加上題目，插圖，版頭，照片，廣告以及詳細指示，如用色，縮放，反白，深淺等不一而足，便可付印。貼版者，把以上資料指示，統統置於眞實報章大小之紙上，以便攝影製版也。貼版時，亂如七國，紙張工具滿增飛，有一紙功成萬紙之欣榮風貌。

諸君或以爲至此一切事成。非也，新聞版上之內容寫作剪貼，有專柴負責。把報紙傳遞至校內校外之人民，機關者，有流傳專柴負責。此外如聯絡，記錄，總務，福利等，皆柴盡其材，方有啓思今日之成。財經方面，唯有人民微薄之徵餉，然每年皆需對外運籌，才足糊口之糧。

可見，啓思一報，雖非經千辛萬苦，然亦雖全柴皆兵，加上英明領導，方可面世。啓思各柴，與諸君實在親又親，與諸君務必心連心。啓思與人民，應當團結起來，對人類有較大的貢献。

本專責委員會對各人民的支持，表示熱烈感謝。對工作繁忙的人民，我們做了附列的出版程序表。讀了表，便不需讀本報告。

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General Editor

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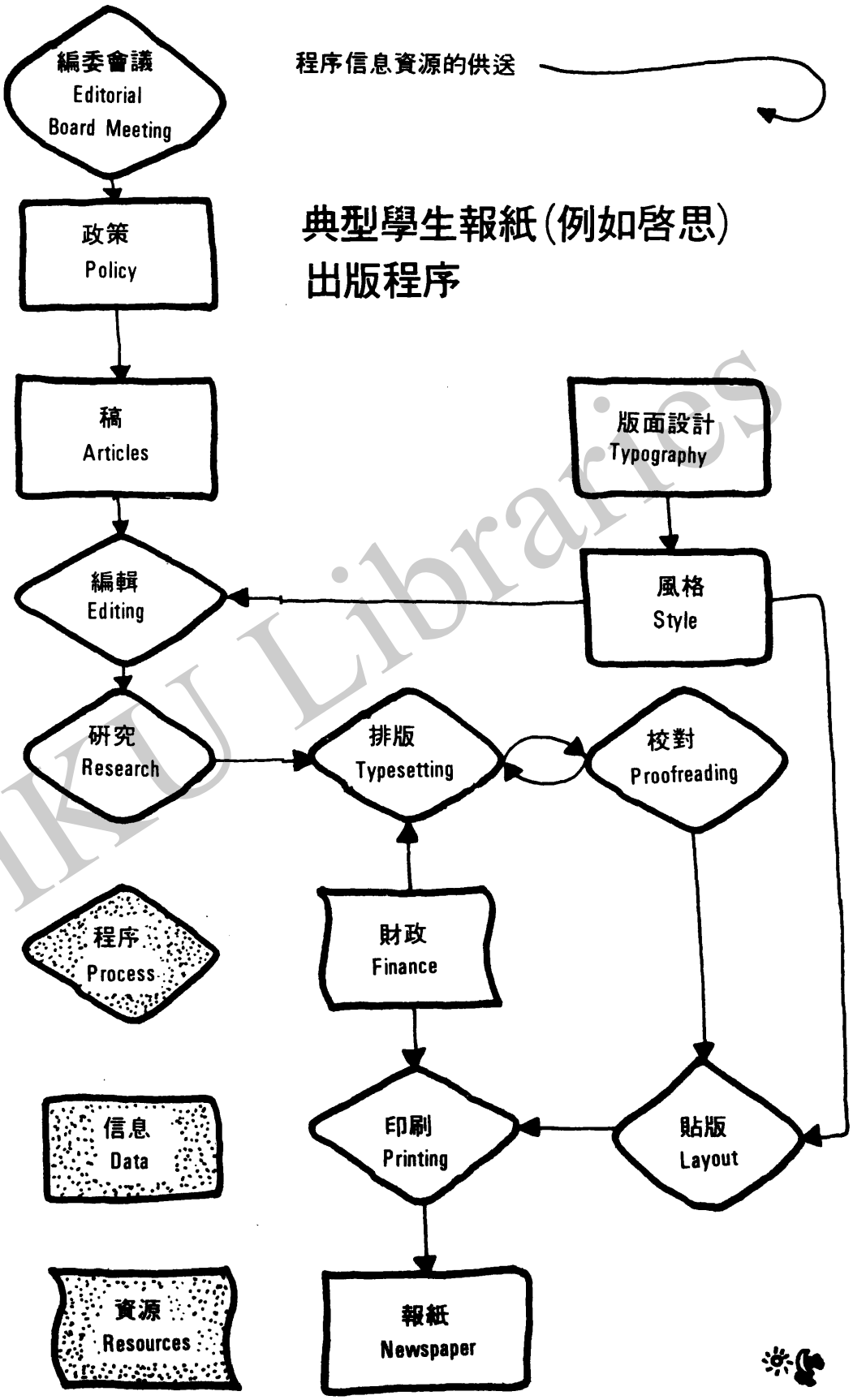
美術編輯
Art Editor



典型學生報紙(例如啓思)出版程序

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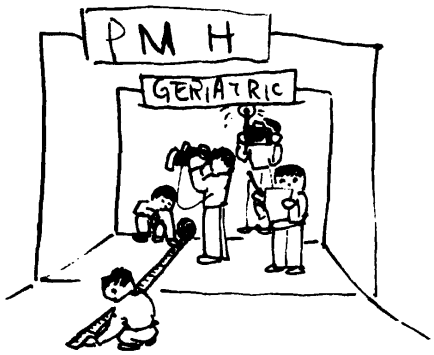
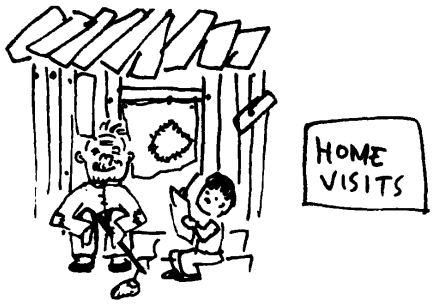
健康委員會全年活動一覽

健康委員會

1





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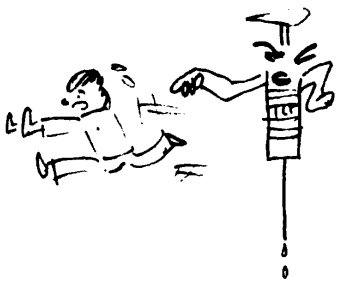

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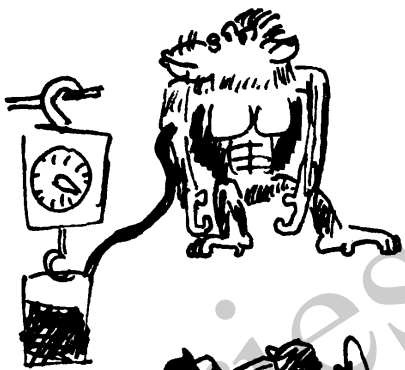

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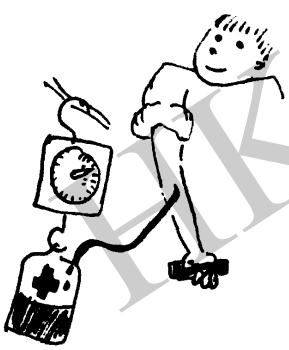

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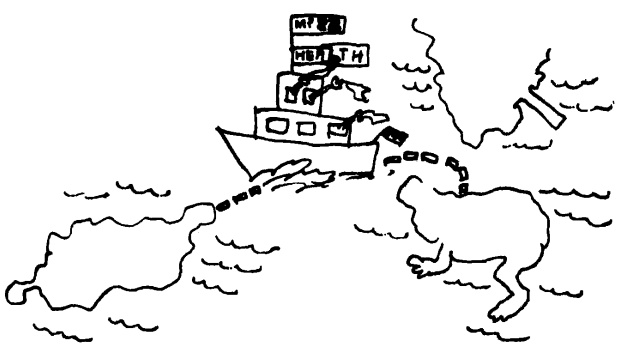

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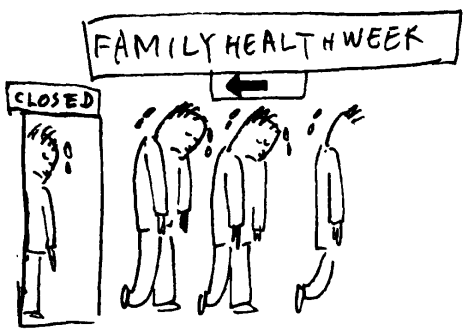

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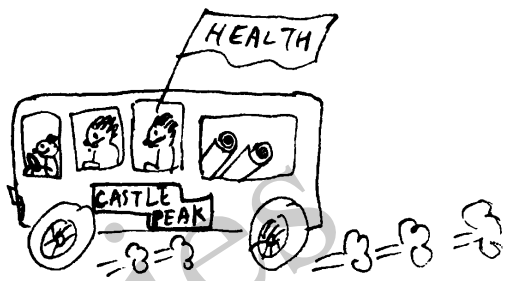

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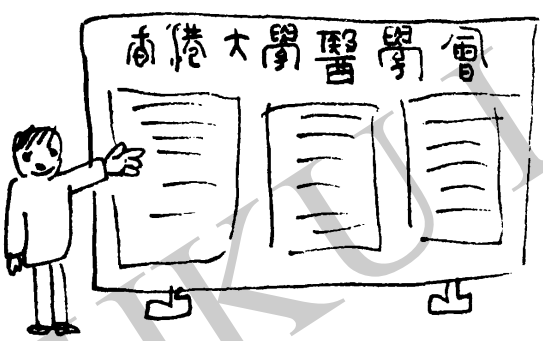

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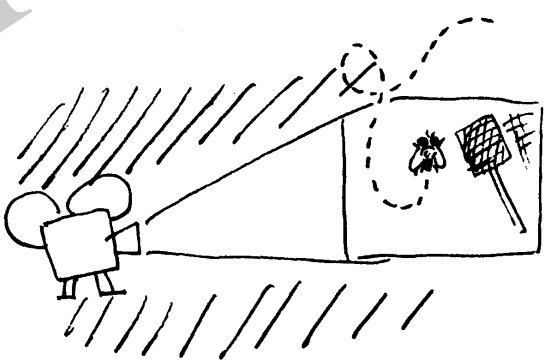

一月四日至二十日①
香港老人問題研究
參觀瑪嘉烈醫院老人科
家訪
座談

三月②
破傷風與小兒麻痺症防疫注射

四月七日至十三日③
心臟周展覽——海運大厦

五月九日④
捐血日

六月七日⑤
與小童羣益會的小學生談眼睛保健知識

六月⑥
放射診斷與洗腎服務研究

七月⑦
理工學院的實驗室診斷課程研究

八月初⑧
參與八二年級的健康的大澳活動

十一月十日⑨
與醫學社會工作員座談

十一月廿二日⑩
捐血日

十一月⑪
醫生前景面面觀

十一月廿七日至十二月二日⑫
參加講解大學診所辦的「家庭健康周展覽」

十二月十五至十六日⑬
流動展覽（在屯門）。題目爲烟酒與健康

十二月卅一日⑭
以小型展覽形式參與中西區民政署等辦的「家庭嘉年華會」。

午間電影。⑮

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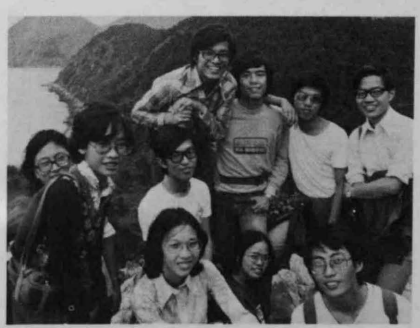

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Medic 79

This year has been characterized by a rotation of specialty clerkships. Before starting the circle game we had lots of fun together in the term break Class Dinner, and activities like social gathering, outing, canoeing etc.

After that, it was difficult to organize activities in a large scale. Most activities are therefore limited to intra-group functions. However, we still managed to organize a talk on Medical Hazards with the Medical Society, and a celebration for the Mid-Autum Night Festival in our class.

Although we could not afford time to have much practice in our sports games, we gained many laurels in the Interyear Sports Competition. We are the overall champion of the year. We won the Men's Championship and shared the Ladies' Championship. The Sportsman and Sportswoman were both from our class. Also 3 of our classmates got the 'Most valuable player' awards.

The rotation is now coming to a stop. We have soon to face tests – namely in our academic skills in the coming examinations, and in our goodwill in our future dealings with patients as doctors. Let us be successful in all these tests.

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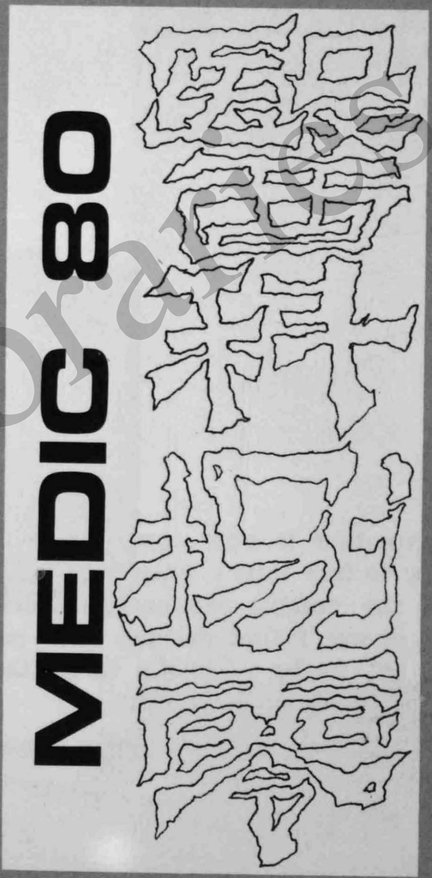
Medic 79

團結互助携手齊邁進
萬眾一心並肩為人羣



OCT	77	TEA PARTY
DEC	77	SOCIAL GATHERING
FEB	78	CLASS BUFFET：大食會
APR	78	INTER-YR MATCH (77-78)：1ST RUNNER-UP
MAY	78	ANNUAL DINNER
JUN	78	CLASS GAMESDAY
JUL	78	LAUNCH：西貢
SEP	78	BEACH PARTY：石澳迎月
OCT	78	INTER-YR AQUATIC MEET (78-79)：2ND RUNNER-UP
OCT	78	MEDIC FESTIVAL：THE DR. T.K. CHAN CUP WINNER

MEDIC 80

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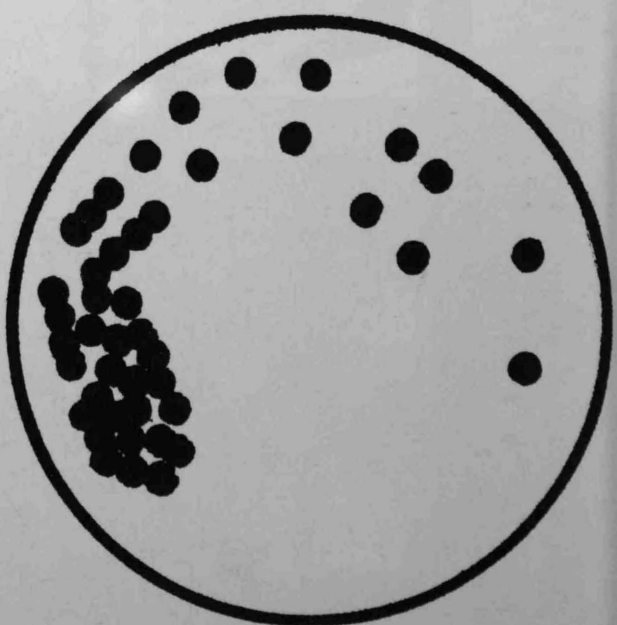
MEDIC 81

The most colorful days in the past year were in the third term of Second year and the long summer vacation. Tea party, barbeque and gather-together-eating were most valued and very enjoyable. These certainly became memories now.

Sharing our experiences in other interests strengthens our bonds, be it passing a driving exam, be it a bit of handicraft-so hearty! So funny! Our class magazine collects many contributions. May our neighbours cry or smile, we have a graceful share whichis a spice of life.

Outdoor and indoor camps, mountain orienteering, cannoings, Marathon race, and perhaps social gatherings were essential physical trainings to prepare us for standing long hours during the ward teaching sessions. We forsee this. We are champion in both the cross-country and Volley ball game.

Brilliant performance by our champion soloist and winning of champion, 1st and 2nd runners up in the group singing are our pride in the Medic Nite.



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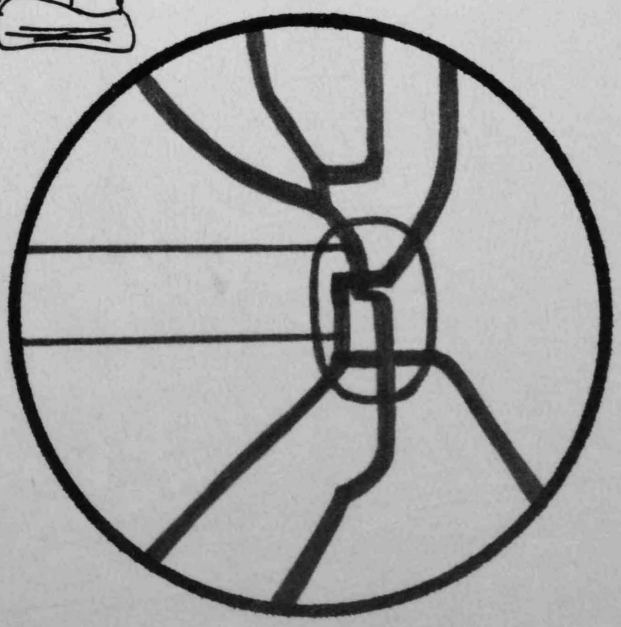
The Tai O project and Christmas service to Yuen Long Home for the Blind in December provided good opportunities for us to give.

We are satisfied with the past year because we are more than we were, both mind and soul.



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舉辦文康體活動，一方面使同學之興趣有所發展，兼可培養和加強同學的團結，及對班的歸屬感。

發揮互助互愛的精神，促進同學們一同思想、學習、研討的氣氛。

放眼世界，認識社會，團結同學力量，肯定將來責任。

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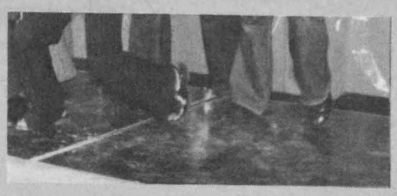
要配合醫學會的方針和發展，加強醫學院整體性。



聯繫各班感情及師生感情，增加融洽氣氛。

反映同學需要，向校方爭取合理權益。

留意學運進展，鼓勵同學多參加學生會活動。

關注社會動態，發動同學作出適當反應。



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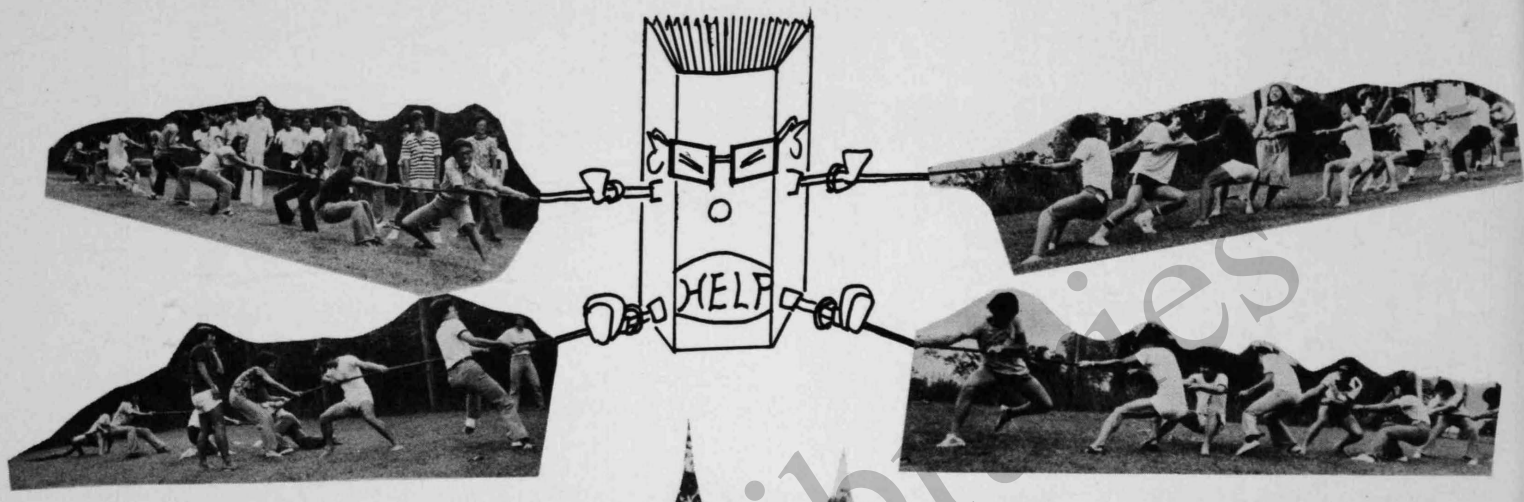
Medic 83







八二精 八二勁

八二合作無得頂！

熊熊烈火 把它煮熟啊！
熟書啊！ 熟書啊！

雄心萬丈前路悠長
放眼千里士氣高張
八二同學各懷理想
願為良醫堅守方向

唉！ 終于熟哂！
可以開開心心食餐飽囉！

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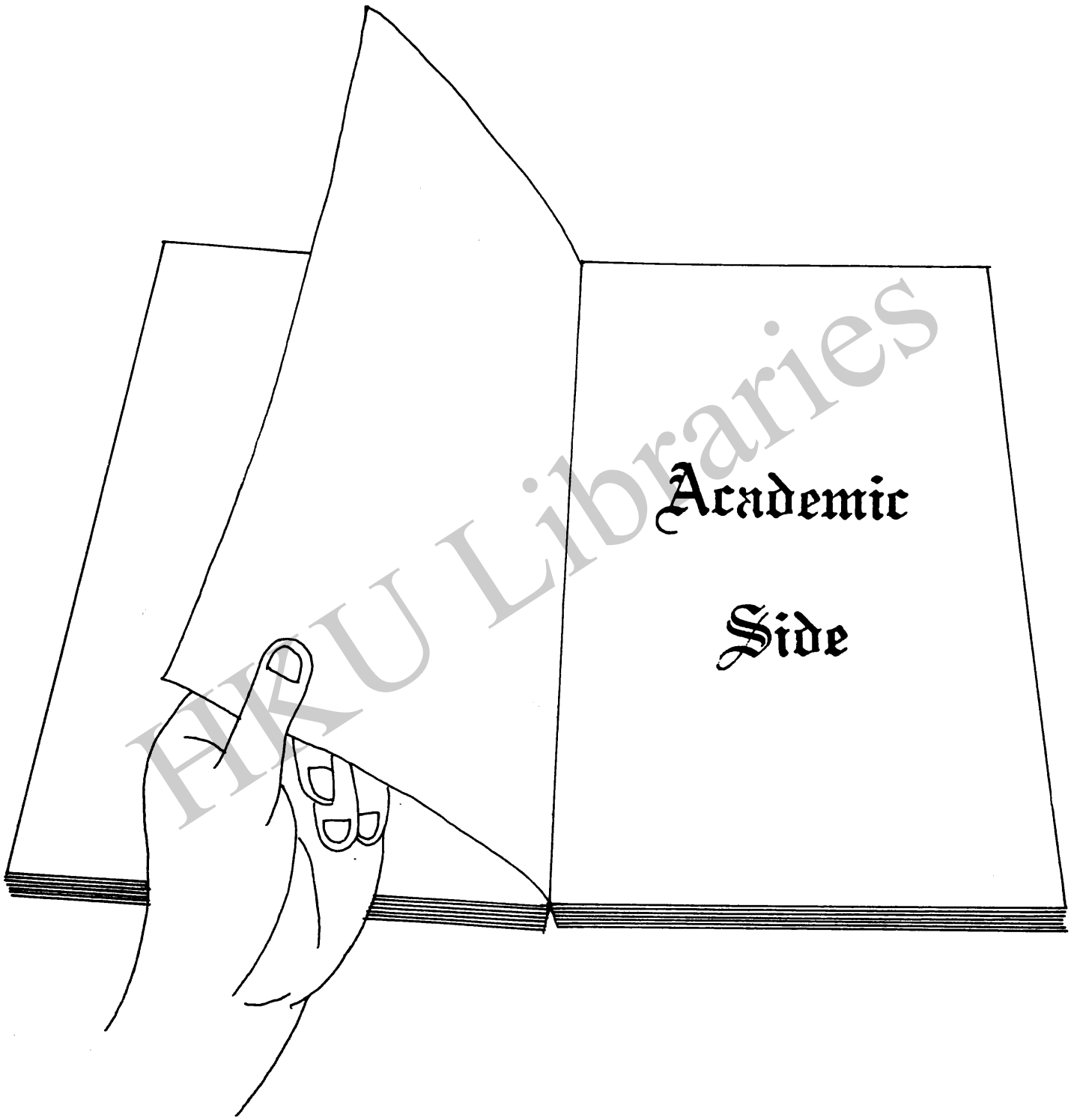

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CARCINOMA OF THE OESOPHAGUS

By

K C McKeown, CBE, MCh, FRCS(E), FRCS (Eng)

Lately Senior Consultant Surgeon
Darlington Memorial Hospital
Darlington, County Durham

THE 9TH DIGBY MEMORIAL LECTURE DELIVERED AT
UNIVERSITY OF HONG KONG
QUEEN MARY HOSPITAL

I am deeply honoured to be asked to deliver the 9th Digby Memorial Lecture at the University of Hong Kong. It is in tribute to the outstanding work of Professor G B Ong that I have chosen the subject for this lecture.

Though one of the less common forms of malignant disease, carcinoma of the oesophagus is perhaps the most interesting from the point of view of its epidemiology, its aetiology and the enormous surgical challenge which it presents.

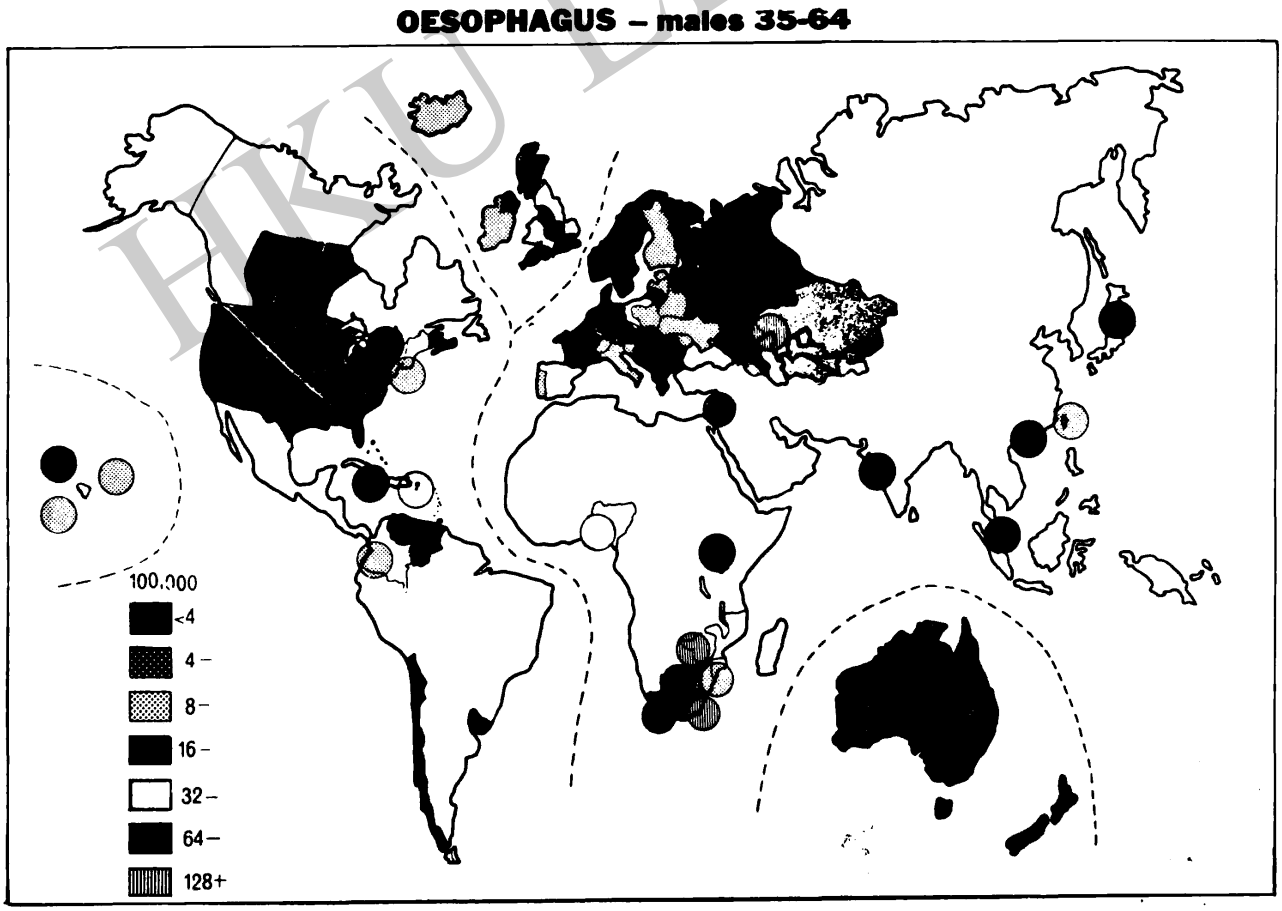
AETIOLOGY

The aetiology of cancer of the oesophagus like cancers at other sites, is multi-factorial and may well bear a close relationship to environmental factors.

GLOBAL DISTRIBUTION

Perhaps one of the most interesting features of cancer of the oesophagus is its global distribution (Fig 1). This shows very wide variations in the frequency of occurrence in different countries. (Doll, Muir and Waterhouse 1970, Waterhouse et alia 1976)

Though data is incomplete the condition appears to be very common in Iran, in the Transkei district of South Africa, in Bulawayo, in Brazil, and in certain districts of China. Study of the geographical pathology suggests that in Asia there is a high risk belt extending from Eastern Turkey through Iran, Afghanistan and the Himalayas to the Honan province of China (Muir 1978). In this high incidence belt over 200 cases may occur per 100,000 of population. In South Africa the high incidence of the disease is seen in the Bantu tribe where there are 35 cases per 100,000 population. The condition is relatively rare in Europe and in the United States.



