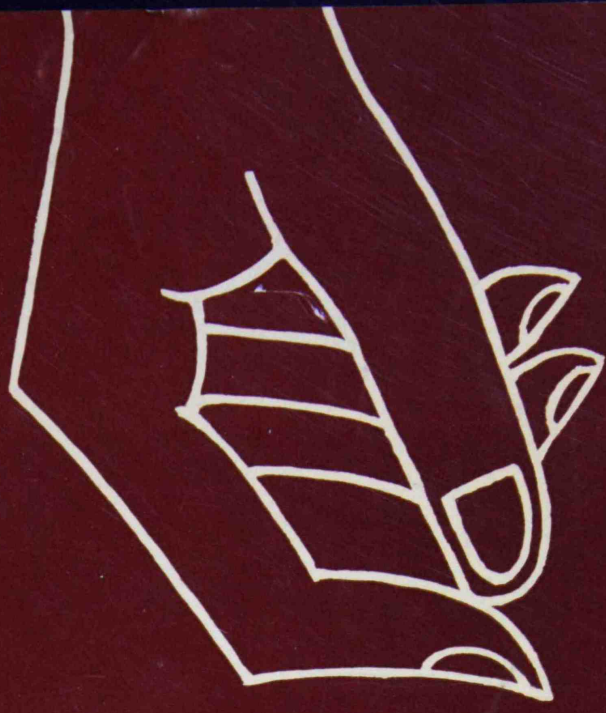


Spring 1977



Medical Society

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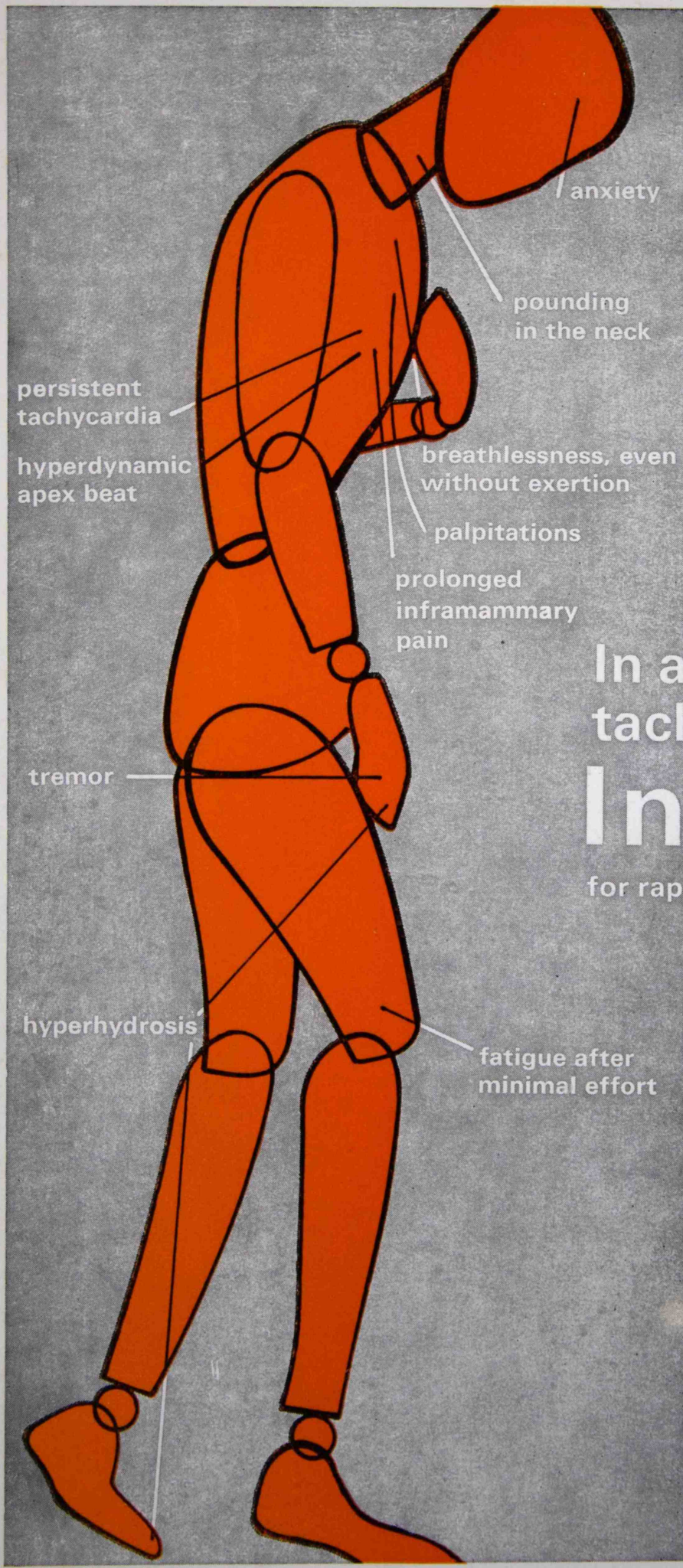




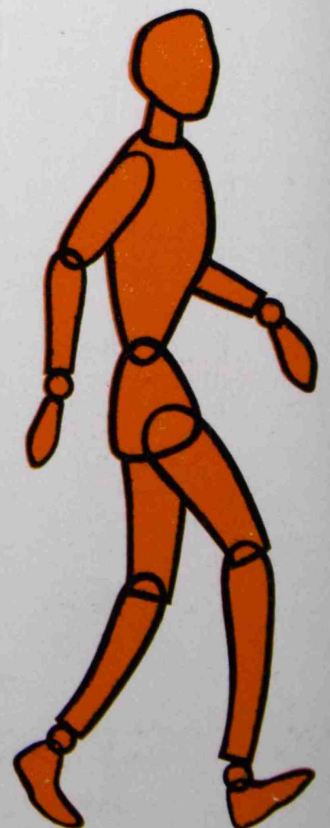
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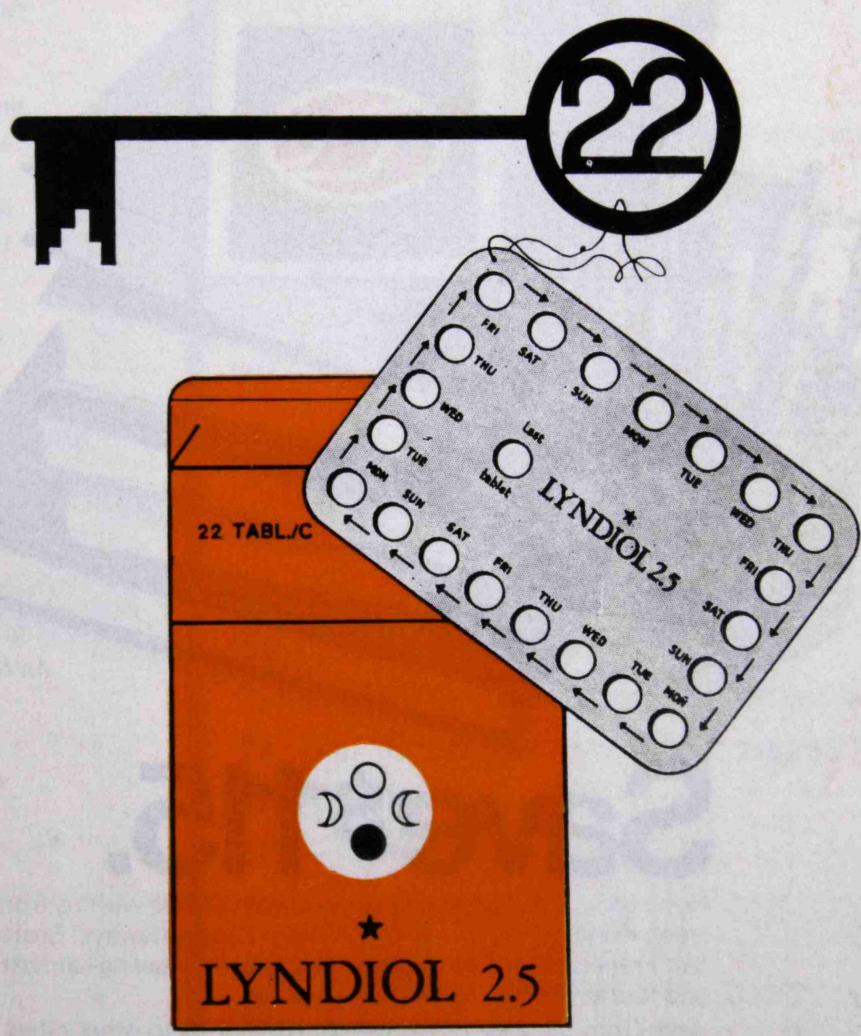
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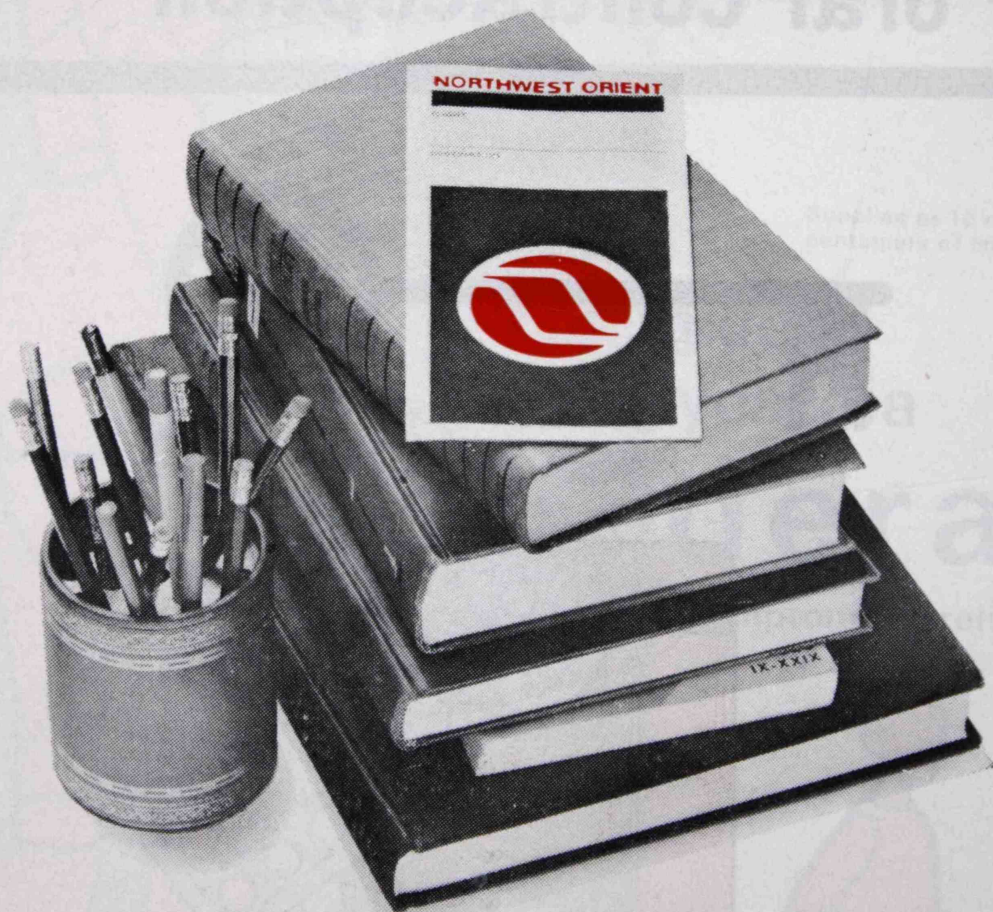


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ELIXIR

Spring 1971

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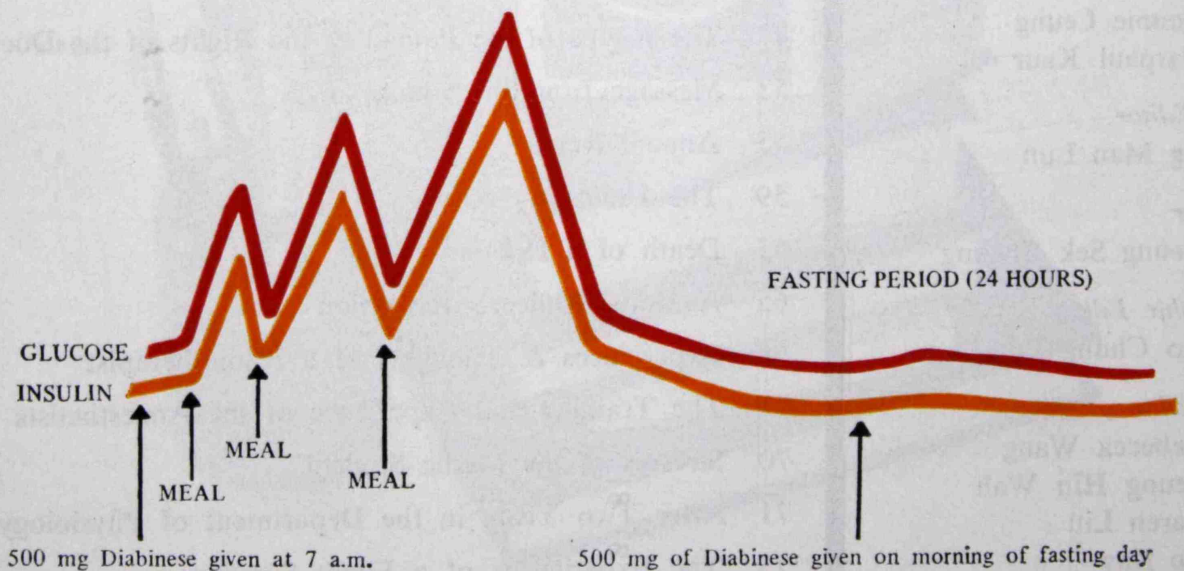
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Foreword

For one reason or another, many a medical student has hesitated to answer the question on what field of specialisation he will up on his graduation. We deem it an advantage, therefore, if not a necessity, that the student be acquainted with a knowledge of the different careers he may join in his practice of the Art. With this in mind we have in this issue taken the opportunity to share the experiences of some of our predecessors who have taken their rank in the Profession, some still fresh with memories of their undergraduate days while others having made their mark in their practice.

In the Chinese section two writers have depicted, through their vivid descriptions of days spent on the soil of their homeland a heart-felt love and desire for their own country that rings its echo in us all.

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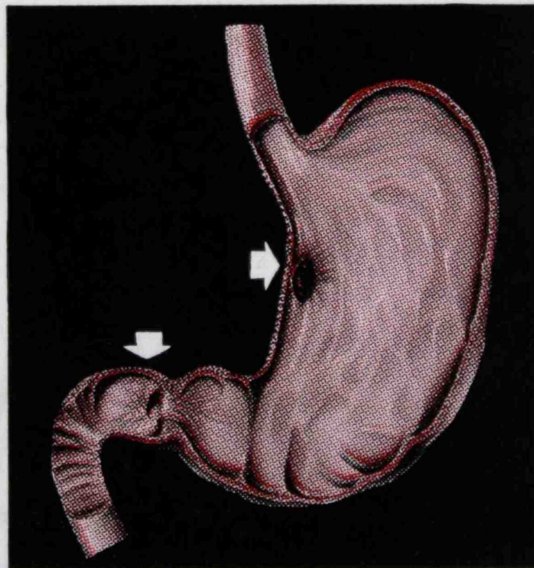
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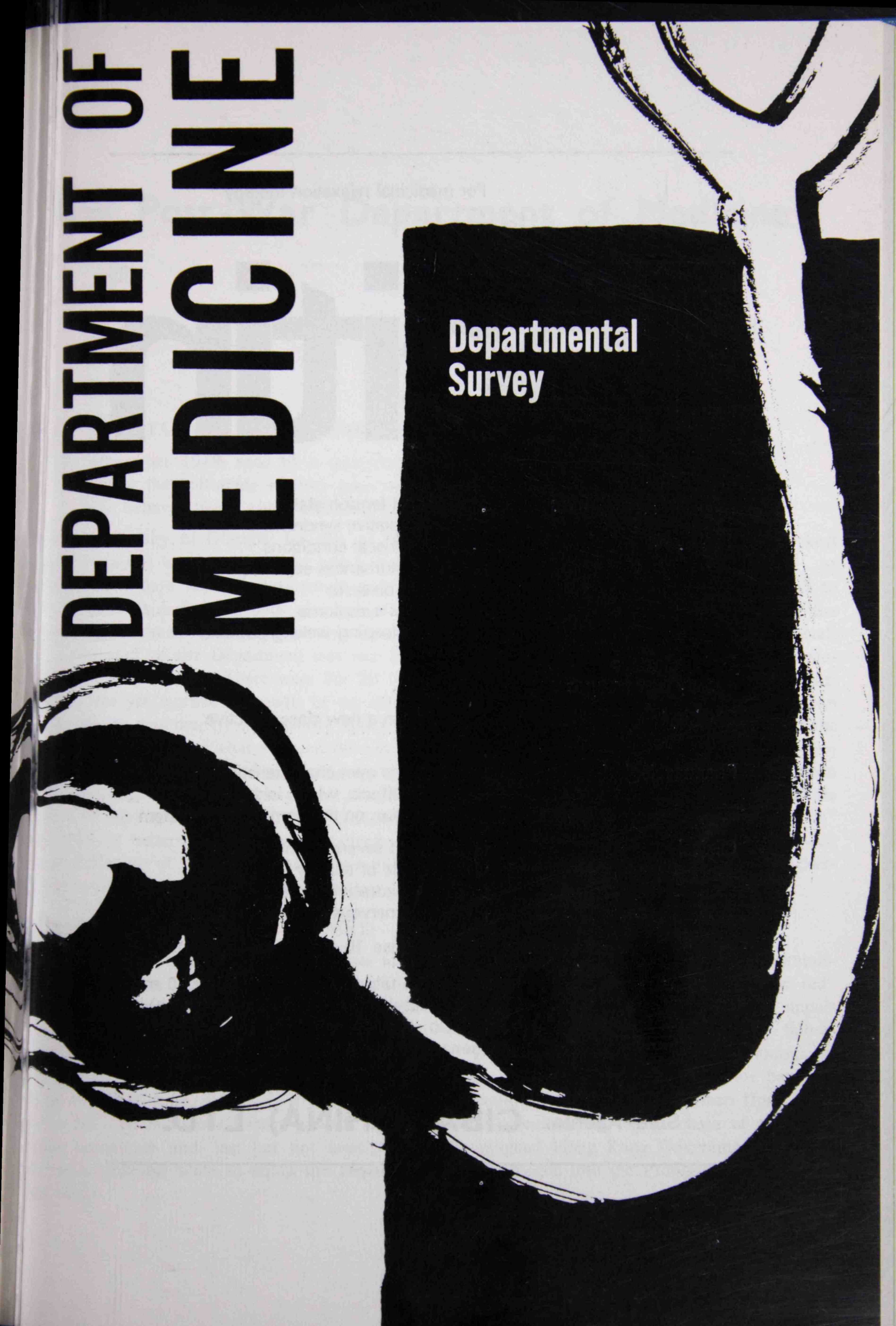
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The Post-War Department of Medicine

A.J.S. McFadzean,

O.B.E., Hon. D.Sc. (H.K.), M.D. (Glasg.),

F.R.C.P. (Lond. & Edin.), F.A.C.P.