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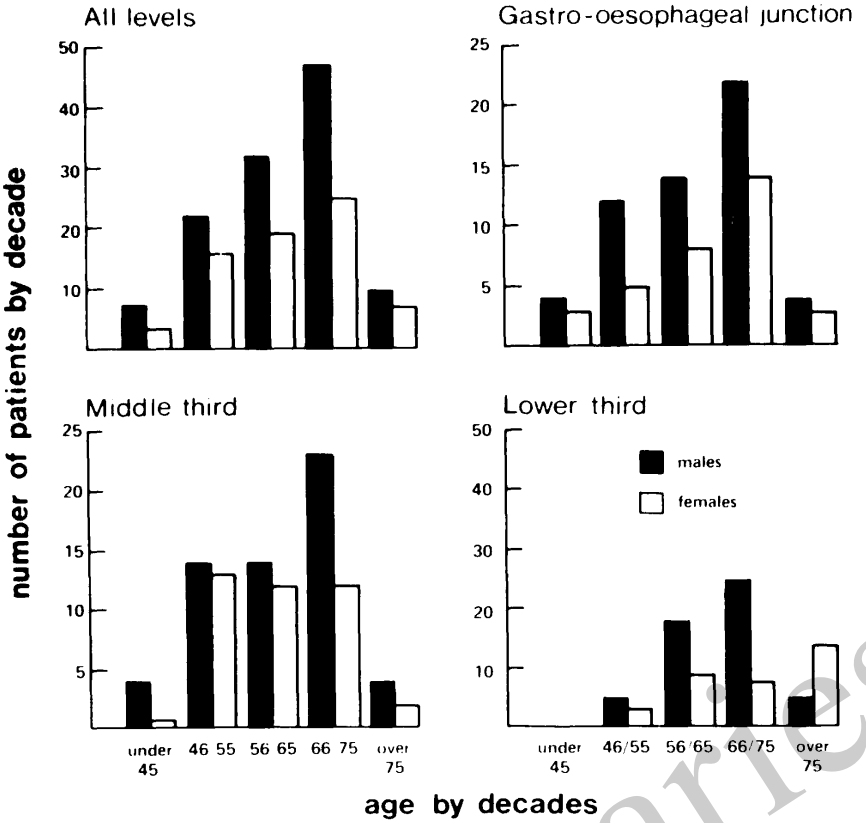
AGE AND SEX INCIDENCE OF CARCINOMA OF THE OESOPHAGUS



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REGIONAL VARIATIONS

One of the most interesting features is the wide variations of occurrence even over very short distances. In Iran the incidence in the Gonbad district south east of the Caspian Sea reaches 174 cases per 100,000 population, while in central districts of the Gilan province east of the Caspian the incidence is 13 per 100,000. (Gillis & Hole 1978). Similar observations have been made in France where there is a high incidence in the regions of Normandy and Brittany, and in which there are considerable variations even in the different departments of each region. Similar local variations have been noted in the Transkei, in China and even in north west England.

AGE & SEX

In Great Britain the disease occurs in patients of advanced years and there is a progressive increase in males and females coming from treatment in each decade over the age of 45 (Fig 2) (McKeown 1972). Sex incidence in the Darlington/Northallerton series shows a preponderance of males over females in theratio of 1.7 : 1, a figure which corresponds to the Registrar-General's figures for England and Wales (1968). Sex variations also occur according to the site of the lesion, and cancer of the lower end of the oesophagus appears to be more common in men whereas hypo-pharyngeal growths tend to be commoner in women. The sex incidence however, shows wide variations from country to country and in north east Iran the condition is much commoner in women.

TIME

From the data available there appears to be a marked increase in the frequency of occurrence of cases in the Transkei over the past 20 years (Keen 1978). A less dramatic increase of incidence is noted in men in France and in non-whites in the United States (Doll 1967).

ALCOHOL & TOBACCO

The condition is said to be more common in hoteliers, barmen and commercial travellers and in occupations where there is an increase in alcohol intake. The drinking of native beer brewed from maize in old oil-drums with the addition of toxic witchdoctor plant concoctions is thought to be a factor in the high incidence in the Bantu tribe of South Africa, though this is not confirmed by other investigators (Cook 1971). The smoking or chewing of tobacco is considered generally to be an aetiological factor (Stocks 1950, and Wynder and Bross 1961). In a review of 307 cases of cancer of the oesophagus Jafarey and Zaidi found that chewing tobacco carried a greater risk of cancer of the oral cavity, while in cancer of the oesophagus smoking played the greater role where the risk of cancer was increased 24-fold. (Jafarey and Zaidi 1978). It is thought that the combination of smoking and alcohol together carry the greatest risk.

CHEMICAL FACTORS

It has long been recognised that lye burns often appear to lead to cancer of the oesophagus in later years. Of more recent times great attention has been paid to nitrosamines as an aetiological factor. Nitrates being converted into nitrites can combine with amides to form N-Nitrosamines which are mutagenic in that they cause alkylation of guanine and affect D.N.A. and R.N.A. (Nunn, Nunn & Roach 1978). Nitrates used in food production, in oils, rubber, fungicides and insecticides and in the preparation of canned meats may present a potential hazard while nitrates may be changed into nitrites by the action of saliva and in the upper gastro-intestinal tract. Contamination of foods such as nuts, beans and cereals by a mould (aspergillus flavus) produces a mycotoxin called Aflatoxin which is carcinogenic.

DIETETIC

Nutritional and dietetic deficiency may well be one of the factors in carcinogenesis. Poor protein intake often associated with the taking of diets largely consisting of maize which is of poor protein value, are frequently encountered. Deficiency in trace elements such as copper, molybdenum and of vitamins especially Riboflavine, in the diet are also of importance.

CLINICAL ASSOCIATIONS

1. *Patterson Kelly (Plummer-Vinson) Syndrome*
An association between the Patterson Kelly syndrome and cancer of the hypopharynx and oesophagus was first described by Ahlbom (1937). A study in Northern Sweden (Wynder, Hultberg, Jacobson & Brass (1957)) showed that signs of this syndrome were absent in only 29% of cases of carcinoma of the oesophagus. On the other hand in Great Britain few patients admit to symptoms of the Patterson Kelly syndrome before the development of dysphagia due to malignant disease.

2. *Achalasia of the Cardia*
This condition results in food stagnation in a dilated inert oesophagus. This results in long continued irritation and oesophagitis which may be followed by the occurrence of carcinoma as described by Fagge (1872). The growth occurs in the upper dilated oesophagus and not in the narrowed segment so that its presence could be easily overlooked unless it is specifically looked for. The incidence of this complication is put at about 7%. (Camara-Lopes 1961), and (Rake 1931).

3. *Hiatus Hernai*
Tanner (1954) reported 21 instances of carcinoma of the lower oesophagus occurring in his series of cases of hiatus hernia. Much confusion and contradiction of this association have been made in subsequent years. In a review of the literature Wilkins is of the opinion that reflux peptic oesophagitis in not a predisposing factor to carcinoma at the lower narrowed segment and that the association is purely coincidental (Moghissi 1977). Mayer et alia (1976) claim that the association is valid. In a very recent review of 52 cases of cancer of the oesophago-gastric junction, Webb and Busuttil observed a high incidence of oesophageal hernia. The great majority had symptomatic hernia but 4 had symptoms of reflux oesophagitis. (Webb & Busuttil 1978).

4. *Diverticulum*
Carcinoma has been reported as occurring in the lining of an oesophageal diverticulum or at its neck. The growth in these instances is of squamous type.

DIAGNOSIS

Diagnosis is based on clinical history, radiological examination, endoscopy, biopsy and cytology.

CLINICAL HISTORY

The condition usually presents as dysphagia in a patient of advancing years. Unfortunately difficulty in swallowing does not occur until the pathological changes are well advanced and much of the oesophageal wall is involved. Dysphagia is first for solids, especially meat, and then for liquids, a feature which differentiates it from oesophagitis with stenosis (Edwards 1974). The patient often indicates the site of obstruction with some accuracy, though an obstruction at the lower end of the oesophagus often gives a sensation of obstruction in the throat. The reverse however is not true and the patient does not indicate the level of obstruction below the actual level of the growth.

Sialorrhoea is distressing and food refluxes add to the misery. Overspill into the trachea causes cough which is often disturbing at night and chest complications are in consequence quite frequent.

Loss of weight, anaemia and halitosis soon follow, while voice changes indicate involvement of the recurrent laryngeal nerve. Extension into the air passages and lung may produce signs of oesophago-bronchial fistula, while pain in the back is quite common. Distant metastases are rarely diagnosed clinically.

RADIOLOGICAL FEATURES

Growths in the upper third are sometimes difficult to visualise because of rapid transit, but those in the middle third usually present a characteristic appearance. The stricture produced is long in extent and tortuous in shape and the lumen is often eccentric. There is a rolling of the upper and lower edge of the tumour and considerable soft tissue shadow (Fig 3). Dilatation above the level of the growth is not usually marked and occasionally fistulous tracts connected with the air passages and pleural cavity may be observed.

Narrowing of the middle segments of the oesophagus may occur from pressure from without as in mediastinal tumour or cardiac enlargement, but this pressure usually produces a smooth indentation (Fig 4). Spontaneous rupture of the oesophagus can lead to a bizarre appearance in the middle third (Fig 5). Rarely a small tumour is encountered (Fig. 6).

The differential diagnosis of the radiological narrowing at the lower end of the oesophagus produces some interesting features. Encircling growths can simulate achalasia (Marshak 1956) but usually obstruction due to achalasia shows a smooth tapering outline with very considerable dilatation above the obstruction (Fig 7).

The main problem of diagnosis at the lower end of the oesophagus is the differentiation from peptic stricuture. Though peptic stricture usually presents as a smooth tapering stenosis, a wide variation in appearance may occur and ulceration may lead to an irregularity similar to that produced in carcinoma (Fig 8). With shortening of the oesophagus a tubular segment of stomach may be pulled into the chest and give rise to a malignant appearance (Barrett 1960, Allison 1943) (Fig 9). Pressure from outside by an enlarged left lobe of liver, a dilated aorta or secondary neoplasms may give rise to difficulty. A small ring line indentation is sometimes present 3 cms above the diaphragm known as Schatzki's ring, but does not usually cause confusion (Schatzki and Gary 1953).

ENDOSCOPY

This examination is of great importance in that it enables a biopsy to be taken, identifies the level of the upper margin of the growth, and enables food debris to be removed and the oesophagus washed clean. The dangers are those of instrumentation and possible rupture of the gullets or the obtaining of a false negative as the result of the lesion being covered by normal mucosa. The use of the rigid instrument enables the fixation of the growth to be assessed and a larger specimen to be obtained for biopsy. The advantages of the fibro-optic instruments are ease of passage especially in patients with marked spinal kyphosis, but the biopsy specimen is often small and inadequate.

CYTOLOGY

Cytological studies of oesophageal washings have been employed not only in diagnosis, but also as a screening technique in Japan where the incidence of carcinoma of the oesophagus is very high.

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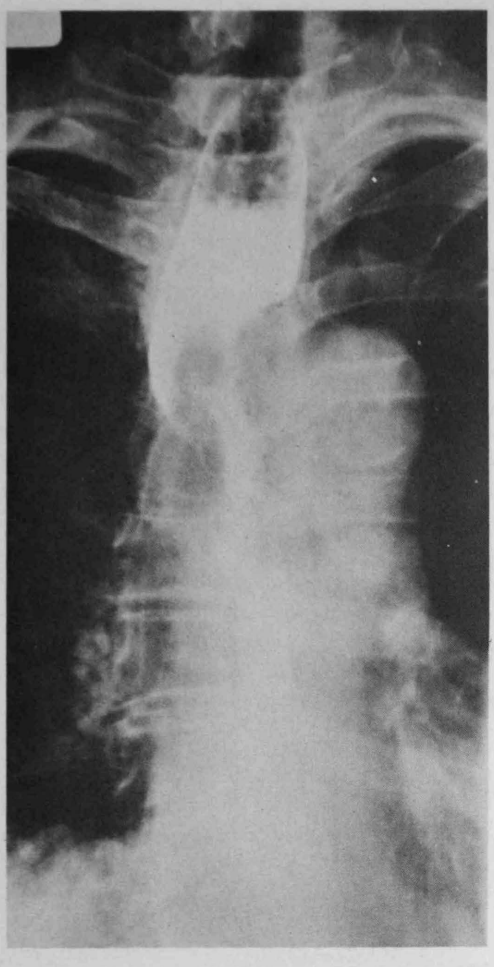

FIG. 3 a

FIG. 3 b

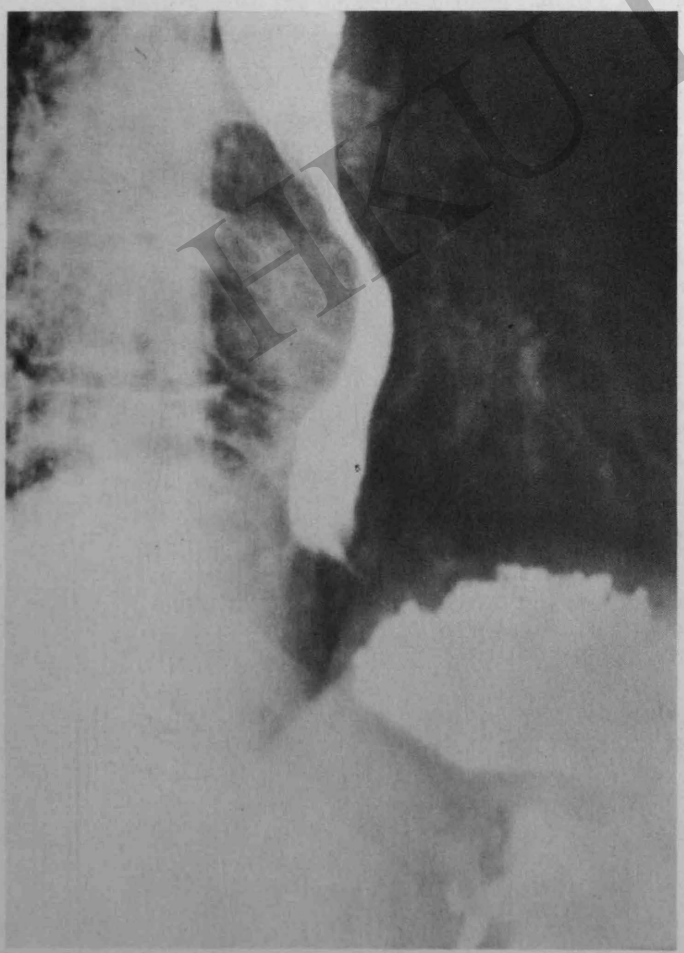

FIG. 4

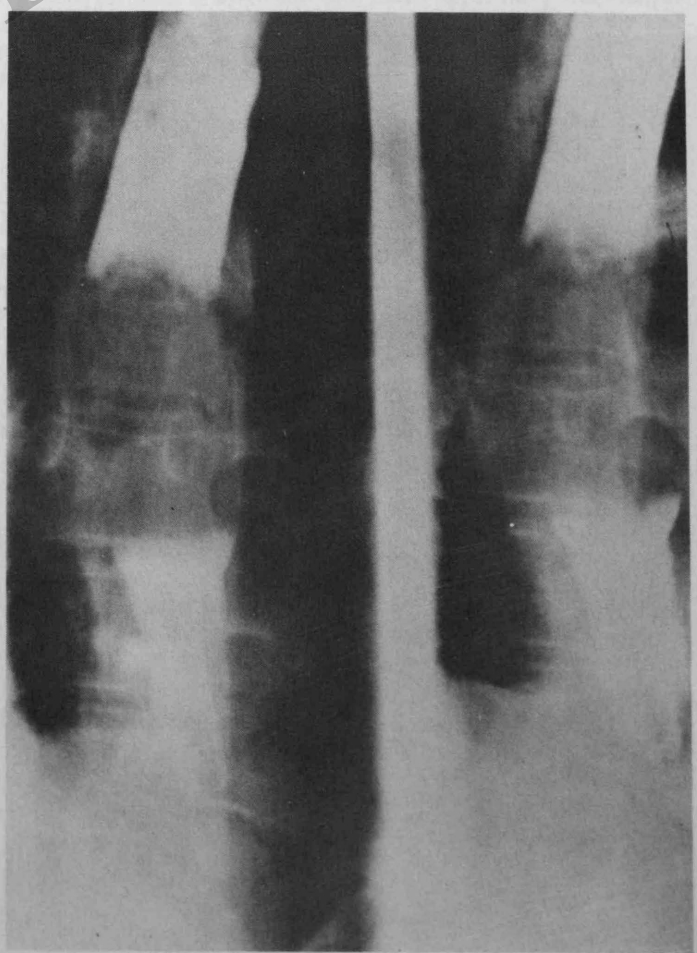

FIG. 5

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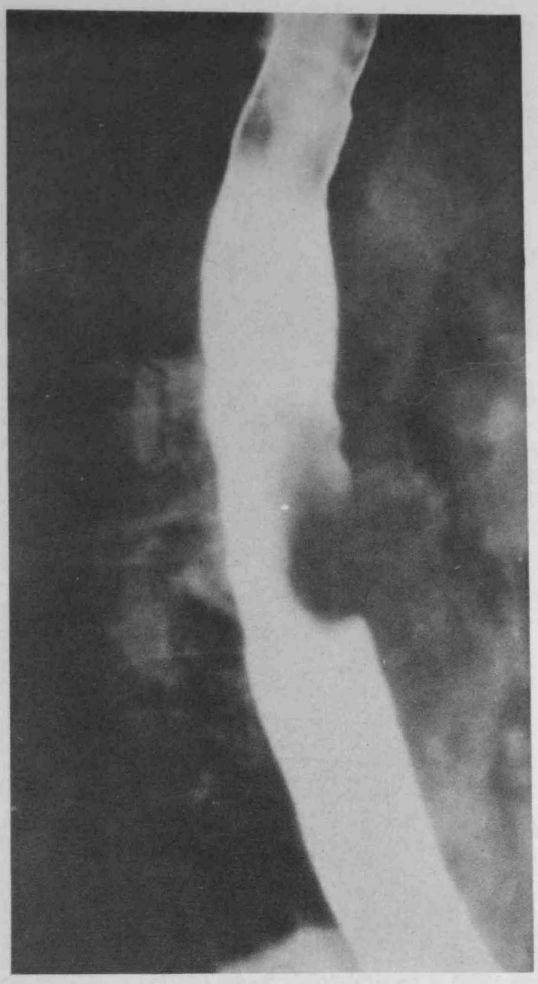

FIG. 6

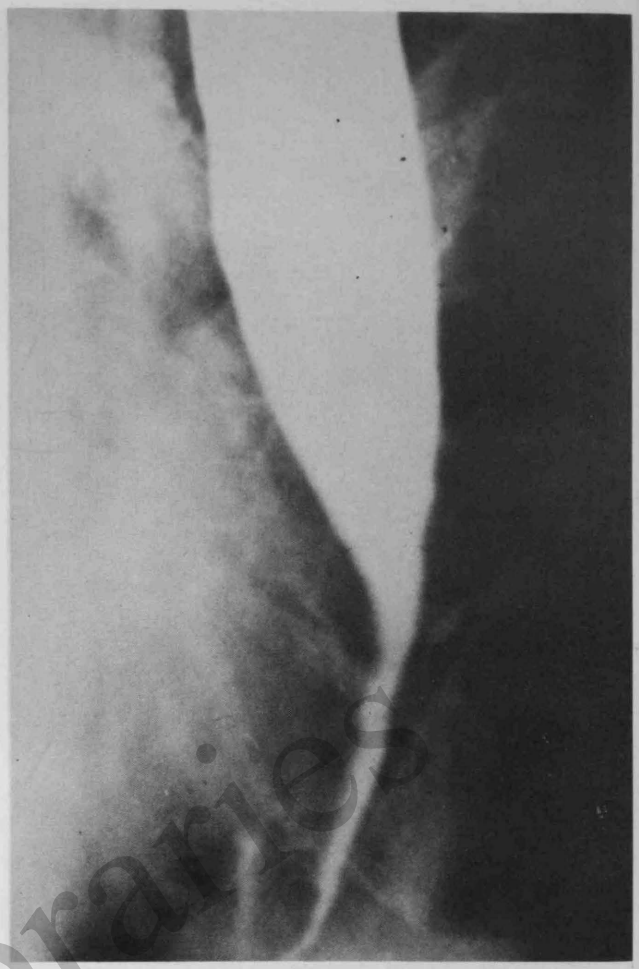

FIG. 7

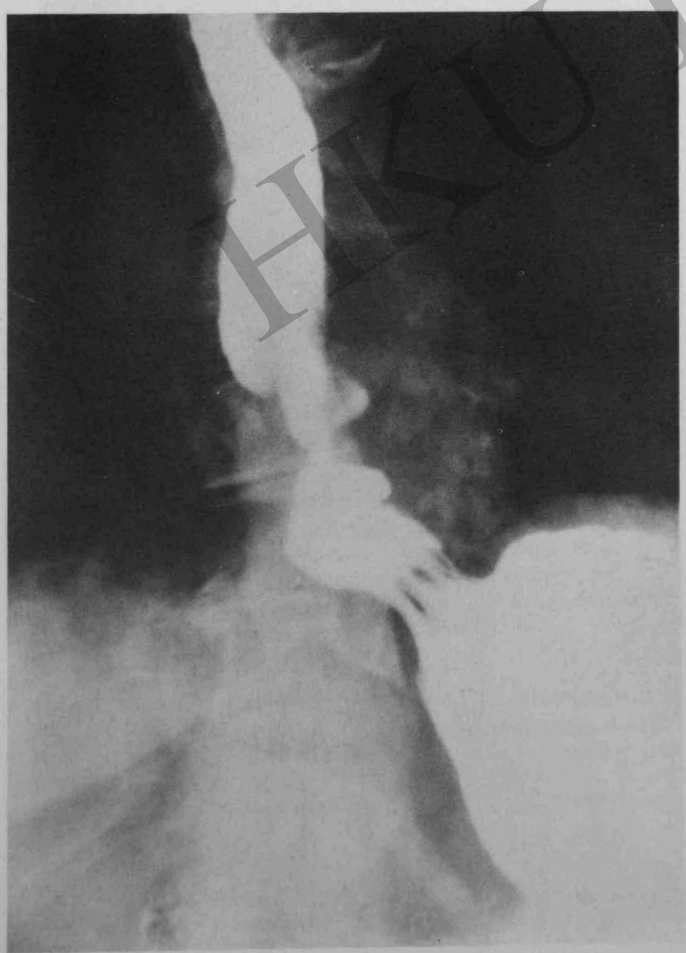

FIG. 8

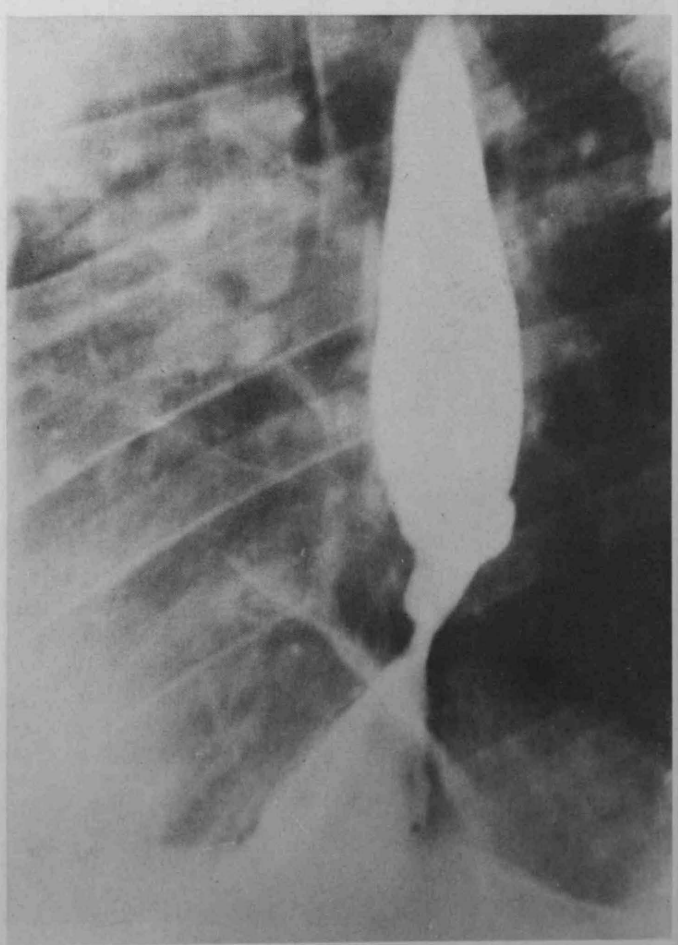

FIG. 9

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SURGICAL HISTORY

There are three phases in the history of surgical treatment of cancer of the oesophagus:

1. Intubation
2. Excision
3. Excision with immediate reconstruction

INTUBATION

It is not surprising that the earliest attempts at surgical treatment were purely related to the relief of obstruction. Symonds (1887) was the first to intube the strictured segment, but the prosthesis had to be held in position by an intra-oral thread attached to the lip margin. The coiled silver wire tube introduced by Soutar (1924) had the great advantage of being self-retaining and in modified form is still used today (Kallor & Leigh Collis). Tubes made of various plastic materials have been introduced by Mousseau-Barbin (1956) and Celestin (1956), while intubation with a special tube to slowly dilate the structure has been described by Didcott (1973).

In the present series of 403 cases intubation was only performed in 25. It was felt that intubation which has a definite operative risk, gives only moderate palliation and is perhaps inappropriate for growths in the lower third. Resection gave the best palliation even in 'inoperable' cases and intubation has been reserved for those unfit for major surgical procedure.

EXCISION

The first successful cases of excision of the throacic oesophagus are those of Torek (1913) and Zaavier (1913), but in neither case was there any attempt at recostruction. The patient had to be fed by gastrostomy or by connecting the cervical oesophageal stoma to a tube leading into the gastrostomy as recommended by Torek.

Grey Turner (1933) carried out a colo-abdominal pull through excision of the thoracic oesophagus to avoid the problems of thoracotomy. Pre-sternal reconstruction by many-staged operations took 207 days to complete (Grey Turner 1933). Such prolonged multi-staged operative procedures are inappropriate in elderly patients whose life expectation is so limited (McKeown 1972).

IMMEDIATE RECONSTRUCTION

The modern concept of surgical treatment is based on wide excision and immediate reconstruction. Occasionally delayed reconstruction is recommended (Nakayama 1959).

The extent of surgical excision is based on the knowledge of the pathology, the modes of spread and the site at which the growth is located. Growths may be ulcerative, polypoidal or desmoplastic stenosing and show characteristic modes of spread.

a. *Sub-mucous Spread*
Growths frequently burrow under the intact mucosa so that spread may well take place beyond the apparent margins of the growth. In addition by a process of lymphatic permeation and embolism, satellite growths may be present well beyond the confines of the tumour. (Fig 10).

b. *Direct Spread*
Circumferential and longitudinal spread lead to a stricture long in extent, tortuous in shape and with rolled upper and lower margins (Fig 3). The muscular wall of the oesophagus appears to offer little resistance to the tumour cells and spread occurs through the wall to involve adjacent organs. This accounts for the frequent involvment of the diaphragm, crura and the structures of the lung hilum. The aorta, perhaps because of constant movement, is not often deeply invaded. (Ong 1978).

c. *Regional Spread*
The disposition of the regional lymph nodes is illustrated in Fig 10. In the lower third, spread is to the paracardial, splenic, left gastric and coeliac lymph nodes. In growths at the lower end it is therefore possible to carry out an 'en bloc' radical operation excising the growth together with the spleen, pancreas and related lymphatic glands. In more extensive spread it is possible to excise the crura and if necessary the left lobe of the liver.

In growths of the middle third, spread is to the lymph nodes in the hilum to the tracheal, bronchial and broncho-pulmonary glands. In view of these features a radical operation is not possible. In the upper third, spread occurs to the superior mediastinal nodes and to the extensive glands in the neck. Radical operation is therefore not possible in the upper half of the thoracic oesophagus, and surgical excision must be regarded as essentially palliative.

d. *Distant Spread*
Spread to bone or the subcutaneous tissues emphasises the very malignant characteristics of oesophageal cancer. Now that more prolonged survivals are possible after surgical excision, distant metastases are more frequently encountered.

SITE OF THE GROWTH

Though anatomically consisting of a cervical, thoracic and abdominal portion, it is usual for surgeons to describe three divisions of the oesophagus. The lower third extends from the inferior pulmonary vein down to an including the gastro-oesophageal junction. The middle third extends from the aortic arch down to the inferior pulmonary vein. The upper third extends above the aortic arch and includes the cervical oesophagus.

It is helpful to sub-divide the three segments so as to equate surgical treatment to the site at which the growth occurs (McKeown 1972). Growths may therefore be considered to occur at 7 sites (Fig 11).