Professor of Medicine

GIANT EXPECTATIONS & DISILLUSIONMENT:

In September 1948, sped by a quotation from Kipling at the Final Year Dinner

“When the half-made recruity goes out to the East

He behaves like a child and he drinks like a beast”,

for the University of Glasgow for that of Hong Kong with great expectations. The quickest means of transport was by flying-boat which, if luck was with it, completed the trip in 5 days. At journey's end 8 days later disillusionment awaited me. The Department of Medicine was found to consist of 2 wards each of 20 beds of which at least half was unoccupied; a laboratory, in which the most important item of equipment was an irreparably damaged centrifuge of Japanese manufacture, and a small clinic. The staff of the Department was one Professor — there wasn't even a secretary. The students posed no problem. There were but 20 in their final year and 22 in their penultimate year. But I had not yet reached the nadir of my disillusionment. A request for funds to equip and run the Department was met by a niggardly allocation of \$5,000 to which the Vice-Chancellor added the gratuitous comment, “See what you can do with that!” The reply was unprintable. There were two courses of action open. The first was to quit. In the circumstances resignation would have been a weak, well-nigh childish reaction, as it commonly is, and would have led to the fulfilment of the first part of Kipling's prophecy for the “half-made recruity”. The alternative was to “soldier on” in the hope of better things to come realising if they did not then solace in the bottle might well result in fulfilment of the second part of the prophecy. The latter course was chosen and the decision has never been regretted, at least, by me.

STRUGGLE FOR FINANCIAL SUPPORT:

At the time of the decision I was not to know, although I soon found out, that the administration of monies in the University was so lax that a Head of Department could “go into the red” without let or hindrance. With an unscrupulousness which beggars description and which appals today, advantage was taken of this laxity and certain basic apparatus was acquired. Subsequently the China Medical Board of New York aided the struggling Department with munificent grants for the purchase of equipment and without these grants the Department could never have developed as it has done, indeed, it is doubtful whether it could have survived. The then Hong Kong Yacht Club and numerous former patients made generous donations for the purchase of additional research equipment and, last but not least, the much maligned Hong Kong Government provided funds on a generous scale to equip the Department when it moved into the Professorial Wing when it was built.

STAFFING THE DEPARTMENT:

Staffing of the Department presented a problem. After several unavailing attempts to recruit from overseas, which in itself had certain obvious demerits, it was decided that the only solution was to embark on a programme of training our own graduates. The University, albeit very reluctantly, accepted the decision but it was not until 1965 that formal cognizance was taken of this programme. That it has been a success cannot be doubted and fears of the danger of in-breeding have, thus far, proved groundless. Perhaps the action which off-set this danger more than any other was the liberalising of the condition under which study leave might be granted to all members of the teaching staff.

There remains one major staffing problem and that is a shortage of technicians. This shortage has bedevilled the research activities of the Department and while there has been some increase in numbers over the years the total still falls short of that which may be regarded even as barely adequate. This results in members of the teaching staff becoming their own technicians in their research with a resultant deplorable loss in time.

THE PROBLEM OF ACCOMODATION:

Accommodation proved a harder nut to crack. The original laboratory was soon totally inadequate. The "old" casualty room was seized upon when it was vacated and fitted out as a Cardio-Respiratory Laboratory. Even undergraduates could not escape the rapacious physicians for their common room, such as it was, was converted into a laboratory and the attached lavatories into a fume cabinet and a dark room. The Wellcome Trust, in 1961, made a grant for the construction of temporary laboratory accommodation which would be used until such times as Government provided adequate accommodation for the Department. Like all temporary structures it bids fair to becoming permanent. Eventually constant dripping did indeed wear away stone but it took 18 years before adequate facilities were provided. Tragically these facilities were designed for a maximum annual intake of 70 undergraduates into the Clinical Years and for the staff therefor. Shortly both the intake and the staff will be more than doubled and this necessitates an expansion of the existing facilities.

A FAR CRY:

It is a far cry from the single laboratory with its broken centrifuge of 22 years ago to the excellently equipped suites of laboratories which house the Department today. The once solitary Professor is now supported by 19 full-time staff members which include 2 Readers and 2 Senior Lecturers, all of whom are graduates of this University. The 2 half empty wards of 20 beds have swollen to 6 wards with 237 beds and all of these are occupied. It is also a far cry from 20 students in the Final Year to the 143 of today.

If the reader has drawn the conclusion that the Department developed as a "one man band" this is a misconception. In the early difficult years Dr. Stephen Chang, an outstanding teacher and clinician, Dr. Gerald Choa, Dr. C. C. Wong and Dr. Joseph Pan contributed substantially to its development. In later years Dr. David Todd, Dr. Rosie Young and Dr. K. S. Lai have been towers of strength and each and every one of the less senior members of the staff have also made their contributions. Last but not least successive "generations" of undergraduates have provided, albeit unwittingly, successive stimuli which have resulted in changes, usually but not invariably, for the better.

THE THREE-FOLD AIMS OF THE DEPARTMENT:

The aims of the Department are, and have been throughout its post-war existence, threefold. The first is to provide the highest possible standard of patient care within the teaching hospital and its associated clinics. The patient is not only the most important individual in the hospital but

or so: plays a most important role in the education of both undergraduates and doctors. If the standard of patient care is of the highest possible there is no doubt that, in witnessing this, much "rub off" on to even the most resistant of students and a number of such are always with us. The second aim is to contribute to the sum total of medical knowledge by engaging in research and this is intricably interwoven with the third and more important aim which is, in the words of Hippocrates, "to impart a knowledge of the Art" to those who wish to learn. This is not a simple matter of merely teaching the Principles and Practice of Medicine. The teacher must inculcate, both by practice and precept, an appreciation of the dignity of the profession for it is the bounden duty of all graduates "to maintain the honour and noble traditions of the medical profession". The student also must acquire a knowledge of the ethics which govern the relationships not only between physician and patient but also those between colleagues for, again in the words of a modern version of the Hippocratic Oath, his "colleagues will be as his brothers".

(1) PATIENT CARE:

The standard of equipment available to the Department for the investigation and management of patients is of the highest and there is a corresponding standard of patient care. But the clinical load of in-patients and out-patients carried by members of the Department is enormous. The former is unavoidable for failure to carry it would result in a fall in the patient/student ratio below the acceptable minimum and clinical instruction would suffer. The latter load is grossly excessive and much of it should not be carried. The Department's responsibility to outpatients properly should be restricted to seeing new patients and to managing patients who fall within the purview of specialists in the Department or patients who could not be adequately managed by others. Fortunately there are many thousands of patients with irremedial disease who could and should be managed in Government clinics but who, for a variety of reasons, are not so managed. The increased number of beds in the Department and the passage of time will result in the unnecessary load being further and progressively augmented. A solution must be found to this problem for the clinical responsibilities known at present very materially interfere with the research activities of the staff.

(2) RESEARCH:

Despite the heavy clinical responsibilities members of the staff have found time to engage in research in a wide variety of fields and these activities have been productive. How they have achieved this is a source of wonder not only to myself but also to the many distinguished physicians who have visited us. Numerous papers have been published in journals of international repute. Unfortunately, an even greater number remains to be prepared for the Press. I know great pride in what has been achieved in and by the Department and especially when physicians of international repute speak in high terms of the professional and academic qualities of members of the staff. But the recognition that in many areas the one-time pupils have outstripped their quondam master is a source of peculiar pleasure to me.

"TO IMPART A KNOWLEDGE OF THE ART":

The reputation of any Department depends to a very large extent upon the quality of its products which are scientific papers and those men and women who have received their education and training in it. By restricting publication of the former to journals of international repute a high standard is ensured and, importantly, they are subjected to the critical appraisal of workers in the same field in other countries. What then of those who have been described as "the parasites of the hospital who take but do not give" yet who are nevertheless the primary reason for the existence of the Department, the undergraduates? In the opinion of all External Examiners in Medicine they are no better and no worse than their counterparts in, for example, the United Kingdom. The last External Examiner reported that their knowledge of Pathologic Physiology and Biochemistry was de-

fective whereas Clinical Practice was of a very high order. In my view this is an accurate assessment for it was by no means a vintage year. It has proved impossible to persuade all but a few undergraduates that a knowledge of Applied Physiology and Biochemistry is a prerequisite to the adequate understanding of the disruption of function produced by disease. What of those who make of a year a vintage one? Again in the opinion of External Examiners who have known the good fortune of encountering such they would be outstanding anywhere. But there is another and important side to this coin. What do the consumers have to say of the goods that the Department provides for them? In a recent survey of undergraduate opinion the goods were considered to be of quality. The reputation of a Department depends also on another product, its postgraduates and lecturers-in-training may be so classified. Examiners in the two major Royal Colleges of Physicians in the United Kingdom have rated the professional competence of trainees from the Department very highly. Certainly there has been an unusually high proportion of passes. All this is very gratifying but there is no doubt that both the undergraduate courses and postgraduate training programme could be improved further. Both have imperfections which are known and probably there are others which are not apparent to us.

SOME THOUGHTS:

Sydenham, the Father of Modern Medicine, has been referred to as "a man of many doubts". Certainly he advocated for the physician what today would be referred to as periods of self-criticism. In writing this paper I have run the risk of being accused of the besetment of vanity and I have admitted knowing pride in what has been achieved in and by the Department. But if I ask myself the question have I failed in any particular the answer is in the affirmative. I have failed to persuade the medical profession at large in Hong Kong that, in order to practise medicine with any measure of competence, the doctor must recognise that throughout his professional life he must undergo a process of continuous education. Tragically, in Hong Kong, education and vocational training all too commonly cease when full registration is obtained.

Let me finish on a lighter note. I have in the past frequently been asked the question why do you refuse to leave Hong Kong. Nowadays, for good and obvious reason, the question is asked in the past tense. There are a number of reasons but one of the major ones is that, over the years, teaching has given me the greatest pleasure of all and the Hong Kong medical student has come to occupy a place both in my affection and esteem. If, as has been frequently claimed, "he (or she) will bring me in my gray hairs in sorrow to my grave" a long time is being taken in encompassing my death. But it would be a fatal mistake to interpret my admission as evidence of a softening in attitude and reactions. Be assured that the hard line still goes and you will continue to know the rough side of my tongue when you merit it.

* * * *

The young physician starts life with twenty drugs for each disease, and the old physician ends up with one drug for twenty diseases

— Sir William Osler

THE STAFF

Professor A.J.S. McFadzean,

O.B.E., M.D. (Glas.), D.Sc. (Hon. H.K.)

F.R.C.P. (Lon. & Edin.), F.A.C.P., J.P.

Professor McFadzean was born in Troon, Ayrshire, Scotland. He received his medical education in the University of Glasgow from which he graduated M.B., Ch.B. with honours in 1936. He was awarded the Brunton Memorial Prize as the most distinguished graduate of the year.

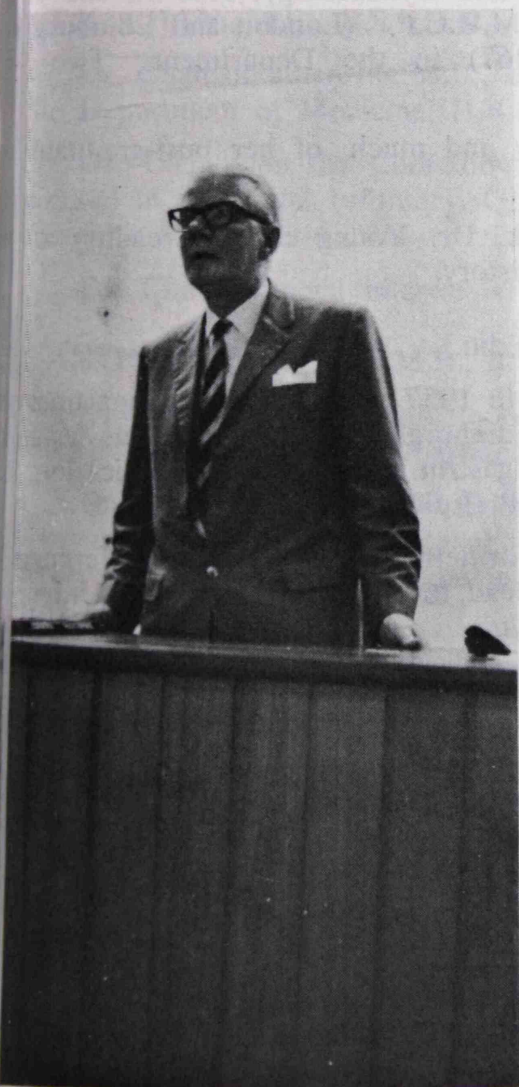
Following graduation Professor McFadzean held house appointments in Medicine and in various specialities appertaining thereto. From 1933 to 1938 he was an Honorary Demonstrator in Pathology. On the outbreak of war he joined the R.A.M.C. and saw service as a Regimental Officer mainly in the Middle East. He became a casualty just before the battle of Mareth and, on recovery, returned to the practice of his chosen specialty in base hospitals in Egypt where he became fascinated by tropical diseases. Following repatriation to the United Kingdom he was appointed Scottish Command Medical Specialist and Officer-in-Charge of a Medical Division.

On demobilisation in 1945, Professor McFadzean was appointed Lecturer and subsequently Senior Lecturer in the Muirhead Department of Medicine, University of Glasgow. He was appointed Professor of Medicine in this University in 1948 and, in the same year, Honorary Consultant to the Hongkong Government, to the Royal Navy and to the Army.

During his 22 years in Hongkong Professor McFadzean was at one time Vice-Chancellor of the University and since 1967 has been Dean of the Medical Faculty. He is a member of the Medical Council and of the Medical Advisory Committee and he serves on a number of other Committees.

In 1959, Professor McFadzean graduated M.D. with Honours from the University of Glasgow and his thesis was awarded the Bellahouston Gold Medal. He is a Fellow of the Royal College of Physicians of London and of Edinburgh and he is also a Fellow of the American College of Physicians. But the honour which he prizes most highly is the Honorary D.Sc. which was conferred upon him by our University earlier this year.

Professor McFadzean's research interests have been in a wide variety of fields. He is the author or joint author of over ninety papers. For relaxation he plays golf, writes poetry and paints but his spare time is mainly devoted to reading for he is a voracious and virtually omnivorous reader.



DR. DAVID TODD: M.D. (H.K.) F.R.C.P. (Edin.)

Dr. David Todd was Born in Canton, China in 1928. His early years were spent in Canton, Hong Kong, and various parts of South China moving with the tides of war. School was initially Diocesan Boys' and later Lingnan Middle School in Kukong, Kwangtung. After World War II and a year at Lingnan University, Canton, he transferred to the Medical School in Hong Kong and the long awaited graduation took place one day in May, 1952. Life has been more or less inseparable from the Department of Medicine at Queen Mary Hospital ever since!

Dr. Todd spent the major period of post-graduate studies abroad in the University Department of Medicine, Royal Infirmary, Glasgow; and shorter visits to departments of haematology or medicine at University College Hospital Medical School, London; Washington University School of Medicine, St. Louis; various other medical centers in Britain and U.S.A. and the Department of Human Genetics, University of Michigan have followed.

Dr. Todd's special interests in medicine, apart from those dealing with the teaching of medical undergraduates, concern haematology — red-cell changes in splenomegalic states and hepatic cirrhosis, secondary erythrocytosis, red-cell enzymes, thalassaemia and haemoglobin synthesis and publications have been mainly on these topics.

Dr. Todd's non-medical interests include music from Bach to Wagner, stamps, boating, hiking, good company, good food and good wine.

DR. ROSIE YOUNG, M.D. (H.K.), F.R.C.P. (Edin.), M.R.C.P. (Lond.)

Dr. Young graduated in 1953 with M.B., B.S. (HK). After serving her internship in the University Medical Unit and then in the Department of Obstetrics and Gynaecology, H.K.U., she joined the Department here as an assistant lecturer. She obtained her M.R.C.P. (London and Edinburgh) in 1959 and became lecturer (1962) and then senior lecturer (1967) in the Department. Two years later, she was made reader in medicine.

Dr. Young's main research interest lies in endocrinology and much of her post-graduate research work and studies abroad is devoted to this specialty.

Besides her zeal for teaching and medical research work, Dr. Young chooses reading as her hobby and her taste ranges from English literature to modern history.

DR. K. S. LAI. M.B., B.S. (H.K.), Ph.D. (Edin.,) F.R.C.P. (Edin.,)

Dr. Lai graduated from the University of Hong Kong in 1957 and joined the Department of Medicine, H.K.U., in the following year. He went over to Edinburgh in 1960 and was awarded Ph.D. (Edin.) in 1962 for his work on the biological assay of gastrin and its clinical application. Dr. Lai obtained his MRCP (Edin.) in 1963 and was elected FRCP (Edin.) in 1970.

A major part of Dr. Lai's research is centered on gastroenterology, with special reference to the stomach, liver, and pancreas. In 1964, Dr. Lai took the lead to cooperate with the University Surgical Unit in establishing a combined gastroenterological Unit.

Personal interests include badminton (in the old days!), bridge, and photography.

DR. S. C. TSO. M.B. B.S. (H.K.), M.R.C.P. (Edin.,)

Dr. Tso is a past graduate of Queen's College. He obtained his M.B.B.S., (H.K.U.) in 1959 and joined the Department of Medicine, H.K.U., in July 1960. Dr. Tso takes a special interest in haematology and part of his post-graduate study was spent in the Department of Therapeutics, University of Edinburgh (1962-63) and Paterson Laboratories, Christie Hospital, Manchester (1963-64). Special research interests lie in the control of erythropoiesis.