I.	Upper Third	1. Cervical
		2. Supra aortic
II.	Middle Third	3. Upper
		4. Lower
III.	Lower Third	5. Supra-diaphragmatic
		6. Infra-diaphragmatic
		7. Gastro-oesophageal

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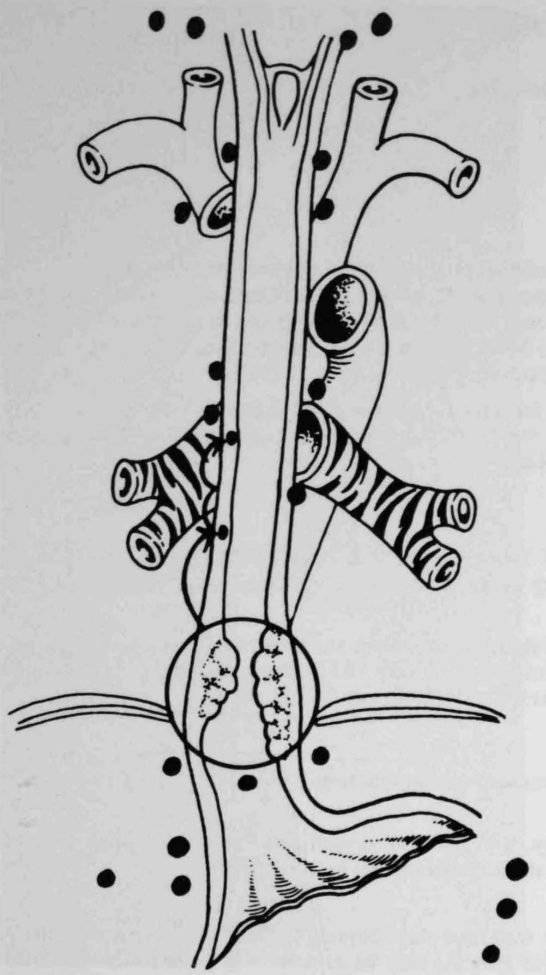

FIG. 10

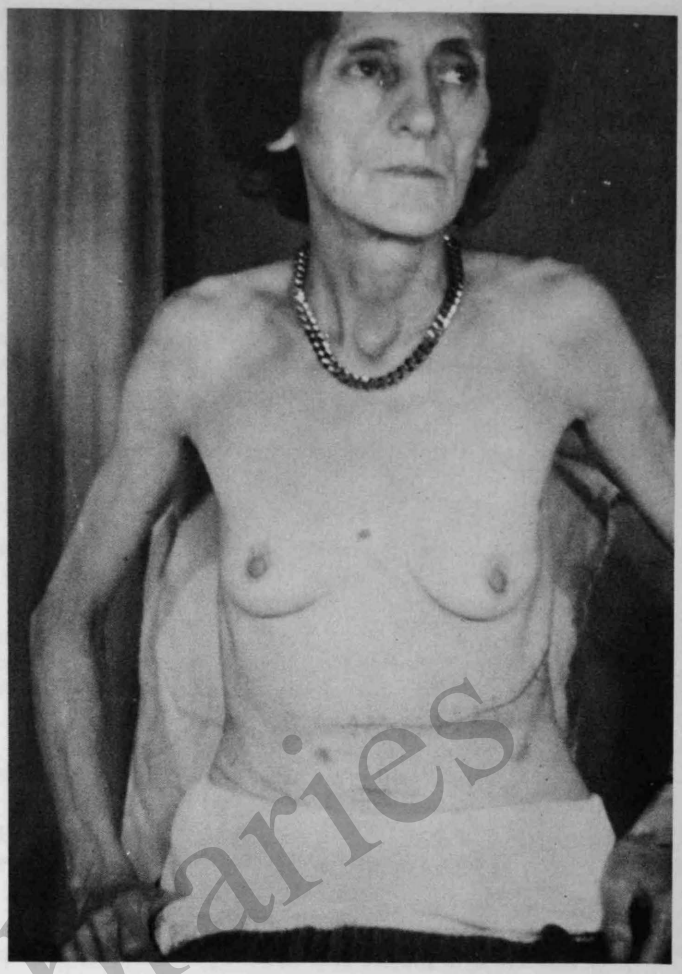

FIG. 12

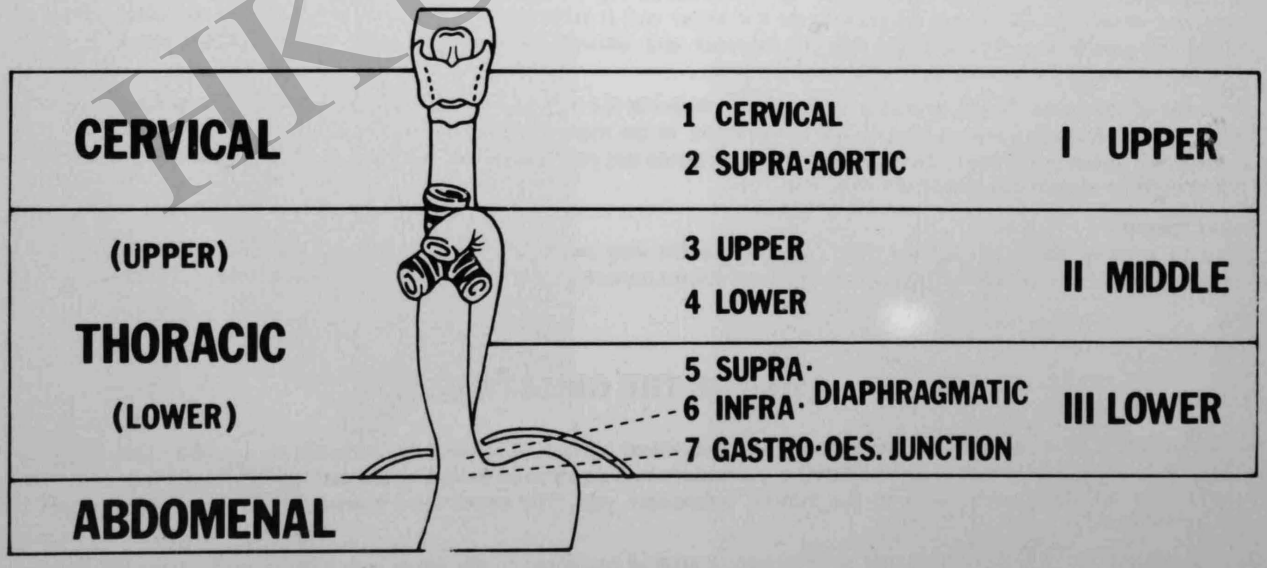

FIG. 11

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MATERIAL & DATA

Over the past 25 years in the Darlington/Northallerton series, a pattern of treatment has emerged appropriate to the treatment of growths at various sites (McKeown 1972). This is based on a series of 402 cases of which 237 were males and 167 females. The type of operations are shown in Table 1. The policy was to resect growths if at all possible and carry out immediate reconstruction, even if the growth was considered 'inoperable'. In only 6 cases was resection abandoned, while 25 patients unsuitable for major surgery were treated by the insertion of a Mousseau Barbin tube. Five cases had pharyngo-laryngectomy.

TABLE I

TYPE OF OPERATION (403 cases)

Operation	No. of Cases	
Roux-en-Y	62	
Oesophago-antrostomy	155	
Oesophago-duodenostomy	20	Total 237
2-Phase	66	
Total 3-Phase	59	
Anterior pre-sternal jejunal replacement	5	
Oesophago-pharyngo-laryngectomy	5	Total 135
Intubation	25	
Unresectable	6	Total 31
TOTAL		403

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THE PROBLEMS OF SURGICAL TREATMENT

There are four technical problems – those of access, the extent of excision, the organ of replacement and the route of replacement.

a. Access
Just as the problems of surgical access to growths at the pelvi-rectal junction have been solved by combined abdominal perineal approach, so too has access to the oesophagus has been facilitated by similar measures.

b. Extent of Excision
A clear margin of oesophagus above and below the level of the tumour must be attained. It is important that the line of section of the oesophagus should be 7 cms above the apparent upper margin of the growth.

c. Organ of Replacement
The criteria for the organ of replacement are that it must have adequate physical length, have a good blood supply amenable at operation, and provide easy mucosal union. Jejunum, colon and stomach – each have a role to play in oesophageal replacement.

d. Route of Replacement
This may be pre-sternal (subcutaneous), retro-sternal (pre cardial) or posterior mediastinal. The pre-sternal route is the least direct but perhaps the safest should stomal leak occur. The posterior mediastinal is the most natural and the shortest route, but should the anastomosis fail to heal the result is usually a fatal mediastinitis. The retrosternal route occupies a position of intermediate importance. It is less direct than the posterior mediastinal route but is safer, though not so safe as the pre-sternal route. If, however, a sternal splitting operation is used as recommended by Ong, then there is little to choose between the safety of the retro-sternal and the pre-sternal route should leak occur (Ong 1978).

SURGICAL APPROACH & TYPE OF ANASTOMOSIS

This depends largely on the site of the tumour.

a. Growths at the Gastro-Oesophageal Junction or at the Diaphragmatic Hiatus (Sites 7 & 6)
The approach is through the classical left thoraco-abdominal incision with the patient in the left lateral position (Fig 12). With the table split to produce lateral flexion of the lumbar spines the operative field is opened up and excellent access can be attained. The aims are radical and consist of 'en bloc' dissection and excision of the lower oesophagus, the stomach, the spleen and perhaps the pancreas, together with the related lymphatic fields (Allison & Borrie 1948). On occasions the crura and the left lobe of the liver also require excision (Fig 13a). Restoration of continuity is by Roux-en-Y anastomosis.

b. Supra-diaphragmatic Growths (Lower third Site 5)
The approach is similar but perhaps at a higher level. The aims are again radical but in these circumstances it is perhaps justifiable to preserve the pyloric antrum for anastomosis with the oesophagus (Fig 13b).

c. Middle Thoracic Growths (Sites 4 and 3)
When growths occur at this site the left thoraco-abdominal approach has severe limitations. Not only is the access limited in the narrow angle between the auricle and the aorta, but performance of the anastomosis under the arch of the aorta is extemely difficult because of limited space and cardiac and aortic movements. Mobilisation of the aorta may be carried out to facilitate access but this in itself is a tedious procedure. (Allison & Borrie 1949)

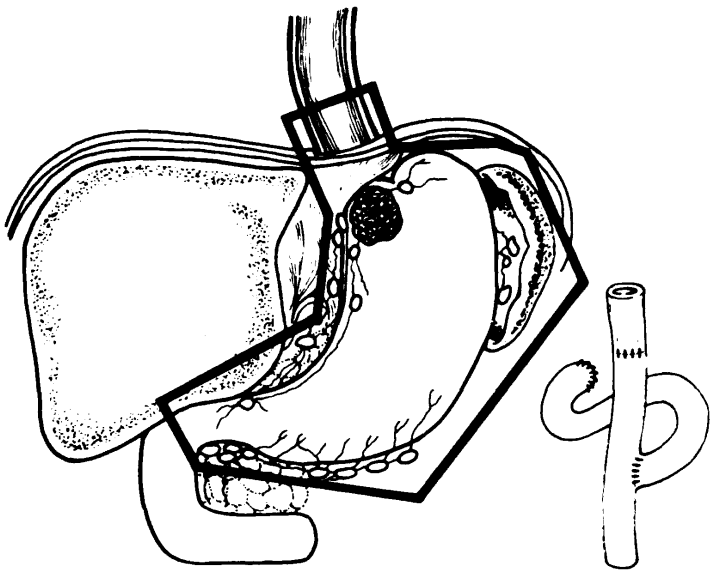

FIG. 13 a

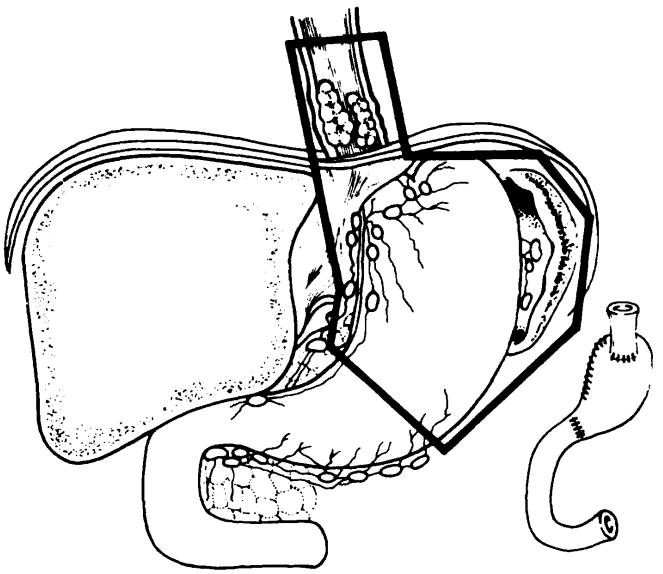

FIG. 13 b

PRESTERNAL JEJUNAL REPLACEMENT

Because of these difficulties it was decided to embark on total oesophagectomy performed through the left side, but carrying out pre-sternal reconstruction between the cervical oesophagus and the jejunum. This procedure was used in 5 cases but here again difficulties arose.

The problems were two fold:

a. Shortfall because of the build of the patient
b. Failure of union of the anastomosis between the jejunum and the upper oesophagus.

In patients with broad chests and those in whom the jejunal mesentery is short, the mobilised jejunum may fall short and fail to reach the cervical oesophagus. In this event the gap between must be bridged by skin tubes as in Grey Turner's famous case. This involves multiple staged operative procedures and the patient may be in hospital for many months.

In thin asthenic subjects with long jejunal mesenteries there is no problem of reach and the jejunum can be anastomosed to the cervical oesophagus without undue tension. Even in these circumstances fistulae may occur due to leakage at the anastomotic site (Grey Turner 1933). Fistula formation was formerly thought to be due to impaired blood supply, either to the cervical oesophagus or to the jejunal segment, but is more likely to due to failure of mucosal union. The squamous epithelim of the upper oesophagus joins reluctantly to the high columnar epithelim of the jejunum (McKeown 1972). Because of the dual problems of shortfall and fistula formation, pre-sternal jejunal replacement was abandoned in the Darlington/Northallerton series many years ago.

TWO STAGE (LEWIS TANNER) OPERATION

To overcome the problems of the left sided approach, Ivor Lewis (1946) and Tanner (1947) devised the two stage procedure which was subsequently used by Franklin (1971). In this procedure the stomach is mobilised through an upper abdominal incision with preservation of its blood supply. A right thoracotomy is then performed in which the oesophagus together with the tumour segment is mobilised. The stomach is pulled through the enlarged oesophageal hiatus and after excision of the lower oesophagus together with the tumour and the upper part of the stomach, the distal gastric remnant is anastomosed to the upper thoracic oesophagus.

In total ignorance of the work of Lewis and of Tanner, a similar technique was employed in Dralington in 1951. In fit subjects the two phases were carried out at the same time, but in 8 patients considered to be unfit, gastric mobilisation was carried out in the first instance, and naso-gastric tube feeding continued while the patient's condition improved. After an appropriate interval, right thoracotomy was performed and the operation completed. In 2 instances the stomach had gained intra-abdominal adhesions and great difficulty was encountered in bringing the stomach into the chest cavity. A similar problem has been encountered by Ong (1971) and also by LeQuesne and Ranger (1966) who felt that an interval of 10 to 14 days would improve the intra-gastric circulation.

The advantages of excision of the oesophagus through the right chest are now generally accepted. The only structure on the right side of the oesophagus is the vena azygus and the aortic arch does not produced an obstacle as in the left sided approach.

d. Growths in Upper Thorax (Sites 2 and 3)

For growths at or above the aortic arch in order to give adequate clearance above the upper margin of the growth, the oesophagus must be divided at a very high level. Anastomosis is therefore carried out deep in the superior mediastinum and in the narrow confines under the dome of the pleura. In this situation poor illumination and the use of long instruments make anastomosis difficult and dangerous. To obviate these difficulties a third cervical phase was first tried in 1964 in the Darlington/Northallerton series. This technique has already been illustrated in a film published in an Hunterian Lecture and described in detail (McKeown 1968, 1972, 1976).

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TOTAL THREE PHASE OESOPHAGECTOMY

In this procedure the first two stages are similar to those of the Lewis Tanner operation, but a cervical phase is added in which the cervical oesophagus is exposed preferably on the right side of the neck (Fig 14).

The operation is based on the principle that the stomach is the ideal organ of replacement and it has the physical length, an appropriate blood supply, and its mucosa joins readily to that of the cervical oesophagus.

Perhaps the most important aspect of this technique is the first phase in which the stomach is mobilised. Since the dome of the fundus reaches to a much higher level than the gastro-oesophageal junction, preservation of the blood supply is of great importance. The fundamental sites of ligature are the vasa brevia, the left gastro-epiploic vessels, the great omental vessels and the main trunk of the left gastric artery (Fig 15). Individual ligatures are applied to the vasa brevia and the greater omental vessels to prevent bunching. Great care is taken to preserve the right gastro-epiploic artery and the right gastric vessels which provide a good blood supply to the body of the stomach (Fig 16). Blood supply to the dome of the fundus which is to be the site of the anastomosis appears to be dependent largely on preservation of the collateral anastomosis of the left gastric artery, which is the largest artery to supply this organ as illustrated in Fig 17 (El-Eishi et al 1973).

Mobilisation of the duodenum is more extensive than in Kocher's manoeuvre. Dissection should continue behind the pancreas (as in pancreatectomy) so that the entire head of the pancreas and duodenum is mobilised and an extent of 8 cms of the IVC and aorta exposed. The duodenum then rotates towards its embryological position in the mid line and the reach of the stomach is greatly increased.

The second thoracic phase is the same as in the Lewis Tanner procedure, but dissection is carried up into the retro-pharyngeal space posteriorly and great care is taken to separate the trachea from the anterior surface of the oesophagus. This manoeuvre prevents kinking and obstruction of the trachea when the oesophagus is drawn up into the neck.

Originally the third cervical stage was carried out in the left side of the neck, but subsequent experience showed that the right side was preferable in that it avoids possible damage to the thoracic duct and there is less risk of injury to the left recurrent laryngeal nerve.

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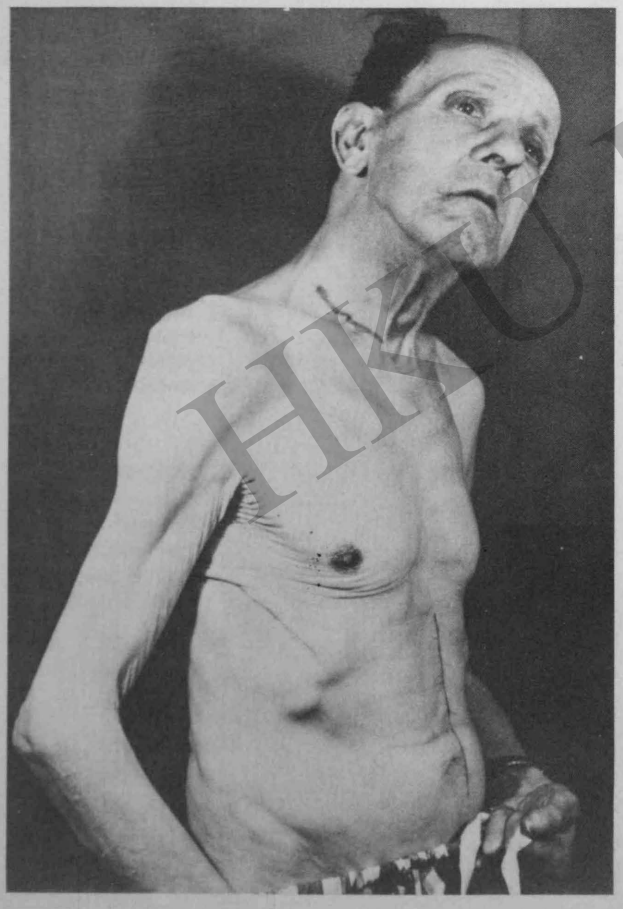

FIG. 14

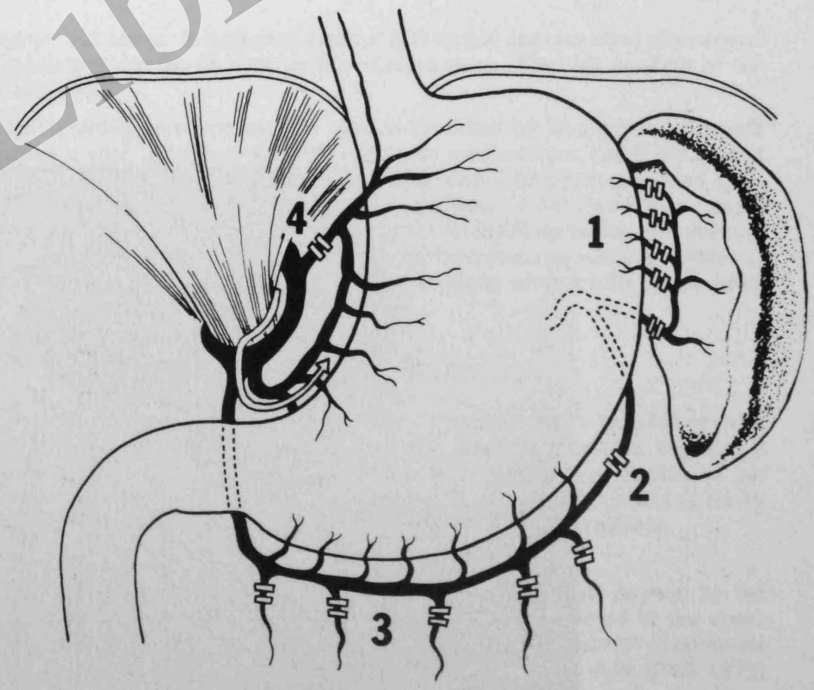

FIG. 15

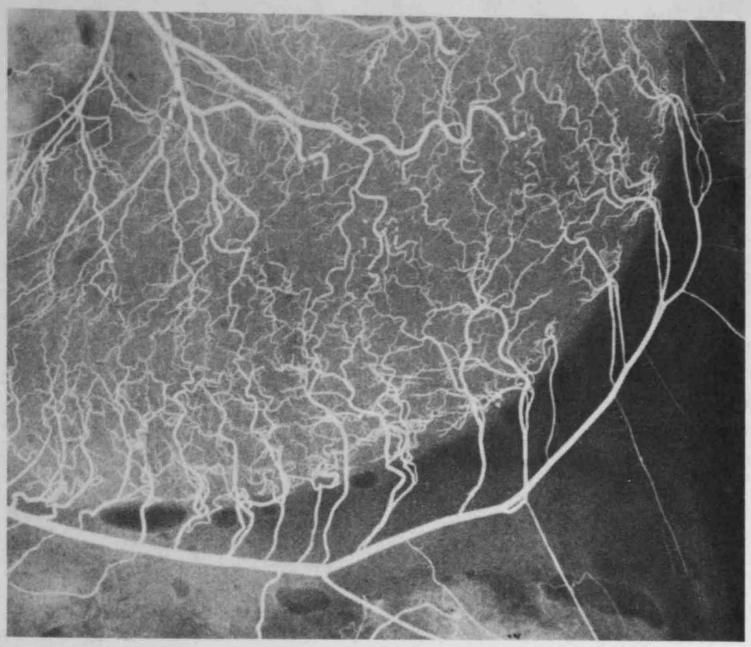

FIG. 16

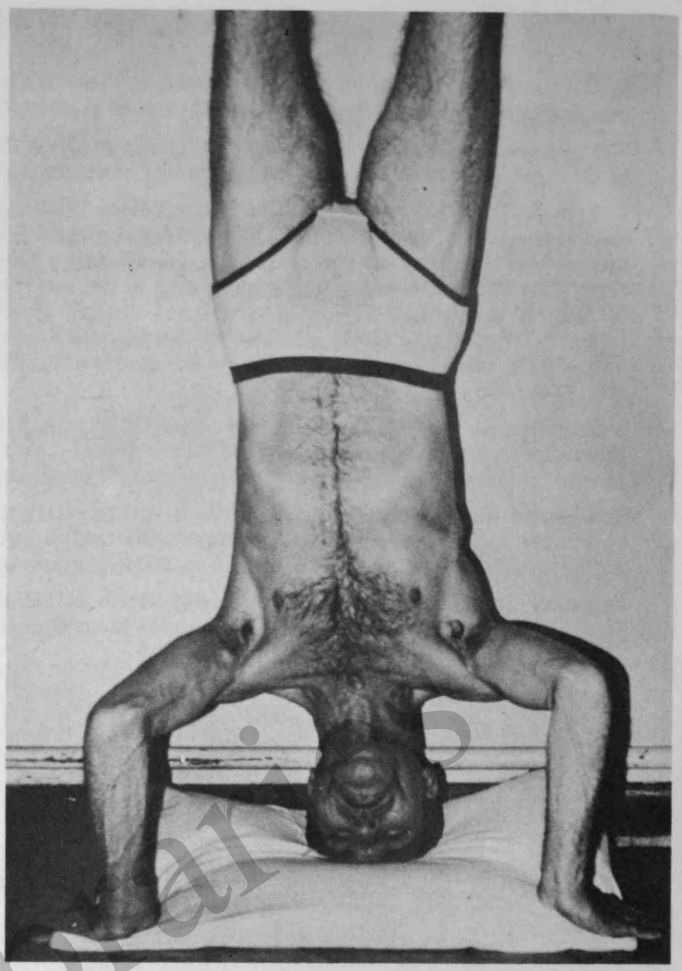

FIG. 18

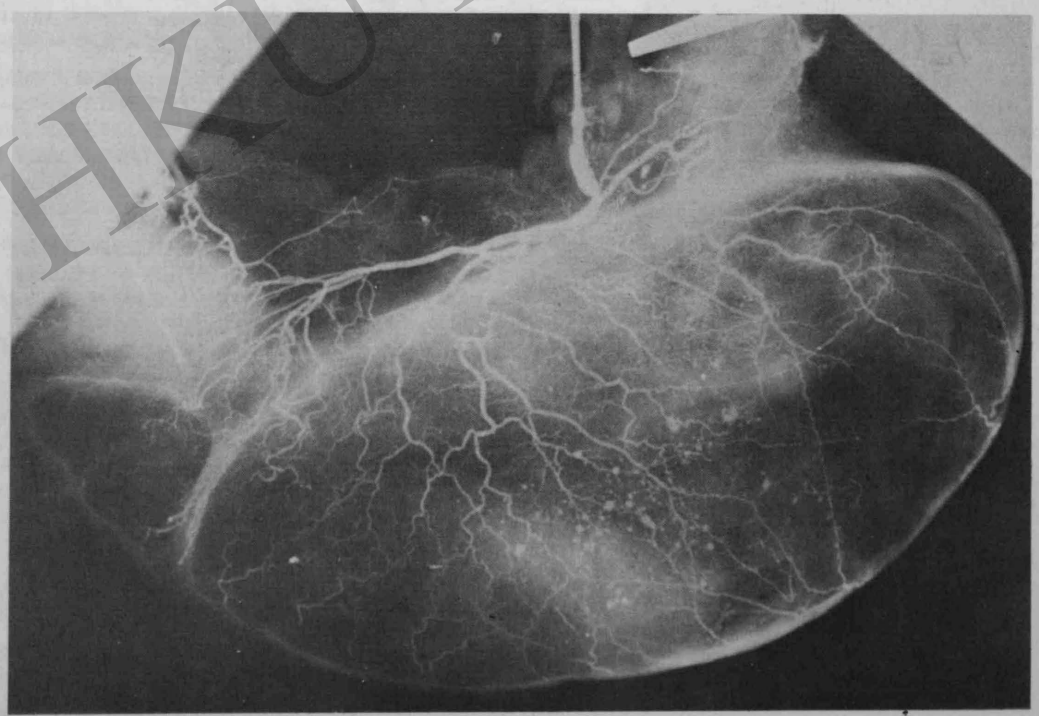

FIG. 17

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ADVANTAGES OF THE TOTAL THREE PHASE OESOPHAGECTOMY

There are many advantages in this procedure:

a. *Wide Excision*
Total thoracic oesophagectomy greatly diminishes the risks of recurrence at the stoma. The wide excision takes care of the problems of sub-mucous infiltration, the occurrence of satellite growths and also the 5% of cases in which the oesophagus shows multiple growths.

b. *Single Anastomosis*
In colonic anastomosis using the right colon, the left colon or the transverse colon, two end-to-end and one end-to-side anastomoses are required. Each anastomosis contributes to the elements of risk by leakage and contamination. In total gastric replacement, though the gastro-oesophageal hiatus requires closure, there is only one end-to-end anastomosis between the cervical oesophagus and the dome of the fundus.

c. *Diminished Infection*
In colonic replacement, potential contamination occurs early in the procedure when the colon is opened in the abdomen. Subsequent dissection therefofe takes place in an infected field and the presence of multiple stomata add to the risk of sepsis. In total three phase oesophagectomy only the less infective stomach cavity is opened and even this procedure is delayed until the final cervical phase of the ooperation.

d. *Ease of Anastomosis*
The anastomosis between the dome of the fundus and the cervical oesophagus is carried out in the superficial levels in the neck. This is in contrast much easier than attempting similar anastomosis deep in the superior mediastinum. The incidence of stomal leaks is therefore diminished and should leakage occur in the neck, it does not carry the great risk should this occur in the chest cavity.

e. *Well Tolerated*
The addition of the cervical phase is well tolerated even in poor subjects and in advanced age. The operation does not take any longer since the anstomosis in the neck is much less time consuming than that in the thorax. A synchronous procedure using two surgeons may also shorten the time of operation (Royston, Dowling and Spencer 1975). An additional advantage is that in the final phase relaxation is not required and spontaneous respiration can be restored which is of great advantage especially in elderly subjects Franklin 1970 and 1971).

f. *Ability to Eat*
An outstanding feature is the ability to eat a full meal with no sensation of thoracic discomfort and the almost complete absence of reflux even on adverse posturing (Fig 18). This observation is in contrast to what is seen in oesophago-antrall anastomosis in which reflux is troublesome even though the anastomosis is low down in the thorax. There appears to be a paradox in that the higher the anastomosis the less the reflux and vice versa.

g. *Post operative Irradiation*
The dangers of irradiation in the region of intestinal stoma are well know. If suspicious areas of infiltration are identified after operation by the insertion of Michaels clips, post operative irradiation can be directed to the affected areas. The high position of the anastomosis in the neck prevents any danger of necrosis at the stoma.

As an alternative to total three phase oesophagectomy, a sternal splitting approach may be used as described by Waddell and Scannell (1975), and used with such success by Ong (1971). A collar incision is used to explore the neck and upper mediastinum, and if the growth is thought to be operable a vertical incision is made down the front of the sternum to the upper abdomen. The sternum is then split. Division of the innominate veins and sometimes mobilisation of the aortic arch is required to free the oesophagus from above, while finger dissection through the oesophageal hiatus frees its lower portion. Replacement is effected by bringing the stomach up behind the sternum and anastomosing the fundus to the cervical oesophagus. This technique is particularly suitable for growths above the aortic arch (Site 2) b ' is unsuitable for palliative resections because of limited space. (Ong 1964). A somewhat similar technique using a split gastric tube, but w. .out sternal splitting is advocated by Gavriliu (1975).

Growths of the Cervical Oesophagus (Site 1)
Growths of the cervical oesophagus though occasionally amenable to local excision must usually be considered in association with hypopharyngeal growths. In general such growths are treated by irradiation, and surgery reserved for those in whom the response is unsatisfactory. In the Darlington series only 5 cases were encountered so experience in this field has been very limited. Review of published work shows two different approaches to the problems of reconstruction after pharyngo-laryngectomy. The criteria laid down by Ranger (1964) are that reconstruction must be safe, immediate, free from fistulae or stenoiss, and suitable for irradiated patients.

a. *Skin Reconstruction*
Successful reconstruction of the cervical oesophagus using a skin flap was described by Trotter (1913), and made popular by the work of Wookey (1948). Of more recent years these multistaged operations in which the pharynx is anastomosed to the upper oesophagus have been used extensively by Stell. Though the mortality rate is perhaps marginally lower than with visceral anastomosis the multistaged procedures may require the stay in hospital to be very long which may range from 22 to 377 days (Stell 1978) and may not be suitable for post irradiation patients.

b. *Visceral Anastomosis*
Immediate reconstruction may be carried out by using stomach or colon, or very rarely jejunum.

The use of stomach is perhaps the most successful and more fully meets the criteria laid down (LeQuesne and Ranger 1966, and Ong and Lee 1960). As an alternative the reversed Heimlich/Gavriliu tube may be used (Heimlisch 1966). The use of colon for replacing the mid oesophagus was described by Orsini and Lemaire (1951) and the use of the left colon after pharyngo-laryngectomy was very fully described by Galigher and Robin (1954). Review of the literature however suggests that leakage is common and the use of anti-peristaltic (left colonic) replacements impair swallowing. The right colon can be used but the limited length of its arterial supply may cause shortfall, though this may be overcome by fine vessel anastomosis (Eastcott 1964).

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ASSESSMENT OF RESULTS

The results of surgical treatment must be evaluated on the operative mortality rate, the restoration of the ability to swallow and the length of survival.

a. Operative Mortality

Comparison of the operative mortality rates of various recorded series is difficult and may be misleading. The definition of operative death is in itself not clear, and may vary from a death directly attributable to the operation, failure to survive 30 days, or failure to leave hospital.

In no branch of surgery is experience of greater importance than in the surgery of oesophageal resection, and much higher mortality figures are shown in the earlier years of an author's experience (Collis 1971). In selecting a group of recorded series only those showing a considerable number of cases is presented (Table II).

TABLE II

OVERALL MORTALITY FIGURES FOR OESOPHAGECTOMY FOR CARCINOMA

Author	Date	No. of Cases	Overall Mortality
Sweet	1956	327	17.4
Watson	1957	182	35.7
Nakayama	1959	975	5.8
Ellis	1960	138	16.0
Miller	1962	272	31.0
Logan	1963	342	25.0
Ong	1964	–	32.9
Lortat-Jacob	1970	1769	29.0
Leigh Collis	1971	350	14.3
Paris	1976	(57 surgeons)	16.0
Gavriliu	1976	352	14.4
McKeown	1976	392	9.6

1. Overall Mortality Rates

Review of the overall mortality figures shows considerable variations from 35.7% recorded by Watson (1975) to 5.8% recorded by Nakayama (1959). During the last year much smaller series have been recorded with lower mortality rates (Amiri and Hashemian 1978).

Even in the review of selected series the factor of *case selection* is important. If good risk cases only are considered the mortality rate for lower third growths can be reduced from 6.2% to 3.8% as in the Darlington/Northallerton series (McKeown 1973). In general, age is not so important as the condition of the patient and their cardiopulmonary status. The *extent of the growth* and the *level at which it occurs* are of great improtance. A very extensive growth with infiltration of surrounding structures is more dangerous to resect than one confined only to the oesophagus. *The percentage of cases resected* will therefore have a bearing on the mortality figures. In a series recorded by Leigh Collis in 1971, in 90% of 400 cases explored resection was completed.

2. Mortality at Different Levels

The level at which the growth occurs and the operative procedure required for its removal greatly affects the mortality rates. In general terms the higher the growth the greater the mortality rate. Table III presents the varying mortality rates for growths at different levels. In those situated at the oesophago-gastric junction the death rate varies from 20% recorded by Lortat-Jacob (1970), and Miller (1962) to that of Collis of 6.2% and 5.6% presented by the author in the present series.

An encouraging feature of recent years is the reduction in the mortality rate in middle third growths which is a measure of better surgical management (Collis 1971). In the period 1972 to 1976 the mortality rate for total three phase oesophagectomy in the present series has fallen from 30.8% to 15.1%.

TABLE III

MORTALITY AFTER OESOPHAGECTOMY FOR GROWTH AT VARIOUS LEVELS

Author	Date	No. of Cases	Mortality rate(%) site of growth			
			Oesophago-Gastric	Lower Third	Middle Third	Upper Third
Ellis	1955	579	14.8	18.4	16.7	–
	1965		10.1	13.0	13.7	–
Nakayama	1956	136	3.5	5.1	–	–
Miller	1962	272	20.0	25.0	32.0	
Lortat-Jacob	1970	1769	20.0	23.4	36.2	–
Leigh Collis	1971	400	11.0		13.0	
Gavriliu	1976	352	13.5	16.0	24.0	20.0
Mckeown	1976	392	5.6		15.1	15.9

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b. Ability to Swallow

The primary objective of surgical treatment is to enable the patient to swallow. The capacity to eat depends largely on the type of reconstruction. The various types of reformations are illustrated in Fig 19. In the Roux-en-Y anastomosis the size of a meal is somewhat limited but biliary reflux is rare. In oesophago-antrostomy and in palliative oesophago-duodenostomy biliary reflux may be a severe problem, though this can be reduced by instructing the patient to sleep with the head of the bed raised. Colonic replacement using the right and the transvers colon produced an iso-peristaltic anastomosis and swallowing is satisfactory. With left colonic replacement the retro-peristaltic anastomosis may cause troublesome reflux (Galigher 1954). Gastric replacements appear to be the most satisfactory. The reversed gastric tube is advocated strongly by Gavriliu (1975), but total three phase oesophagectomy allows a patient to take a full meal and respiratory distress or reflux appear to be very rare. It is a paradox that the higher the oesophago-gastric anastomosis, the less the reflux, and vice versa.

c. Survival Rate

Survival rates are poor when compared with cancer at other sites, except perhaps for gastric carcinoma. A worthwhile survival is very important to the patient who has undergone the discomforts associated with oesophageal resection.

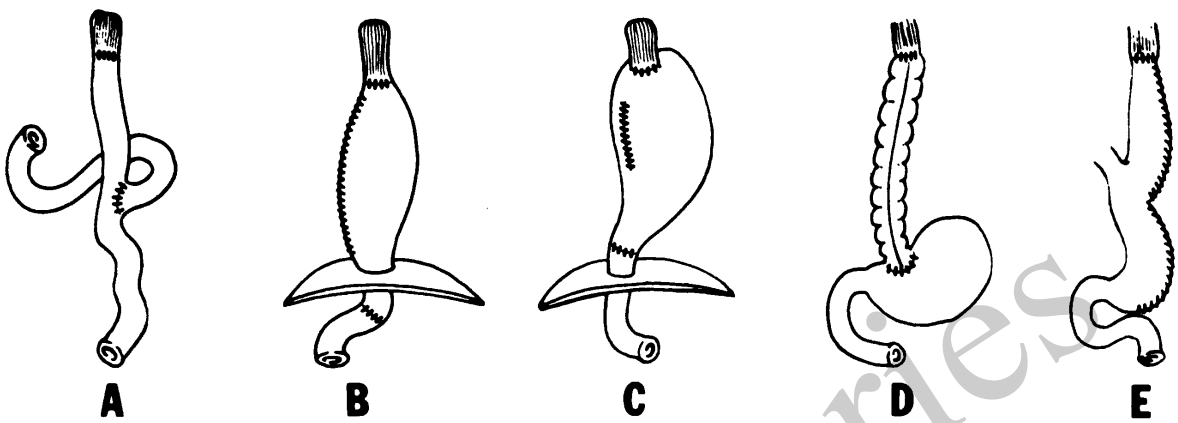

FIG. 19

A characteristic feature of the survival figures is the great wastage in the first year after operation. This finding applies to growths occurring at all levels. Figure 20 shows the survival rates for growths at the lower end of the oesophagus. For those extensive growths at this site which necessitate the removal of the pancreas and results were very poor and out of 14 patients only one survived for 3 years. For growths not so extensive the wasting for the first and second years is very much less. If however no recurrence takes place before the third year the prognosis appears to be much better and long term survivals of 17, 21 and 24 years have been noted (Fig 20).

In growths of the thoracic oesophagus the pattern of survival is similar (Fig 21). The wastage in the first year is marked, but after

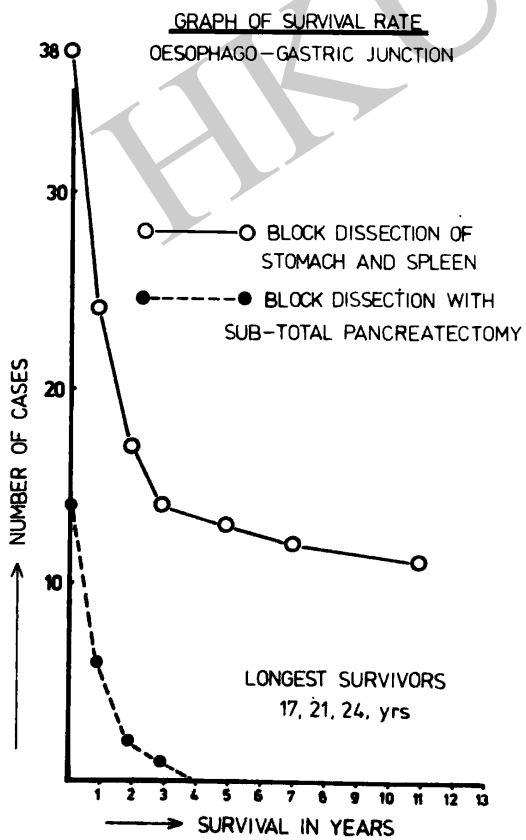

FIG. 20

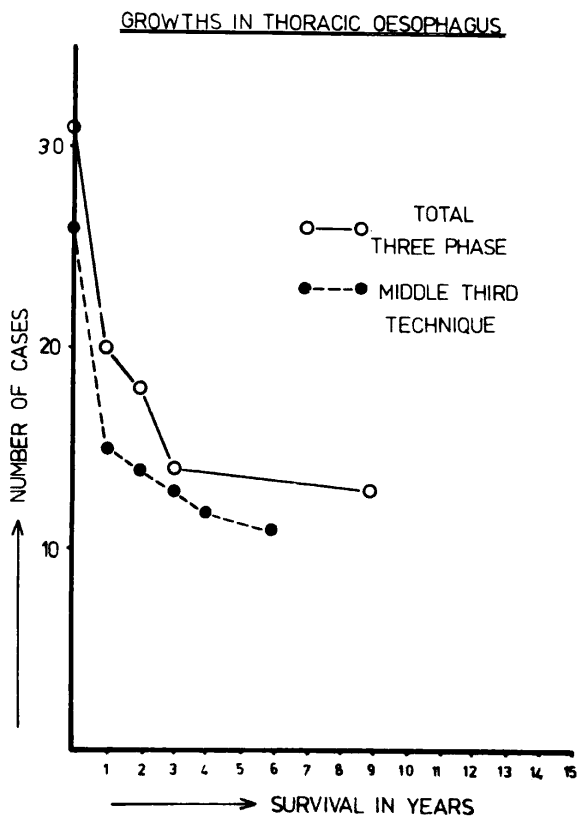

FIG. 21

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this the survival curve levels off. It is remarkable that in growths of the mid oesophagus where surgery cannot be radical because of hilar spread, and where the procedure is essentially palliative, the results compare more favourably than those obtained at the lower end where treatment is essentially raidcal. The survival rates here recorded are comparable to those of other authors. (Gunnlaugsson et alia 1970, Lortat-Jacob et alia 1970 and Webb & Bosuttil 1978). This unusual finding may be accounted for by the type of tumour. Growths of the middle third are usually of squamous type, while a considerable number of those at the lower end are adeno-carcinoma. It is suggested by Leigh Collis (1971) and by Ellis et alia (1959) that if squamous growths at the lower end are considered separately the long term outlook appears to be the most hopeful of oesophageal growth. On the other hand, from the pathological analysis of 52 cases of growths at the oesophago-gastric junction (out of a total of 415 cases), Webb & Busuttil (1978) emphasise the poor prognosis of tumours at the oesophago-gastric junction. They emphasise the histological picture, the special features of anatomy and lymph drainage, and point out that 79% of patients operated on with growths at this site are dead within 2 years. In their opinion these growths should be regarded as a special group and the outlook is worse than in squamous growths of the oesophagus or even in carcinoma of the stomach.

CONCLUSIONS

A pattern of surgical treatment for carcinoma occurring at various levels in the oesophagus has now emerged. For growths at the lower end (Sites 7 and 6), the classical left thoraco-abdominal approach of Ohsawa (1933) provides adequate access for radical 'en bloc' excision of the growth. For growths in the lower thorax (Sites 5 and 4) the Lewis Tanner procedure is very satisfactory. For growths in the upper thorax (Sites 2 and 3 and possibly 4) total three phase oesophagectomy has very many advantages. In growths occurring in the cervical oesophagus (Site 1) surgery is reserved for those subjects in which radiotherapy has proved ineffective.

To obtain the best results an experienced team is essential, but even then operative mortality is high and long term survival disappointing. A plateau of surgical endeavour has been attained and further improvement in results must lie with other methods of treatment either alone or in combination with surgery.

The basic problem is the cause of the disease and its possible prevention. Epidemiological studies provide a rich field for research into these problems and their solution.

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Fig 1 Carcinoma of the Oesophagus – Global Distribution (after R Doll) Showing the number of cases per 100,000 of population in areas where the 'frequency of occurrence' has been determined.

Fig 2 Age and sex incidence of carcinoma of the oesophagus in 276 subjects. (By kind permission of the Annals of the Royal College of Surgeons)

Fig 3 Characteristic radiological appearance of carcinoma of the oesophagus.
(a) antro-posterior and (b) oblique view

Fig 4 Radiological appearance showing extrinsic pressure on mid-oesophagus

Fig 5 Spontaneous leak in cancer of the mid-third causing unusual X-ray appearance

Fig 6 Filling defect in oesophagus due to simple tumour

Fig 7 Radiological appearance in advanced achalasia of the cardia (Courtesy of Dr Desmond Whyte)

Fig 8 X-ray showing small sliding hernia with reflux oesophagitis and ulceration

Fig 9 Shortening and stenosis due to reflux oesophagitis

Fig 10 Modes of Spread of Oesophageal Cancer
Spread under the mucosa by burrowing, lymphatic permeation and embolism is illustrated. Regional spread is to the lymphatic glands related to each oesophageal segment.

Fig 11 Divisions of the Oesophagus

Fig 12 Classical Surgical Approach for cancer of the lower end of the oesophagus

Fig 13 (a) & (b) Extent of Resection of growths in the lower third of the oesophagus
(a) Infra diaphragmatic growths (Sites 7 and 6)
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Fig 14 Incisions for two and three stage oesophagectomy

Fig 15 Showing the sites of ligature for gastric mobilisation in total three phase oesophagectomy. The vasa brevia, left gastro-epiploic, omental and left gastric vessels are tied as shown.

Fig 16 Angiograph of right gastro-epiploic and left gastric arteries

Fig 17 Angiograph of the left gastric artery after preliminary ligation of all other gastric vessels. The oesophageal and oesophago-fundic branches are clearly shown.

Fig 18 Showing absence of reflux in total three phase oesophagectomy, the patient having just taken a full meal

Fig 19 (a) (b) (c) (d) & (e) Types of reconstruction after oesophageal resection
(a) Roux-en-Y
(b) Oesophago-antrostomy
(c) Total gastric replacement
(d) Colonic replacement
(e) Heimlich/Gavriliu split gastric tube

Fig 20 Survival Time. Growths at the lower end. Note marked wastage in first and second post operative years and poor survival if pancreas has had to be removed

Fig. 21 Survival Time. Growths in thoracic oesophagus illustrating similar survival curves as shown in Fig 20.

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5th ANNUAL WORKSHOP ON THE TESTIS. GEILO, NORWAY, APRIL 1978
Endocrine Approach to Male Contraception
International Journal of Andrology, Supplement 2 (1978)

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Electrolyte and Water Transport in Rat Epididymis; Its Possible Role in Sperm Maturation

By

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Electrolyte and water transport in different regions of the rat epididymis has been studied using a microperfusion technique. The caput and proximal corpus epididymides were found to absorb NaCl and water and secrete K^+ at a lower rate than the cauda epididymidis. The secretion rate of protein was the same in both regions. In the caput and proximal corpus, reabsorption of chloride was hypertonic. Reabsorption of sodium could not account for water reabsorption. In contrast, water reabsorption in the cauda epididymidis was dependent upon the intraluminal sodium ions. Amiloride inhibited both the Na^+ and water reabsorption in this region. It was concluded that in the proximal regions of the rat epididymidis, water reabsorption may be secondary to an active transport of chloride, whereas in the cauda, a net transepithelial transport of sodium ions is the driving force for water reabsorption.

Transport of electrolytes and water across the perfused rat cauda epididymidis has also been studied under various experimental conditions. Treatment of rats with alpha-chlorohydrin (9 mg/kg/day) for 7 days inhibited the rate of sodium and water reabsorption without affecting the secretion of proteins. Ligation of the testicular efferent duct or the corpus epididymidis had no significant effect on the transport functions of the cauda epididymidis. When cyproterone acetate (10 mg/rat/day) was injected into male rats, the rate of sodium and water reabsorption was reduced. This effect was accompanied by a loss of sperm motility. It is concluded that the transport functions of the cauda do not require the normal flow of testicular fluid, but may depend on the supply of circulating androgen in the blood. Alpha-chlorohydrin and cyproterone acetate may affect sperm maturation by disrupting the normal milieu of the epididymal duct.

Key words: electrolyte and water transport – rat epididymis – antifertility agents.

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It is now well established that the epididymis is the site where sperm maturation takes place. During the passage of the spermatozoa through the epididymis, they encounter a series of changes in the lumen of the duct, and as a result, they gradually become motile and able to fertilize. The acquisition of the fertilizing capacity is accompanied by a number of morphological and biochemical changes in the spermatozoa (Voglmayr 1975; Hamilton 1975; Chulavatnatol & Yindepit 1976). Many experiments have been carried out in an attempt to determine the nature of sperm maturation, particularly the active part played by the epididymal cells in creating an optimal condition for sperm maturation. It has been found that the epididymis secretes carnitine (Casillas 1972), sialic acid (Rajalakshmi & Prasad 1968), glycerylphosphoryl-choline (Scott et al. 1963) and specific proteins (Koskimies & Kormano 1973; Amann et al. 1973) and absorbs electrolytes and water (Jones & Glover 1975; Levine & Marsh 1971). All these processes, like the processes of sperm maturation (Blaquier et al. 1972; Dyson & Orbegin-Crist 1973 & Orbegin-Crist & Davies 1974) and maintenance (Young 1929), require the supply of androgens to maintain their activities. However, the exact physiological role of each of these parameters in sperm maturation is yet to be established.

Rat seminiferous tubules secrete fluid (Tuck et al. 1970; Cheung et al. 1977a) which is reabsorbed by the epididymis (Crabo & Gustafsson 1964; Levine & March 1971). Micropuncture experiments have shown that the concentration of Na^+ decreases and that of K^+ increases as the epididymal fluid flows down the epididymis. This suggests that both Na^+ and water are reabsorbed by the epididymal epithelium (Levine & Marsh 1971; Turner et al. 1977). We have studied the ionic basis of water reabsorption in the rat cauda epididymis *in vitro* and *in vivo* and found that fluid reabsorption is a passive process and secondary to active Na transport (Wong & Yeung 1976, 1977a, 1978). This process is abolished by castration, indicating that fluid reabsorption, similar to many epididymal functions, is dependent upon the presence of circulating androgens in the blood (Wong & Yeung 1977b, 1978). Furthermore, the adrenal glands are essential for the maintenance of sodium and water reabsorption in the cauda epididymidis (Au et al. 1978). In many respects, these transport processes seem to have many characteristics similar to the distal tubule of the kidney. The milieu of the epididymis is actively maintained and this may play an important role in the maturation process of spermatozoa. In view of the important dynamic role of the epididymis in sperm maturation, we have further investigated the mechanism of ion and water transport and secretion of the proteins in different regions of the perfused rat epididymis. Electrolyte and water transport were also studied under conditions which were known to produce sterility in male rats. It is hoped that this kind of study will shed light on the possible functional relationships between electrolyte and water transport and maturation of epididymal spermatozoa.

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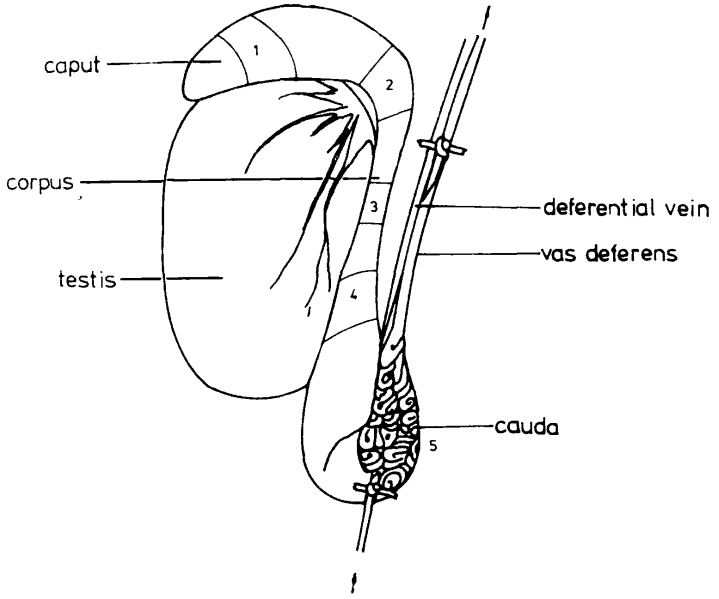

Fig. 1.
Schematic diagram of the rat testis. The epididymis was divided into 5 zones. 1, caput epididymidis; 2, proximal corpus epididymidis; 3, mid-corpus epididymidis; 4, distal corpus epididymidis, and 5, cauda epididymidis. Only the perfused cauda epididymidis is shown. The arrow shows the direction of perfusion (see text for explanation).

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Experimental Work

The rat epididymis was divided into 5 zones representing the caput, proximal corpus, mid-corpus, distal corpus and the cauda epididymides (Fig. 1). Electrolyte and water transport and protein secretion were studied in these regions using the microperfusion technique.

Microperfusion of the cauda epididymidis

Fertile male Sprague-Dawley rats weighing between 350 and 450 g were anaesthetized with pentobarbitone (50 mg/kg body wt.). Tracheostomy was performed to ensure a clear air passage. A paramedial incision was made in the scrotum to expose the epididymis. Under a dissecting microscope, a small piece of the connective tissue sheath (about 1 mm^2) was removed at zone 5 of Reid & Cleland (1957) classification and a small loop of the coiled epididymal duct was freed from the connective tissue. The duct was cannulated by insertion of fine (Clay-Adams PE-50) polyethylene tubing pulled to a tip diameter of 300 μm. The cannula was held in place by anchoring in Plasticine. The ipsilateral vas deferens was freed from the adjacent blood vessel and was slit open using ultra-fine irridectomy scissors. The cauda epididymidis was then flushed with Krebs bicarbonate solution to remove all the spermatozoa using a tuberculin syringe after which a polyethylene cannula (Clay-Adams PE-10) with tip diameter of about 300 μm was inserted into the lumen of the vas

deferens and ligated in place (pressure was required to flush out all the spermatozoa however this did not cause damage to the epithelium and the duct still exhibited transporting functions). The clear segment of the cauda epididymis (about 18 cm long) was then perfused in situ with Krebs bicarbonate solution using a syringe infusion pump (Harvard 970) set to deliver from a 1 ml. glass-syringe at constant rate of 1 μl/min (Fig. 1). Perfusate was collected into sample cups (Bel-Art) and was collected over 60 min. The effluent rate was obtained from weight of the perfusate divided by the collection time. The duct was perfused for 40 min before experimentation.

When the perfusing medium or rate of perfusion was altered, samples were collected only after sufficient time had elapsed for washout of catheter dead space. In most cases, the experiments were carried out over 6 h. The rectal temperature was monitored by a thermister probe and was maintained at 37°C by direct illumination. At the end of the experiment, the perfused segment of the cauda epididymidis was dissected out and the length determined. In thirteen experiments, the length was 17.9 ± 0.6 cm (mean ± SE).

Microperfusion of the caput and corpus epididymidis

Similar procedures were applied to the caput and the three regions of the corpus epididymidis (Fig. 1), except the cannulae used had tip diameters of about 150 μm. The perfused lengths of the caput, proximal corpus, mid-corpus and distal corpus epididymides were 8.34 ± 0.91 cm (mean ± SE); 7.42 ± 0.75 cm (mean ± SE); 5.26 ± 0.15 cm (mean ± SE) and 8.01 ± 0.82 cm (mean ± SE) respectively. The lumens were flushed free of sperm and perfused at a rate of 0.8 μl per min for 40 min before experimentation. Perfusates were collected over the next 2 h and analysed for Na^+, K^+, Cl^-, inulin and protein (see below).

Analytical procedure

The rate of water reabsorption was measured by using [^{3}H]inulin as volume marker. The inulin ratio IR, i. e. [^{3}H]inulin in perfusate over [^{3}H]inulin in perfusion solution was determined and the rate of water reabsorption was calculated by: Rate per cm duct = Effluent rate (IR–D)/d, where d is the length of the perfused epididymidis.

To check that inulin did not penetrate the epithelium, and therefore was a valid marker for fluid volume, blood was drawn from the deferential vein draining the cauda epididymidis and from the spermatic vein draining the caput and corpus epididymides at the end of the experiments and checked for radioactivity. No inulin was present in the blood collected from these veins. Howards et al. (1976) have also demonstrated a complete blood epididymal tubule barrier for inulin. At the end of the experiment, the epididymis was flushed with 'cold' solution and the duct was isolated and solubilized in soluene

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and counted for radioactivity. It was found that the perfused segment took up less then 1 % of the total counts in the perfusate. No correction was made for the uptake of inulin into the epididymal cells.

Determination of Na^+, K^+ and chloride

The concentrations of Na^+ and K^+ in the perfusate were determined by flame photometry (Zeiss PF5) and chloride by a chloridometer (Buchler-cotlove). The perfusate was diluted 500 times for the determination of Na^+ and K^+ and 80 times for the determination of chloride. The net electrolyte fluxes were determined from the perfusion rate and the initial and final electrolyte concentrations in the perfusion solutions.

Protein concentration in the perfusate was determined by Lowry's method (Lowry et al. 1951). Fifty μl of the perfusate was used in each determination. The rate of protein secretion was expressed as ng protein secreted/cm duct/min.

Ligation of the efferent duct and corpus epididymidis

Unilateral ligation of the efferent duct or corpus epididymidis (Fig. 2) was carried out in a group of Sprague-Dawley rats. The animals were anaesthetised with ether. The testis and epididymis were then exposed through a scrotal incision. Ligation was performed with care to perserve the vascular supply to the testis and epididymis. After ligation, the organs were returned to the scrotum. Experiments were carried out on the cauda epididymidis 14–21 days after ligation of the efferent duct and 7–10 days after ligation of the corpus epididymidis. The epididymides from both sides were perfused simultaneously so that the unligated side served as control. Epididymides showing evidence of adhesion or ischaemia were discarded.

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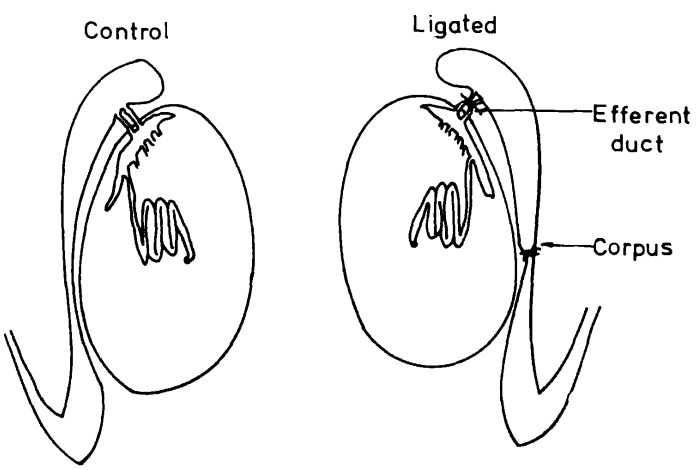

Fig. 2.
Schematic diagram of the rat testis showing the positions of ligations which were performed on one testis. Ligations were placed at the testicular efferent duct or corpus epididymidis. In each experiment the contralateral testis was left intact as control.

Treatments with α-chlorohydrin and cyproterone acetate

A detailed account of the treatment with α-chlorohydrin has been given previously (Wong & Yeung 1977c). For injection with cyproterone acetate, a group of sexually mature male Sprague-Dawley rats weighing approximately 400 g were given daily subcutaneous injections of 10 mg of the antiandrogen suspended in 0.2 ml of a castor oil and benzylbenzoate mixture (4:1 v/v). Control rats were injected daily with 0.2 ml vehicle. Injections were for 10 or 25 days and the electrolyte and water transport in the cauda epididymidis was studied by the microperfusion technique. At the end of the perfusion experiment, the reproductive organs including the testes, epididymides, seminal vesicles, ventral prostate and coagulating gland were removed and weighed. Tissues from normal rats (vehicle treated) were obtained for comparison with those from the treated animals. In some experiments, the motility of the spermatozoa collected from the cauda epididymidis was examined. The cauda fluid was diluted with physiological Ringer and observed under a phase contrast miscroscope. The motility was expressed as the percent of motile sperm.

Basal rate of electrolyte and water transport and protein secretion

When different regions of the rat epididymis were perfused with normal Krebs bicarbonate solution at a rate of 1 μl per min, the inulin ratio always exceeded one. This indicated a net water reabsorption along the entire length of the epididymis. After correction for net water flux, Na^+ and Cl^- were

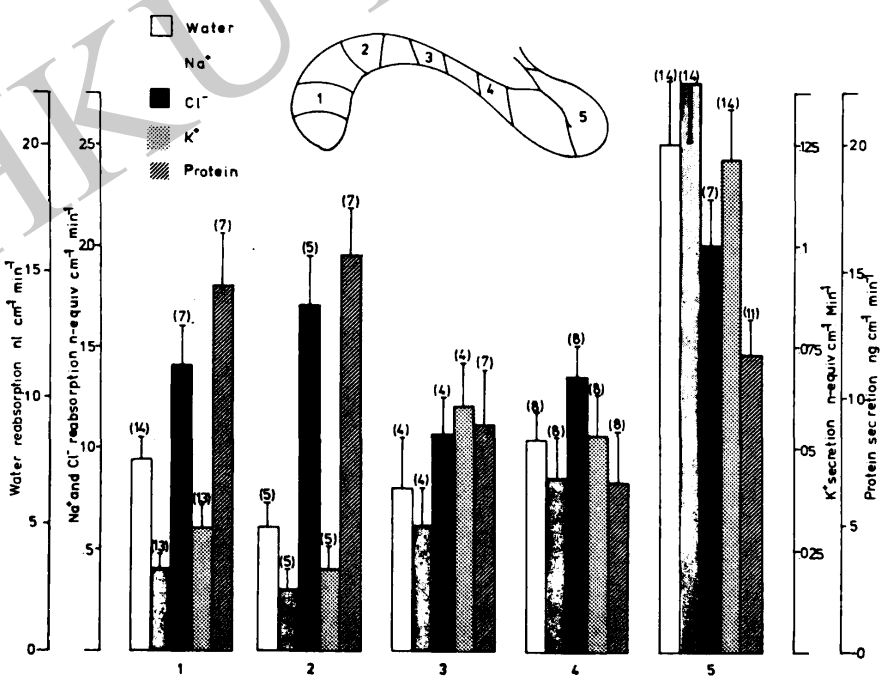

Fig. 3.

The rates of reabsorption of Na^+, Cl^- and water and secretion of K^+ and protein in 5 different regions of the rat epididymis (see text). Each column shows the mean ± SE with the number of experiments shown in parentheses.

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found to be reabsorbed while K^+ was found to be secreted into the ductal lumen. The rates of reabsorption of Na^+, Cl^- and water and secretion of K^+ were summarized in Fig. 3. The caput and proximal corpus epididymides absorbed Na^+, Cl^- and water and secreted K^+ at a lower rate than the cauda. In these regions, Cl^- reabsorption was hypertonic and had a higher reabsorption rate than Na^+. Na^+ reabsorption could not account for the observed water reabsorption. In contrast, the cauda epididymidis absorbed Na^+ at a higher rate than Cl^-. Reabsorption of Na^+ was isotonic.

Secretion of protein was found to take place along the entire length of the epididymis. The secretory rates of the caput, proximal corpus and the cauda epididymides were higher than that of the middle and distal parts of the corpus epididymidis.

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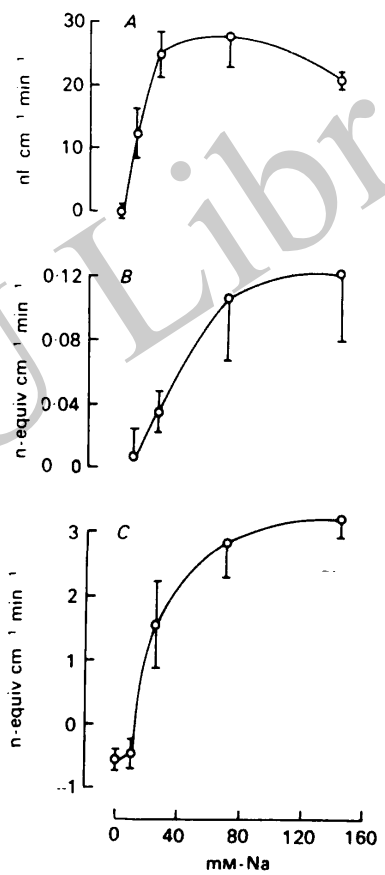

Fig. 4.