Dr. Tso has been an active undergraduate. He has been the secretary of the University Hong Kong Student's Association (1956-57), and a year later, he became President of the H.K.U. Students' Union. A game or two of badminton has been on old hobby.

DR RICHARD Y.H. YU. M.B., B.S. (H.K.), Ph. D. (Lond.), M.R.C.P. (Edin.)

Dr. Richard Yu spent his secondary school days in Diocesan Boys' School. He entered the University of Hong Kong in 1952, qualifying with M.B., B.S., in 1958. Since then he began his medical training as medical officer in the Government Medical Unit, Queen Mary Hospital, working under Dr. G.H. Choa. Later he was trained in the Medical Unit, University College Hospital, London and obtained his M.R.C.P. (Edin.) in 1963. Dr. Yu was awarded Ph. D. of the University of London in 1966 for his work on the role of angiotensin in chronic hypertension in rabbits.

Dr. Richard Yu joined the Department here in 1966. His special interest embraces renal diseases and clinical physiology, while his research centres mainly on the normal physiological role of renin and angiotensin and their role in hypertension.

DR DONALD Y.C. YU. M.B., B.S. (H.K.), M.R.C.P. (Edin.)

Dr. Donald Yu was educated in Diocesan Boys' School. He entered the University of Hong Kong in 1955, qualifying in 1960 with M.B., B.S. (Hons). Subsequently he joined the Department of Medicine, H.K.U., as clinical assistant and then assistant lecturer. In 1964, he obtained his M.R.C.P. (Edin.).

Dr. Yu received part of his post-graduate training in Brompton Hospital, Institute of Chest Diseases, London (1964-66), working as senior house-officer and research fellow in the Medical Research Council Unit of Immunology, Brompton Hospital.

Dr. Yu's special interest is respiratory physiology and his research centres around allergic lung diseases and mechanism of bronchial constriction.

DR T.K. CHAN. M.B., B.S. (H.K.), M.R.C.P. (Lond.), M.R.C.P. (Edin.)

Dr. Chan obtained his M.B., B.S. in 1961 with honours. Having served his internship he joined the Department of Medicine, H.K.U. in 1962.

Dr. Chan won the Commonwealth Scholarship to the United Kingdom from 1965-67 where he worked in the Royal Infirmary, Glasgow and University College Hospital, London and where he obtained his M.R.C.P. in 1966.

Dr. Chan's special interest is haematology.

DR ANTHONY K.Y. LEE. M.B., B.S. (H.K.), M.R.A. C.P.

Dr. Lee is a past graduate of St. Paul's Boys' College. He graduated with M.B., B.S. (H.K.) in 1965 and joined the Department of Medicine, H.K.U., in the following year.

Dr. Lee was awarded the Commonwealth Scholarship by the Australian Government in 1968 and became a member of the Royal Australian College of Physicians in 1969 (M.R.A.C.P.). Since then he worked as research fellow in Walter and Eliza Hall Institute of Medical Research in Melbourne (1969-70).

Dr. Lee's special field of interest is immunology. In his undergraduate days, Dr. Lee has been chairman of Lugard Hall Students' Association. (1963).

DR R. K.C. LAM. M.B., B.S.

Meanwhile Dr. Lam is in Australia, sitting for his M.R.A.C.P. examination. Hence no information can be gathered.

DR VICTOR W.T. YAN. M.B., B.S. (H.K.)

Dr. Yan completed his secondary education in Queen's College and entered the University of Hong Kong with Morrison's scholarship in 1962. Dr. Yan has been with the Department since 1968, first as assistant lecturer and later as lecturer.

Dr. Yan has been chairman of the University Hall Students' Association (1965-66) and his hobbies include swimming, stamp and coin collecting.

DR. S.K. LAM. M.B., B.S.

Dr. Lam did his secondary schooling at St. Joseph's College after which he joined the University Medical Faculty where he obtained his M.B., B.S. in 1967. After one year as an Assistant Lecturer in the Department, he was appointed Lecturer.

Dr. Lam has found his interest in the branch of Gastroenterology, and wishes to specialize in this field.

DR. CHRISTINA C.L. WANG. M.B., B.S. (H.K.)

Dr. Wang matriculated in 1963 from St. Paul's Co-Educational College. She obtained her M.B., B.S. with honours in 1968 and joined the Department of Medicine, H.K.U. in the subsequent year.

Dr. Wang was one of the Nuffield exchange students in 1968 and during her undergraduate days, she has been the Hon. Secretary of Medical Society, H.K.U.S.U. (1965-66).

DR. L. W. MAK. M.B., B.S. (H.K.)

Dr. Mak is a past graduate of King's College. He entered the University in 1963. He was one of the Nuffield exchange students to Sheffield University Medical School in 1968. With outstanding academic credits, Dr. Mak graduated with M.B., B.S. (Hons) in 1968 and joined the Department of Medicine, H.K.U. in the following year.

DR. T. F. TSE. M.B., B.S. (H.K.)

Dr. Tse spent his secondary school days in Wah Yan College, Kowloon. He obtained his M.B., B.S. (H.K.) in 1968. Having served his internship in the University Medical Unit and University Surgical Unit, Dr. Tse joined the Department in July 1969.

Dr. Tse has been an outstanding sportsman in his undergraduate days and sports is still his favourite to-day.

DR. RONALD NG. M.B., B.S. (H.K.)

Dr. Ng is a past graduate from Diocesan Boys' School. He graduated from the University of Hong Kong with M.B., B.S. in 1969 and joined the Department in 1970.

Dr. Ng has been an active undergraduate — being the Hon. Secretary, Executive Committee, H.K.U.S.U. (1967) and the Council Chairman, Union Council, H.K.U.S.U. in 1968.

DR. ANDREW HUA. M.B., B.S. (H.K.)

Dr. Hua graduated from Diocesan Boys' School and entered the University in 1964. During his final undergraduate year Dr. Hua won the Nuffield Travelling Scholarship to Guy's Hospital, London. He obtained his M.B., B.S. in 1969.

Dr. Hua's main interests include methods of communication and student work.

DR. S.C. SO. M.B., B.S. (H.K.)

Dr. So had his secondary education in Diocesan Boys' School. He was one of the 2 Nuffield Exchange Students to Guy's Hospital during his final undergraduate year. He obtained his M.B., B.S. with honours in 1969. Having served his internship in the University Medical Unit and University Surgical Unit, Dr. So became a lecturer in the Medicine Department, H.K.U. in 1970.

Special hobbies include basketball and motoring.

DR. C.S. TENG. M.B., B.S. (H.K.)

Dr. Teng is a graduate of St. Paul's Boys' College. He qualified with M.B., B.S. (H.K.U.) in 1969 and served as house officer in the University Medical Unit and Government Surgical Unit.

Though he has never dreamed of teaching before, fate led him to be a lecturer in the Department of Medicine, H.K.U. in 1970, and Dr. Teng is now pretty fond of the task of "imparting the knowledge of the Art" (Hippocrates).

Dr. Teng has some interest in the field of urology.

The Pathologist and Surgical Pathology of Head and Neck Tumours

T. B. Teoh

M. D. Institute of Pathology

I wish first to express my sincere appreciation to the University Faculty of Medicine for inviting me to deliver the second Digby Memorial Lecture. I am greatly honoured and also very pleased to have an opportunity to contribute in a small way to the memory of a teacher. Looking back into the chronicles of Hong Kong's own medical publications I was fortunate to come across the first volume of "Transactions of the Hongkong Medical Society" published in 1889. This Society was founded in September 1886 and its first president Patrick Manson in his presidential address stated "A worker in China has in many respects a magnificent opportunity. There is no lack of material original and useful work." Twenty-eight years later on 12 January 1914, *Caduceus* the journal of the Medical Society of this University was founded largely through the initiative of the late Prof. Digby. Kenelm Digby's presidential address to the Society in 1924 emphasised the need for studies of Pathology so as to establish "standards" for the Chinese race. A very fitting appreciation to this man of vision has been well recorded by our learned speaker Prof. Sir John Bruce when he delivered the first memorial lecture. It was a privilege to hear this lecture and has made my task of selecting the topic of this second lecture easier. Sir John's references to team work and the realisation that a man's practice is often selective, and restricted to a particular corner of even that contracting field" have been most reassuring.

Pathology originally grew out of clinical observations and is still stimulated and benefited by contact with clinical problems. Thus when a pathologist speaks at a meeting to a mixed audience usually with more clinical interest, he is sometimes expected to provide the "fundamentals" of the subject on which the clinical phenomena are based. This expectation is based on a dangerous fallacy. Our approaches to problems vary in being made at different levels of biological organisation, but none of these is more fundamental than another. Thus in selecting the subject of this lecture on "The pathologist and surgical pathology of head and neck tumours" I have in my mind certain problems which a general histo-pathologist has to answer when confronted with tissues removed for diagnosis from these areas. Like my predecessors I hold that morbid anatomy and histology still hold the key to some of the unsolved problems which are an inspiration of research.

Tumours of the head and neck cover a wide range of pathology and in these regions many surgical specialities are involved. Besides the many problems which

confront us in histopathological diagnosis, the pathologist in some instances has to understand the language of clinicians. After more than 20 years contact with them my only concern is, to borrow Sir John's phrase, "with scientific concepts and philosophies". In these complex areas of the head and neck selection of material for this lecture is necessarily restricted and confined to one's gradually narrowing interest. I hope they are representative of problems which a general histopathologist working in China learns to understand and appreciate. The first group of tumours which attracted my interest when I first started pathology was nasopharyngeal carcinoma.

In 1930 Digby and his colleagues noted that malignant tumours of the nasopharynx "are seen with considerable frequency in Hong Kong but are rare in most parts of the world". Patients usually presented with unilateral or bilateral enlargement of the upper deep cervical lymph nodes. Often biopsies of the enlarged cervical lymph nodes were carried out and the growths were diagnosed as either lymphoepithelioma, transitional-cell carcinoma or reticulum-cell sarcoma. Similarly when small bits of tissue were removed from the nasopharynx, the same problems in histological diagnosis were encountered. Among those diagnoses mentioned none has caused more confusion among pathologists and clinicians than "lymphoepithelioma". Lymphoepithelioma was originally described in France and Germany in 1921 as a cellular malignant growth in the nasopharynx consisting of a syncytium of large cells accompanied by a mixture of lymphocytes. The prevalence of malignant growths in the nasopharynx in this geographical area presented good opportunities to clarify the histogenesis, the typing of these growths and the accurate histological assessment of biopsies.

Altogether 183 necropsies on malignant growths of the nasopharynx among Chinese were thoroughly studied, 125 were males and 58 females. By a special technique the nasopharynx was removed as a block together with the base of skull. The cervical lymph nodes were carefully dissected together with the large vessels of the neck. The experience gained from adequate histological examination of post-mortem material has been helpful in typing biopsies of the primary nasopharyngeal growths from 2116 cases. These comprised 1437 males and 679 females. The aged and sex distribution are shown on the Figure.

The naked-eye appearances of the primary growths are predominantly ulcers of varying sizes and depth involving part or the whole nasopharynx. However, the

roof and adjoining posterior wall are common sites for the primary growths. A few show nodular growths with or without ulceration. In one specimen the nasopharynx appeared practically normal except for fullness of the left pharyngeal recess. In such cases clinical detection is difficult or impossible.

Histological studies of the primary growths and those of the cervical lymph nodes show a similar range of structural variants. The predominant type of tumour cells contain moderately large, slightly irregular, ovoid vesicular nuclei with prominent nucleoli. The cells are often syncytial and may be arranged in sheets mixed with plentiful lymphocytes, features identical to those described for lymphoepithelioma. In other parts of the same growth there may be clumps of tumour cells separated by fibrous septa of varying thickness. Besides the type of tumour cells just mentioned, well-differentiated squamous cells with or without keratin are also seen in parts of the growth in 8 per cent of cases. Other structural variants which may be present are pleomorphic, hyperchromatic nucleated cells and those with spindle-shaped nuclei resembling a sarcoma. In parts of the growth which show cellular ill-defined masses of tumour cells with plentiful lymphocytes, silver impregnation stain reveals reticulin fibres demarcating the tumour cell masses. However, there is no reticulin between the tumour cells. Serial sections of selected tumours may demonstrate continuity between tumour cell areas and the overlying squamous epithelium and also *in-situ* changes.

The histological study of metastases in organs which do not contain lymphoid tissue reveal that only the epithelial component is present. Furthermore in few tumours where the primary growths only show features of an undifferentiated carcinoma, the metastases contain foci of squamous differentiation.

All these observations clearly indicate that the histogenesis of these tumours is from the stratified squamous epithelium of the nasopharynx; they are thus epidermoid carcinomas. The confusing term "lymphoepithelioma" should be abandoned. The lymphoid component seen among tumour cells in the nasopharynx and in lymph nodes is only incidental and not neoplastic. The conclusion by light microscopy that these carcinomas arise from the squamous epithelium of the nasopharynx was further substantiated by Svoboda *et al.* (1967) who by electron microscopy demonstrated keratin fibrils in undifferentiated nasopharyngeal carcinoma cells.

I shall not go into details about the direct spread and metastases of nasopharyngeal carcinomas. Tables I and II illustrate the frequency of invasion of base of skull and the distribution of metastases. However, one mode of spread of malignant head and neck tumours worked out by Willis in 1930 is significant. He demonstrated a correlation between remote metastases and tumour invasion of the neck vein by metastases in cervical lymph nodes. He found that out of 25 cases with remote metastases, 24 had cervical vein invasion. In my original study of 31 untreated cases, there were 15 cases with remote metastases and out of these 11 had cervical vein invasion.

The aetiology of this disease is still puzzling. There is adequate evidence supporting a racial predisposition. Certainly environmental factors must play a part and have to be assessed from all angles. The early observation of Digby *et al.* (1941) suggested that the high incidence of nasopharyngeal carcinoma at a relatively early age in Chinese might be due to the prolonged inhalation of smoke in badly ventilated houses. However, epidemiological studies did not substantiate this. Recent

studies by Hadfield (1970) on adenocarcinoma of the paranasal sinuses among woodworkers in Oxfordshire and part of Buckinghamshire, by Acheson and his colleagues (1970) on nasal cancer among workers in the boot and shoe industry of Northamptonshire will stimulate wider investigations into unsuspected environmental carcinogens in this area. Further the preliminary report of nasopharyngeal carcinomas among bush pilots in Canada by Andrews and Michaels (1968) is of great interest and requires further study. A recent review by Epstein (1970) on EB virus quoted Henle who found that 100 per cent of patients with nasopharyngeal carcinoma have high titre antibodies to EB virus. The significance of this curious relationship is not yet known. It has been repeatedly recognised from the start that the EB virus may well prove to be no more than an opportunistic passenger living as a commensal in lymphoid cells. Although it is quite possible that EB virus may turn out to be a wild goose, the chase will provide information for the purpose of exclusion. Epstein commented that the role of viruses in human malignancy presents a considerable dilemma. Once a virus has been found which, from direct or indirect evidence, is suspected of oncogenicity in man, direct role in the causation of malignancy may be impossible to obtain. The question then remains as to the value of accumulating yet more and more evidence for the association of this agent with human malignancy and yet this information can never give a final definitive answer. It would appear at present that the only way to resolve this difficulty might be the long-term development of an experimental vaccine and the undertaking of a trial pilot vaccination programme in an area of high endemicity of the tumour, followed by long-term prospective surveillance to detect any consequential decrease in the expected number of cases.

In animals tumours of the nasopharynx are rare but tumours of other parts of the upper respiratory tract have been recorded in dogs, horses, sheep and cattle. This subject has been well reviewed by Cotchin (1967) of the Royal Veterinary College. In Hong Kong neoplasms have been observed in the posterior part of the nasal cavities of Friesian cows which usually show marked respiratory distress and foul nasal discharge.

Malignant tumours in cattle presumably arising from the mucous membrane of the ethmoid bone were described by Stenström in Sweden in 1909 and 1915. The most detailed report of these tumours in 20 cattle also came from Sweden by Magnusson in 1916. Since then there have been only isolated reports, one from South Africa in 1936 and another from India (1964) describing a case of adenocarcinoma in the nasal cavity of a bullock. Prof. Cotchin of the Royal Veterinary College kindly confirmed the first tumour here as being a carcinoma. This finding stimulated our interest and close collaboration with the veterinary surgeons of the Royal Hong Kong Jockey Club enabled me to study in detail the heads of 16 Friesian cows. On naked-eye examination they presented usually as large, fungating ulcerative growths. Gross invasion into the brain and paranasal sinuses was seen in 6 and 9 tumours respectively. The histological typing of the tumours is shown in Table III which compares my findings with those of Magnusson. Sarcomas and carcinosarcomas were not seen in my series. On the other hand there were 4 epidermoid carcinomas, histologically showing varying degrees of cornification, accompanied by squamous metaplasia of the respiratory epithelium. Downgrowths of this epithelium merged with the underlying carcinoma. In the adenocarcinomas, mucin can be demonstrated in both the glandular lumen and in the tumour cells. The undifferentiated carcinomas exhibit sheets or ill-defined masses of tumour cells with scanty fibrous and reticulin stroma. Mitoses are frequent.

to aetiology, intranasal inoculations of tumour material into the nasal cavities of normal cows failed to produce tumours. Transplants into the peritoneal cavity and subcutaneous tissue of rats failed to take. Explants of these growths were cultured *in vitro* by Dr. Chang of Virus Unit. She had been able to maintain the growth of these cells for more than 1 month and further investigation is necessary to assess the significance and nature of these cells.

Speculatively, rhinitis might be considered as a possible precursor lesion, being due at times to viruses, bacteria, moulds or parasites. Again the nasal mucous membrane of animals must be subjected to contact with a variety of chemicals, some of them on their way to the mucosa, and some it seems possible, on their way out. Prof. Cotchin has emphasised the need for world-wide study of these tumours so that features of epidemiological significance may be found. These could have a bearing not only on upper respiratory tract tumours of animals but also those of man.

Another group of tumours involving the faciocervical region which is of great interest to both surgeons and pathologists is the salivary gland tumours. The great diversity of histologic patterns encountered in these tumours bear little resemblance to the appearance of the normal salivary gland. The histology has given rise to much speculation and varied terminology.

Up to the middle of the last century records of tumours developing in the salivary gland, especially the parotid, were scanty and lacked detailed histological description. Paget in 1853 in his "Lectures on surgical pathology" was probably the first to regard the salivary gland tumours as a separate group, intimately connected with the salivary glands. His histological description that these tumours were "composed of cartilage, or fibrous tissue, variously mixed with other tissues, and especially with what appears to be an imperfect or a reverted glandular tissue" was accurate. Billroth in 1855 described a separate type of tumour which he named "cylindroma" which I shall refer to later. In 1899 he published the histopathological and clinical records of 8 patients with tumours of the parotid and maxillary region. All his tumours showed nearly similar features and four different types of tissue were present namely: connective, cartilaginous and mucous tissues, and areas of closely packed polyhedral cells. Since then the literature on the so-called "mixed tumour" of the salivary gland has grown tremendously and centered mainly on the histogenesis. Virchow's theory that mixed tumour was mesenchymal in origin is not accepted by the French school which at a very early period claimed it to be purely epithelial. To complicate matters further another theory suggesting their origin from embryonic remnants was put forward. Because of the varied histological structure, uncertain histogenesis and clinical course, the classification of salivary gland tumours before 1950 was based on diffusely delimited groups. The lack of distinction between different types with varying grades of malignancy led to uncertainty concerning prognosis and treatment of these tumours. This uncertainty in evaluating malignancy explains the widespread acceptance of the term "semi-malignancy" following publication of Ahlbom's monograph in 1935 on "Mucous and salivary gland tumours". Except for Farland's work (1936 and 1942) the extensive literature on salivary gland tumours contained no good reports of large operative series until the early nineteen-fifties. It is only in the past two or three decades, following technical advances in surgery of the major salivary glands, that pathologists have been provided with suitable material to permit correlation of histological and clinical

features. Thus studies in the earlier half of the present century suffered from the lack of recognition of some now clearly differentiated pathological types. The work of Foote and Frazell in 1954 confirmed earlier observations, provided more detailed information about the rare types of tumours and gave us a more solid basis for classification. However, there are still a number of gaps in the typing of salivary gland tumours. The World Health Organization initiated a study 4 years ago on both major and minor salivary gland tumours to clarify further the histogenesis of certain group of tumours and their place in the classification. This classification for histological typing of salivary gland tumours agreed upon recently is shown in Table IV. Accurate typing of these neoplasms will eliminate variations in terminology and make comparison between one series of cases with another possible.

The present investigation is based on materials and records of the Institute of Pathology from 1961-1969. (Table V). There were 178 and 24 tumours of the major and minor salivary glands respectively. This collection can be considered as a random sample since there was no bias in the selection of cases for surgery; it therefore indicates the incidence of these tumours here. From the Table you will note that benign tumours are much more common than malignant ones. I will concentrate my discussion to the most common type, the pleomorphic adenoma.

The term "mixed tumour" was introduced nearly a century ago and is still widely used. This suggested that the tumour was of both epithelial and mesenchymal origin. Later Willis introduced the name "pleomorphic adenoma", which is more descriptive of the structural variants present in different parts of the same tumour together with mesenchymal-like areas. At present most authorities favour a purely epithelial origin and probably from the intercalated ducts. The major problem in accepting the epithelial histogenesis of these tumours is to explain the origin of cartilage-like substance from epithelial cells.

Pleomorphic adenomas in this series of cases account for approximately three-fourths of the tumours of the major salivary glands. There were more females than males and the largest numbers were seen in the 4th and 5th decades. The distribution shown in Table VI clearly indicates that the Chinese parotid gland is equally susceptible to tumour formation as people in the west. They occur approximately three times more frequently in the parotid than in the submandibular gland. This preponderance of tumours in the parotid was also observed by Chen and Loucks in 1933 among 45 cases of salivary gland tumours seen at Peiping Union Medical College. In contrast Marsden (1951) found that a larger proportion of salivary gland tumours among Chinese in Malaya arose in the submandibular gland.

For the minor salivary glands, pleomorphic adenoma again is the predominant type seen in Hong Kong. Even though the number of tumours in the minor salivary glands is relatively small, the incidence of palatal pleomorphic adenomas is comparatively high, see Table VI. In 1935 Prof. L.J. Davis who was one time Professor of Pathology in this University published a detailed study on 4 cases of palatal mixed tumours. These were encountered in only one year's routine surgical pathology work and 3 of them were Digby's patients. There were 3 females and 1 male. In the present series of 16 cases, females exceed males in the ratio of 10 to 6. Besides Chinese, J.N.P. Davis and his colleagues (1964) in Uganda also found a large proportion of salivary gland tumours arising in the palate of Africans. Thus

further work on tumours of minor salivary glands here will shed more light on this problem of palatal salivary gland tumours among Chinese. Clinically, Chen and Loucks in their 1933 paper noted that among their 45 cases observed in Peking approximately three-quarters had the tumour for 6-30 years and one patient for 37 years. In the present series 25 cases had histories of over 10 years, and among these six had the tumour for 30 years and one for 40 years. In the palate there were two cases with histories of 14 and 20 years respectively.

Briefly microscopic appearances of a typical pleomorphic adenoma show strands and masses of proliferating epithelial cells with differentiation into tubular or adenoma-like structures and proliferating myoepithelial cells. The latter merge with the myxoid, chondroid or fibrous areas. Another distinctive change noted among the epithelial cells is squamous metaplasia. This change was especially marked in one of my cases where the tumour was present for 40 years in the parotid of a female 68 years. It presented as a partly cystic growth 6 cm in main diameter. The cyst was lined by thickened well-differentiated squamous cells. The diagnosis of pleomorphic adenoma would have been difficult if not for the masses of epithelial cells with tubular differentiation seen on one side. In other tumours where myxoid and chondroid areas predominate the plentiful stellate-shaped myoepithelial cells present can be shown to contain abundant glycogen. Histochemically Azzopardi and Smith (1959) proved that myoepithelial mucin which formed the ground substance of these areas belongs to the connective tissue type and is distinct from epithelial mucin. Besides glycogen, Mallory's PTAH stain when properly processed will stain the myofibrils blue. Mylius (1960) used this stain and the electron microscope to identify myoepithelial cells. His electronmicrographs depicted cytoplasmic myofilaments in cells of the myxoid area similar to those present in normal myoepithelium. Besides myofibrils, myoepithelial cells in pleomorphic adenoma are seen in close association with collagen fibrils. One striking pattern which I have observed is the rosette arrangement of myoepithelial cells around radiating fibrils of collagen. This strongly suggests that the latter is a product of myoepithelium rather than mere stroma of the tumour. This pattern was present in pleomorphic adenoma of the parotid, palate and lacrimal gland. However, in a paper by Coles and Jones (1967) entitled "Odontogenic tumour of lip" a very similar pattern of radiating fibrils was encountered and interpreted as dentine-like structure, an interpretation which I cannot accept. Last, electron microscopic studies of the chondroid areas are conflicting. In 1968 there were two papers, one by Welsh and Meyer and the other by Doyle et al. The former maintained that true cartilage cells were present together with epithelial and myoepithelial cells in the stroma. In contrast Doyle and his colleagues failed to identify chondrocytes but observed neoplastic myoepithelial cells embedded in a hyaline matrix similar to that of immature hyaline cartilage. They further postulated that similarity of structure and function of myoepithelial cells and visceral smooth muscle indicated that myoepithelium probably is mesenchymal in origin.

Another distinctive feature in a few pleomorphic adenomas is the presence of small masses or strands of cells surrounded by abundant cylinders or anastomosing bands of hyalinised stroma. The term "cylindroma" was used by Billroth more than a 100 years ago for a tumour with a hyalinised stroma surrounding or within islands of epithelial tissue. He used this term to designate a stromal feature of the tumour and not the epithelial component. The misuse of the term "cylindroma" is so

prevalent in the literature that it should be abandoned. This structural variant in a pleomorphic adenoma must not be confused with another malignant tumour of the salivary gland called adenoid cystic carcinoma. The hyalinised stroma I believe is a product of myoepithelial cells. In this distinctive stroma, special stains reveal the presence not only of abundant collagen but also plentiful elastic fibres.

The other problem concerning pleomorphic adenoma is the strong belief that the tumour is semi-malignant. Masson introduced the term semi-malignancy and was later supported by Ahlbom whose criteria for semi-malignancy were high cellularity, predominance of epithelial component, presence of cylindromatous structures, incomplete encapsulation and multiple foci. Eneroth (1964) reviewed 562 pleomorphic adenomas of the parotid more than 50 per cent of which were originally classified as semi-malignant. Careful follow-up of these cases, however, showed no higher incidence of recurrence than those cases with benign features nor were they responsible for metastases or death.

An illustrative case from the present series demonstrates the difficulties in histological diagnosis. A Chinese female aged 61 years complained of a growing mass over the angle of right jaw for 2½ years and enlarging rapidly in the recent 7 months. A superficial parotid lobectomy was performed in January 1965 for removal of the growth. The histological diagnosis then was a pleomorphic adenoma, but when the slides were reviewed, suspicious-looking cellular areas with mitotic figures were seen. A follow-up study, 5½ years after the operation, showed that the patient is alive and well.

The risk of post-operative recurrence of pleomorphic adenomas is generally considered high. McFarland in 1942 stated that more than simple microscopic examination would be required for post-operative prognosis and methods existing then were no more accurate or scientific than the flipping of a coin. He noted a 48 per cent recurrence among cases observed for 5 years. On the other hand Wyatt and his colleagues (1967) noted a 10 to 12 per cent recurrence rate among cases with primary excision after 10 years follow-up. This marked discrepancy can be largely attributed to evolution of better surgical techniques for more aggressive surgery based on a sound understanding of the behaviour of these tumours. Foote and Frazell have rightly stated that recurrence rate of primarily removed tumours largely reflects the quality of surgery within a special head and neck surgical department.

At present I am not able to give the recurrence rate for pleomorphic tumours treated here. These tumours have been operated upon by different surgeons in scattered centres using different procedures. To deal effectively with tumours of the salivary glands concentration of material in one specialised unit is essential. Such a set-up will permit better correlation of clinical and histological observations which have proved very useful in prognosis.

Recurrent pleomorphic adenomas invariably present as multiple, discrete tumour nodules which are in contrast to the primary growths which are solitary. This feature was seen in all 4 cases of recurrent tumours, two after primary excisions 6 and 11 years ago and the other two had two previous excisions with histories of the growth for 14 and 30 years. These recurrent growths are in almost all cases the result of incomplete removal or implantation of tumour cells in the operative bed. Once recurrence has taken place it will be difficult to eradicate the tumour.

Besides recurrence pleomorphic adenomas may undergo malignant change. There is general agreement on this in the literature and carcinomas may develop either in long-standing primary pleomorphic adenomas or recurrences following unsuccessful surgery. Patey, Thackray and Keeling (1965) gave an incidence of approximately 5 per cent of malignant change in pleomorphic adenomas. In the present series 5 carcinomas have been identified, three in the parotid and two in submandibular glands. This gives an incidence of approximately 3½ per cent. All the 5 cases were primary tumours and 3 of them have very long histories ranging from 10 to 30 years. None had facial nerve paralysis. Spontaneous facial nerve paralysis which is persistent is a clear indication of malignancy. Eneroth from the Caroline Hospital, Stockholm, in a recent personal communication, observed that among 378 cases with malignant parotid tumours 46 had persistent facial nerve paralysis. Out of these 46 cases there were 6 patients whose first and only symptom was spontaneous facial nerve palsy **without** clinical evidence of a tumour. Histologically carcinoma in pleomorphic adenoma may show either singly or in combination, the features of adenocarcinoma, epidermoid carcinoma or anaplastic carcinoma. Our 5 cases reveal some interesting histological variants. In one case within solid masses of carcinoma cells there are small areas near the centre composed of closely packed collagen fibrils. Another tumour shows the presence of bone surrounded by poorly differentiated epidermoid carcinoma cells many of which with clear cytoplasm. Glycogen is present within the cells. Finally in one tumour there are bands of spindle cells with moderately large, irregular, elongated hyperchromatic nuclei between fairly well demarcated masses of undifferentiated carcinoma cells. Van Gleson reveals the presence of collagen fibrils in between spindle cells. These were regarded as atypical carcinoma cells by Patey, Thackray and Keeling and not a sarcomatous component. However, Doyle's observation of the ultrastructure of the chondroid areas of pleomorphic adenoma showed morphological similarities between epithelium and visceral smooth muscle. This feature together with the fact that the mucin associated with epithelium is identical with mesenchymal mucin make them suggest that myoepithelium is of mesenchymal origin.

Mr. Dean, in this limited discussion on tumours of the head and neck, I hope I have not disappointed those who very generously spare the time to be here this evening. I have attempted to illustrate the efforts of a general histopathologist with many limitations trying to provide some answers on problems of surgical pathology. Apart from those which I have already mentioned, one problem lay beyond the scope of academic pathology. It is the communication gap between surgeons and pathologists. The narrowing or closure of this gap can be achieved on the basis of genuine, common interests in certain clinicopathological problems irrespective of departmental hierarchy. On the other hand it is the pathologist's responsibility to try to offer diagnostic opinion. In order to improve this further one has to look into the future and assess whether present day techniques used for biological research can be utilised probably for diagnostic and analytical work. The application of electron microscopy to surgical pathology has been relatively neglected. The belief is that tissues fixed for routine histopathologic examination are unsatisfactory for evaluation of subcellular structure. In general there is no dispute about this but recent investigations of Tsai and Rodriguez (1968) have shown that tissues fixed in the usual way are suitable for the demonstration of certain cellular structures allowing for diagnosis of certain

neoplasms whose identification by light microscopy is doubtful or controversial. They cited a puzzling example of an enlarged cervical lymph node which showed prominent sinusoids filled with cells containing large nuclei, prominent nucleoli and indistinct cell boundaries. Various diagnoses such as metastatic anaplastic carcinoma, malignant lymphoma and malignant histiocytosis of the "histiocytic medullary reticulosis" type are possibilities. The precision in histological diagnosis for such cases is required for further clinical investigation and treatment. Such cases without an obvious primary tumour the electron microscope proved to be of value. The electron micrographs showed that the tumour had features of an epithelial cell, i.e. abundant tonofilaments arranged in bundles, and numerous typical desmosomes. Thus a diagnosis of metastatic carcinoma was made and careful search revealed a small nasopharyngeal tumour. This is but one of the many problems which confront a pathologist in the differential diagnosis of head and neck tumours. In order that this tool can be used more effectively a fixative for tissues has to be developed which will serve both light and electron microscopic work.

In histopathology the terminology has become more precise and there is a general agreement on taxonomy. This will facilitate the development of code systems for computer work. This fascinating piece of equipment is able to handle large amounts of data, the storage and retrieval of which is essential for analytical work. The full value of the computer in histopathology especially tumour work has not been thoroughly explored. In the identification of tumours the primary process is the recognition of pattern and relating them to information drawn from memory. This is a very complicated cerebral activity. Direct application of the computer to this diagnostic process is not yet possible. However, automatic recognition of patterns by the computer has made a beginning in the limited and relatively simple fields of cytology and chromosome study.

Finally in the last analysis the human being is still the prime mover. Looking back on Digby's presidential address to the University Medical Society in 1924, the historian will have no difficulty in assessing this man. His emphasis on imagination and critical sense, the former restrained by the latter, is even more important today when confronted with confusing material and moral issues. My old chief Professor Hou whom many of you knew well has repeatedly echoed these words, not only in pathology but also in the study of Chinese ceramics and bronze mirrors. In G.B. Ong's department the foundations for a critical and visionary approach to surgery have been laid and paving the way to bridge the academic generation gap. Personally I have benefited in some ways the fruits of his labours and I see a bright future for contributions to the pathology of head and neck tumours in Hong Kong.