Dependence on the intraluminal Na^+ ion concentration of the rate of (A) net water reabsorption, (B) net K^+ secretion (C) net Na^+ reabsorption by the rat cauda epididymidis. A negative value in Na^+ reabsorption indicates net secretion into the ductal lumen. Each point shows the mean ± SE of five experiments. The H_2O, N^+ and K^+ values were obtained from the same samples from five animals.
(From Wong & Yeung 1978).

Ionic Basis of water reabsorption in the epididymis

Absorption or secretion of fluid in many transporting glands is thought to involve an active transport of ions (Diamond & Wright 1969). In the isolated duct of the rat cauda epididymidis, there is evidence that water reabsorption is secondary to an active transepithelial transport of sodium ions (Wong & Yeung 1976, 1977a). The effect of varying the intraluminal sodium ion concentration on sodium and water reabsorption and K^+ secretion in the perfused cauda epididymidis has been studied (Wong & Yeung 1978). In that study, the rat cauda epididymidis was perfused with normal Krebs bicarbonate solution and subsequently with solutions containing different concentrations of Na^+ ions (Fig. 4). Na^+ reabsorption was found to alter in a curvilinear fashion with the intraluminal Na^+ concentration, suggesting saturation kinetics. The apparent K_m values were about 20 mM Na^+. Water reabsorption also followed the pattern for Na^+ reabsorption. The secretion of K^+ ions by the rat cauda epididymidis was also dependent upon the presence of Na^+ in a similar manner. From these results, K^+ secretion seems to be coupled to Na^+ reabsorption. This situation can also be found in the distal tubule of the kidney (Malnic et al. 1966) and other transporting glands (Edmonds & Marriott 1967; Young et al. 1967).

The contention that water reabsorption is caused by an active transepithelial transport of sodium ions is further supported by experiments with amiloride,

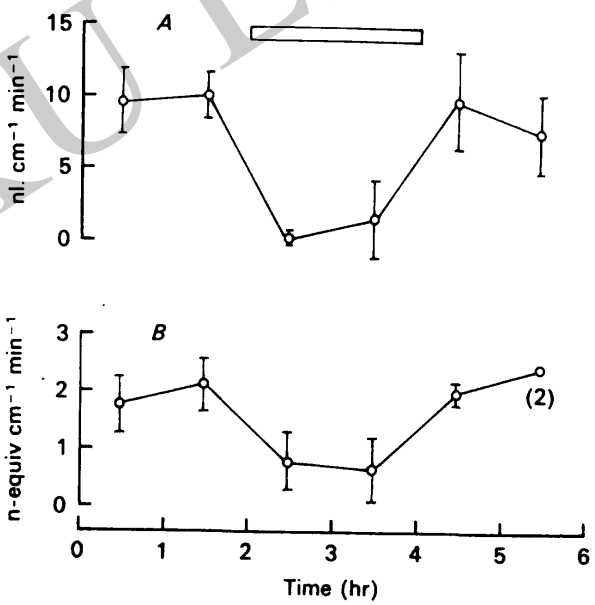

Fig. 5.
Effect of amiloride (10^{-4} M) on the rate of (A) net water reabsorption, (B) net Na^+ reabsorption by the rat cauda epididymidis. Amiloride (10^{-4} M) was applied to the perfusion fluid for 2 h as indicated. Each point shows the mean ± SE of four experiments except for the point where the number of experiments is shown in parentheses. The H_2O and Na^+ values were obtained from the same samples from four animals. (From Wong & Yeung 1978).

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a drug which inhibits sodium reabsorption by interferring with passive Na^+ transfer at the luminal membrane. When the duct was perfused with solution containing amiloride (10^{-4} M), water reabsorption was abolished and Na^+ reabsorption was greatly reduced. This effect was reversible on removal of the drug (Fig. 5) (Wong & Yeung 1978). In the cauda epididymidis, the driving force for water reabsorption is therefore an active transepithelial transport of sodium ions.

In our present experiments, in the caput and proximal corpus epididymides, reabsorption of Cl^- has been found to be hypertonic and higher than Na^+ reabsorption. The reabsorption of Na^+ cannot account for water reabsorption. It is probable that in these parts of the rat epididymis, active chloride transport followed by a passive movement of Na^+ is the driving force for water reabsorption.

Effect of ligation of the efferent duct and corpus epididymidis

The epididymis is an androgen-sensitive tissue which responds to very minor fluctuations in circulating androgens (Prasad et al. 1973). Apart from the circulating androgens, the epididymis may have access to two other sources of male sex hormones: androgens are present in the testicular fluid entering the epididymis (See Setchell 1970; Hansson et al. 1975) and the epididymis may itself be capable of synthesising androgens (Inano et al. 1969). Electrolyte and water transport across the rat cauda epididymidis has been found to depend on circulating androgens (Wong & Yeung 1977b, 1978). In castrated animals ,the transport of Na^+ and water was completely abolished and the secretion of proteins was markedly diminished. These effects were reversed by injecting testosterone into castrated rats. However, it is not certain whether the transport functions of the cauda epididymidis are also dependent on testosterone and some other components in the testicular fluid. If the absorptive and secretory functions of the cauda epididymidis are dependent upon the normal flow of the testicular fluid or some secretory products of the caput epididymidis, then the rate of transport of ions and water in the ligated epididymis should decrease in comparison with the non-ligated control epididymis.

We have therefore studied the effect of ligation of the efferent duct or corpus epididymidis on electrolyte and water transport. The rates of Na^+, Cl^- and water reabsorption and K^+ and protein secretion following ligation of the efferent duct for 14–21 days or the corpus epididymidis for 7–10 days were shown in Table 1. It was found that these operations did not produce any change in the reabsorption of Na^+, Cl^- and water and secretion of K^+ and protein by the rat cauda epididymidis. The transport functions of the cauda epididymidis may therefore not be dependent on the normal flow of fluid in the epididymis.

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Table 1.

Effect of ligation of the efferent duct or the corpus epididymidis on electrolyte and water transport in perfused rat cauda epididymidis.

	Na^+ reabsorption n-equiv $cm^{-1}min^{-1}$		Cl^- reabsorption n-equiv $cm^{-1}min^{-1}$		H_2O reabsorption nl $cm^{-1}min^{-1}$		K^+ secretion n-equiv $cm^{-1}min^{-1}$		Protein secretion ng $cm^{-1}min^{-1}$	
Contralateral (Normal)	0.97 ± 0.17 (n = 7)	NS	0.48 ± 0.10 (n = 7)	NS	7.7 ± 0.95 (n = 7)	NS	0.12 ± 0.01 (n = 7)	NS	8.80 ± 1.80 (n = 7)	NS
Ipsilateral (Efferent duct ligation)	0.91 ± 0.18 (n = 7)		0.54 ± 0.13 (n = 7)		8.12 ± 0.76 (n = 7)		0.13 ± 0.02 (n = 7)		8.70 ± 1.80 (n = 7)	
Contralateral (Normal)	1.10 ± 0.23 (n = 7)	NS	0.74 ± 0.16 (n = 7)	NS	8.48 ± 1.20 (n = 7)	NS	0.12 ± 0.02 (n = 7)	NS	8.88 ± 2.65 (n = 6)	NS
Ipsilateral (Corpus ligation)	0.81 ± 0.17 (n = 7)		0.65 ± 0.13 (n = 7)		6.96 ± 1.35 (n = 7)		0.12 ± 0.03 (n = 7)		6.76 ± 1.17 (n = 6)	

Each value shows the mean ± SE with the number of experiments shown in parentheses.

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α-chlorohydrin

In recent years, considerable attention has been focused on the epididymis as an extragonadal site for control of male fertility. A number of antiandrogens and α-chlorohydrin have been used to interfere with the process of maturation and the survival of spermatozoa in the epididymis. The mechanism of the antifertility action of α-chlorohydrin is unknown but several pieces of evidence have indicated a multiple site of action. The motility (Samojlik & Chang 1970), enzyme activities (Mohri et al. 1975; Yang & Srivastava 1976) and metabolism (Edmonds et al. 1976) of the epididymal spermatozoa were known to be affected by α-chlorohydrin. These effects were associated with the loss of fertilizing capacity of the spermatozoa (Ericsson & Baker 1970). Labelled α-chlorohydrin has been shown to accumulate in the cauda epididymidis (Crabo & Appelgren 1972) and the evidence is quite strong that it acts principally at the cauda epididymidis (Coppola 1969). However, it is not certain whether α-chlorohydrin acts directly on the spermatozoa or through its action on the epididymal epithelium. We have recently reported that low doses of α-chlorohydrin inhibit the sodium-dependent fluid reabsorption in the isolated duct of the rat cauda epididymidis (Wong & Yeung 1977c). This effect may be

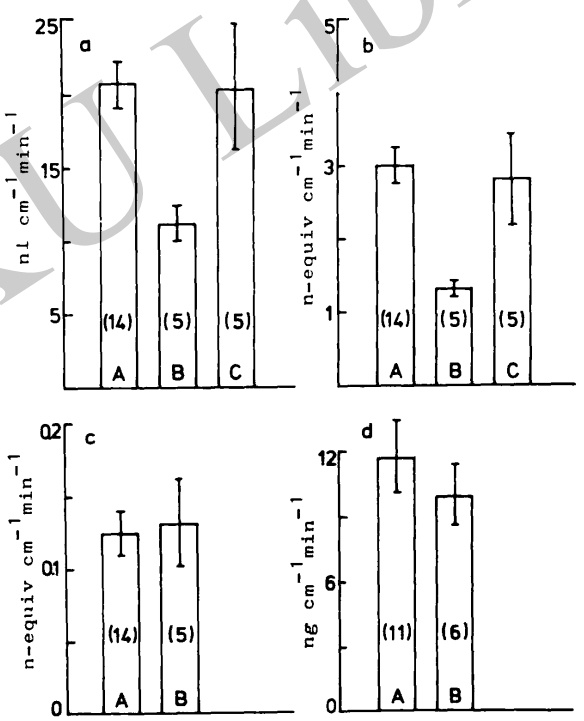

Fig. 6.

Effect of α-chlorohydrin on the rate of (a) net water reabsorption, (b) net sodium reabsorption, (c) net potassium secretion and (d) protein secretion by the perfused rat cauda epididymidis. (A) control, (B) rats treated with α-chlorohydrin (9 mg/kg/day) for 7 days, and (C) same as (B) but followed by a 7 days recovery period. Each column shows the mean ± SE with the number of experiments shown in parentheses. (From Wong et al. 1977).

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mediated through an inhibitory action on the active sodium transport across the epididymis.

The direct effect of α-chlorohydrin on electrolyte and water transport in the perfused rat cauda epididymidis has also been studied (Wong et al. 1977). Treatment of rats with α-chlorohydrin (9 mg/kg/day) for 7 days inhibited both sodium and water reabsorption by about 50 % ($P < 0.001$) (Fig. 6 a and b). These effects were clearly reversible within 1 week of cessation of treatment. In contrast, the secretion of K^+ and proteins was not affected. Histological examination of the cauda epididymidis in α-chlorohydrin treated rats showed no difference from the control indicating that α-chlorohydrin given at this dose rate did not cause structural damage to the epithelium.

Antiandrogen

Prasad et al. (1970) reported that continuous release of microquantities of cyproterone acetate from subcutaneously implanted silastic capsules at doses too low to inhibit testicular and accessory gland functions resulted in the loss of sperm motility and fertilizing capacity. This may result from an impairment in epididymal functions, causing disruption of the plasma and acrosomal membrane (Rajalakshmi et al. 1976). The exact mechanism of action of cypro-

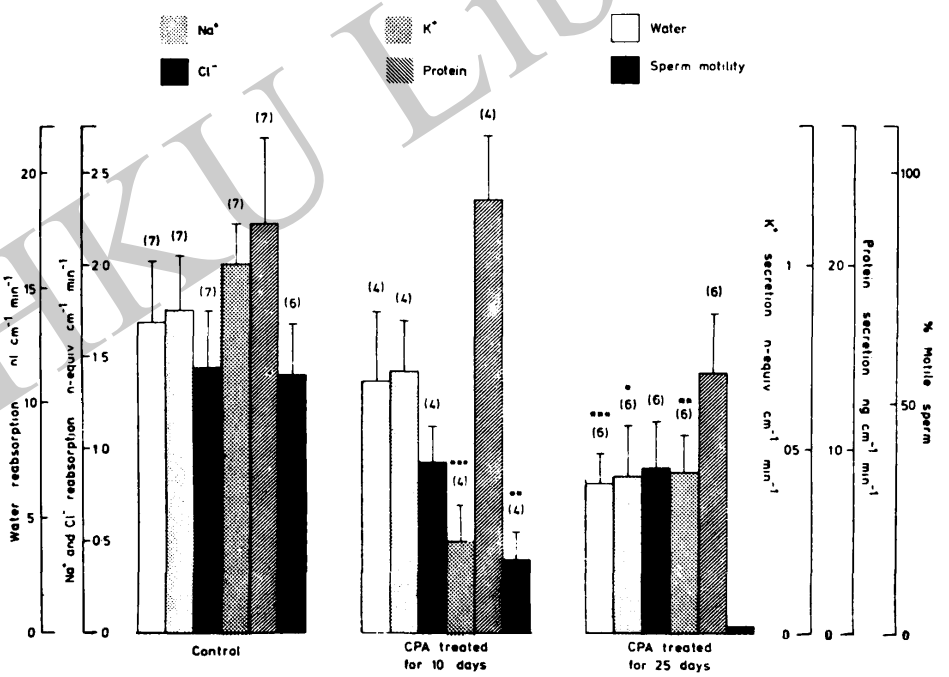

Fig. 7.
Effect of cyproterone acetate on the rates of Na^+, Cl^- and water reabsorption and secretion of K^+ and protein by the perfused rat cauda epididymidis. The percent of motile sperm in the cauda epididymidis was also shown. Cyproterone acetate (10 mg/day) was injected into rats for 10 or 25 days. Each column shows the mean ± SE with the number of experiments shown in parentheses. Values significantly different from the control at $^*P < 0.05$; $^{**}P < 0.005$ and $^{***}P < 0.001$.

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Table 2.
Weights of testes and accessory glands in rats injected with cyproterone acetate (10 mg/day).

	Testes	*epididymides*	*ventral prostate*	*seminal vesicles*	*coagulating gland*
Control (vehicle treated)	348.7 ± 7.99 (n = 7)	123.7 ± 3.6 (n = 7)	148.7 ± 12.5 (n = 7)	300.0 ± 28.9 (n = 7)	75.8 ± 6.2 (n = 7)
Injection for 10 days	377.1 ± 6.2 (n = 4)	104.3 ± 8.2* (n = 4)	102.5 ± 12.4* (n = 4)	107.6 ± 16.0*** (n = 4)	51.5 ± 9.2 (n = 4)
Injection for 25 days	341.6 ± 18.2 (n = 6)	83.3 ± 3.9*** (n = 6)	70.2 ± 12.5** (n = 6)	56.8 ± 2.8*** (n = 6)	26.6 ± 2.1*** (n = 6)

Values are the mean ± SE with the number of observation shown in parentheses.
Values significantly different from the control at $*P < 0.05$; $**P < 0.005$ and $***P < 0.001$.

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terone acetate is still unknown but it may act by competing with testosterone for androgen receptors in target cells (Fang & Liao 1969; Stern & Eisenfeld 1969). Histological and ultrastructural studies of the epididymis treated with cyproterone acetate (Rajalakshmi & Prasad 1975; Flickinger & Loving 1976) have shown an involution of the epididymal cells with depletion in secretory granules. Back et al. (1977) have suggested that cyproterone acetate may interfere with the absorptive and secretory activities of the lining cells of the epididymis. However, Glover and co-workers (1976) did not find any alteration in the concentration of sodium or potassium ions in the epididymal plasma in rats treated with cyproterone acetate.

We have used our perfusion model to see whether cyproterone acetate treatment had an effect on electrolyte and water transport in the cauda epididymidis. Cyproterone acetate treatment (10 mg/rat/day) for 10 days slightly diminished the rates of Na^+ and water reabsorption although the difference from the control was not significant statistically. Treatment for 25 days inhibited Na^+ and water reabsorption and K^+ secretion by about 50 % (Fig. 7). The secretion of proteins was little affected. Concommitant with these effects on the electrolyte and water transport, there was an increasing percent of immotile sperm in the cauda epididymal fluid (Fig. 7).

Following injection with cyproterone acetate (10 mg/rat/day), there was a significant reduction in the weights of the accessory sex organs (Table 2). Our results therefore confirm earlier reports that cyproterone acetate given at this dose rate adversely affects the accessory organs of reproduction in the male (Neumann et al. 1970). Cyproterone acetate may inhibit the functions of the accessory glands by depriving them of circulatory androgens.

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Discussion

Transport of spermatozoa through the epididymis is a prerequisite for the acquisition of sperm motility and fertilising capacity. During the flow of the testicular fluid down the epididymis, a major portion of water is reabsorbed (Crabo 1965; Waites & Setchell 1969; Levine & Marsh 1971; Turner et al. 1977). The composition of the epididymal fluid also changes in different regions of the duct, and as a result, the milieu of spermatozoa in the epididymis is considerably different from that in the testis. As the spermatozoa pass down the epididymis, they encounter a decreasing Na^+/K^+ ratio and total Na^+ and K^+ content (Mann 1974; Jones & Glover 1975; Levine & Marsh 1971). This change in ionic medium may trigger certain processes which render the spermatozoa motile and able to fertilize.

We have studied the mechanism of electrolyte and water transport using an *in vivo* perfusion technique. This technique was first applied to the cauda

epididymidis (Wong & Yeung 1978) and has now been extended to the more proximal segments of the epididymis. Our perfusion technique has one main advantage over the previous micropuncture studies (Levine & Marsh 1971; Jessee & Howards 1976; Turner et al. 1977) in that since the perfused segment of the epididymis is completely sperm-free, the change in ion concentration can be attributed to the functions of the epididymal epithelium alone. Using this technique, we found that the caput, corpus and cauda epididymides absorb sodium chloride and water and secrete K^+ and proteins. The rates of these transport processes have been found to vary with the regions of the duct. The cauda epididymidis has the highest rate of Na^+ and water reabsorption and K^+ secretion; whereas the more proximal parts of the rat epididymis absorb Na^+ and water and secrete K^+ at a much lower rate. Since a major portion of the testicular fluid is reabsorbed by the proximal regions of the rat epididymis (Levine & Marsh 1971), it would be expected that the caput has a high rate of water reabsorption. Jessee & Howards (1976) found that when they used sperm count to mark water transport in the hamster epididymis, the caput epididymis might secrete rather than absorb water.

In the cauda epididymidis, water reabsorption is found to be completely dependent on the transepithelial transport of sodium ions, as the removal of intraluminal sodium ions can abolish water reabsorption. In addition, amiloride, which prevents sodium transport by inhibiting its passive entry into cells also inhibits water reabsorption (Wong & Yeung 1976). It seems possible, therefore, that sodium ions are actively reabsorbed by the epithelium thereby creating an osmotic gradient for water reabsorption. The mechanism of water transport coupled to an active sodium reabsorption may conform to the standing gradient model of Diamond & Tormey (1966). In this context, it has been shown by electron microscopic studies that widely dilated intercellular spaces were present in the epididymal ducts which were reabsorbing water at a maximal rate (Wong et al. 1978).

In the more proximal regions of the rat epididymis, there is evidence that active chloride transport is the driving force for water reabsorption. First, reabsorption of chloride ions is hypertonic and is higher than that of sodium ions. Reabsorption of sodium cannot account for water reabsorption (Fig. 3). Secondly, working on the electrophysiology of the rat epididymal cells, Cheung et al. (1977b) observed that the luminal membrane of the caput epididymidis hyperpolarized in the absence of external chloride ions. This result can be interpreted in terms of an active chloride transport component in the luminal membrane of the caput epididymal cells. Lastly, Levine & Marsh (1971) found that the luminal fluid collected from the rat caput epididymidis had a lower chloride than sodium concentration whereas the concentrations of both ions in the rete testis fluid are identical to those in the blood plasma. These pieces of evidence taken together may indicate that in the caput and the proximal

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corpus epididymidis, the driving force for water reabsorption may be an active transport of chloride ions. Sodium ions probably move passively down the electrical gradient generated by active chloride transport.

In a previous study, we have shown that electrolyte and water transport in the rat cauda epididymidis is dependent upon the supply of circulating androgens for castration has greatly diminished the transport rates (Wong & Yeung 1977b, 1978). A possibility exists that the transport functions of the cauda epididymidis may also be regulated by the source of testosterone in the testicular fluid (see Hansson et al. (1975) for androgen binding protein in the testicular fluid) for it has been reported that some epididymal functions e.g. the contractility of the epididymis are dependent on the normal flow of the testicular fluid (Hib & Ponzio 1977). We found that ligation of the efferent duct for up to 21 days or of the corpus epididymidis for 10 days did not affect significantly the transport functions of the epididymis. It seems possible that the electrolyte and water transport in the cauda do not require the normal flow of the testicular fluid. Prasad et al. (1973) have suggested that the functions of the caput epididymis are dependent on the flow of the testicular fluid, whereas the activities of the cauda epididymidis are mainly maintained by the circulating androgens. Our results with cyproterone acetate further support this view (see below).

To establish a functional relationship between electrolyte and water transport and sperm maturation in the epididymis, we have studied transport under conditions which have rendered the sperm immotile and unable to fertilize. Daily injection with α-chlorohydrin (9 mg/kg) for 7 days has been shown to produce sterility in male rats (Ericsson 1970). We have demonstrated an inhibitory and reversible effect of the same dose of α-chlorohydrin on electrolyte and water transport in the cauda epididymidis. This effect was not caused by structural damage to the epithelium. Furthermore, ethylene chlorohydrin, which has a structure similar to that of α-chlorohydrin and is unable to produce sterility in male rats (Ericsson & Youngdale 1970), had no effect on fluid reabsorption (Wong & Yeung 1977c). Cyproterone acetate treatment produced similar effect as α-chlorohydrin. Injection of the antiandrogen into rats (10 mg/rat/day) for 10 days caused a slight though insignificant decrease in the Na^+ and water reabsorption rates and longer treatment for 25 days produced a 50 % inhibition. This event was paralleled by a progressive loss of motility of the spermatozoa taken from the cauda epididymidis. There seems to be a causal relationship between transport processe and sperm maturation in the epididymis.

In conclusion, using a perfusion technique, we have obtained evidence that sodium chloride and water are reabsorbed while potassium and proteins are secreted by the epididymis. There are regional differences in the nature and extent of these transport processes. In the caput, active chloride transport seems

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to create the driving force for water reabsorption, whereas in the cauda epididymidis, active transepithelial sodium transport is the primary event in fluid transfer. Furthermore, Na^+ reabsorption is coupled to K^+ secretion in the cauda. There seems to be a functional relationship between electrolyte and water transport and sperm maturation. Since these transport processes bear a marked resemblance to those of the renal tubules, it is of interest to see whether the transport of ions and water by the epididymis is also affected by diuretic drugs (amiloride is one example). We should like to think that there are some important basic differences between the epididymis and the kidney tubules, so that, on the basis of these differences, it would be possible to obtain an agent which specifically inhibited ion transport in the epididymis without affecting the kidney tubules and other transporting glands. A better understanding of the physiology and biochemistry of transport in the epididymis would permit a systematic search for antifertility agents capable of interfering with the process of sperm maturation by disrupting the normal milieu of the epididymis.

Acknowledgements

This work was supported by a grant from the World Health Organization. We are grateful to Professor A. C. L. Hsieh for reading the manuscript and Dr. M. Chulavatnatol for a gift of *a*-chlorohydrin. Thanks are also due to Schering AG, Berlin for the supply of cyproterone acetate and to Merck, Sharp & Dohm for the supply of amiloride. The technical assistance of Mr. Raymond Wong is gratefully acknowledged.

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THE WHEEZY CHILD

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I approach the subject of "the wheezy child" with some trepidation. This is not related to my unfamiliarity with the problem but to an acute awareness of my not infrequent therapeutic impotence in dealing with it; to an awareness of the not infrequent disappointment of parents who have sought my help; and to my inability in many instances to understand its aetiology. However, in contrast to the aetiology, the pathogenesis of wheezing is clear enough and that is, of course, narrowing of the larynx and upper trachea, when by convention we call it "stridor", or more *commonly* of the bronchi or bronchioles. When the degree of bronchial narrowing still permits both the entry and the egress of air-by-pass valve obstruction – the wheeze will be audible during both inspiration and expiration as, for example, in asthma; but when a more severe degree of narrowing permits the entry of air but severely impedes its escape – check-valve obstruction – the wheeze may be heard only during inspiration and the result will be obstructive emphysema with ballooning and over-distension of the alveioli; and when the bronchial obstruction is complete – stop-valve obstruction – the wheeze disappears as resorptive atelectasis develops.

The causes of stridor or wheezing in a baby or young child are legion. They range from multiple papillomata of the larynx which is rare but for which we have no satisfactory treatment to cystic fibrosis of the pancreas which is rare in the Chinese and for which also we have no entirely satisfactory treatment. I propose to consider but a limited number of causes of stridor and wheezing, chosen *either* because they are common *or* because effective treatment is available if the diagnosis is timely. I have included stridor in my remit because this symptom in a young child must always be regarded seriously.

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Congenital Laryngeal Stridor

Congenital laryngeal stridor is the commonest type seen by the neonatologist and one of the few which are generally regarded as benign. Some have attributed it to an unusually long and curved epiglottis which is drawn down into the larynx with each inspiration, while others have postulated laryngomalacia without much evidence to support it. While the prognosis is usually good it is important to consider and investigate the possiblility of a vascular ring in every case where the stridor becomes more severe rather than less during the early weeks or months of life, and particularly if it is accompanied by feeding difficulties and slow weight gain. Even in apparently benign cases the passage of time sometimes reveals unwelcome neurological problems such as cerebral palsy or memtal retardation because the stridor *has*, in such cases, been due to neuromuscular incoordination. It is prudent, therefore, not to be too dogmatic too early, and that your reassurance should not be completely unqualified.

Croup

In the older baby or child the commonest cause of laryngeal stridor is "croup" which means "a hoarse sound". We use the word to include stridor, cough, and hoarseness associated with laryngeal and upper tracheal narrowing. Nowadays with the disappearance of diphtheria the commonest cause is acute laryngotracheobronchitis due usually to parainfluenza or other viruses, and which can vary from a relatively mild to a life-threatening illness. A highly dangerous bacterial variant of this condition is, of course, acute epiglottitis in which *H. influenzae* can be isolated from both throat swabs and blood culture.

Croup often follows a day or two of mild upper respiratory catarrh and the stridor seems frequently to commence during the night when *everything* seems more alarming. It may abate as the day goes on but if it becomes more severe with increasing restlessness, anxiety, and distress on the part of the child

admission to hospital is imperative. Immediate measures should include propping the child up, and giving 40 per cent oxygen in high humidity. An adequate fluid intake must be ensured. In acute epiglottitis the acutely inflamed and oedematous epiglottis can be seen as a red cherry-looking swelling which obstructs the pharynx at the base of the tongue. In such cases, after arranging for appropriate virus and bacterial cultures, amplicillin or chloramphenicol should be given in full therapeutic doses by a parenteral route. In every case of laryngeal obstruction immediate arrangements for tracheostomy or tracheal intubation should be available, but no attempt should ever be made to perform laryngoscopy *before* a clear decision is reached that mechanical relief of the obstruction is to be undertaken. In my view it is better to carry out such an operation even unnecessarily than to leave it too late, and this very difficult decision is better based on the clinical signs of increasing distress and exhaustion than on blood gas values.

Congenital Lobar Emphysema

To return to the newborn, an important but uncommon cause of a *bronchial* wheeze, in contrast to stridor, is congenital lobar emphysema. Acute respiratory distress and wheezing develop during the neonatal period, or occasionally later on, and it is probably due to chondromalacia of the bronchial cartilage. The result is a check-valve obstruction with obstructive emphysema affecting one of the upper lobes, more often the left. Rarely the middle lobe may be involved but never the lower lobes. Prompt diagnosis is important because emergency lobectomy results in complete recovery. While it may be difficult to detect hyper-resonance and diminished breath sounds in a distressed baby the diagnosis can always be confirmed by chest X-ray. This shows increased translucency in the emphysematous lobe which may herniate across the midline with mediastinal shift to the opposite side.

Acquired Obstructive Emphysema

Obstructive emphysema of a lobe may also be due to a variety of acquired in contrast to congenital causes of check-valve obstruction. An *inhaled foreign body* is easily missed, especially when it is non-radio-opaque. It is important to remember that the initial episode of choking, gagging and stridor at the time the foreign body was inhaled may not have been observed by any adult, and the child may be too young, or afraid to tell anyone about it. Inhaled vegetable matter, a peanut for example, can cause rapid damage in a lung and bronchoscopy should be regarded as a matter of urgency in any child who has a wheeze and obstructive emphysema which cannot otherwise be explained. If the foreign body completely occludes the bronchial lumen the wheeze will, of course, disappear and the X-ray will then show atelectasis, so that unexplained atelectasis is another clear indication for bronchoscopy.

Another important cause of lobar obstructive emphysema is *primary intrathoracic tuberculosis.* This may prduce erosion and then perforation of the bronchial wall by the caseous hilar lymph nodes so that the bronchial lumen becomes filled with tuberculous grandulation tissue. Most often there is complete obstruction of the lumen with atelectasis and no wheeze. In other cases, however, a check-valve obstruction is produced with obstructive emphysema. A characteristic feature of these cases is the presence of an audible wheeze at the open mouth which Chevalier Jackson called "the asthmatoid wheeze". Indeed, in the young child inspiratory *and* expiratory wheezing may result from simple external compression of the thin-walled bronchi by the caseous hilar lymph nodes and this is the basis for Chevalier Jackson's frequently quoted aphorism that "all is not asthma that wheezes". In the paediatric literature of the 19th century you will find references to what was called "the wheezy wasting syndrome of infancy" and which we would today recognise as tuberculosis; even now when tuberculosis has become much less common I think it is important always to exclude this disease before making a diagnosis of asthma in a young child.

Generalized Obstuctive Emphysema

Obstructive emphysema may, of course, develop as a widespread condition throughout both lungs when there are multiple check-valve obstructions in the bronchioles, in contradistinction to the obstructive emphysema which affects a single lobe due to check-valve obstruction in a lobar bronchus. It is most commonly seen in *acute bronchiolitis* due to infection by the R.S. virus, and it is particularly dangerous during the first 6 months of life. Following upon a few days of upper respiratory catarrh the

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infant becomes acutely distressed with both inspiratory and expiratory wheezing, severe spasms of coughing, and restlessness due to hypoxia. The chest is held in the inspiratory position of over-inflation, and while auscultation may or may not reveal fine crepitations or rhonchi the chest Xray will show the over-inflation and increased translucency of generalized obstructive emphysema. In the worst cases dangerously low and high levels of arterial PO_2 and PCO_2, respectively may develop; and increased insensible water loss from the lungs combined with feeding difficulties and reduced fluid intake may cause a potentially brain-damaging degree of hypernatraemia to develop.