Table I

183 NECROPSIES OF EPIDERMIOID CARCINOMA OF NASOPHARYNX DIRECT INVASION

	No. of Cases	Per Cent
BASI-OCCIPUT BONE	85	46
CRANIAL FOSSAE	70	38

Table II
183 NECROPSIES OF EPIDERMOID CARCINOMA OF NASOPHARYNX METASTASES

Site	No. of Cases	Per Cent
CERVICAL LYMPH NODES	128	70
LUNG	70	38
LIVER	90	49
SPLEEN	18	10
BONES	89	49

Table III
MALIGNANT TUMOURS OF CATTLE IN THE POSTERIOR NASAL CAVITY

	EPIDERMOID CARCINOMA	ADENOCARCINOMA	CARCINOMA	SARCOMA	CARCINOMA & SARCOMA	TOTAL
MAGNUSSON (1916)	0	1	8	6	5	20
TEOH (1970)	4	7	5	0	0	16

Table IV

W.H.O. HISTOLOGICAL TYPING OF TUMOURS OF SALIVARY GLANDS, 1970

I. EPITHELIAL

A. ADENOMA

1. PLEOMORPHIC ADENOMA (MIXED TUMOUR)
2. MONOMORPHIC ADENOMA
 - a) ADENOLYMPHOMA
 - b) OXYPHILIC ADENOMA
 - c) OTHER TYPES

B. MUCOEPIDERMOID TUMOUR

C. ACINIC CELL TUMOUR

D. CARCINOMA

1. ADENOID CYSTIC CARCINOMA
2. ADENOCARCINOMA
3. EPIDERMOID CARCINOMA
4. UNDIFFERENTIATED CARCINOMA
5. CARCINOMA IN PLEOMORPHIC ADENOMA (MALIGNANT MIXED TUMOUR)

II. NON-EPITHELIAL

III. UNCLASSIFIED

IV. ALLIED CONDITIONS

- A. BENIGN LYMPHOEPITHELIAL LESION
- B. SIALOSIS
- C. OTHERS

Table VI

**HISTOLOGICAL TYPING OF MAJOR SALIVARY GLAND TUMOURS
AT INSTITUTE OF PATHOLOGY (1961 — 1969)**

TUMOUR	PAROTID	SUBMANDIBULAR	SUBLINGUAL	TOTAL
PLEOMORPHIC ADENOMA	105	33	-	138
LYMPHOMA	12	-	-	12
EPIDERMAL CELL TUMOUR	3	-	-	3
MUCOEPIDERMAL TUMOUR	2	1	2	5
ADENOCARCINOMA	2	-	-	2
ADENOID CYSTIC CARCINOMA	2	3	-	5
CARCINOMA IN PLEOMORPHIC ADENOMA	3	2	-	5
UNDIFFERENTIATED CARCINOMA	5	3	-	8
TOTAL	134	42	2	178

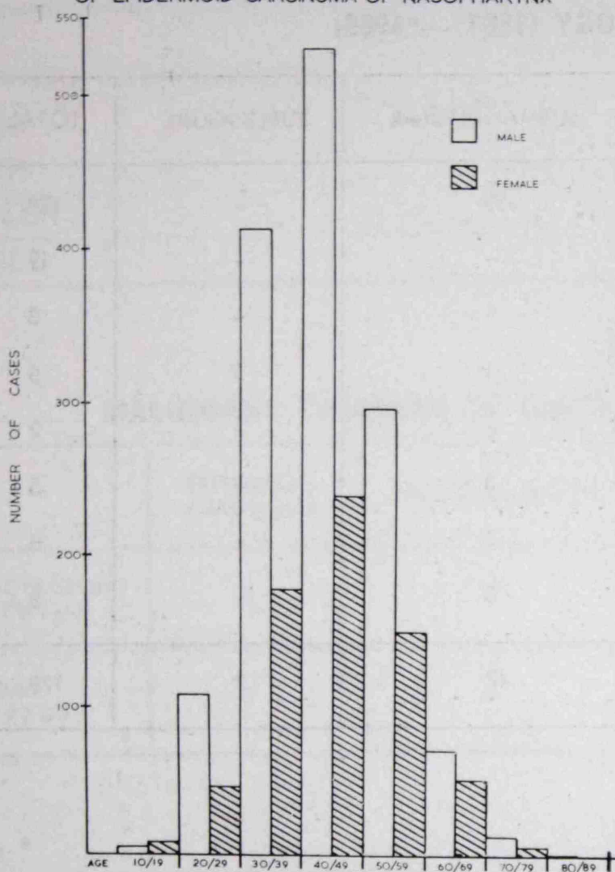
Table V

**DISTRIBUTION OF PLEOMORPHIC ADENOMAS IN
MAJOR AND MINOR SALIVARY GLANDS**

	PAROTID	SUBMANDIBULAR	SUBLINGUAL	PALATE	LIPS AND OTHER SITES	TOTAL
PATEY (1931)	38	6	-	5	5	54
HARVEY ET AL. (1938)	230	21	2	6	9	268
WILLIS (1967)	35	6	1	5	1	48
TEOH (1970)	105	33	-	16	7	161

Figure

AGE AND SEX DISTRIBUTION OF 2116 BIOPSIES OF EPIDERMOID CARCINOMA OF NASOPHARYNX



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AN INAUGURAL LECTURE

ANATOMY DEAD OR ALIVE

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Pro-Vice-Chancellor, Professor Walsh, colleagues, ladies and gentlemen, it is a great honour to be invited by the Senate of the University of Hong Kong to deliver an Inaugural Lecture from the Chair of Anatomy. Indeed, it would be the greatest of honours and of pleasures for any anatomist to stand in my place this evening.

Before I begin I should like to use this occasion to express my respects to two gentlemen. First to Professor Francis Chang, my immediate predecessor, who so valiantly built up the Department of Anatomy. He had the courage and fortitude to embark on a vast programme of growth studies which are still bearing fruit. He also was the creative spirit behind one of the finest anatomical museums which will stand as an enduring monument to him. At the same time I also wish to remember my teacher of anatomy, the late Professor E.J.R. Evatt of Dublin, whose enthusiasm and brightenedness stimulated me in my student days to take up anatomy.

Man's interest in human anatomy is as old as man himself, especially his interest in the anatomy of the opposite sex. And thus one may say anatomy began. It is probably one of the oldest of the medical sciences and since the earliest days has been one of the cornerstones of medical education, and this is a position which anatomy is likely to retain. I shall not burden you with a lengthy discourse on the history of anatomy, but rather deal with a brief account of the development and trend of the subject and its relation to medical education and to research.

In tracing the history of the subject one actually follows the evolution of the whole field of medicine. For 2000 years anatomy dominated western medical science through the works of Aristotle, Herophilus and Galen, while the anatomist Vesalius might be called the father of modern medicine. We must also note that today we are rediscovering the early contributions made to medical science by the forefathers of modern medicine from ancient China, India and the Middle East. Their discoveries were either ignored or remained unknown since medical scientists in the West were unable to read their texts, and unfortunately the historians and philologists of Europe and America were not, and are not, interested in the subject matter.

It was the achievements of William Harvey (1578-1634) which provided a deeper insight into the true nature of medical science. For he established the vital concept that every organ has a discoverable function which must be integrated within the functioning of the body as a whole. Here a physician was applying analytical, physiological and mathematical principles both to the advancement of knowledge and the benefit of his patients, the first vision of medicine as an integration of primary sciences.

At this time too the professors of physics had to teach not only anatomy but also logic, philosophy, Greek, botany, zoology and the practice of surgery and medicine. Thus at this stage medicine was truly integrated with the cultural background as well as with all the disciplines that at that time had a bearing on medicine. As knowledge increased, the subject matter gradually became specialised and fragmented into separate departments. And so in each branch the compass of learning increased. Early in the 19th century physiology separated from anatomy. The first chair in physiology was filled by Purkinje at Breslau in 1824, while the first chair of physiology to be established in England under William Sharpey was at University College London, in 1836. Later on further subdivisions of anatomy such as histology and embryology emerged. Pathology in its modern form originated with the recall of Virchow to Berlin in 1856. Since then every decade has been marked by the proliferation of new disciplines, each one presided over by an autonomous head who feels it his duty to his subject to see that sufficient hours are allocated to it in the curriculum. Thus the old principle of integration was systematically overthrown.

During the 19th century the knowledge of gross anatomy, histology and embryology increased enormously both in scope and detail. Topographical anatomy was especially important in relation to the development of modern surgery. Detailed information on anatomical regions was vital for safe surgical intervention, particularly as with the advent of Lister and Semmelweis antiseptic practice gave an opportunity for more exacting operative procedures. And at the turn of the century the development of anaesthesia allowed for more complicated techniques which were mostly based on greater anatomical knowledge. At that time every medical student had to learn his anatomy in detail and was taught by anatomists who had at one time or another practiced surgery. In Britain the latter had to hold the Fellowship of one of the Royal Colleges of Surgeons. This surgical diploma was both *de rigueur* and *de reg'le* for any aspiring anatomist, while today it is considered unscientific.

The observation and recording of the fine structure of tissues as seen through the microscope became one of the anatomical specialities. A great deal of fundamental material was accumulated, much of which proved to be basic to the study of pathology and to biology. And in another speciality, embryology, the interests at that time were centered on the development of different structures rather than on the causative forces at work.

In general the anatomists of the 19th century followed the classical approaches of morphology and comparative anatomy. This period was the collecting phase where details of structures and their relationships were recorded and comparisons made with other organisms.

The origins of tissues and of man were hotly debated. The great Virchow pronounced that the Neanderthal skull belonged to a modern man who had suffered from rickets, while Mayer of Bonn declared that Neanderthal man was a demented Mongolian Cossack who had been left behind by the Russian Grand Army in 1814, and only an Irish anatomist by the name of King from Galway dared to say that he could possibly be one of our ancestors.

With the rise of the experimental approach to biological problems all this began to change. The method was first pioneered by the early physiologists but since 1875 it has been as much the tool of the anatomist. In that very year Hertwig demonstrated that the essence of the act of fertilization lay in the fusion of a single sperm with a single ovum. This discovery together with that of the principles of heredity by Mendel was the dawn of genetics, the passing on through a solitary sperm and egg of the hereditary qualities of the next generation. Then Roux and his coworkers showed how one could interfere with the course of development following fertilization. Thus they sought to infer the course of normal development.

The experimental method, however, could not have arisen but for the vast improvements in the microscope and the development of better fixation and staining techniques. It was the microscope that brought about the reunion of morphology and function. Only a few highlights need be touched on now. Schleiden and Schwann introduced the cell theory, Roux in 1885 performed the first tissue culture and, before the century expired, His senior enunciated the neurone theory. This was followed in the first half of this century by the development of autoradiography under London and Kotzareff, the introduction of the phase contrast microscope by Zernike, and in 1931 Knoll and Ruzicka produced the first electron microscope which gave birth to cell biology.

Towards the end of the 19th and the beginning of this century anatomists, due to their interest in physical anthropology began to use biometry and statistics, which they later extended to experimental work. It was through morphology that this important mathematical tool was introduced to the other medical sciences. Already long ago Helmholtz had stated that all science is measurement, to which Sir Henry Dale had later added that all true measurement is essentially comparative. And comparison is the essence of experiment.

During the last twenty years anatomy departments in Britain and other countries have made substantial contributions in the fields of growth, neuroanatomy, adaptation, endocrinology, cell biology and tissue culture and transplantation. A few random examples will serve as an illustration. In neuroanatomy comparison of the regional effects of mental activity and visual stimulation upon the electroencephalogram shows that these functionally different cerebral activities have a neuroanatomically distinct origin within the brain. Endocrine studies have demonstrated a specific role for adrenal androgens in controlling sexual receptivity in the female rhesus monkey, while ovarian hormone plays a significant part in regulating the sexual preference of the male for one of a pair of females. In the field of adaptation, work on morphological changes in response to differences in altitude have revealed characteristic changes in the structure of the pulmonary trunk. Investigations of the growth of children in Hong Kong have given us information on the influence of the socioeconomic status on various growth parameters. Study of the fine structure of chromosomes in the mammalian oocyte has shown that differences in chromosomal morphology may

be correlated with interspecific variations in radiosensitivity. And a technique has been developed for maintaining prostatic tissue from monkeys and from man with benign prostate hypertrophy in organ culture. In this way it has been shown that the neoplastic tissue actively metabolises testosterone in culture.

In many instances anatomists have been pioneers in the development and biological use of a variety of new techniques and instruments including histochemistry, cytochemistry and autoradiography. In addition the more traditional work in histology, comparative anatomy, embryology and physical anthropology continues to enhance our knowledge of human biology. Here work has revealed that the action of intra-uterine devices in normal rhesus monkeys cause constant histological changes in the endometrium, though hormonal normality of the latter is maintained. The investigation of changes in oxygen tension in relation to early embryological development has produced remarkable vertebral malformations that are helping us to understand some of the mechanisms of transformation during early growth. And measurements of selected bones and muscles have been used, in canonical analyses, to correlate structure with locomotor activity in primates. These investigations point to the relative importance of particular groups of muscles in relation to the varied ways in which the limbs are used in different species and emphasize the high degree of specialization found in man when contrasted with sub-human primates.

Today the progress of anatomy depends, to a large extent, on the perfection of instruments of observation and control. Some of the most recent and most powerful adjuncts to anatomical study have come from physics. Thus the transistorised amplifier enables us to measure minute currents and potentials in living systems, as for example in the investigation of the functions of the brain, and in radiotelemetric techniques developed for stimulating and recording tension in the muscles of conscious and unrestrained monkeys. The electron microscope which bridges the gap between the light microscope and the interatomic dimensions studied by X-rays, and the use of isotopes and tracer elements which help in the elucidation of the actual process of transformation of chemicals in living systems are carrying us to the very frontiers of cell and molecular biology. And more recently the laser beam has become an important tool in experimental work. Locomotor and postural problems in primates are also being investigated on the basis of biomechanical principles. Similarly the advances in chemistry, such as selective cytochemical methods, are of great benefit to anatomy. In addition statistical theory, and the use of computers in applying it, have proved invaluable in exacting significant information from the characteristically variable measurements of biological science.

These new methods are already transforming our concepts not only of biological structures but also of biological functions and thus provide us with new dimensions in human biology. Anatomy has clearly evolved beyond the merely natural history approach of former ages. Structure and function are indivisible, the one is unthinkable without the other. In the light of these modern developments Sir Wilfred Le Gros Clark redefined anatomy as the science of the form and structure of living organisms which is concerned with the study and interpretation of those factors which determine or modify form and structure, whether they are chemical, physical, physiological, developmental, or phylogenetic, and with the precise relation between structure and function.

This anatomy has adopted optical, radiological, electronic, chemical and mathematical aids. By so doing, moreover, anatomy and physiology, and even biochemistry, are converging towards a unified discipline of human biology. All three deal with the mechanisms of living processes, although their approach is different. As far as their research work is concerned the compartmental barriers that separate them have eroded, as far as academic appointments go physiologists are becoming anatomists and anatomists are becoming physiologists. In addition zoologists, physicists and chemists are entering the basic medical sciences. The prospects of multiple advances over the enormous field of human biology emphasize the ever-greater need of cooperation. Effective advance in this area is necessarily a combined operation. Having started off fully integrated, the preclinical sciences diversified into many sustained subjects in response to the discoveries of their time and today we are again approaching the age of synthesis in medicine.

At the present time medical education and its reformations are very much in the minds of all those concerned with the training of our future doctors. We are all aware that although the advances in anatomy and other preclinical sciences have been truly prodigious, unfortunately these have been slow in making themselves felt in the sphere of medical education. Compartmentalisation and the ideas of our mentors, a hangover from the old days, still largely bedevil the curricular structure. We are all victims of our pioneers. We are also victims of our own bright ideas. In this sense we relive in every educational experiment our own intellectual palaeontology, trying to justify earlier ideas, trying to suck from them their last drop of inspiration.

Historically speaking, positive action to reorganise medical education along modern lines was first taken in America during the early half of this century. New integrated programmes were designed that broke down the artificial boundaries between the disciplines and emphasis was placed on inculcating a research attitude in our graduates which has had a beneficial effect throughout medicine. Thus the students were trained from the outset to think of the body as a whole. But one also has to take heed, there are signs that some of the more spectacular experiments in medical education in America are not turning out quite as well as had been hoped. This is not an argument against such experiments but it emphasizes the importance of detailed planning and of avoiding gimmicks.

In Britain the first medical school to adopt such an outlook, against considerable objection, was that of the University of Birmingham. And here I wish to take the opportunity of expressing my gratitude to Professor Sir Zuckerman of the Department of Anatomy and the Medical School with which I had the honour to be associated for some fifteen happy years. And I am glad that Birmingham continues in the forefront of medical education. Gradually other medical schools followed and today there is quite a ferment in British medical thinking.

Since the Second World War a series of official committees have reviewed British medical education: the Clarendon Report (1944); the report of the British Medical Association (1948); the General Medical Council (1957); and in 1968 the most far reaching of these the Report of the Royal Commission on Medical Education, otherwise known as the Todd Report. All of them demand a ruthless pruning of the curriculum, the elimination of detail and greater integration. The key principle to be followed is to educate more and instruct less and to mould the medical student into a scientific doctor. How-

ever, it has to be remembered that any change in the medical curriculum is difficult to assess since the whole course takes over five years and the product must serve at least for another five following qualification, thus ten years have to elapse before a proper assessment can be made.

The Todd Report, in many ways admirable, certainly can stand as a guide for the next decade. However, it is unfortunate that though the report contains a good deal of preclinical evidence the committee did not include a single anatomist or physiologist. This rather underlines a notion that is current, and is generally applied to the preclinical sphere as a whole, and stems from the fact that we all seem to have been brought up to believe that different kinds of scientific activity can be graded socially because of a presumption that some imply a higher intellectual quality than others. Too often medical practitioners assume that medical preclinicians are failed clinicians and that nonmedical preclinicians have never quite made it! What has to be realised is that anatomy and physiology are sciences in their own right, as biochemistry is, with their own dynamics and ethos and that the vocational aspect of their subject matter, though of importance, has been relegated to a subordinate position.

In certain quarters there has been some objection to the proposed two-year preclinical course as set out by the Todd Report. The feeling is that the curriculum should be shorter and designed to train the clinician, i.e. the course should be less scientific and more vocational. The controversy as to how much of each is not new. But the point of view that there is a fundamental distinction between the medical scientist and medical practitioner is erroneous since both employ the same procedure in their work. When confronted by a problem both observe the facts, reason out a working hypothesis and then act upon it. The outcome confirms, refutes, or modifies the hypothesis and this in turn may lead to further action. The retention of a certain amount of vocational matter can also be justified educationally in so far as the biology of man illustrates fundamental principles, and one must realize that medicine is applied human biology. It is also quite clear that at the moment the national budgetary exigencies in the technologically advanced countries as well as the shortage of medical manpower tend to press for a rather greater vocational content in the preclinical curriculum. In the future, however, it may well be that the preclinical period will be extended to three years, of which the first two will deal with the basic medical sciences, while during the last year an elective subject will be chosen out of those covered earlier and that this will be treated in greater depth under the guidance of one or other of the preclinical departments. The products of this course will qualify with a B.Sc. in Medical Sciences and it is from these that the future clinical students will be chosen.

Wise decisions for today cannot be safely taken unless one realizes that those same decisions determine the shape of tomorrow and possibly the day after. This realization, as Sir Solly Zuckerman stated, may not lead to the right decisions, but it might help to obviate some of the worse (Zuckerman, 1966). The basic objectives of medical education are that fundamental principles should be emphasised rather than factual detail. It is impossible to give a student a full training in the preclinical and clinical disciplines and make each one an expert in every subject. But it is possible to put him in a position from which to continue his own education. This means that he first must be trained to use the scientific method. The aim of teaching is to make

him think and to make him question common assumptions. He has to be made aware that medical knowledge is not static. At the same time one has to enable the student to relinquish the security of thinking in well defined channels and to find a new kind of stability based on the recognition and acceptance of ambiguity, uncertainty and even of open choice. The undergraduate must be given a thorough grounding in those basic sciences that are concerned with normal and abnormal structure and function on which the clinical understanding of disease depends. It is unfortunate that all too often the student considers the preclinical subjects as hurdles to be overcome rather than tools to be utilized in providing the best health care. The grounding in the primary sciences must be devised on the assumption that the newly-qualified doctor may have a working life of some forty years. And in this connexion it would be unwise to select only that which is immediately useful. Only if all these precepts are observed will it be possible for the individual to extend his education throughout his professional life and so safely exploit whatever advances may arise. This is why the undergraduate curriculum must also favour the acquisition of enduring habits of work and thought and of enthusiasm for study. With this training the young graduate should be able to enter any of the main branches of medicine and to develop his education in his selected speciality. Plato observed that education is a life-long task, and the growth of knowledge in medicine and in methods of education means that any recommendations as to the medical curriculum can never be final — they are always moving to that end but they never arrive.