The infant should be nursed propped up in high humidity in an oxygen tent with an oxygen concentration of at least 40 per cent. It is, in fact, extremely important that the oxygen level in the tent should be frequently monitored with an oximeter; and the arterial PO_2 and PCO_2, also the serum electrolytes, should be measured periodically. An adequate fluid intake must be assured, by I-V infusion if necessary. Antibiotics are commonly prescribed for these very ill babies. In fact, they achieve nothing and I prefer to avoid them. Some have advised hydrocortisone on very doubtful evidence, while others, finding the liver edge depressed, prescribe digoxin on the basis of cardiac failure. I find it difficult to understand why a previously healthy myocardium *should* fail because of R.S. virus infection but used with care at least digoxin should do no harm. It is, however, more important to correct metabolic acidosis when it is present with intravenous sodium bicarbonate, always provided the serum sodium level is carefully monitored. In the worst cases, which are fortunately few, a PCO_2 rising to 70 mm Hg or above is an indication for tracheal intubation and mechanical ventilation.

An important and common cause of generalized obstructive emphysema in Caucasians is *cystic fibrosis of the pancreas* in which the multiple check-valve obstructions are due to a staphylococcal bronchiolitis. As this is the most commonly fatal genetic disease of the West it is likely to appear in Hong Kong from time to time. The usual clinical picture is that of a baby or young child with an over-inflated chest, obvious dyspnoea and wheezing, subcostal inspiratory recession, distressing spasms of coughing which cause vomiting and failure to thrive, *but* with only low-grade fever. The characteristic very foul-smelling greasy stools may not develop until the infant is established on a mixed diet. The response to antibiotics and physiotherapy is never complete and remarkably variable. Only too often later Xrays show the increased interstitial lung markings and multiple soft shadows of progressive lung suppuration. By this stage the child is markedly underweight, continuously wheezy with purulent sputum and a deformed and over-inflated chest, while the fingers show clubbing. The presence of diffuse obstructive airways disease can be confirmed by lung function tests, and serial ECG's will reveal the development of cor pulmonale. The prognosis in the individual patient depends almost entirely upon the physician's success in controlling the lung infection; he cannot hope to eradicate it.

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ASTHMA

Let me turn now from conditions which are reasonably well defined to the problems which have so frequently found me confused, and sometimes frustrated by my therapeutic impotence. Asthma, asthmatic bronchitis, bronchitic asthma, wheezy bronchitis – the very names reflect our uncertainties. There is, indeed, no generally agreed medical definition of "asthma" which means, literally, "breathing hard". This lack of a precise definition explaines the many conflicting reports on its incidence, classification and prognosis. Most physicians have used the term "asthma" to describe a clinical disorder which is characterized by intermittent attacks of bronchospasm with prolonged expiration and rhonchi; and the most clearly defined *type* has been variously preceded by the adjectives extrinsic, allergic or atopic. Extrinsic asthma is identified by a family history or allergy, a preceding history in many children of atopic eczema, and a raised serum IgE level in about 60 per cent of cases. Cases in which there is no demonstrable allergic diathesis have been labelled intrinsic asthma and it is in this group that the attacks seem frequently to be provoked by infections, and in some cases by emotional stimuli. Unfortunately, there is considerable overlap between these two types of asthma, and despite its allergic basis infection appears to be an important precipitating factor in many episodes of extrinsic asthma, but whether the infecting viruses or bacteria act primarily as antigens or only secondarily is uncertain.

There is, furthermore, a wide variation in the behaviour of different children, whether they be classified as cases of extrinsic or of intrinsic asthma. The term "spasmodic asthma" has sometimes been used to describe cases in which isolated attacks are separated by completely symptom-free intervals; when some wheeze is present everyday the word "continuous" has been employed; and "intractable" has been applied to cases which prove unresponsive to bronchodilators and in which chest deformity often develops. If ashthma has no agreed definition neither has the frequently used term "status asthmaticus". It has been used to describe the attack which is severe enough to necessitate the patient's

admission to hospital; others use it for a severe attack which has persisted beyond a certain number of hours; and some have used the term merely to describe the case which is refractory to treatment with adrenalin or aminophylline which, of course, raises the question as to how refractory is refractory? Perhaps the term is best confined to those cases in which life itself is thought to be threatened.

The age period in which the biggest difficulties arise – whether of classification, assessment of lung function or prognosis – is from about 18 months to 3 or 4 years. This, of course, is the age period during which *most* children are prone to respiratory infections. Indeed, they might almost be regarded as part of the normal process of growing up in an urban community. However, some children develop broncho-spasm during each of these infections with a variable degree of respiratory difficulty, wheezing expiration, an unproductive hacking cough, fever and obvious anxiety. In the majority there is no other evidence of allergy and the serum IgE level is not raised, although in some a hisotry of similar attacks during their childhood can be obtained from one of the parents. The problem which confronts the paediatrician is to know which child has true extrinisc asthma, which may become more typical in its manifestations with the passage of time, and which is likely to go with him into later life; and which child is likely to stop having attacks of bronchospasm as his proneness to recurring respiratory infections disappears. I do not know of any reliable way of differentiating asthma from asthmatic bronchitis in the pre-school child in the absence of clear manifestations of an allergic diathesis.

A search of the voluminous literature will reveal to you that the prognosis of asthma is surrounded by as much uncertainty and contradiction as its diagnosis or classification. It has often been suggested that 50 per cent or more asthmatics will have outgrown their asthma by the time puberty is reached, but I wonder how many of these spontaneous recoveries have been cases of recurrent wheezy bronchitis and not true allergic asthma. In a careful follow-up study of over 18 years which was published in 1977 good evidence was produced that the prognosis for spontaneous recovery was poor if there was a clear history of asthma in first degree relatives, or evidence of other atopic diseases such as eczema, hay-fever or perennial rhinits. On the other hand, the prognosis was *not* influenced by the age of onset or by the sex of the patient. An important additional observation was to the effect that a history of breast-feeding for not less than 8 weeks considerably improved the prognosis. I sometimes wonder how many parents I have myself given a reassuring prognosis through the years on quite inadequate evidence, but I take comfort from the fact that parents are more ready to forgive an excess of optimism than they would be to excuse an unduly pessimistic outlook. The high incidence of chronic bronchitis and emphysema among adults, at least in the U.K., raises yet another unanswered question, and this is how many of these are the long-term results of wheezy bronchitis in childhood which did *not* undergo spontaneous recovery? I know of no prospective follow-up study which has answered this question.

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The Managment of Acute Asthma

In contrast to the classification and prognosis of asthma its treatment is less controversial although even here there is disagreement; for example, between those who, like myself, regard subcutaneous or intramuscular adrenalin as a valuable initial measure and those who decry its use because of its possible cardiovascular effects. There is little disagreement about the value of intravenous aminophylline, provided it is given slowly, but a slow intravenous injection in a restless 4-year old in a private house is not always an easy affair. More recently the use of salbutamol for a severe attack has become popular. It may be given intravenously by slow injection in a dose of 4 mcg/Kg, or intramuscularly in a dosage of 8 up 20 mcg/Kg, or it may be administered in the form of an aerosol using a mechanical nebulizer. In every severe attack the child should be placed in 40 per cent humidified oxygen, the blood gases should be monitored, and an adequate fluid intake must be ensured – by the intravenous route if necessary.

In *less* severe cases one of the many bronchodilators given orally will prove sufficient and I suppose we all have our preferences – salbutamol 2-4 mg 6-8 hourly; orciprenaline 5-10 mg 6-8 hourly; terbutaline 1.5-5 mg 8 hourly; choline theophyllinate 30 mg/Kg/day in 3 or 4 divided doses. It is common practice to prescribe antibiotics for the child who has both fever and bronchospasm, but I have found them of little value and I believe their risks outweigh their doubtful advantages. Antihistamines are also contraindicated because of their drying and sedative effects.

In life-threatening status asthmaticus intravenous hydrocortisone is essential although its effects will not become appraent for several hours. It should be given in a dosage of 100-200 mg 4-6 hourly for 24 hours, after which the dosage can be reduced over the next 3-4 days, or an oral preparation can be substituted. In the very few children with an arterial PCO_2 above 65 mm Hg mechanical ventilation should be instituted, and if there is also a marked metabolic acidosis intravenous sodium bicarbonate will be necessary under careful biochemical control.

Long-term Management

In the long-term management of the asthmatic child there are 3 principal avenues of approach; and it is helpful to monitor progress by pulmonary function tests, especially the Peak Expiratory Flow Rate using the simple Wright PF Meter.

The *first* apprach is the psycholgical; to gain the confidence of the child and his parents by adequate explanation, and discussion of what faces them in the future. Asthma is a condition which has to lived with an restriction of the child's physical activities must be discouraged. In fact, he should be actively urged to undertake physical exertion, and swimming is a particularly suitable sport. It is often important to explore the inter-relationships between the child and his parents, especially when a careful history has revealed a psychological trigger for many of the attackes. Many parents become too protective and restirctive; others are guilt-ridden about the part they think their own heredity has played in their child's problem; some fear for the child's life, or are worried about possible future career limitations; and some parents come to resent the way in which their child's asthma repeatedly interferes with their family plans. On the other hand, some children use their asthma to evade normal family or school responsibilities. The paediatrician should be able to resolve most of these problems, and I think the child psychiatrist only needs to be involved in the very few children in whose cases deeper family problems have seen uncovered.

The *second* approach to management may be called the physical, and it includes regular deep breathing exercises which I have found very beneficial, althouh I have to admit that I know of no contolled studies to support this opinion. Environmental measures such as foam rubber mattresses and pillows, the removal of heavy curtains and carpets, damp dusting of furniture and floors are difficult to evaluate. Indeed, the management of asthma is bedevilled by clinical impressions and they very multiplicity of measures argues against their value to some extent.

There is, however, convincing evidence in support of the *third* approach. In particular, two drugs which act in quite different ways have revolutionized the lives of many severe chronic asthmatics provided they are regularly and efficiently used. I refer, of course, to sodium cromoglycate and beclomethasone dipropionate (or betamethasone valerate). It is, however, important that the paediatrician teaches the child and parents how to use these two different types of inhaler and they are unlikely to be within the competence of children much under the age of 5 years. *Prick skin testing followed by courses of desensitization have always had their enthusiastic adherents, and while they may *sometimes* prove effective I have never been convinced that they are of much valve. In the uncommon situation where asthmatic attacks are triggered by only one allergen, such as a dog, prawns or flowers, it is earier just to avoid contact with the offending article.

The literature on asthma is enormous but the *real* improvements in its management since I qualified over 40 years ago have been relatively modest and can be readily summarised:—

(i) More efficient drugs, including corticosteroids for the treatment of the severe attack,

(ii) More accurate lung function tests to assess progress,

(iii) The introductin of sodium cromoglycate and the metered sterioid aersols which have undoubted prophylactic value.

In the U.K. more school days are lost through asthma than any other condition, which must reflect our comparative therapeutic impotence. Fortunately, the death rate is low, but there is no evidence of its having fallen during the past 40 years. On the contrary there was a marked increase in deaths between 1960 and 1967, probably due to the introduction of the metered (pressurized) aerosols containing sympathomimetic drugs such as isoprenaline. It would seem to me better if there are not used in children at all. Indeed, at the risk of being considered a therapeutic nihilist I shall conclude with the thought that more cases of asthma and asthmatic bronchitis are over-treated than under-treated.

* It is, however, now also possible to administer sodium cromoglycate to the young child through the face mask of a nebulizer (Pari).

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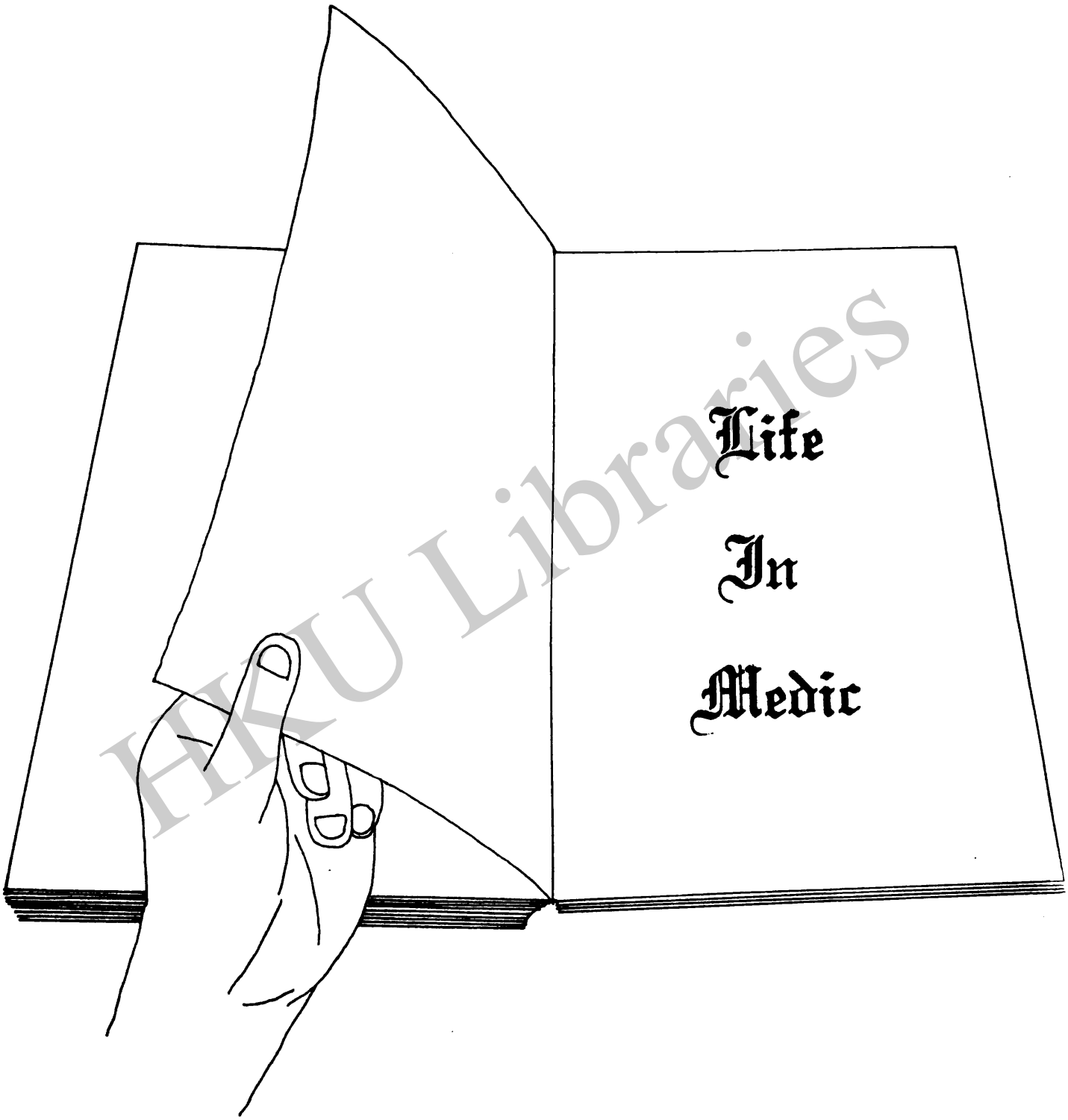

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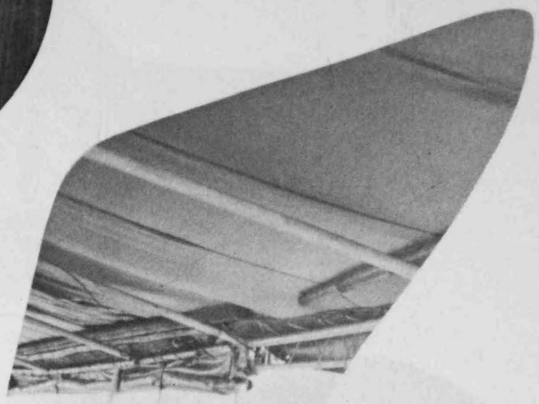

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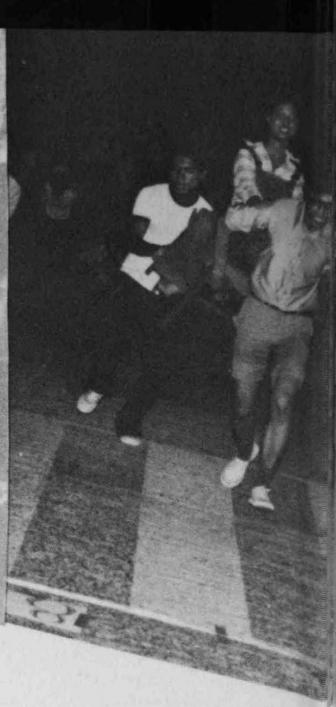
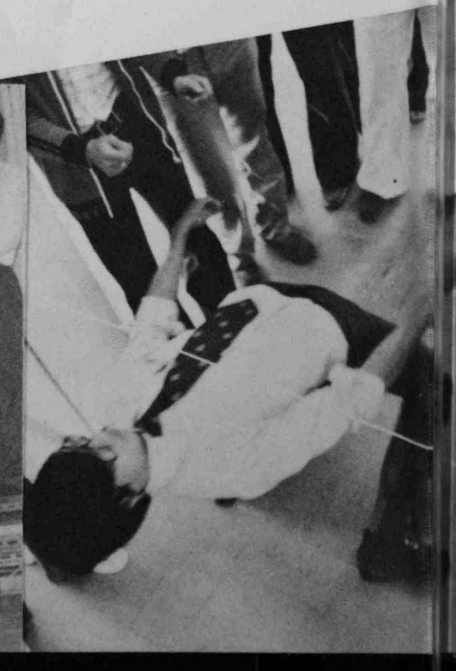


MEDIC FESTIVAL HKU

Lunch-time programme	23-27/10
Music Festival	25/10
Medic 80 got the Overall Championship and was honoured Dr. T.K. Chan Cup	
Fratem Nite	27/10
The Overall Championship went to Medic 82	



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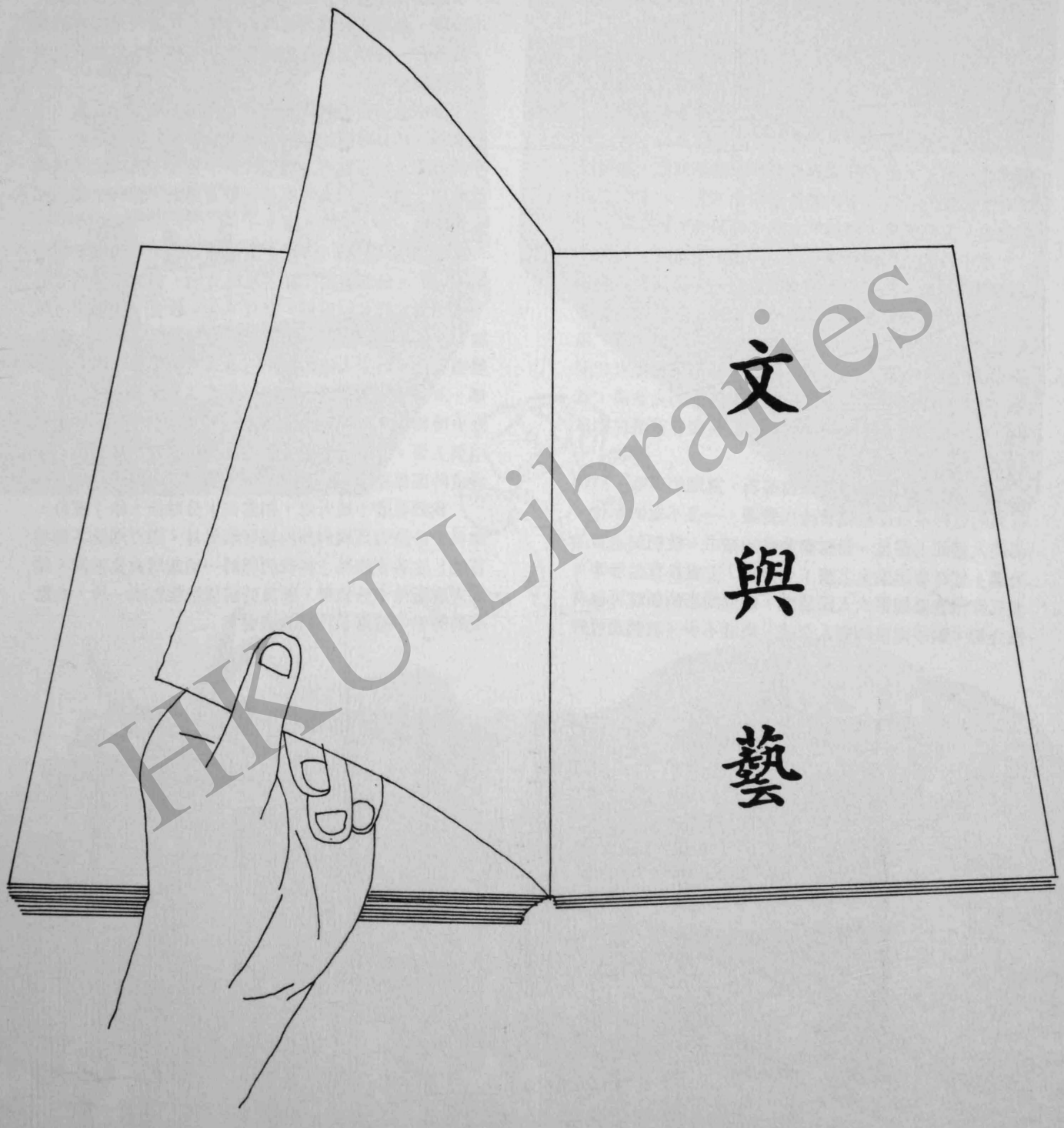

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我們的旅程

劉少懷

八月五日終於來到了，大家都懷興奮的心情踏上北京的途程。

今次醫學會首次舉辦北京團，目的是希望同學能够親身回到祖國大地，增加對中國的認識。除了遊覽名勝古蹟外，也希望能够接觸當地人民，了解他們的生活情況。

我們一行共二十六人，浩浩蕩蕩的坐上了火車，開始了十八天的行程。在這短短的十數日內，我們遊遍了華東五個城市——杭州、上海、南京、蘇州和北京。

首先到達的是廣州，我們停留的時間不長，第二天便飛往杭州了。由於很多同學是首次乘坐飛機，那種既好奇又緊張的心情，令到團員都坐立不安，在座位間奔來跑去，又唱又笑，機艙內充滿了熱鬧的氣氛。

三小時的航程轉眼便到了，從機窗望出外，西湖那碧澄澄的湖水，映着四周的翠叢綠蔭，好像仙景一般幽美。杭州的風景和名勝大家都不肯放過，「謀殺」了許多菲林，就是爲了要捕捉一點湖光山色。三潭印月，島中有島，湖中有湖，建築獨具匠心；長長的蘇堤夾在兩旁的垂柳中，別有一番詩意；還有靈隱寺的大金佛；氣象萬千的六和塔；玉泉的大鯉魚，以及龍井茶葉虎跑泉……散之不盡。

到了上海，高大的西式建築物，寬闊的馬路，形狀各異的燈桿以及那些隨着時代變遷，一去不返的標牌，都使人感到上海是一個歷盡桑滄的城市。我們到過黃浦公園，虹口魯迅先生之墓，少年宮，工業展覽館等等。並且有機會參觀第六人民醫院，聽到精彩的斷肢再植科技介紹，跟手術後的病人交談，獲益不少。我們還曾經在「風雷劇場」欣賞到上海木偶劇團演出的「孫悟空三打白骨精」，劇情高潮迭起，加上精心佈置的背景，色彩鮮明，木偶動作靈巧，生動，活潑，氣氛營造恰當，眞是一齣成功的木偶戲。

南京和蘇州行程比較匆促，因爲接待人手不足，我們的行程重新安排，逗留的時間縮短了，爲了好好利用，所以節目安排十分緊密。紫金山天文台，長江大橋，中山陵，梅園新村我們都只能走馬看花。但是難得的是，能够有一個晚上與南京的青年朋友們暢快地談天說笑，其樂無窮。

蘇州是個古老城市，那裏有小橋、流水、人家，十分幽靜。林林總總的林園也表現出優美的民族風格。在小院庭間，竹石雜列，橋廊軒榭，各有千秋。此外我們還參觀了蘇州的刺繡研究所和檀香扇廠，那些工藝品都十分精緻，令人嘆爲觀止。

從蘇州到北京，坐了十幾個鐘頭的火車，大家仍是精神奕奕。來到這個充滿了歷史文物，名勝古蹟的地方，眞使到我們大開眼界，充實不少。故宮、頤和園、天壇、北海公園、長城、定陵，這些聞名的建築，大家都讚嘆不已，對於人民智慧和巧奪天工的創造感到十分欽佩。至於現代的建設，我們也參觀不少，如地下火車，歷史博物館，人民英雄紀念碑，毛主席紀念堂，地底防空洞工事。北京著名的全德聚烤鴨，我們也嚐過了，十幾道的菜都以鴨肉爲主要材料，厨子也算盡了心思。

我們在這十幾天內，相處都十分融洽，除了團長，組長十分盡力爲我們團內搞好氣氛外，還有兩位不辭勞苦的「生活管理員」替我們照料一切起居飲食細則，使到大家玩得十分快樂，團員的感情也能打成一片，在歡樂的笑聲中結束了我們的旅程。

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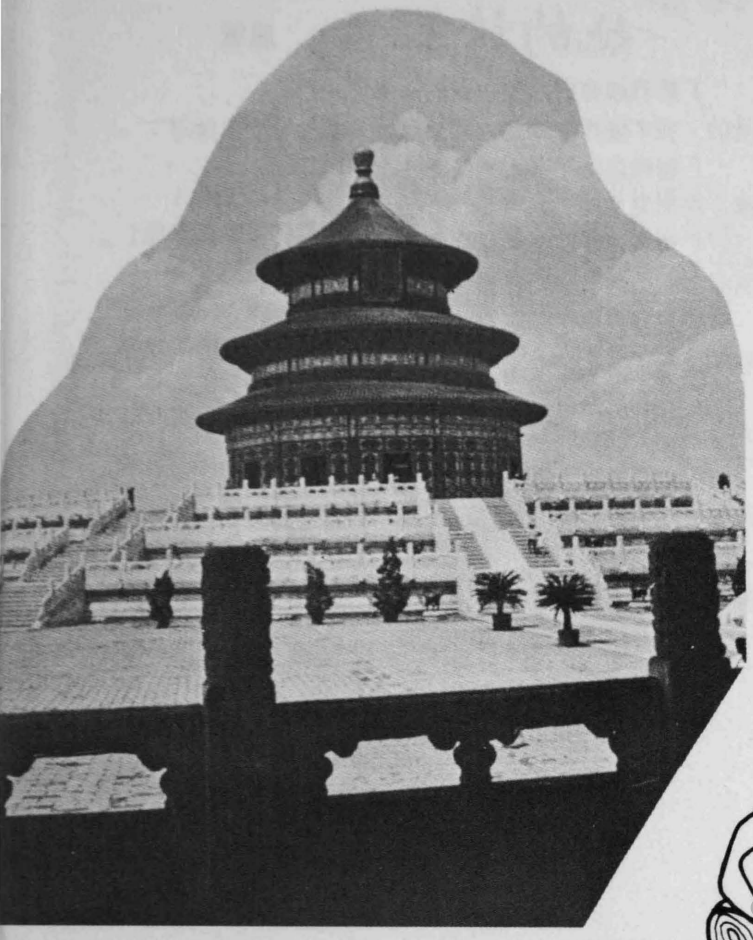

KULLra

THE WORLD IS A BOOK

她的詩篇

思慧

「若我沒有原諒他給我的侮辱」，
是的，我不懂得看顧別人的感受，其或故意令人難堪，
「若我忘記了那人的優點」
噢，在那兒？
「若我不在禱告中惦念他」，
謝謝妳，但請不要把我放在首位；
「若我拋棄了所下過的承諾」，
我早已拋棄了，爲甚麼要保守著妳底諾言呢？
「若我只爲自己落淚」，
不要難過，我也在爲妳落淚！
「若我擺出一副傲慢的面孔」，
妳的傲慢，也許使我能爲看不到妳的軟弱而平安，
「若我讓愛心的火燄熄滅」，
請不要爲這短暫的時光在燃燒自己，
「我就絲毫不懂加略山的愛」，
啊，求妳教導我！

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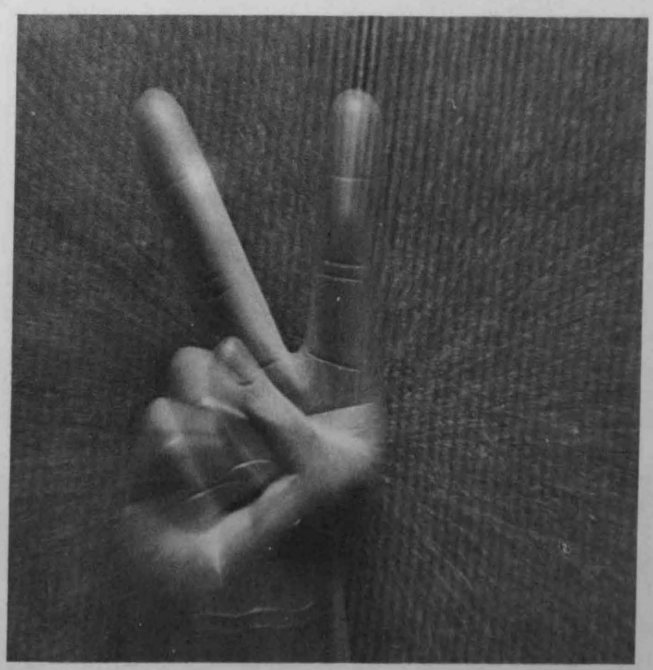


手

馬

這是一雙醜陋的手，
它們乾癟，
它們粗皺，
它們在顫抖！
菜刀嚐過它們的血，
車縫針穿過它們的指頭；
在沒有父親的日子裏，
爲了兒女，它們奮鬥！
這雙手，把痛苦艱辛默忍受，
這雙手，沒有指環，沒有指甲油；
這雙手，愛勞動，不停休，
在兒女的眼中，是最華美最華美的一雙手！

略談健康展覽

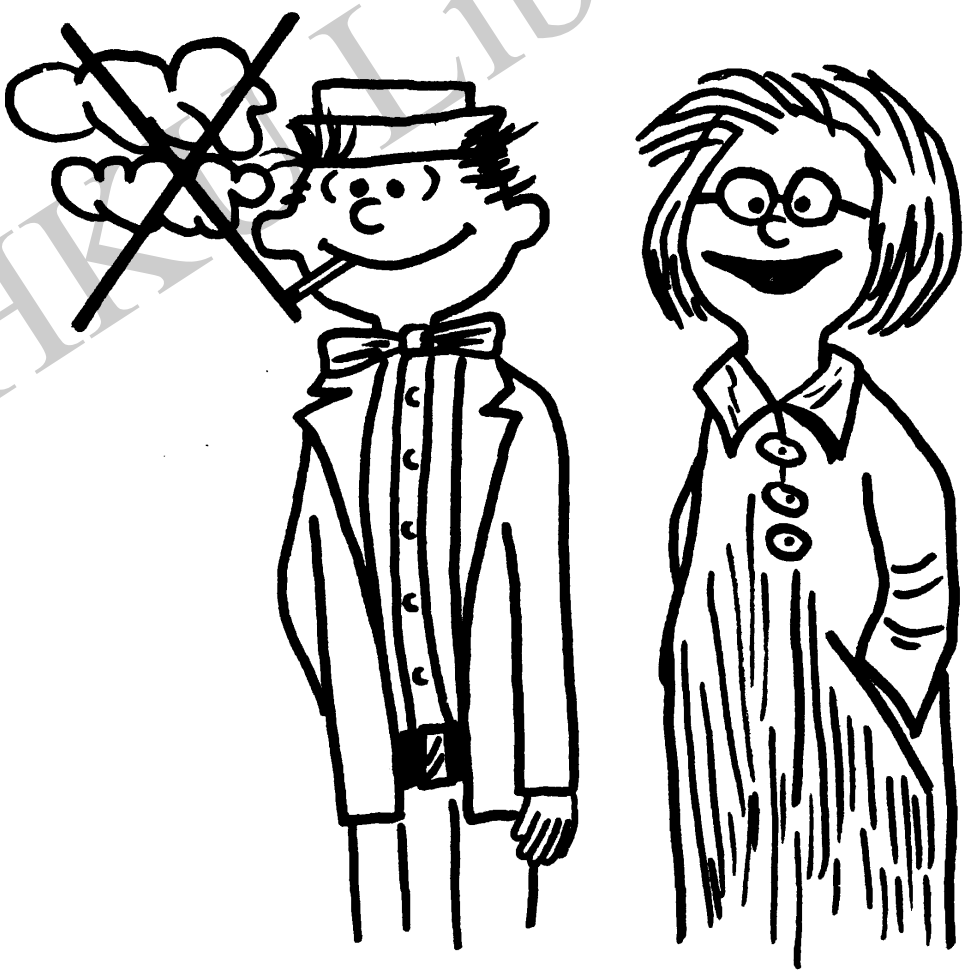
馮康

七八年四月下旬，健康委員會決定維持自「健與疾」展覽以來的傳統。於是，一班有興趣的同學便聚集起來，開始商討人事上及選題的問題。通常不易處理的人事安排，今回可一下子給弄妥當了。然而，選題方面却頗傷腦筋：要在六月考試假期前定好，要不重覆以前做過的題目，要市民有興趣的，要對市民有用的。更何況討論過程中少不免又要談點什麽宗旨意義。五月亦更顯得來也匆匆，去也匆匆。

由最早的時候開始，我們便說烟酒不是個挺好的題目。理由之一是範圍太窄了，不易做。做太重，市民不懂；做普通一點，市民又未必滿足。而且烟酒在近年來也可算是個老生常談的話兒。大小報章刊物，沒有未提過烟酒與健康的關係的。不過，烟酒確實引起不簡單的醫療健康問題，我們又何妨一試！很感謝Prof. Colbourne 的話：「假使你們能使百餘名中學生避開烟酒，你們便成功了。」

我們不知道展覽到底成功了沒有。整個展覽的參觀人數和往年差不多，大約二萬人，其中不少是中學生。有些年紀較小的則由學校老師整羣帶來，他們肩負起時代給予他們的任務，附會著老師們的要求，在會場中，充份地表現出抄寫功夫的熟練和到家。我們差不多可以肯定他們會有優越的成績。只是，不知五年或十年後，他們手中的是雲絲頓還是紅雙喜了。無論如何，20,000 C100 不是個容易計算的數目。但總可計算。我們也始終相信我們的希望。

數年積下來的傳統，相信已令一些人養成一個習慣：每逢九月，便記起有這麽的一羣醫學生。大概醫學會是應該在社會中扮演個更積極的角色的。每年一次的健康展覽，只像是象徵式的一個玩意兒。這一兩年來，有許多同學對于展覽能否繼續搞下去存有疑問，那當然要深入討論一番。不過，私意以爲：所謂成敗得失既往往無從決辨，而我們仍相信健康展覽的意義；加上歷年來這個項目亦儼然是迎新的一部份。如此計起來，我們大可暫時拋棄一切顧慮吧！傳統很多時候經不起時間的考驗，但每每又在同時成爲許多人心中眷戀的地方。



"I don't object to your smoking so long as you don't puff!"

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我的一年中

張偉麟

三月，一羣黑影有節奏地隨着強勁的音樂搖擺，跳躍。在黑暗的一角裏：

「喂，Medic Ball可不可以帮手，今年是爲醫學會籌款的。」

「也好，考完M.B.，都想做些事，而且我都想知道Medic Ball是怎樣的。」

五月，籌備工作開始，我當了售票經理。因爲沒有經驗，於是到處詢問別人的心得經驗，並且找了幾位同學帮忙。一連串宣傳工作隨即展開：打信、印信、寄信、印海報，到處推銷入場券。主要對象爲各年級同學，各科教授職員，醫院及診所醫生等等。

六月十七日，1978年年醫學會週年舞會在凱悅酒店舉行。因我當晚要安排接待工作，而亦想親身體驗大家多月來工作的成果，於是不惜大破慳囊，參與盛會。

經過一番致詞後，舞會正式開始，一時舞池中彩裙飛舞，香氣四溢，歌樂之聲飄揚於柔和氣氛之中，眞是和一般舞會截然不同，使我大開眼界。舞會的高潮是大抽獎，頭獎是來回馬來亞雙人機票，不過一向無運的我，祇好將自己的快樂建築在別人快樂之上。

六月十八日　12：30AM

「的士！」

「到那裏？」

「紅磡。」

「五元去不去？」

於是無運的我又祇好付額外數元。

這次舞會終於爲醫學會籌得額外的六，七千元而完滿結束。

問自己，何所失？何所得？

失時間，金錢；增見聞，經驗。

失者有限，得者無價。

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德詩中譯

予慕子歌

楚橘

予慕子夸
予慕子兮
子不予慕
予爲晦夜
子爲明晝
予恆戚戚
子恆樂歡
子嘗過予
不予回看
予含苦兮
而知其故
子不慕予兮
予何子慕

ICH LIEBE DICH

Ich liebe dich,
Du liebst mich nicht.
Ich bin die Nacht,
Du bist das Licht.
Ich bin der Schmerz,
Du bist das Glück.
Drum schaue nie,
Zur mir zurück.
Ich weiß es doch,
Bitterlich.
Du liebst mich nicht,
Ich liebe dich.

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弱智問題探討計劃

張壁濤

前言：

這個探討計劃，是醫學會的活動之一。它的出現，並非偶然。籌劃「弱智」的主要目標，是要貫徹這幾年來醫學會的方向：透過不同種類的活動，使院內同學能一起探索將來的責任。此外，亦亟希望在過程裏，對有關問題作貢獻。

在去年裏，醫學院同學有機會接觸的事件、活動很多。譬如實習醫生問題，老人探討計劃，健康展覽，弱智問題探討劃，關心艇戶計劃，大學醫務處事件，上水菜園村事件，金禧事件，釣魚台，中文運動等，涉及範圍由校內，醫療界伸展到社會及國家的問題，正是各適其色，包羅萬有。有人懷疑，醫學生是否應多辦有關醫療界的活動，則更能達到探索責任的目標。然而，筆者覺得接觸層面越廣，越發能幫助組織一較全面的人生觀，從而亦直接影响對責任的理解及掌握。

在芸芸衆多活動中，「弱智」這計劃，是較接近醫療界的一個。

工作：

總的說來，計劃分前、後兩期。前期活動適值考試時期，故無論組織或參予，都差不多全是一年級同學；其後在啓思第十卷第四期的「弱智——社會遺忘的一羣」一文中交代過。後期捲入一、二、三年級的同學，把活動擴散開；除座談、探討中心、家訪外，於家訪之同時，我們作了一調查。其後還在「烟洒與健康」展覽中設了一部份介紹這問題。

工作的籌劃著重兩點原則：其一是令同學能親自接觸弱智人仕，了解他們的困境。其二是希望能解決弱智人仕的一些困難。在考慮後者時發現並不易做到，前期我們協助招開記者會，由家長們親自向傳播界申訴弱智人仕遇到的困難。後期我們祇可靠在健康展覽把一點正確的訊息帶給市民。另外調查是與明愛中心的社工合作的，希望結果能幫助中心作一些具體檢討。在過程中，我們曾接觸香港擴播有限公司，嘗試由專題節目引發社會人仕關注這方面的問題。

至於前者，主要仍是以家訪的形式去貫徹。不過，前、後兩期探訪的家庭有不同的背景。前期所有家庭都沒有中心帮助，而後期則剛相反。這樣造成同學接觸的情況有點差別——後期的家庭比較少眼前的困擾，對問題了解得也較多。可惜在本港的弱智家庭，類似前期的却佔大比數，因此後期家訪見到的並不完全反映本港情況。然而，我們亦不妨將之作爲一個反證，具體顯示了中心照顧對弱智家庭的重要性。無論如何，這是籌劃中的一個不足。

弱智的問題：

和其他精神科病一樣，弱智病患者是受到社會人仕的誤解及歧視的。弱智人仕很早便給予家庭平添不少壓力，舉凡精神上（家長的失望、痛苦），事務上（由於弱智者照顧自己能力差，特別是嚴重及中度者，需要更細心的照顧），經濟上（在很多家庭，父母親均是生活支柱）等。長期的壓力，危害著家庭幸福。

理論上，弱智病患者是於童年時智力發展緩慢，致無法達到平常人的智能（智商約由零至七十五，共分輕度，中度及嚴重三類）。而專家們強調；若弱智者能儘發揮他們底潛能，他們的表現是會遠較一般弱智者的爲好。以往將嚴重弱智者列爲「不可教育及訓練」，中度爲「可以訓練」而輕度則爲「可以教育」。不過現代學及社會學強調所有弱智者都可接受教育及訓練。故此，面對「弱智病」問題，除了加強防止其發生和研究「藥物」治療，及早發現同時給予弱智者適當的誘導是迫需的。

對弱智者的誘導應是多元化的，它包括了家庭、友人的愛護，適當及有系統的教育、訓練和出路，影响它的因素可分兩類——制度和意識。

在制度的層面看，直接面對的是有沒有足够訓練中心，特殊學校和庇護工場。這類福利設施，本港非常缺乏，致令很多家庭困難重重。據政府估計，嚴重弱智者約有一千二百人，中度三千五百人，輕度一萬三千人。但政府及志願機構提供的服務額祇相對爲五百、一千二百及千多個。政府在這方面缺乏完善的計劃，就連弱智者的數量也沒有作任何統計，要憑外國的百分率來「估量」。雖然七七年的「康復服務發展」白皮書提及加強預防、檢查及服務，但它的數量，即使如期完成，還是嚴重的供不應求。

談到意識方面，最主要普遍存在着對弱智病的誤解。認爲他們「白痴」、「無可救藥」的大不乏人，有些更歧視或懼怕他們。這種觀念，使弱智者不能得到正確的關注、愛觀和鼓勵。由此可見，弱智問題不祇是本身特定的（如其成因，預防或藥物治療），它同時牽涉制度不健全，社會意識偏差等等的問題。

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意義：

作爲一個行醫者，他需要有足裕的專業知識、技術；對病人態度好，有愛心，對工作有責任感，能够堅忍刻苦。他同時要了解在醫療服務裏一個行醫者的角色；除推動整體運行外，還須作爲一股改進、革新的力量——無論是專業知識或組織機構。當然，行醫者仍是社會一份子，對社會、國家、以至全人類，一樣要乘担責任。

「弱智」給予我們一定的啓發。

它讓同學親身及較深入接觸弱智的問題，帮助同學建立正確的觀念及加深對問題的感情，好待日後遇到同類問題時有更合適的表現。

它也讓我們看到醫療服務的發展規律。處理弱智病，祇懂診斷，用藥是不全面的。如何防止弱智病、如何加強病者的『康復』照顧等等。均不能忽視。現代醫療服務對「健康」的理解已漸有改進；祇針對個人病態是落後的，社康的重要性已逐漸明確。

既然醫療服務在進步，其分工亦隨之越仔細，組織成員亦越複雜。在工作的進行中，社工給予我們最大的帮忙，他們似乎對整個問題了解最深。我們更發現，家長們往往是由社工或中心工作人員處得到照顧弱智病患者的資料，並非醫生。這與一般病人接觸護理人員的機會比醫生多的現象，同樣地令我們體會到，爲了病人能得到完善的照料和康復，醫生和各有關人員的合作再不容輕視。

此外，弱智問題反映出其社會性的一面。要問題徹底解決，就要有制度上的改進，意識上的提升。行醫者和社會運行中的一切是不能分割的。

雖然祇是學生，但我們已有責任作出我們的貢献。在計劃中，我們曾嘗試。我們做得不多。不過，應該強調的是如何能時刻努力貢献自己的一份兒，不論你是個年青力壯的學生，還是個年邁八十的老人。

結語：

「弱智」計劃帶來多少成績？相信不多！但它帶給每個個接觸者的一點一滴都值得珍惜。

每個活動，都有其偏差之處，祇有通過不同形式的活動，才能把「偏差」減至最少。

「弱智」，除了推行時有不妥善的地方，還有人認爲問題本身根本不太重要和吸引，對成果有影响。這些是事實，不過，它的不吸引與不重要，很大程度上是因它不直接影响大家的利益，也因它爲受社會忽視。亦正正有這樣的因素，計劃當初才被考慮。

最後，希望說的是；縱使題目多吸引，縱使問題多嚴重，縱使參予者多得很，成績也不一定好。同學能够從接觸到思考，有所反應甚至能「舉一反三」，方始是「弱智」眞正的成果。

冬興二首

葉

在那樹濤狂風的道上
龍茅花又冒出簇簇紅火；
輕快的步伐，沈重的腦子，
又是八時三十分。
不知多少次倒下，多少次矢志，
掀起被子，闖進堂子，
但見一班學子，可眞沒有面子！

× × ×

水冷烟寒兩坎坷，仰眺顧憐又如何，
霓宮苦讀求學問，爲救老弱疾苦心。

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健康委員會，你去了那裡？

潘德鄰

本文和各位同學見面之日，應是健委活動積極開展之時，如展覽籌備，社會服務，及醫療問題學習等，大家斷不會問這一個問題的吧？

七八年健委好像沈寂了一點，活動比較少一點，宣傳也不太起勁，是甚麼原因呢？這裏面有歷史因素，環境因素和人事因素。

以往健委的活動，除了例行的捐血，打針之外，主要分社會服務及認識社會兩大類。社會服務包括流動展覽及在中學設立Health Club 等。認識的活動多是一些不定期的專題研究，內容有參觀，採訪，座談不等，如「元朗三二〇」之類。

根據港大醫學會的議章，健委的作用是提高同學的社會意識，但如何做法，具體目標如何則全靠摸索。幾年來，活動形式，範籌不斷改變，目的就在模索。然而不斷的摸索與檢討，究竟甚麼時候才有一條長期可行的路呢？甚麼時候才可以落實的工作呢？所有同學都焦急地等待著。

七七年末，我們召開了一個頗爲大型的檢討會，聽取了各方面的意見，發覺流動展覽耗費人力太多，而其作用並不很大，故此決定不再定期舉行，另外 Health Club 的意見在很多學校都不甚受歡迎，加以最近中學有了健康教育課程，因此他的存在價值便降低了，我們決定不再辦下去，而將全力放在認識社會上，尤其是醫療問題上，好使我們明白社會需要我們當一個怎樣的醫生。這就是七八年活動的主題。

第一個活動是香港老人問題研究。選擇這個主題的原因包括老人問題確實嚴重，如生活，居住，醫藥等，而當時亦剛好出了一份綠皮書，因此引起了我們的關注。我們首次安排了一個完整的專題研究，內容有介紹，資料搜集，訪問瑪嘉烈醫院老人科，家訪，座談，總結等項目。由于缺乏經驗，及健委結構之不够嚴密，工作效率及收效都不似預期的理想。但我們認這樣的活動仍是值得繼續做下去的。

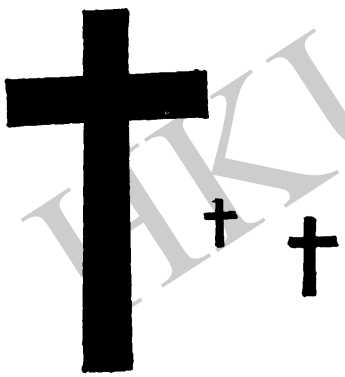
克服了不少困難，終于在七八年十一月搞了一個「「醫生前景面面觀」的活動，活動也包括了介紹，訪問醫生，座談，小組總結等項目，由于題目切身，反應很好，使我們決定明年仍會搞類似的活動。

七八年暑假八二年級搞了一個「健康的大澳」的活動。這給了我們一點啓示，同學是很願意利用課餘的時間做一些有益社會的服務，因此服務性的活動仍是要搞的。但希望服務中仍能對認識有裨益。

七八年尾，我們再召開了一系列的檢討會，回顧了一年以來的活動，可以肯定成績是有的，而且摸索也有了點方向，于是大約的定了明年的活動計劃，那就是分爲三部分：學習，服務與展覽，而且有一個比較周密的分工。

參與了一年的健委活動，在一起工作中，認識了很多朋友，並且對健委也產生一份感情，關注著他的成長，發展，希望他能活得更有意義。

今年頗有點休養生息的味道，意味著明年的大展拳脚。但願大家以熱切的鼓勵，支持和參與去迎接新階段的健康委員會吧！



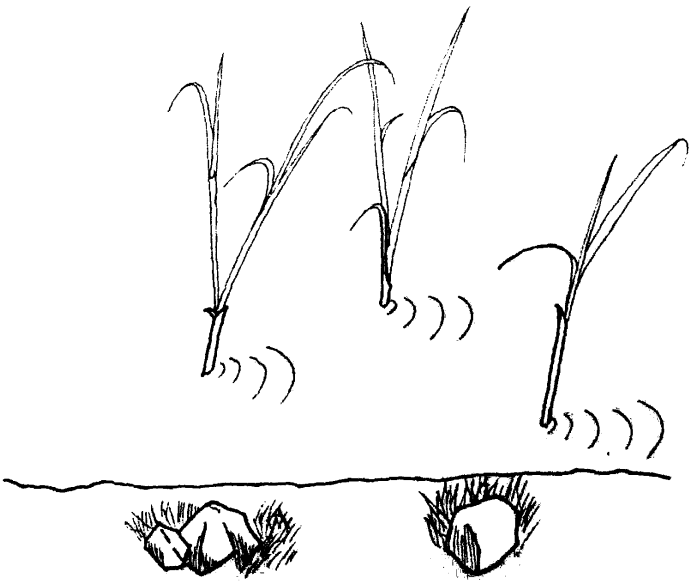
By medicine life may be prolonged, yet death will seize the doctor too.

– SHAKESPEARE

殘葦

根

靜靜的池邊，泛動兩片蓮葉，
藍藍的長空，默躺一縷雲絮，
壓傷了的蘆葦，仍在微風中拂撓，
將殘的燈火，還在努力發光
眞的，活力充滿了世界，
　　愛心揚溢在宇宙，
朋友，總不要輕看別人，他們有堅毅的心，
朋友，更不要小覷自己，務要献上你底熱誠



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冬　夜

因慧

多少次望着窗外的影樹頂的紅花，多少次沉醉在不遠處的荷塘；過去了，過去了！

看！不是絢爛的紅花，也不是嫩青欲滴底荷葉；那灰黑的樹幹，盤根倚屆，疏疏落落的葉子，隨風飄忽地瘋舞，我看不到一絲兒步法，將視綫再擺到那荷塘，他水平滑得像一塊黑布，偶爾一兩條魚兒禁不住水中的寒氣，咕咕一聲跑上來呼一口氣，弄得本來靜靜的水面，泛起一個個漣漪，擴開去，擴開去，終於他們碰着了。一瞬間，仍是那黑色底的平面。

寒冷似乎把一切都嚇得要躲起來，周遭聽不到那昆蟲樂隊的大合奏；仰視那深邃的長空，滿宇宙的星宿傳下那閃爍的耀目亮光，比以往更光亮，不知是不是低溫把空氣中的塵埃也凝固了，滿天星斗，帶來多少墨客騷人的暇思，曾經把它們構思成一顆顆的寶石，可是，總覺得有點兒俗氣。也嘗試看成眨著眨著的眼睛，但，不是嗎？這可破壞我獨個兒的愁靜。星星，星星，我還是愛叫你做星星，造物主賜給你和太陽光芒，太陽的能耐，使人受不了，我愛你的爾雅，你的優嫻。

夜，低垂下那沈沈的圓帳，奇怪，我一點兒不覺那帳兒的約束，舉目探望，但見那深邃的黑影兒，闊得像無涯的……噢，還是叫他宇宙罷！

我在暇思，假如能飛離地面，攀向那星星，那一絲兒的光輝或許會給我一點温暖，但這叫令我失去了冬的樂趣，不知道是否在擠爐賞雪，我愛那瑟縮的歡樂，假如冬沒有寒冷中的肅剎，那裏來風雪中的臘梅，北風帶來一點寒意，清新了我底煩擾內心。

一顆那快的流星，劃過那羣星綴點著的黑幔，人生中光輝燦爛的時刻眞是那麼短暫，心中油然來了一陣哀愁；生命中已走了二十年的我，璀燦的日子還有多少呢？想著，想著，噢，我找到了！我要發光，我要在那一瞬卽逝的時空中發光，不是嗎，流星雖轉眼烟滅，多少人兒正翹首長空，盼望著下一顆的呈現，當人們看到，都懷上了滿足的心情，啊，我要作流星！

冬夜，是寂靜的、是凋零的，却是懷孕著春天底花兒芬芳，夏天的蟬鳴燕語，秋天的金風送爽，也蘊函著黎明的朝霞，暖烘烘的陽光，和那黃昏日落的金黃幻彩長空。我足躅在這夢幻的美景中，四季的美景都泛現在目前，那黑色的幔兒底背後，放出一絲絲微光，夜之將盡，何日才是春之將至？

劉楚超

增進各院校宿舍的團結，是學生節的主旨。要達到這目的，先決條件便是各院校宿舍的熱烈支持。希望各「大仙」、「小仙」都能在復活假前輕鬆地享受一星期長的五花十色的活動。不過就以上列的主旨而言，學生節未算成功。

在醫學院，因時間不配合，許多同學都要準備考試和測驗。所以除了一些個人項目外，大部份參加者都來自一年級。但在這環境下，一年級的同學混成一體。平時不大活躍的「拉記」常客也全力以赴。在萬衆一心下，醫學院得到頗爲不俗的成績。

一年級同學的團結是一個意外的喜悅，但各院校、宿舍間的合作却未符理想。在某些比賽中，「水火不容」的情形屢有出現。也許這些都是一般比賽制度下的副產品吧！

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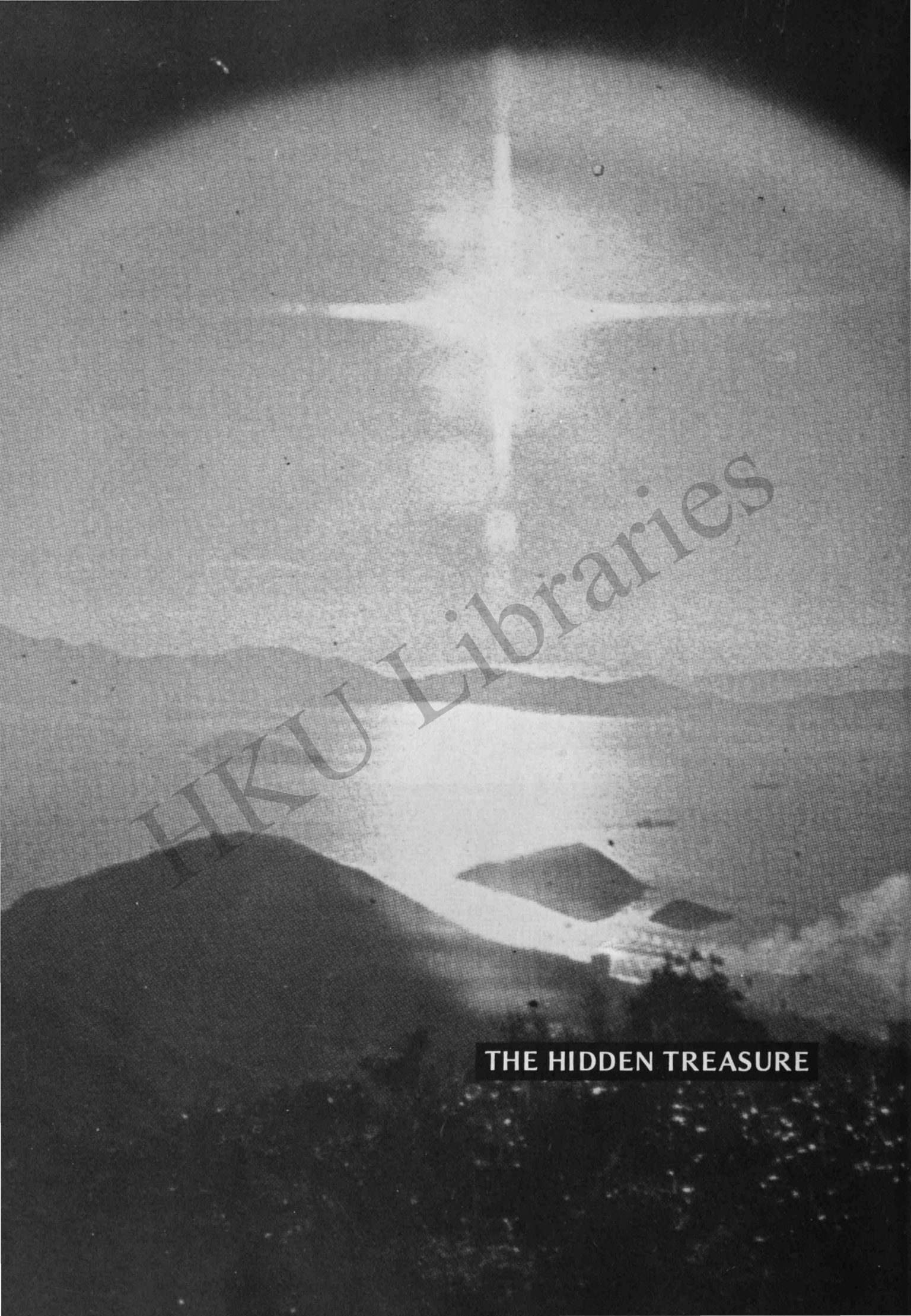

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'The kingdom of heaven is like a treasure hidden in the field, which a man found and hid; and from joy over it he goes and sells all that he has, and buys that field.'

Matthew 13:44

This is the parable Jesus told as He was conveying to others what the kingdom of heaven is like. For myself, I think this is very true. After all, most of us live up to only seventy or eighty years, thanks to the help of modern medicine. But investment to the kingdom of heaven will bring everlasting dividends. Besides, who can when he will be alive or dead. (as manifested by the reality we medical people face today). Perhaps as medical students, we can understand the kingdom of heaven better, using one analogy, that the news of the kingdom of God is like tips obtained for the final exam. Some people need the tips but some don't. But those who heed them and study accordingly, how happy they are when they find what they have prepared in their study really turns out in the exam.

When God crated the Universe, He also set out law and order to maintain it; as the Creater of Man He loved us so much as to have granted us freedom when we thought of it. This is no trifling matter because God did not create a robot but a human being with a free will. Being free, man was not meant to be alone; he needs to live and function in relation to God requiring divine guidance and love at all times. Unfortunately, through the fall of man recorded in genesis, man was cut off from God and his sinful nature is manifested everywhere to this day.

However, God in His infinite mercy did not give up nor forsake man. He had appointed a saviour in the person of Jesus Christ, His son to deliver us from our sins. This has been accomplished and at long last we can be reconciled to God and learn to live because Christ has shown us by His living example. Throughout the old Testament, God has revealed the Saviour through all the prophets many, many times; these prophecied descriptions were fulfilled in the details in the life of Jesus Christ as recorded in the New Testament and the consistency of the whole scripture simply bears witness to the fact that Jesus is the Christ to take away our sins by dying for us while we are sinners.

Well, it seems that all is well and the salvation has been accomplished; but what uses it is to Mankind if nobody accepts the salvation, we would still be judged and found to be guilty in front of God.

In order to be served, one must repent of his own sins and turn to God. Looking at our faulty nature and mistakes face to face has never been easy, even more difficult is to admit it. But I thank God for having taken this step and accepting the Lord Jesus Christ into my life as Lord. As an afterthought, it was the best decision I have made in my life; faced with the choice of self-justification and eternal life through faith in Christ, I am glad that I did not let my pride of self-righteousness send me to hell. (as initially I was not sure of whether I was really sinful in the eyes of God). But ever since I have received Christ into my life, I have no doubt that I am indeed a sinner and only through the blood of Christ can I be cleansed. Futhermore it is me to know that we are not alone by ourselves. Chrsit, sitting at the right hand of God led us to the Father all the time, to help us live a righteous life.

Having been reconciled to God, nothing is more rewarding than to give ourselves in a free spirit to serve the Lord and to please Him (as He Himself had given up His life in a free spirit for each of us. In doing so, there is a very intimate relationship if love between the Lord and me. This mutual giving of oneself whole-heartedly out of love is the most beautiful thing in the world and is the source of my joy and satisfaction in life.

Unfortunately, in the world many people have not known the Lord Jesus Christ yet or has rejected Him. As a result many of them go after things that do not satisfy and things that cannot be carried with them to afterlife. They are lonely because they do not have the love care and guidance of the Most High and are worried about their future and their afterlife because they do not have Christ. These problems in turn manifest themselves in real physical illness so that the chain effects of spiritual problems lead to emotional and resulting in physical illness goes on and on.

As Christian medical students, we are ambassadors of goodwill from the lord, and to heal people in the spiritual emotional and physical aspects.

Fellow medical workers, thank you for letting me share the Gospel and my convictions with you. May I invite you to the tables of the Lord by accepting salvation through Jesus Christ.