Anatomy is nearly always the subject most criticised, partly this is because it has been identified with topography and dissection alone. Many of the criticisms are justified, anatomy has in the past been taught in far too much detail. But what is forgotten is that the subject has changed enormously since the undergraduate days of the clinicians and medical scientists currently most concerned with reshaping the medical curriculum. The belief of many clinicians that anatomy has not changed is still very strong. One is frequently asked whether students have to be able to discern the side to which a carpal bone belongs, or whether they have to learn all the branches of a particular artery. When one says that this sort of anatomy is dead and passed away by the end of the Second World War, and that today's students are examining the intricacies of the cell and the dynamic changes that occur during growth, hands are thrown up in horror and one is told "but that is not anatomy". This sort of attitude is, of course, tantamount to an anatomist saying that surgery is still at the chloroform and open ether stage of anaesthesia! The basis for this hostility towards anatomy is a psychological one, for the established doctor of the present day remembers with revulsion how he was harassed in his student days with morphological detail. He forgets that just as his own speciality has evolved so has anatomy changed. Quite apart from alterations in the content of the courses, a glance at the time devoted to anatomy shows that considerable changes have occurred over a period of seventeen years (Table 1). It is therefore essential that before curricular alterations are made those concerned should ensure that they are truly acquainted with current conditions.

Year	Country	Range (hrs.)	Mean Total (hrs.)
1953	Britain	700—1400	950
1955	U.S.A.	562—825	650
1963	Britain	405—850	580
1969	Denmark	430	430*
1967	Hong Kong	712	712
1970	Hong Kong	525	525

Table 1. Total hours devoted to the teaching of anatomy.

* Students are sent to U.K. for an intensive three weeks course in dissection (about 90 hours).

When considering the contents of a new course in anatomy there are several criteria for deciding selection. Some topics are useful as a tool for training in the scientific method, others provide a fundamental basis for other subjects, thus a knowledge of the anatomy of the kidney is necessary for the understanding of the physiology, pathology and clinical aspects of this organ. Practical work is essential for the need to develop the capacity for observation and investigation of unknown material by standard techniques. At the same time an allowance must be made for subject matter of potential scientific importance. Again, it has to be emphasized that principles rather than details must be taught and that there has to be a reduction of factual detail but not a total elimination of facts. We also have to remember that the study of anatomy introduces the medical student to the greater part of medical terminology, this is a point that is frequently lost to sight.

In connexion with the revaluation of anatomy within the preclinical context and by way of comment, I just want to touch, in passing, upon a rather interesting publication. Recently there appeared the first of a three volume work, *A companion to medical studies*, which was designed to deal with the preclinical sciences. This volume has been hailed by many as forward-looking and relevant to modern ideas in medical education. And I am sure the authors wished to eliminate all that is inessential and include all that is important and of real relevance today. While not wishing to detract from the merits of the work, I wonder whether those interested have ever considered it worthy of a statistical analysis. Such an analysis is most illuminating (Table 2). Over half of the volume is devoted to anatomy, one quarter to physiology, about one seventh to biochemistry, and about one seventeenth to such important fields as psychology, sociology, human genetics and statistics. In fact topographical anatomy occupies more space than the total of physiology. Is this an indication of the relative importance of the subject matter today? The parts dealing with anatomy were quite rightly pruned down to what was considered essential, but it was as dead as that of any of the older textbooks, what was so lacking in topographical anatomy was the functional approach.

It is quite clear that a modern curriculum must keep pace with the new developments and has to reflect not only changes but also differences in emphasis. In taking this into account one has in anatomy to distinguish two parts, the scientific and the topographical. To a certain extent this division tends to be artificial since the two are interrelated, but from a teaching point they can be considered separately. Scientific anatomy deals with the fundamental principles, although will, of course, include some matter that has a vocational bearing. Topographical anatomy, on the other hand, though based on fundamental concepts of human biology, is vocationally orientated and more of an applied nature.

Scientific anatomy embraces certain basic subdivisions:

- (a) Cell biology, which narrows the gap between morphology, biophysics and biochemistry and also i

Subject	No. of Page	% of Total
Topographical anatomy	265	26.0
Embryology	85	8.3
Histology	126	12.3
Neuroanatomy	81	7.9
Total anatomy	557	54.5
Total physiology	254	24.8
Total biochemistry	148	14.5
Others *	62	6.0

* Includes: psychology and sexual behavior 28p., sociology 7p., human genetics 12p., statistics 15p.

Table 2. An analysis of *A companion to medical studies*, R. Passmore & J.S. Robson (eds) Vol 3, 1, Oxford: Blackwell (1968).

of cytogenetics, the natural link for the study of human heredity. It is a frontier subject that is breaking down the walls between the biological and physical sciences. Cytology without a doubt will play a prominent part in the future of anatomy.

(b) Histology, which is concerned with the structure — function relationship of tissues is intimately based upon cytology and is a solid link with physiology.

(c) Growth, which concerns changes in dynamic structural relationships in space-time patterns and includes prenatal and postnatal development, the latter, of course, closely associated with paediatrics. Unfortunately so far very few medical schools teach anything about growth although a vital subject in its own right.

(d) Neurology, the organisation of the nervous system, which deals with the stimulus — response relationship; here structure and function are more intricately bound up with one another than in any other part of the body. This is a subdivision that can only be properly taught in conjunction with physiology.

(e) Systematic anatomy, which includes the study of the general arrangement, form and gross structure of the skeletal, muscular, joint and other body systems, as well as those factors which influence or modify their spatial relationships. In this part one must also include human evolution, human variations and adaptations which in turn link with genetics, physiology and pathology.

These five subjects are already being taught or will be introduced in one form or the other in Hong Kong. They should of course not be dealt with in isolation but rather integrated with physiology in the first instance and with biochemistry and pharmacology where possible. This is the only logical way in which to present a realistic view of the preclinical subject matter. Good integration avoids much of the unnecessary duplication which goes on in so many preclinical departments. As mentioned before, the anatomist when discussing structures has to mention function, similarly the physiologist frequently finds it necessary to introduce anatomical conditions in order to be sure that the student appreciates the structural basis of the functions he is about to explain. From this standpoint any survey of a textbook of physiology is most revealing. True integration, however, presents formidable problems of teaching organization. The way to overcome this lies in concentrating initially on those areas where the structure — function relationship is closest and where it is easiest to teach. In such a course, as for example in neurology. Gradually this can be extended until ultimately most of the preclinical disciplines are integrated. In this procedure the general principles of development and structure of a system or an organ should be presented first and then viewed by the functional aspect. Thus there is a centre common to anatomy and physiology, accompanied on either side by one body of knowledge of purely anatomical interest and another of physiological interest.

In addition clinicians should be drawn into this programme in order to point out the relevance of the scientific base to the clinical superstructure. In the matter of integration the preclinical sciences have gone a long way. To deal further than the clinical subjects, who, to a certain extent, are still at the discussion stage.

The second major division, topographical anatomy, which has been severely cut in Hong Kong in order to incorporate some of the basic anatomical science material and in order to relate it to the living body, is much more clinically orientated and in a sense

could be termed applied anatomy. It forms the foundations for procedures in diagnosis, radiology, surgery, obstetrics and in other medical fields and therefore is more vocational in emphasis. Though concerned with practical work in the dissecting laboratory, it does combine topographical with radiological anatomy and living or surface anatomy. Topographical anatomy is a science of the living, not of the dead, and though our knowledge is, perforce, acquired from the cadaver it is in terms of the living that we must think. It also teaches us something about human and constitutional variations — no two bodies are ever alike anatomically — and about the plasticity of the human form and biological variation of living populations. Thus, for instance, Ethiopians have a large ascending loop of the sigmoid colon that may reach to the level of the liver while most other people have an intrapelvic sigmoid colon, this is the reason why sigmoid volvulus is the commonest abdominal emergency in Ethiopia. No course in topographical anatomy can be considered without normal radiological anatomy since it relates cadaver anatomy to living anatomy and forms the backbone to the radiology of pathological conditions. In the past too little attention has been paid to this important subject. And living anatomy only becomes meaningful when muscles, bones and joints can be seen and felt alive with movement and when palpation, percussion, auscultation and endoscopic examination reveal what is hidden to the naked eye.

A major criticism of topographical anatomy has been the amount of time devoted to dissection, and owing to this the question has arisen whether it might not be just as good to learn the subject from ready dissected specimens. The time factor can certainly be greatly reduced if the students are directed to dissect according to a strict time table. As regards the value of dissection versus a study of prepared parts, there is no doubt as to which is the more rewarding. From experience gathered in Birmingham and Addis Ababa it is clear that the knowledge gained from dissecting a cadaver is retained longer and more vividly than that gained from examining prepared specimens. Dissection of the body is an essential basis for the understanding of human structure, organization and function. It is a visuo-tactile method of learning and is of value as a discipline and as a training in observation and investigation. It often comes as a shock to the student to discover during dissection that the body does not agree with the textbook. Dissection is itself a basic research method in application for the student which is carried out no where else in the preclinical course — the student does his own investigation and confirms or contradicts the literature, i.e. actual research in the proper sense, and he uses a technique that is analytical in nature. One cannot teach locomotion or the limits of joint movement until the student has dissected the relevant parts, else he cannot understand what is happening, except, of course, he can learn the matter by heart from the book!

The question that arises in connexion with topographical anatomy is when should it be taught. Traditionally it is dealt with in the preclinical years where it exists rather in isolation. Topographical anatomy is one of the firm bridges between the preclinical and clinical periods and really ought to be taught during the clinical years in conjunction with surgery, orthopaedic surgery, obstetrics and the new field of traumatic surgery. Here is the best place since otherwise many essential details will be forgotten long before they can be used. The reasoning for this is quite simple, a surgeon spends much of his time operating and much of operative surgery is no more or no less than applied topographical

anatomy. Anyone who has had the misfortune to see a surgeon flounder and fluster, completely lost in the depths of the pelvis or the neck, or who has been called to the theatre to sort out tendons and nerves divided at the wrist which have perplexed the operator trying to deal with them, or who has had to deal with the sad business of a damaged biliary tree or a cut ureter, realizes the value of a deep knowledge of topographical anatomy. The great majority of practising surgeons spend most of their working life using their anatomical knowledge which therefore ought to be imbibed during the relevant clinical phase.

The amount of topographical anatomy that is necessary varies from environment to environment and is closely related to the socioeconomic conditions of a region. In technically advanced countries a good case can be made that only the essentials need be taught while the details can be left to postgraduate specialist education, thereby allowing more time for the scientific aspect of the preclinical sciences. On the other hand in developing countries the need at this stage for a very much greater concentration on detailed topographical anatomy is obvious, for the moment the student graduates he is expected to practise surgery, often in remote parts of the country. To cite only one example, in one of the African countries a young graduate of two weeks standing had to perform a hysterectomy by the light of a torch held by a medical auxiliary. In these environments therefore a different sort of anatomy has to be taught with a main emphasis on the vocational which is much more directed towards the immediate needs of the country.

As regards Britain, the Todd Report, while not denying the importance of topographical anatomy, recommended that the major part of this ought to be taught at the postgraduate level since it was mainly of specialist interest to the surgeon. In this way too, British medical schools would be able to continue to recruit their temporary lecturers and demonstrators in anatomy who after one or two years specialisation sat their Primary Fellowship of the Royal Colleges of Surgeons. These people, in fact, provide about twenty to forty per cent of the academic staff in a department of anatomy. Within the last two years, however, the Royal Colleges of Surgeons, of Physicians and of Obstetricians and Gynaecologists have been considering replacing the Primary Fellowship by a common examination in applied human biology. If this plan goes through, it will raise one question and create one problem. At what level in medical education should topographical anatomy be learnt, for it must be dealt with at either the undergraduate or the postgraduate level. And the problem that departments of anatomy in Britain are about to face is from where are they going to get their badly needed staff? These medical graduates, who have temporarily joined the academic world, have so far belonged to the few who have been able to relate the scientific part of anatomy to the clinical subjects. In future this useful source will be closed. The effect will be serious for already ordinary recruitment into the preclinical sciences is difficult.

The task of an anatomy teacher is to lead his class through a course of instruction, but the responsibility for progress rests entirely with the student. Unfortunately the student's notion of a good teacher is usually one who hands out exactly what he needs to pass the examination, because this enables him to get through with the minimum of effort. Obviously the teacher must protect the student from work which is useless, and this necessitates distinguishing between education and the giving of information. Education develops the capacity for scientific investigation and reasoning, whereas the

giving of information, though important, nevertheless tends to suppress curiosity and to stifle critical thinking and can even lead to a waste of time and effort in worthless detail.

Instruction in anatomy, as in any other scientific subject, is by way of lectures, seminars, tutorials and practicals with the aid of audiovisual and other equipment. In many medical schools anatomy, and in particular topographical anatomy, has been and is being taught by lectures. This form of presentation has probably done the greatest harm to the reputation of anatomy and has contributed to the notion that it is a dead subject presented by living corpses. The regurgitation of masses of dry facts is a traumatic experience with devastating effects for it has not only sent many an audience to sleep, but it has also instilled in the student an eternal enmity towards the subject. It would have been better to advise the student to read a textbook than to attend one hundred and fifty lectures in topographical anatomy. For far too long lectures have been the standby in the preclinical departments.

The School of Education in the University of Birmingham recently did some investigation into the method of presentation (Stones, 1969). Although the report is concerned only with student opinion and not with the efficacy of the different methods used in teaching, nevertheless it should be considered very seriously. This investigation is backed up by other evidence too. The report revealed that students present teaching groups on a seminar or even tutorial basis; they reject the lecture and see its only function as a device for giving out factual information. Research into the efficacy of the lecture method (McLeish, 1968) shows that an instructional system which relies too heavily on it is probably very inefficient. The method apparently copes with problems of large numbers, but it would have been possible to achieve the same result by other means such as guided reading, which would help to free students for small group discussions. Lectures must, therefore, be confined to subject matter which is really suitable. It is clear that the seminar is preferred by students for very real pedagogic reasons, since it represents an optimum size which increases the group resources of knowledge, variety of approaches to problems and the ability to provide feedback without at the same time inhibiting individual participation. The students feel that they must make a personal contribution to the teaching and learning process and also that they need to do some preparation for small group work, while hardly any feel the same about the lecture. Similarly too the tutorial system has obvious advantages.

One of the most admirable facets of British medical education has been the clinical teaching method. The tutorial or apprenticeship approach, known as clinical clerking, has withstood the test of time. Here a small group of students is guided by a series of senior clinical tutors through the rigours of medicine and gery up to the time that each student is ready to set himself for the finals. This system incorporates all that the seminar or tutorial method represents. I wonder that the student who enters the clinical world after surviving the preclinical torpidity breathes a sigh of relief and never will look back. Why is it that the clinical departments are so slow in adopting the seminar system? The answer, as to so many problems, is financial: the clinical departments have a far larger number of academic and honorary staff that they draw on than the preclinical departments. However, in spite of these difficulties the seminar and tutorial systems are slowly being introduced into the latter.

Practicals are of inestimable value, particularly if they can be arranged in small groups. Here in Hong Kong lectures in topographical anatomy have been abandoned, instead an effort has been made to teach in seminar types of practicals since this is the difficult and dry part of the whole course. Small groups of students headed by a tutor dissect to a timetable. During this course they have discussions throughout which function is stressed and they have to present essays. Their work is constantly related to the living body, and radiology plays an important part in this. In addition it is planned to consolidate the newly acquired anatomical knowledge with a series of lectures given by clinicians that stress the particular relevance of a region to clinical practice. Owing to a shortage of staff rather larger groups have to be arranged in the microanatomical and neurological practicals.

In the teaching has to be rather selective than comprehensive much will be left to the students' private reading. This requires careful supervision. It is unwise to expect a student to use a 1000-hour reference book for a 100-hour course. Too many teachers persuade themselves that students develop a sixth sense for selecting relevant material. But how can they judge what is relevant when they have no knowledge of the second half of the curriculum? Conscientious students may easily drown themselves in detail. It also has to be remembered that textbooks may err. History may repeat itself but the writers of textbooks do, and in this way error is perpetuated.

Apart from the educational side, anatomy has also a service function. This aspect has already been mentioned in connection with the various clinical fields and is quite obvious in such important branches as surgery, orthopaedics, traumatic surgery, neurosurgery, obstetrics, gynaecology, and so forth. In medico-legal work anatomists are of value in the problem of identification, sexing and age determination of human remains. Archaeology too derives a good deal of help from anatomy in the analysis of prehistoric demography, population migrations, much of the latter is of a statistical nature. In his study of the evolution of man human adaptation and variation, the anatomist has a considerable influence too on physical anthropology. And an understanding of anatomy has been fundamental in art and sculpture, for in these works the exterior surface contours and expressions reflect the underlying fascia, muscles and bones and are usually brought to life.

But there is one other service that anatomy can perform, and indeed it applies to the other medical sciences as well, and that is the help that can be given to medical schools in the developing world. I shall briefly mention this in relation to Africa though it is also relevant to other regions. The urgency of the medical manpower problem is underlined by the fact that many governments in Africa still rely heavily on expatriate medical staff. Thus the percentage of expatriate doctors for example (Bennett, Lutwana & Hall, 1964), is 47 per cent in Mali, 80 per cent in Niger and 82 per cent in Congo (Brazzaville). In Ethiopia, with a population of 23.5 millions, there are about 340 doctors (1968) of whom about 40 are Ethiopian, i.e. 88.2 per cent are expatriate. In addition it has to be realised that in some African countries considerable numbers of private practitioners (this term includes doctors belonging to religious missions and private enterprises, as well as those engaged exclusively in private practice) do not take part directly in the work of public health services. They work almost exclusively in

urban areas where only a small percentage of the population lives.