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邊患未息，繼是蓬果二州的官吏逼起民變，朝廷急調重兵鎮壓。

晴天霹靂，李商隱正在逐中一所客棧留宿，把玩著不久前妻子匆忙中寫來的信。突然店小二送來一書，竟是妻子的噩耗！

於是更欲急歸，眞想不到往徐州一別，竟成永訣。

輾轉回到長安，妻子已經歸葬了，只餘空房一間，錦瑟一張，生前死後，都不及見妻子一面。

過了半個月，李商隱的內兄王十二與襟兄韓瞻來訪，並邀他小飲，意欲給他解悶。然而一則李商隱素不飲酒，二則妻子剛去世，心情實在悲痛，三則家中單子獨女，俱是忘妻骨肉，不忍不顧，只寄了一首詩謝他們。

李商隱因與王氏結婚，不斷遭到朋黨之徒的忌恨和打擊，婚後，在家庭生活和政治遭遇方面都不少辛酸，眞是「萬里西風夜正長」。

時局也加劇惡化。白敏中奏謂平了黨項，但國庫空虛，民變，軍亂，邊患，此起彼伏，朝廷中牛黨排擠李黨，宦官又與牛黨爭權，皇帝又不理朝政，大中五年一整年就只裴休爲鹽鐵轉運使及張義潮收瓜，伊，西等十州兩件事可以稱道。

季秋，柳仲郢任東川節度使，治四川梓州，辟了李商隱爲幕僚，後改判官，先往西川成都，十月尾起行。匆匆來去，不得好好的悼念妻子。所謂「蜀道難」，一路上並不好走。到了散關，下起大雪，積地三尺。同行的人家中都有寄來新縫的寒衣，自己却已成無家的人，夜裏每見妻子刺繡裁衣，醒來盡都是夢。

蜀地多山，形勢險要，左邊是當年諸葛亮布八陣圖之地，至今遺石尚存，右邊是唐與吐蕃接壤之疆，日夜都聞警析之聲，唐自安史亂後，蜀地常有據險叛亂的事，但憲宗初年的劉辟爲朝廷蕩平，以往望帝，劉備都不能成功，可見今日野心勃勃的奸雄之輩，又豈能恃險生驕呢？

此日來到諸葛武侯祠。祠前有一株參天的古相，李商隱因樹想起以前的馮異將軍，功高不誇，然而風雨摧殘，古柏也枝葉凋零，又痛惜武侯因時勢不當，出師不捷。

巴山此去，莫問歸期，蜀如空浮，無非夜雨。過了年商隱便抵成都。

三、颯颯東風細雨來　芙蓉塘外有輕雷
金蟾齧鎖燒香入　玉虎牽絲汲井回
賈氏窺簾韓掾少　宓妃留枕魏王才
春心莫共花爭發　一寸相思一寸灰

大中六年二月二日，李商隱正在西川。成都之春是美麗的，且看那東風日暖，階前吹笙，花髮柳眼，紫蝶黃蜂，都無不醉人，奈何自己是羈旋異地，欲歸不得。李商隱踏青到了新灘流畔就停住了，淙淙的流水，怎麼要學作風檐夜雨的凄清之音呢？

日間如此，夜自不眠。自傍晚啓門燒香，直至清晨牽絲汲井，一夜聽著風聲雨聲雷聲。妻子是如何鍾情於我，如今也只下錦瑟而去。

不久商隱便回東川柳仲郢梓州幕。

二月間，蓬果民變已給王贊弘強行鎮壓下去了。朝廷正欲粉飾昇平，四月黨項又復入侵。

六月河床李業侵入胡人聚居處，大肆屠掠，民憤載道宣宗後遷了李業爲義成節度使，並不治罪。

到了大中七年，李商隱已自覺無能爲也矣，但見唐轄土大于建中之時，然財政收入反少，可見官吏從中尅扣更甚，實無心在官場再混下去了，於是編定「樊南乙集」，自序：「三年以來，喪失家道，平居忽忽不樂，始剋意事佛。」其實李商隱又豈是甘心皈佛呢？不過借個託詞罷了。只有長安有友人來告知他的兒子近況，還可勾起一絲歡笑。

八年宣宗下詔停止殺戮與貶逐官員，以甘露之變中除李訓鄭注當獲死罪外，王涯，賈餗等得昭雪。但前此遭逼害的已不計其數。令狐綯早已貴爲宰相，但密謀削弱宦官權力事洩，此後宦官朝官更是勢成水火。到了大中九年末柳仲郢也罷了梓幕，李商隱隨之返京。

這幾年在梓幕身病心苦，無日得安，早欲回京。途經籌筆驛，不是諸葛亮籌軍伐魏的地方，感慨以諸葛亮之謀，逢著劉禪之庸，終難挽回蜀漢的覆滅。

尾聲

大中十年初，李商隱回到長安，當了個無所事事要鹽鐵推官，惟借南朝，隨宮等事諷今而已。宦官恃勢，外戚恃權，而執政的牛黨各人門戶之見又甚深，宰相魏謩也以剛直被逐。十一年五月容州軍亂，十二年四月嶺南軍亂，囚了節度使，五月湖南軍亂，六月江西軍亂，七月宣州軍亂。夏季李涿賄賂令狐綯，得安南都護之職，爲政貪暴，激起民反，秋季，河南河北大水，湮沒了四萬戶人家。

是年，商隱罷了鹽鐵推官，閑居鄭州。一日冬降，不知何處又傳來錦瑟之聲，登時百感交集：近五十歲的人了，一生襟抱，未嘗一開，往事怎如春曉殘夢，妻子早經玉葬藍田。當時既已惘然，如今何奈追憶？只枉斂人空泣一場罷了。

幾天之後商隱便病故，享年四十六歲。正是：

一朝星殞搖天闕
四海波洶脇祚緣

（完）

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短篇小說

此情竟待成追憶

楚橘

引子

「歸來人不見，錦瑟長於人……」吟唱著，吟唱著。幾年的奔波，添了不少條紋，然而失去的一切，盡都是無可估計的。

蠟炬透過燈盞，曳著將沒的紅影，鑿鑿香爐的嘴裏，似乎還蒸着一縷一縷冷香。圍鏡空承案上，猶似向人覓面。

中年憔悴，淚已早枯。曾經爲西郊的村民哭過，爲劉菁哭過，爲時局哭過，更加爲自己的妻子，王茂元的女兒哭過。但事到如今，哭又何補？一絲曙光，透過青紗，照得瑟上微塵玲瓏欲立，但錦瑟已經不會再響了。

一、

相見時難別亦難　東風無力百花殘
春蠶到死絲才盡　蠟炬成灰淚始乾
曉鏡但愁雲鬢改　夜吟應覺月光寒
蓬萊此去無多路　青鳥殷勤爲探看

唐宣宗大中三年臘月，李商隱來到徐州盧弘止幕府。盧弘止是李德裕曾在會昌年間重用的人物，隨著李德裕被貶，他的際遇也坎坷不平。李商隱早年和他相識，此次來到徐州，也還是很高興的。

薄雪之下，江南又自有一番景緻。一路上光禿的楓樹，枝椏上覆著一層粉白，地上的新雪給車轍劃出一道道鮮明的泥濘。小亭的簷角閃著冰珠，橘下的流水漂著一片片薄冰，迷迷蒙蒙的天，下著如柳絮的雪。但沒有虫鳴，沒有鳥唱，車輪輾在雪上也軟綿綿的沒有一點聲音，未免繭煞一些了。

李商隱拜會過盧弘止和幾位同僚，安頓好行李，即開始新事。其時歲晚，大家都頗爲清閑。

徐州本是軍亂之地，將領盡都驕張頑劣，無一聽中央調度，去年還逐了節度使李廓。盧弘止到後，先誅了都虞侯胡慶方，繼又把一些不服令的治罪，徐州的動亂于是平定。六七月間張義潮驅逐了吐蕃的奴隸主，收服了鳳翔等三州七關，這都是令人振奮的消息。

可惜天下間有才得用的人不多，十一月又有幽州軍亂，而邊疆的黨項之患，亦連年侵擾不已。

過了冬之後，朝廷來消息說令狐綯拜了中書舍人，充翰林學士，還說快要代兵部侍郎云。對此李商隱不無感觸。想起當年受令狐綯的父親令狐楚賞識，教他做駢體文，讓他和自己的兒子同起居同讀書，眞是一腔躊躇滿志。曾幾何時，宣宗即位，牛黨得勢，排斥異已。李商隱娶了王茂元的女兒後，令狐綯一伙即反目成仇，刻意的冷遇與排擠，其實王茂元又算甚麼李黨？

如今令狐綯可算官運亨通了，自顧不過一個徐州幕僚，作一個操筆事人而已，不免發出「平生誤識白雲夫」的感嘆（令狐楚曾自稱白雲孺子）。但願在徐州能有一點作爲罷。

李商隱借了新春夜宴的機會，寫了一首「偶成轉韻七十二句」送給盧幕的幾位同僚，表示願久居于此，與鴛侶鸞朋同爲盧弘止的部下，並很欣賞盧弘止的豪俠氣慨。但宣宗廢棄前朝很多有積極意義的措施，貶謫功臣，朝政益腐，使自己「失職辭南風」，「補吏府中趨」。雖然如此，自己仍是「愛君憂國去未能」的。

可惜盧弘止由于年事已高，身體亦不大好，不可以再做些甚麼了，同僚中有一位李樞言，與商隱過從甚密。大家都已是貧寒子弟，抱治世之才而乏知人之用。一日，春色明媚，二人趁政簡簫閑，出遊宴樂，各抒己懷。李商隱的興緻很高，吟了很多詩，並自謂少壯。當時清風墜露，柳密啼鶯，李樞言携了一壺酒，一張琴，來到城外汴水泗水交滙之處覓地坐下，天南地北的談起來。李商隱是不喝酒的，而樞言則一杯接着一杯的喝，並說：「義山兄，你看此年光之飛逝，不飲又如何尋得歸路？醉後或坐榆莢，或枕楊花，有誰管得？且受此東風白日罷。往昔辛勤攻書，結果不外如是。要是沒有盧尙書，如今也不知漂流到何處了。少年短暫，無人賞識，徒令沾濕雙腮。。」說罷叮叮咚咚的鼓着琴。先是一曲「風入松」，繼是一曲「秋塞怨」，彈到家處，二人相對垂淚。商隱道：「樞言兄也不必如此頹唐，我倆一不攀權，一不附貴，今日猶自壯健，應及時勉力，老大不致傷悲。」

時閑易過。李黨黨魁李德裕給一貶再貶，已死于崖州，李商隱爲此哀慟不已。

八月幽州又亂，新立的周琳又卒，朝廷征討黨項一事，兀自無功。

年末令狐綯已同平章事了。

大中五年初夏，李商隱正擬著奏章，役人入來，氣促促的稟道：「老爺仙去了！」

盧弘止的死，李商隱頓感措手，且不言以後作何打算，身後事也費安排。此時役人又送進一信，拆開一看，原來是妻子寄來的。淡淡的墨跡，纖弱的字體，不禁一陣痛心。信內說如今病重，一子一女無人照料，剛有人要到徐州，忽草此書給他帶上，請盡快回京一看。

李商隱既不能再耽在徐州，待辦了盧弘止的後事，立即返京，一路上歸心似箭，只記挂着妻的身子。

二、

來是空言去絕蹤　月斜樓上五更鐘
夢爲遠別啼難喚　書被催成墨未濃
蠟照半籠金翡翠　麝薰微度繡芙蓉
劉郎已恨蓬山遠　更隔蓬山一萬重

十三年前，自己初入經原節度使王茂元幕，才華初露，娘子當時每每躲在簾後偷看。父親總知女兒心事，就把娘子許配給我。本中了博學宏詞，却給中書長者抹去，後做弘農尉，觸怒了觀察使，幾乎罷官，都得娘子安慰開解。

一年之後我們移家長安，再一年，重爲丈人幕僚。

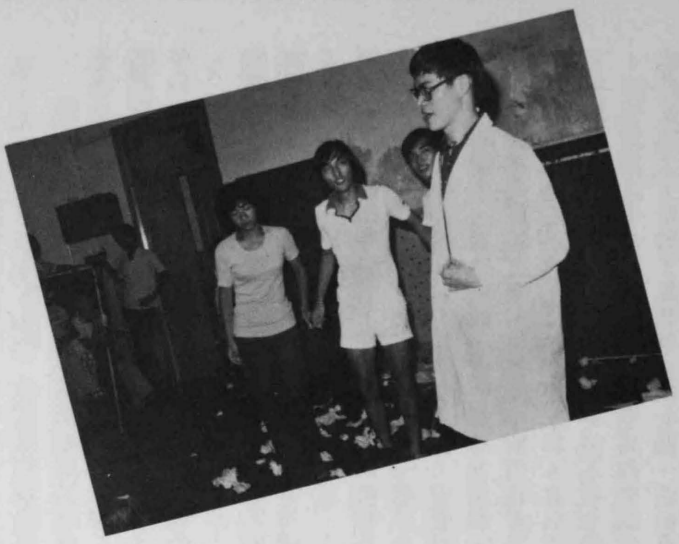
同年我母親病故，艮師益友劉菁被貶，死于滯陽，你與我一起痛哭。

八年前你父親去世時，我們如何哀悼，還記得嗎？那幾年特別多病，得你悉心照料，至今難忘。

後一年，我們的兒子出生，那是我們最快樂的日子。可惜不久，我又要到桂州入鄭亞幕。兒子剛會喚人，你抱著他相送，歷歷在目。

兩三年後，鄭亞又貶，我始回京與你相聚，兒子已會讀書，可惜不得一載，我又去了徐州。但願此次回來不再離別了。

李商隱眼中閃著淚花，一幕一幕的回憶著往事。風雨路遙，又不斷的聽著各種壇傳聞。先是黨項



大澳小品

鍾麗珊

「從今以後，你們祇得兩個暑假了，你們得好好把握這些寶貴的時間。」這正是高年級同學給我們的眞誠的忠告。因此，不少同學便計劃到外地觀光遊覽，藉此看看外面的世界，了解其他地方的文化；但是也有不少同學會留在家中，細嘗家庭生活的樂趣；當然也有些終日書不離手；而約有五十多位同學，在這多姿多采的暑假中，籌辦了「健康的大澳」。

筆者並非在首天隨大隊出發，而是在翌日八號風球高掛，巴士輪船停駛前的一刻才抵達大澳。冒著疾風趕到學校上補習課，誰知校門緊閉，找到威叔，才知補習班已於一小時前停課，各人亦已離開。心想：「幹得好！不過，應該留下告示，使其他人知道我們今天的節目將會取消。」一邊想，一邊跑回石仔埗街宿舍。忽然看到在街市的報告板上，登上：「因颱風關係，今日節目取消」，內心異常高興，宣傳組同學做得好，又快又自發。

回到石仔埗街住所，同學們都忙於工作，有預備午餐的，有上板的，有製作宣傳品，有籌劃興趣小組的，幾位負責同學則在商討如何應付當前情況。

午飯後，我們以問答比賽形式，溫習健康常識。之後，又一起學習講解資料。緊張的三小時過後，便是給我們舒舒筋骨的土風舞時間。

颱風使我們預備好的節目被迫取消，難得不少熱心同學在大風大雨下仍進行家訪宣傳，使以後七日的項目得成功舉行。

每天清早，「你睡够未？」無人願起牀。「今早誰煮早餐？」良久，才有人從黑沉沉的角落答聲「是我。」「負責補習的同學快快起身啦！」每天總有人遲，不是煮早餐的，便是吃早餐的。許多時候，趕着往補習班的同學，眼見食物熱得燙嘴，唯有餓着肚子出門。

早餐時間過後，各人便開始做自己的本份。宣傳組的同學圍起來，商討當日的宣傳攻勢。一聲出發，便揹着擴音器，夾着一叠叠眼保健操，牙齒保健，節目表等傳單及興趣小組的參加表格，浩浩蕩蕩的向市集邁進。而做家訪的同學，亦四出活動。

午飯後，展覽開始。我們各就各位，不只要向到場的男女老幼講解展覽內容，還要回答他們的問題。不幸有些人誤以爲我們是醫生，竟然向我們求診。展覽在晚上繼續開放，所以我們要輪班吃晚飯。

除了展覽，健康檢查，急救班，電影放映亦緊密地舉行。檢查員一面要講解檢查的目的及有關的健康常識，一面又要小心檢查。其他同學則充當講解員，導師、技師，各盡其職。

一直忙到九時，展覽完畢，各人才舒一口氣。收拾妥當後，向神父，威權和在門口等候給我們說聲晚安的小朋友告別，回石仔埗去。

沐浴後，我們圍起來開檢討會。大家都能坦誠討論，把當日所遇到的事情。明日要改善之處都提出來，氣氛相當融洽。

檢討完畢，已近零晨。接着是自由時間，有些同學看相，有倒頭大睡的，也有些與知己互訴心聲的。

十一日在大澳的時間不算短，但這次「健康的大澳」在各同學和當地居民的心中，可能只像一點雨滴在平靜的湖面上所產生的絲絲漣漪，不算得甚麼。但無論如何，我們已費盡心思了。

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「把握時間」、「鍛鍊服務精神」、「找機會多多了解社會」、「消磨悠長的暑假」；這些雖不是「健康的大澳」所黑白標明的目標，但却就是我們竭盡所能的原動力。雖然這次籌備工夫十分倉猝，在事前各同學之間並未有充份時間互相了解心底裏對「健康的大澳」的期望，但在一起生活的日子裏，大家開始了解對方的想法，目標。雖未盡相同，但正是一個好機會去了解，檢討，反省。籌備和推行整個「健康的大澳」爲數位同學帶走了三分之二的暑假，爲五十多位同學帶走了七月和八月間的幾個星期。

籌備困難重重，幸好逢凶化吉，一一都順利渡過了，首先出現的便是財政問題，「健康的大澳」的籌備太遲，未能申請到其他社團之資助，也由於種種關係，未能得到醫學院之支持，祇好向教授，講師及同學籌錢了，籌得約二千多元，加上各參予同學要完全負責他們的食用支出，所以經費問題並沒有打退我們的熱心，與此同時，便是找一個合適作鄉村服務的地方，經初訪到大澳門，馬灣及大澳，基於當地居民對此計劃的態度，地方上的須求範圍及我們同學的日常起居，生活問題等，考慮過後，一致通過地把這計劃推動至大澳。「健康的大澳」也從此定名。整個計劃維持共十一天，編排了每天的程序和決定了重心後，便再訪當地的老師，校長，鄉委會秘書，作更妥善的安排。資料，人手也是我們面臨的問題，在圖書館裏翻書，教授，講師，高年級同學的指導及提供資料後，再加上去年展覽會留下的資料，經整理後，總算勉強齊備。人手不斷增加，我們對健康常識傳遞的要點是普遍，所以有些地方並未作深入探討。

在推行的過程中，也遇到不少問題。在入大澳的當日已懸三號風球，翌日更掛上八號風球，原先預定的節

目都被取消，不幸風姐再「回頭望一望」，風雨交加竟達四日之多。但自此準備宣傳工夫更見充實，互相了解更進一步。繼而出現的便是交替問題。風雨過後，大部份第一階段的同學要離開了，部份工作的接續成了問題，不知道物件儲放的地方及處事的態度。互相溝通好像又要再來一次。幸好漸漸地大家合作得很愉快，融洽。可是，參加第二階段的同學又要離開，再有十數位同學補上來，當地和當時的情形在他們來說很是新鮮和陌生。但由於時間及負責人經長時間工作後，已沒有專心地讓新加入的同學了解這些，大家合作出現了微波。大家一起生活後，晚上傾談的時刻，使同學之間有更多交流的機會，開此互相了解。不過，每階段都有約二十人住的房屋，很容易便成一團糟，家務料理沒有專人負責，祇有由那些自發的同學挺身而出，在工作一天後再料理繁鎖之家務，每日的體驗相信各位會在另一篇文章會看到，也不用多提了。

「健康的大澳」祇是一個服務和體驗社會的開始，目標並未完全達到，與大澳的關係也未斷絕，未來就是我們的希望。這計劃給予我們一個互相認識，了解，合作的好機會。經過最基本的了解，大家都開始認識對方的想法，方向和態度。「一個團體，思想上應有分別，但行動不能分歧。」我們同屬一個團體，有著共同的目標——做一個好醫生，建設美好的社會，就讓我們成爲此團體不同的肢體，各展所長，互相勉勵，爲達到最高理想而努力。

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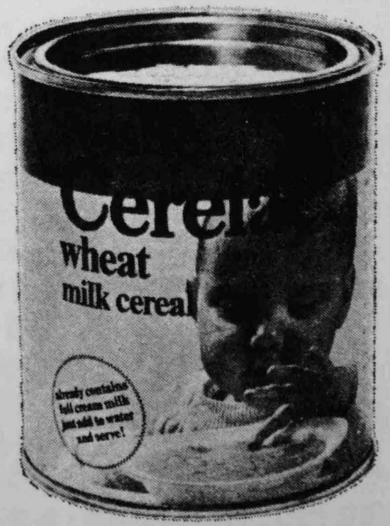

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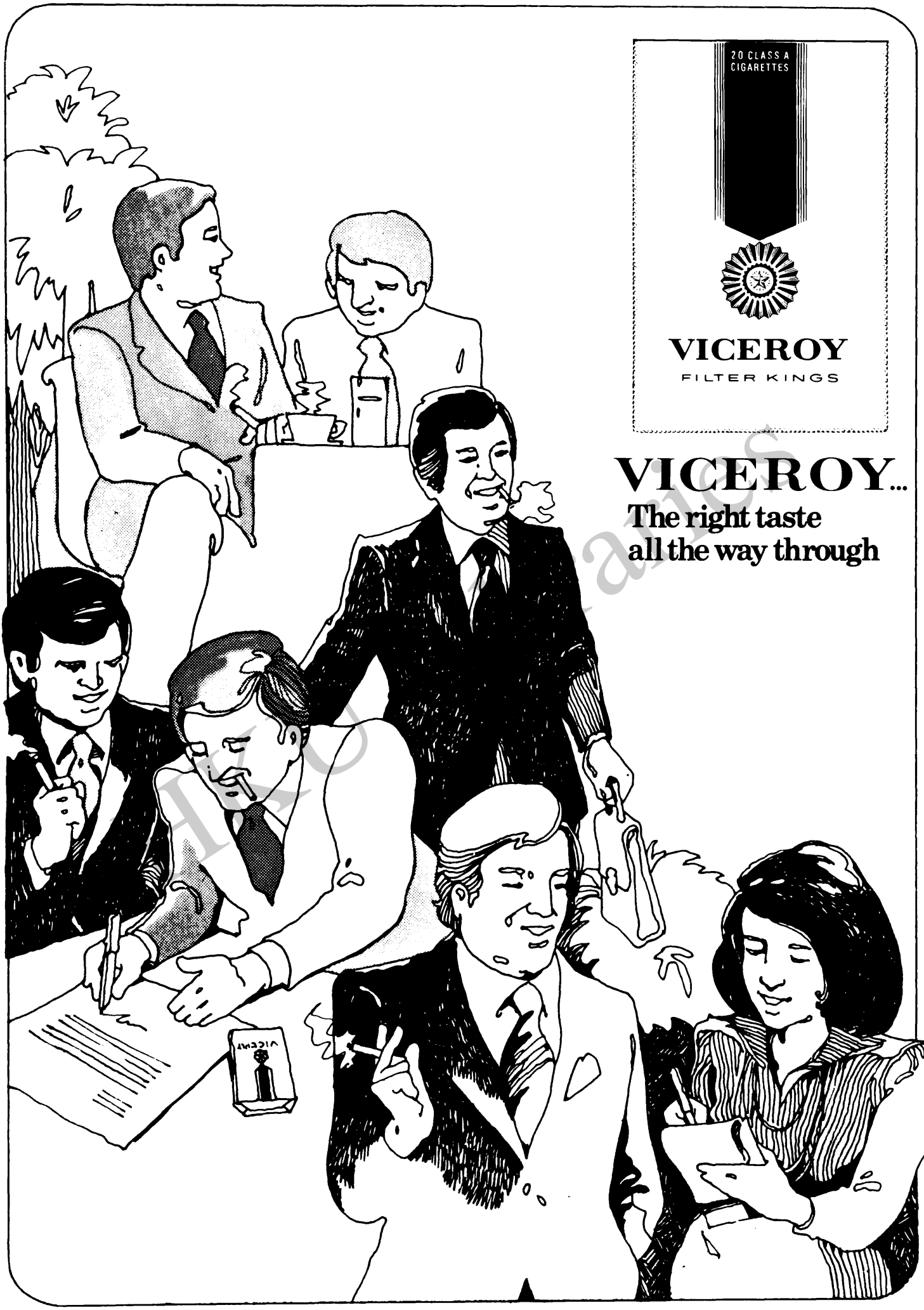
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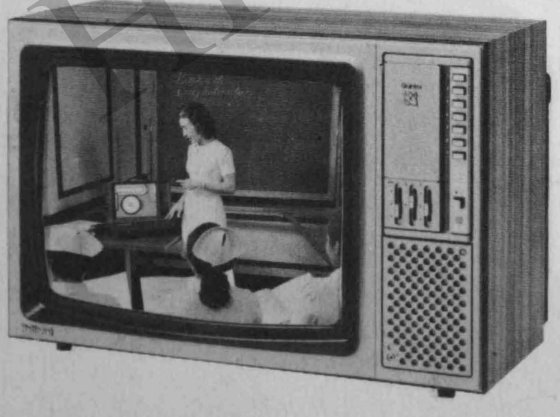

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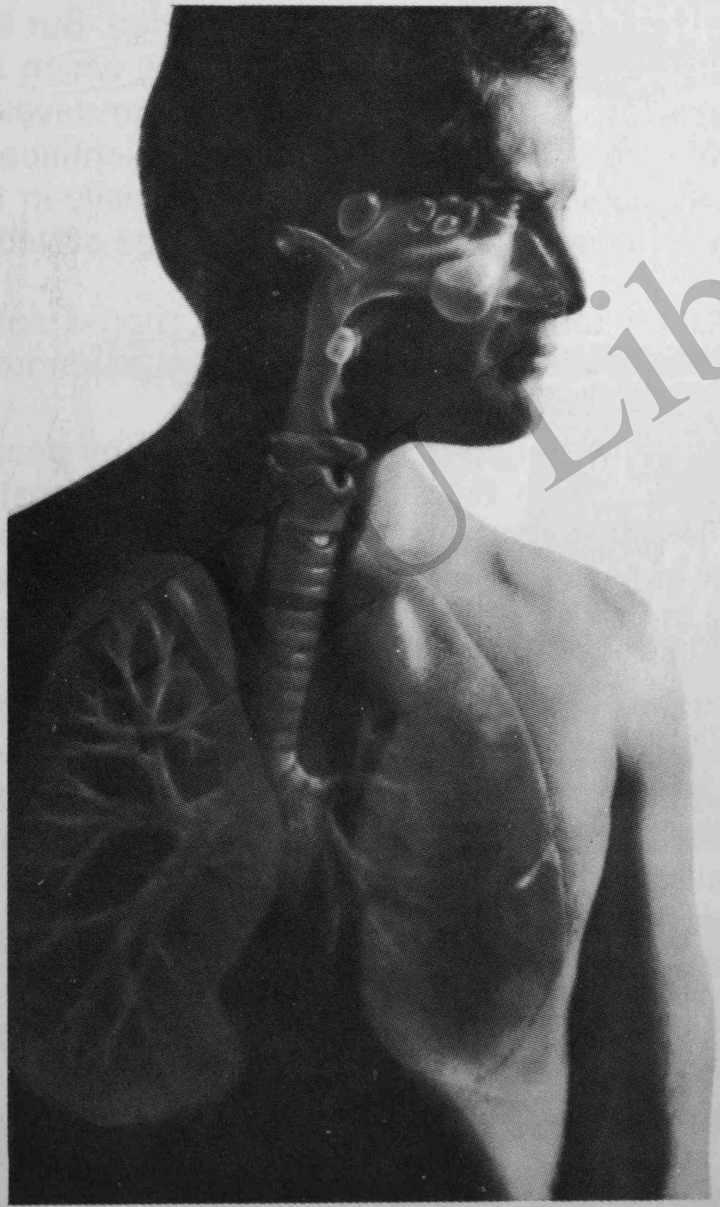

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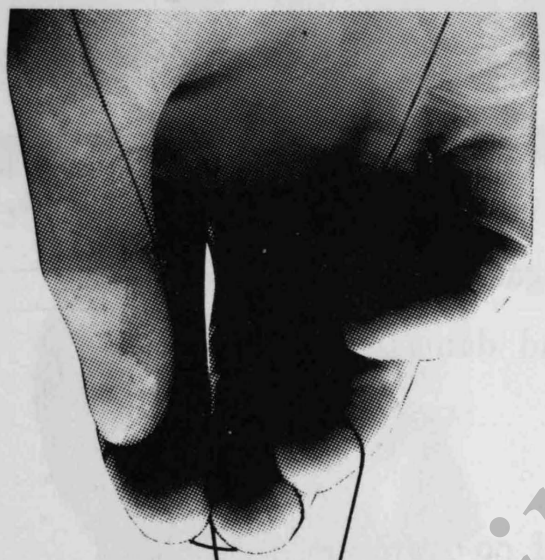

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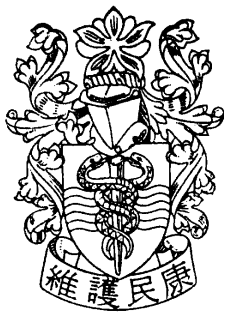

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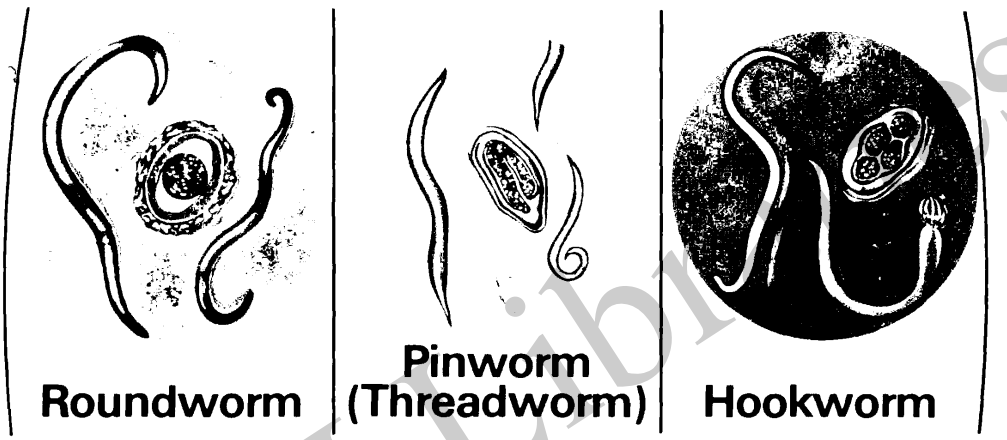

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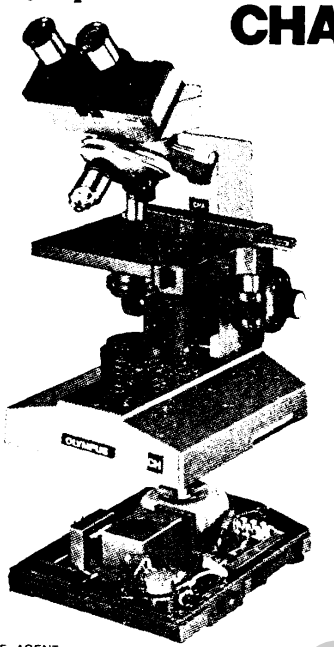

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In a medical ward a student was asked what dosage of particular drug should be administered to a patient. 'Five grams, sir, replied the student confidently. But a minute later he raised his hand diffidently.

'Professor,' he gulped, 'About your last question . . . I think the answer should have been ——'

Don't bother, young man, 'broke in the professor,' glancing at his watch. 'Your patient has already been dead for thirty-five seconds.'

* * *

A young man in a metropolitan hospital is attended by a charming and attractive young nurse As he is getting better, he claimed that he has developed an indescribable affection for the nurse and he is getting more and more aggressive.

One day, he said to the nurse,

"I don't want to get better, Nurse, for I am deeply in love with you."

"I think you probably won't," replied the nurse amiably." The houseman saw you trying to kiss me last night. He is my fiancee."

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