To attract the right kind of university teachers is absolutely vital. In the first instance they will have to be to a large extent expatriates, though the main aim should be to train local experts as well. The continued reliance on expatriate academics in the various branches of medicine, though traditional, has certain inherent dangers since there is a great shortage even in the developed part of the world, owing to the rapid expansion of medical education and the national health service demands. Such a sustained demand for graduates by the advanced countries will widen the manpower gap even more since it will encourage a brain-drain to the developed regions from areas that can ill afford such losses. Here individual departments of medical schools in the advanced countries can give real aid. Thus some of the more fortunate anatomy departments can be of service in the training of anatomists for developing countries. If they have the possibilities and facilities then they have, in fact, a duty to help the weaker departments. In many ways this is a two-way help — it helps the poorer country to get its medical teachers trained and on the other hand they help the staffing situation temporarily in the better-off medical schools. Though the trainee should be shown and at least introduced to the latest techniques, yet primarily he must be trained to meet the teaching and research situation that obtains in his home country where electron microscopes are at present unobtainable and the experimental use of laser beams at this stage verges on criminal waste of badly needed capital and effort. The man must be trained to use local resources and be able to do applied research that can benefit his country more immediately.

The proliferation of medical schools in the underdeveloped countries at this stage of their development is a real danger, since this duplication will inevitably lead to an underutilisation of intellectual capacity and a continued squandering and dispersion of resources. Only an integration of medical education can ensure the high level manpower specialisation which is so essential for public health development. In fact medical imperatives necessitate integration. Medical schools are extremely expensive and only worthwhile and effective if properly set up. These sorts of projects demand inter-country cooperation, i.e. between neighbouring countries.

No department of anatomy can exist on teaching alone. Research, the spirit of inquiry, must permeate a scientific department, this is part of its life force. By its very presence this spirit can be transmitted to the students and fire their imagination and stimulate them in their studies, thus preventing them from becoming mere imbibers of information and disinterested or even disenchanted with the subject they are studying. The dual role of research and teaching in a university department is obvious — one fructifying the other, similarly the service and research aspects of anatomy are interrelated, often resulting in important discoveries. The pure science part and the applied side have progressed conjointly over the years, the pure fertilizing the applied with ideas, and the applied often providing the pure with the physical apparatus to help in the next intellectual leap forward.

Various broad research fields in anatomy have already been mentioned when dealing with its scientific side. Time does not permit delving into topics of my own interest. Suffice it to say, that the Department of Anatomy in the University of Hong Kong will continue with its research into the growth of children of this re-

gion, and various histological and cytological investigations are now also bearing fruit. In addition studies have been started on functional morphology in the field of primatology and more specifically in human biology. This work shows that the skeletal and muscular systems are plastic and easily adapt to changes in posture and locomotion with resultant wide spread morphological effects. This is not only of importance to the orthopaedic surgeon, but also of significance to the physical anthropologist. For this approach indicates that this method is of particular help in the elucidation of the sequential changes that occur in the fossil primates and will throw further light on the evolution of upright posture and locomotion.

In conclusion one may say that medical science is no more than the body of knowledge which is always being added to by scientists, through controlled and reproducible observations, which in turn must ultimately affect medical education. When considering anatomy, as indeed any other scientific discipline, and the relationships between the various subjects within the medical education at any one phase in our history. We must be flexible and courageous in initiating change, we must try to do it as logically as possible. While stressing one's own subject one must at all times be conscious of the greater unity of the whole, for medicine is a natural as well as social science, in the sense that it is concerned with human beings and is directed more immediately towards human welfare than any other natural science.

Ladies and gentlemen, it is my contention that anatomy is not dead but very much alive and aware of its responsibilities within the totality of medicine.

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ABORTION

by

Daphne Chun and H. K. Ma

There has recently been much public and private discussion on the need of an abortion law in Hong Kong. Opinions expressed are diverse. Those who speak in favour of legalizing abortion cite the recent case of an orphan girl who was allegedly raped and was refused abortion, thereby creating hardship for and heaping humiliation on her. They also claim that criminal abortions which are on the increase in Hong Kong can be reduced or wiped out with the introduction of the abortion law. Their opponents, however, argue that the present law is adequate in enabling the medically indicated cases to have therapeutic abortion. Furthermore, they contend that no person has ever been prosecuted in carrying out the present practice of therapeutic abortions.

Perhaps it is time to examine the present "abortion law" to see how it works in Hong Kong. Reference to this can be found in the Hong Kong Ordinance, Cap. 212, 1964 Ed. under the caption "Offences against the Person", which states:

"ATTEMPTS TO PROCURE ABORTION.

46. Any woman, being with child, who, with intent to procure her own miscarriage, unlawfully administers to herself any poison or other noxious thing, or unlawfully used any instrument or other means whatsoever with the like intent, and any person who, with intent to procure the miscarriage of any woman, whether she is or is not with child, unlawfully administers or causes to be taken by her any poison or other noxious thing, or unlawfully uses any instrument or other means whatsoever with the like intent, shall be guilty of felony, and shall be liable to imprisonment for life.

(Amended, 30 of 1911, ss. 2, 4 and 5)

47. Any person who unlawfully supplies or procures any poison or other noxious thing or any instrument or thing whatsoever, knowing that the same is intended to

be unlawfully used or employed with intent to procure the miscarriage of any woman, whether she is or is not with child, shall be guilty of a misdemeanor, and shall be liable to imprisonment for three years.

(Amended, 30 of 1911, ss. 2 and 5)"

It has been inferred, from the use of the word "unlawfully" in the above two sections that termination of pregnancy can, under certain circumstances, be lawful. This is when the life of the pregnant woman is threatened by the pregnancy. However, a court of law may give a different interpretation of its meaning.

On 26th September, 1956, Dr. Leung Hon Man was charged under Section 46 of the Offences against the Person Ordinance with using an instrument with intent to procure miscarriage (Hong Kong Law Reports 1956). The accused did not deny using the instrument but pleaded that, at the time he did so, he believed that the foetus was dead. He was acquitted even though the pathologist showed that the foetus had antepartum injuries.

It seems, therefore, that induced abortion in cases where the foetus is dead, is not unlawful. There is no law, however, to protect a case where the foetus is alive but where the mother's health is endangered by the continuation of the pregnancy. The present "Hong Kong law" is, in fact, similar to that covered by Offences against the Person Act of 1861 in the United Kingdom, which did not recognize therapeutic abortion. It implies that every case of induced abortion, no matter how genuine it may be, is liable to prosecution if the court of law chooses to do so.

In 1936 Mr. Aleck Bourne, after terminating the pregnancy of a young girl who had been raped, was charged under the act. He claimed that continued pregnancy would have been detrimental to the patient's future mental and physical health and was acquitted after standing trial in the Old Bailey. Since then, this case law had been referred to as something like a judicial permit for therapeutic abortions. With the introduction of the abortion law in the United King-

dom in 1967, this case law can presumably be no longer valid in Hong Kong.

The concept of terminating pregnancy to prevent the death of the mother or to preserve her health is not new. Soranus (2nd Century A.D.) stated: "The fruit of conception is not to be destroyed at will because of adultery or of case for beauty, but it is to be destroyed to avert danger appending to birth, if the womb be small and cannot subserve perfection of the fruit, or if it has hard swellings and cracks at its mouth, or if a similar condition prevails."

During the late 4th Century A.D. Priscianus wrote: "Only where the uterus is diseased or where the mother is exposed for other reasons to danger through pregnancy, is an abortion permissible . . . just as it is sometimes of advantage to remove the dry twigs of a tree in order to save the whole tree or as a heavily laden ship may find it necessary in a storm to throw overboard some of its cargo in order to prevent a ship wreck."

The current attitudes towards abortion are of recent origin. They first arose when the Christians accepted the tenets of the ancient Hebrew teachers who permitted abortion only when pregnancy threatened the life of the mother. The present adamant stand of the Catholic church authorities against abortion for any reason took sometime to develop, for there was no proscription against abortion by the early church leaders in Rome. The beliefs of most Protestant sects are more liberal but the church would not like an amendment of the Act to make abortion a mere matter of choice. They favour some liberalization of the law on abortion so long as the purpose of such liberalization is to preserve the health and well-being of the mother.

The indications of 20 years ago were simple; they were purely organic and were usually confined to advanced cardiovascular and renal disease, tuberculosis and similar conditions. Termination was not often considered if it seemed likely that the patient would survive the pregnancy, even though the mother had to remain in bed in the hospital for the entire period and was expected to die a few months after delivery. Abortions for psychologic reasons and those to prevent birth of abnormal children were rarely considered.

In present day medical practice, conditions posing a threat to the life of pregnant women have been greatly reduced as a result of the advances in medical knowledge in recent years. Many serious diseases are being prevented and others such as diabetes can now be treated effectively. Serious organic heart diseases occur less often now and many acquired and congenital cardiac defects can be corrected surgically.

Fewer women develop pyelonephritis, there are potent antibiotics with which to treat infections. Even tuberculosis can now be effectively controlled. Thus, therapeutic abortions are less frequently performed for these lesions.

About the only therapeutic abortions performed in the interest of the infant before 1930 were those for lethal hereditary conditions where an abnormal infant could be anticipated in each pregnancy. However, they were rarely and reluctantly performed.

In 1941 Clegg reported a high incidence of congenital anomalies, mostly involving the eye, heart, brain and hearing in children whose mothers had had rubella during pregnancy. Subsequent prospective studies indicated that the risk is about 20 per cent.

Some physicians, making reference to the figure of 20 per cent, have asked "Shall we destroy 80 normal embryos to prevent the birth of 20 affected infants, particularly when cardiac defects can be corrected and when so many blind people get along so well?" Others, however, argue that such pregnancies should not be allowed to continue even though a certain percentage of the embryos will be unaffected. It must be remembered that the miseries and sufferings resulting from congenital anomalies are confined only to the affected children but have to be borne by the family as well as the community. A few decades ago, terminating a pregnancy was rarely undertaken even though it meant giving birth to an abnormal child. Malformed and mentally incompetent children were cared for within the family group and did not impose the enormous economic, social, and emotional drain on the family members that such an individual now does. In addition, while an abnormal child in the home creates problems for the family members, its siblings pose even greater problems. The financial obligations necessary to provide adequate care for such an abnormal child will make it difficult for the average family to provide long-term educational support for the other children. As a result, the children may be inadequately equipped to survive the competition of our demanding society.

Mumps is suspect of an abnormal foetus. Certain drugs, such as thalidamide, methotrexate and other antimetabolites may disrupt embryonic genesis. Therapeutic abortion should be made available, if requested, for such women as may give birth to a deformed child.

The opponents to induced abortion point out that it carries a high incidence of complications including death. However, these complications are certainly very much higher when termination of pregnancies is carried out by

abortionists than by experienced gynaecologists in hospitals.

In the United States, as many as one-third of the maternal deaths in some states and two-thirds or more of those in large cities are the result of illegal abortions. In fact, these figures do not reveal the true picture because an unknown number of deaths following abortion are recorded as being from other causes. The report on Confidential Enquiries into Maternal Deaths in England and Wales (1964-1966) reveals that 98 out of 133 abortion deaths were classified as due to illegal interference of the pregnancies.

In Hong Kong, the analysis of abortion and maternal mortality rates (Table I) in the past 20 years show that the average abortion mortality rate was higher than that of the average maternal mortality and in some years (1960, 1961 and 1964) it was two to three times higher. In the cases of abortion admitted to the Queen Mary Hospital from 1961-1969 the incidence of complications was alarmingly high. Out of 149 cases admitted under the care of the gynaecological unit there were four deaths giving a mortality rate of 0.67 per 1,000. For comparison in the corresponding period, there were 4 deaths due to obstetrical complications out of 58,761 delivered at the Tsan Yuk Hospital

giving a mortality rate of 0.10 per 1,000. Clearly the mortality rate was almost seven times higher in the cases of abortion. Apart from the deaths there were also other complications. The previous analysis (Braga, 1963) of emergency abortion cases admitted to the Queen Mary Hospital show that the morbidity rate was 59.9 per cent and the present analysis reveals that it is 40.5 per cent with 7 per cent suffering from serious complications such as severe blood loss, anuria, perforation of uterus and fulminating infection. Three of the cases are illustrated below to show the seriousness of the complications encountered:—

Case 1 was a 26 year old multiparous woman separated from her husband. She was seven weeks pregnant when an abortionist inserted a "rubber tube into her vagina". She suffered from chills and fever with a temperature of 106°F. On examination, general peritonitis with a pelvic abscess was found. At laparotomy, both the uterus and the descending colon were found to be perforated and there was an abscess on the right side of the uterus. The colon was repaired and the uterus with the abscess removed. With intense antibiotic therapy she made a complete recovery. Fig. 1 demonstrates the perforation in the uterus leading to the abscess cavity.

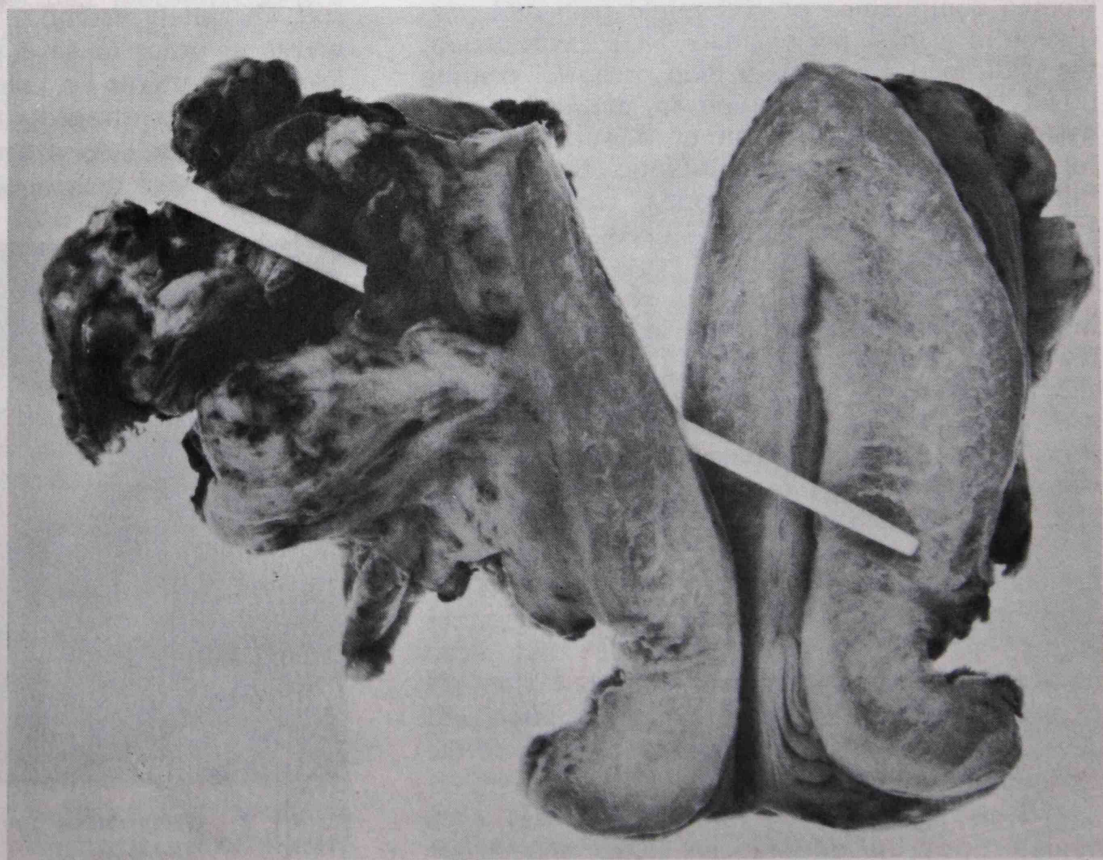


Figure 1 Stick showing uterine perforation and abscess cavity.

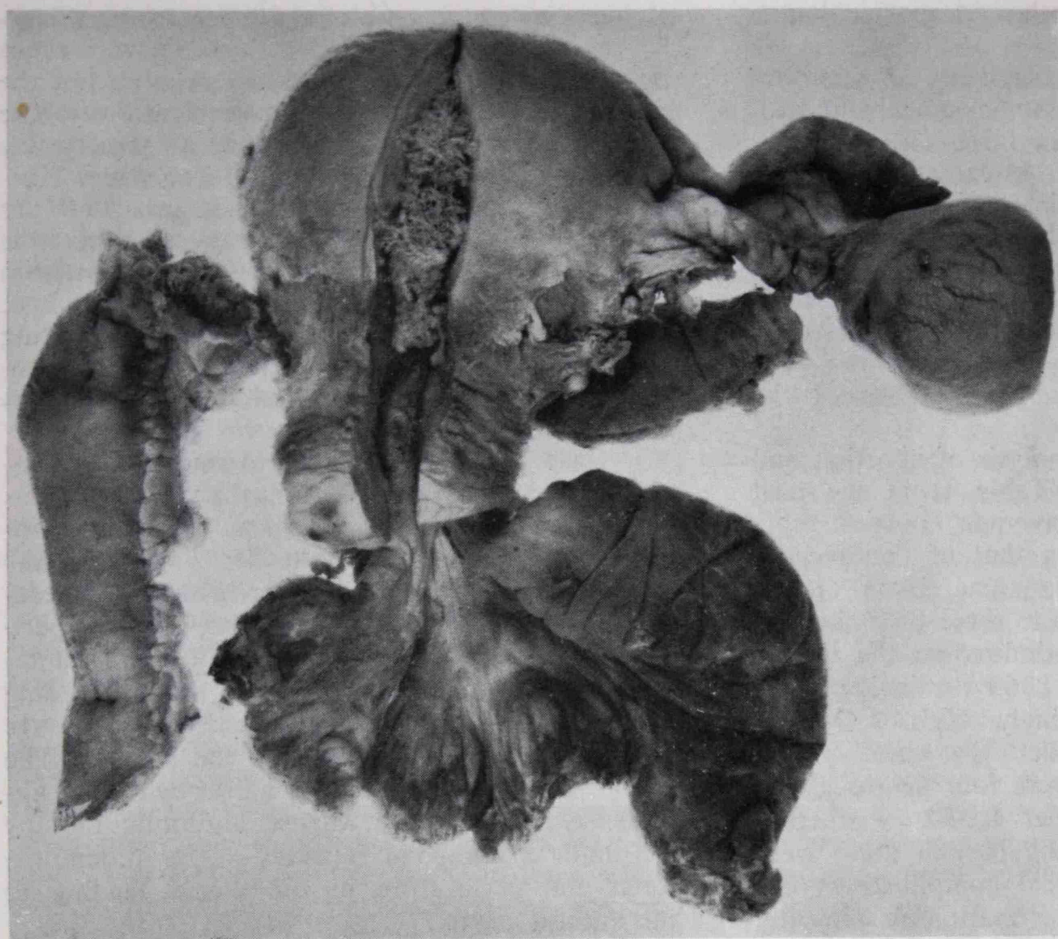


Figure 2 Uterus showing chorionic villi, perforation and prolapsed bowel.

Case 2 was a 43 year old multiparous woman complaining of abdominal pain and protrusion of a mass per vaginam. On examination, the protruded mass was a loop of bowel coming down through a perforation in the uterus. A hysterectomy and resection of bowel were performed. With intense antibiotic therapy she fully recovered after a stormy convalescence. Fig. 2 shows the perforated uterus and a loop of the prolapsed bowel.

Case 3 was a 23 year old woman complaining of abdominal pain and vaginal bleeding a few hours before admission. On examination, she was found to be in endotoxin shock which was promptly treated with antibiotics, blood transfusion and fluid replacement under central venous pressure monitoring. An X-ray of the abdomen revealed gas bubbles in the pregnant uterus indicating gas gangrene which was confirmed at laparotomy (Fig. 3). A total hysterectomy was performed to remove the gangrenous uterus, partially necrotic placenta and dead foetus (Fig. 4). The patient recovered after six weeks' hospitalization but two years later, she developed severe psychosis due to the loss of the reproductive function.

Thus, in each of the above three cases, even though powerful antibiotics, blood transfusion

and fluid replacement were administered, it was still absolutely essential to remove the necrotic uterus in order to save the patients' lives. The loss of the uterus i.e., the organ of reproduction, is the greatest tragedy that can befall upon a young woman. As a result of the psychological trauma, Case 3 developed severe psychosis.



Figure 3 Gangrenous pregnant uterus seen at laparotomy.

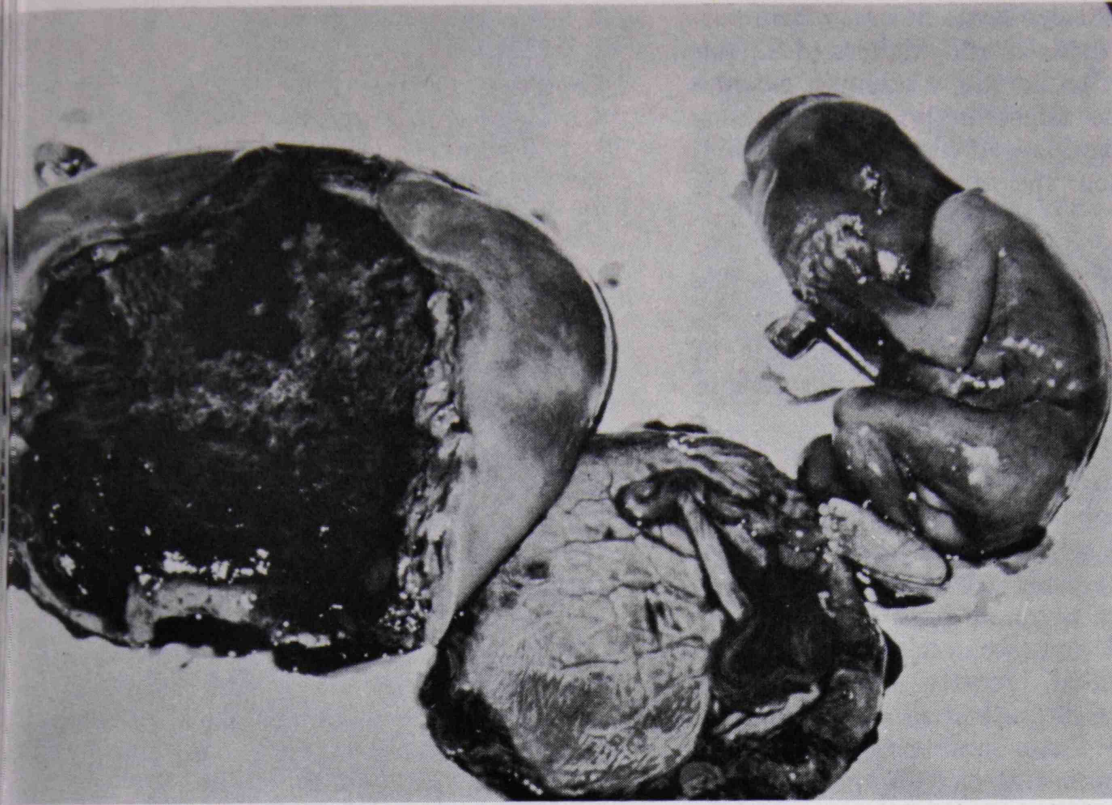


Figure 4 Necrotic uterus, placenta and dead fetus.

Because women do not always disclose the occurrence and circumstances, it is impossible to have accurate information about the proportion of criminal abortions out of the total of 49 cases admitted to the Queen Mary Hospital. Judging from the high morbidity rate it can be deduced that many of the cases were illegally induced. Women take their secrets to their graves. We witnessed a case of post-mortem performed by the late Professor P. C. Hou. Before her death this woman had repeatedly denied interference with the pregnancy, and yet, at the post-mortem Professor Hou found a piece of wood in the peritoneal cavity where he also found massive gangrene of the pelvic and abdominal organs.

In countries where there is a liberal abortion law the mortality rates as well as serious complications are low. In the eastern European countries and Japan, the mortality rate for legal as well as illegal abortions was 0.06 per 1,000 in the 1950s. In the recent years the mortality has dropped to 0.01 to 0.04 per 1,000 for legal abortions which is lower than the lowest maternal mortality of 0.05 per 1,000 recorded in the World today. Other complications are also corresponding lower (Tietze, 1969).

The complications of induced abortions are due, in most instances, to the use of unsterile instruments and dangerous techniques by lay abortionists. The instruments used by them are either for penetrating or injecting. The former

include Crochet hooks, knitting needles, bicycle spokes, pencils, pieces of wood and rubber tubes. Of the injecting instruments, the Higginson's syringe is by far the most popular. The nozzle or an adaptor is inserted into the cervical canal and fluid consisting usually of soap solution, with or without an antiseptic is forcefully pumped into the uterus. The most common causes of death under these circumstances are infection and haemorrhage. Other causes are anuria and embolism.

Induced abortions carried out by the unskilled medical practitioner are also fraught with danger, even though he may use accepted therapeutic procedures. Dilatation and curettage resulting in perforation of the uterus, haemorrhage and even the removal of coils of intestine through the cervix account for many deaths. Uterine pastes have also caused death in unskilled hands.

The position is quite different when the therapeutic procedures are carried out by experienced gynaecologists in hospitals with modern facilities. Both the morbidity and mortality rates are low as shown in Table II (Jurukoviski, 1969) and are far less than those associated with childbirths. This Table also shows the incidence of complications in relation to the methods used. There were two deaths out of 7,833 abortions terminated by the classic technique i.e. dilatation and evacuation and no deaths in 10,925 by the suction method and saline induction. The mor-

bidity is lowest (3.90 per cent) in cases terminated by the suction method and highest (4.82 per cent) by the classic technique. Vacuum evacuation is therefore the safest method for terminating pregnancy in experienced hands but it should only be used when the gestational period is within 12 weeks. In the United States comparable results are shown in Table III (Cushner, 1970). Out of 385 cases terminated by this method in the Johns Hopkins Hospital there was no morbidity or mortality and in the state of Maryland the morbidity rate was 0.5 per cent in 435 cases.

In our unit, 13 cases of therapeutic abortions were performed in the last ten years and there were no complications. In cases under 12 weeks gestation the suction method or dilatation and curettage was used, while hysterotomy or saline injection was used in those with a gestational period of 12 or more weeks. One of the pregnancies terminated recently was for a patient four feet tall with marked thoracic kyphosis (Fig. 5). She was three months pregnant and her vital capacity was 600 c.c. Of the two physicians consulted, one was in favour and the other against therapeutic abortion. We terminated the pregnancy because we felt that with such a limited vital capacity and severe thoracic deformity the continuation of pregnancy could be disastrous. The method chosen in this case was hysterotomy, as at the same time she requested permanent sterilization by tubal ligation.

The present techniques for the operation, when it is performed by a competent gynaecologist are so safe that the risk to life is well below the risk of childbirth itself. For this reason, an abortion law with an aim to eliminate criminal abortions was introduced in the United Kingdom in 1967. In America, this law has been enforced in some of the States for many years and a few more have adopted it recently. Singapore and some cities in Australia have also introduced this law. The indications vary from medical conditions to the control of population.

In Hong Kong, there is a wide-spread concern over the plight of women whose mental or physical health is endangered by pregnancy or where there is a serious risk of the birth of a deformed child or where pregnancy is the result of a sexual offence. These are indications for terminating pregnancies that many people would like to see recognized by statutory law so that doctors would, with a clear conscience, be free to recommend and carry out therapeutic abortions.

It is inadvisable or would even be harmful to introduce abortion merely for socio-economic

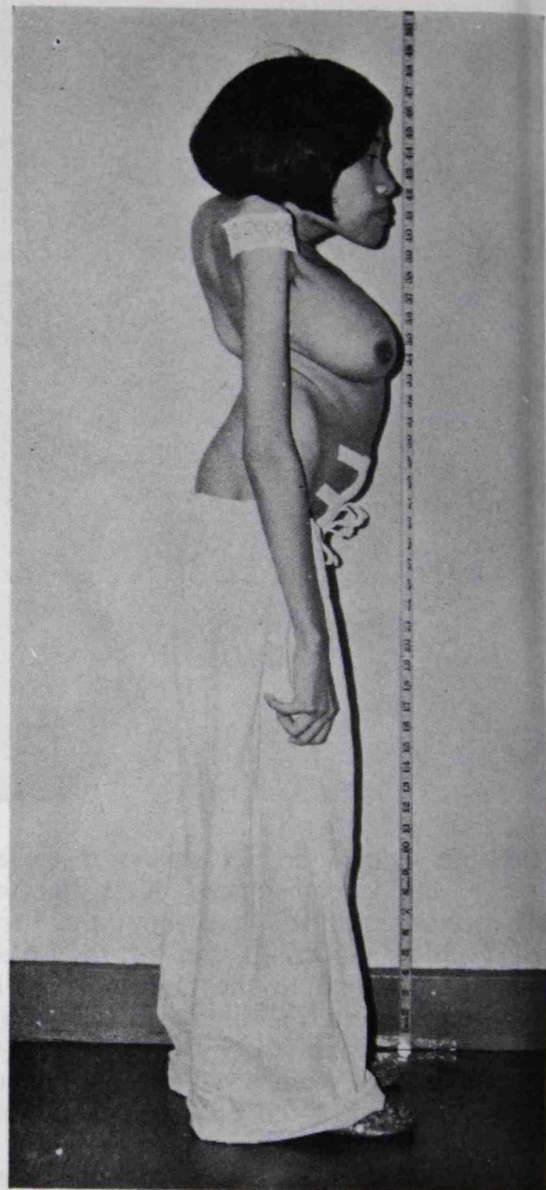


Figure 5 Marked Thoracic Kyphosis.

reasons. The unwanted pregnancies should have occurred. Here is a field in which preventive medicine has an important place. It is one in which educational and social workers have a reasonable part to play. In a series of 12,351 therapeutic abortions analyzed by Leitch (1969) 47 per cent were performed on single women, eight per cent on widowed, divorced or separated women and the remaining 45 per cent on married women. The abortions could have been carried out on medical grounds, but they were more frequently performed on women without husbands rather than those with husbands and especially as far more of the latter group become pregnant. When pregnancies are terminated freely for indications not strictly medical, it encourages promiscuous sexual relations leading to the decline of morals in

Besides, the women concerned tend to conceive again quickly. In a series studied in Japan 20 per cent requested another abortion within 6 months and 50 per cent within 12 to 18 months. In Sweden 38 per cent and in Czechoslovakia 50 per cent of women whose pregnancies were terminated had a second unwanted pregnancy within two to four years (Legalized Abortion, 1966).

For the control of family size and population induced abortions are very effective. Birth rates have generally declined in countries in which it has been legalized. In the eastern European countries with liberal abortion laws the birth rates dropped by 40 per cent during the decade or so following liberation. In the Soviet Union, the decline was about 15 per cent and in Japan about one-half (Tietze, 1965). However, without relying on induced abortions, the birth rates in Hong Kong had dropped from 38 to 20 per 1,000 in the past decade. Family planning programmes carried out in the Colony had done much to achieve these results. It must be remembered that all contraceptive methods are safe whereas therapeutic abortions even when carried out under the most ideal conditions are without risk. For those who have had their desired number of children, one means of preventing the unwanted pregnancies is to sterilize either the female or the male partner. There are few ethical objections and complications to these operations than those arising from termination of pregnancies.

Finally, the long-term psychological reaction to abortions should be considered. A follow-up study (Willson, 1967) reveals that patients who have been least affected by abortions are those whose pregnancies were terminated because of a fear of the birth of a deformed child. Most of them became pregnant again soon after the abortion and have had one or more children. They accepted the abortion as a welcome solution to a temporary but serious problem. Others, whose abortions were performed because of physical or mental conditions have had more trouble. They were well aware that their pregnancies were terminated because the birth of their children would be dangerous to their welfare. Many have been advised against future pregnancies and some with irreversible defects have been sterilized. They are likely to feel that they are different from normal women who can conceive and can carry a pregnancy successfully even though they do not choose to.

If the indication is flimsy and fleeting it is more likely that the patient may suffer a sense of guilt for the rest of her life. The incidence of serious permanent psychological sequelae is variously reported as being between 9 and 59 per cent. Therefore, in deciding whether the induction of an abortion is justified, the person performing the operation has to make sure that the risk of allowing the pregnancy to continue is, for that particular patient, greater than the danger of terminating it.

Table I
Maternal and abortion mortality rates (Hong Kong)

Year	Maternal mortality rate (excluding death due to abortion) per 1000 births	Abortion mortality rate per 1000 cases of abortion
1960	0.70	1.45
1961	0.44	1.08
1962	0.41	0.68
1963	0.45	0.22
1964	0.28	1.17
1965	0.33	0.25
1966	0.32	0.45
1967	0.39	0.18
1968	0.28	0.17
Average	0.40	0.63

Table II
Morbidity and mortality following legal abortions (1965-68)
(Jurukovski 1969)

Abortions performed	Total Number	Morbidity		Mortality	
		No.	%	No.	%
Classic technique	7,833	377	4.82	2	0.02
Suction method	10,586	413	3.90	—	—
Saline induction	339	15	4.42	—	—
Total	18,758	805	4.29	2	0.01

Table III
Incidence of Morbidity following Legal Abortions
(Cushner 1970)

Method	Maryland		Johns Hopkins	
	Number	Morbidity per cent	Number	Morbidity per cent
Vacuum aspiration	2/435	0.5	0/385	0.0
D & C	12/580	2.1	0/83	0.0
Saline injection	25/888	2.8	14/617	2.3
Hysterotomy	34/139	24.5	22/60	36.7
Hysterectomy	5/92	5.4	14/60	23.3

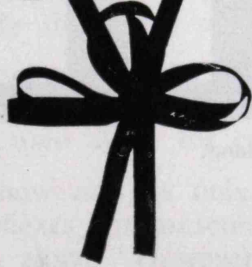
Stroke indicates combination with one other method.

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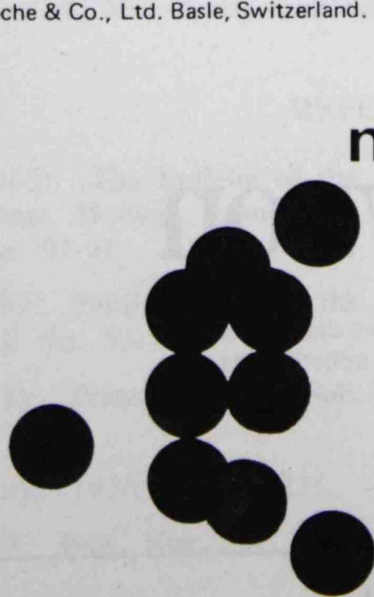
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COMPARISON BETWEEN THE EMPLOYMENT OF “GENERAL” AND “LOCAL” ANAESTHESIA

Z. LETT

M.D., F.F.A.R.C.S. (Eng. & Ire.), D.A.

The objective of anaesthesia is to enable surgical operations (and investigations) to be carried out free from pain and in a safe manner. The painful stimuli from the area of operation travel along sensory pathways and reach the sensory cortex, where they give rise to a very unpleasant and often even unbearable sensation called pain.

We have, at present, several ways by which to prevent this pain due to surgical procedures:—

- (a) By the use of “**General Anaesthesia**”, the central nervous system (C.N.S.) will be depressed so that consciousness is lost and pain not appreciated. Any number of drugs (Narcotics) such as diethyl ether, Halothane, Methoxyflurane, Fluroxene, nitrous oxide, trichlorethylene, chloroform and others, are capable of producing general anaesthesia.
- (b) By the use of “**Local Analgesic drugs**” injected around nerves from the operation field — conduction of stimuli along these nerves will be interrupted and thereby pain prevented from travelling along the nerves towards the C.N.S. As a modification of this method and for operation on mucous membranes, a local analgesic drug can be applied to the surface of the membrane (Topical).
- (c) There are in addition modifications of general anaesthesia known as—
 - i) Neurolept anaesthesia (by drugs such as Haloperidol)
 - ii) Dissociation anaesthesia (by drugs such as Ketamine or “Ketalar”).

In these methods full unconsciousness does not have to be produced, but in neurolept anaesthesia, a powerful analgesic such as ‘Fentanyl’ has to be added, while “Ketalar” has sufficient analgesic properties of its own to be used alone for certain surgical procedures.

Surgical interventions require, however, not only anaesthesia or analgesia, but also in addition a certain amount of depression of reflexes (or muscular relaxation). This could, theoretically, be achieved by general anaesthetic drugs alone. However, the dosages required would have to be so high as to assume toxic proportions. Consequently, when general anaesthesia is used for surgical procedures needing more than a mild degree of muscular relaxation — a group of drugs called “**Muscle Relaxants**” are used in addition to G.A. These substances can be divided into “Depolarising” (succinylcholine, decamethonium) and “non-depolarising” (d-tubocurarine, Gallamine, diallyl mivacurium, pancuronium). As these muscle relaxant drugs cause indiscriminate paralysis of all the skeletal muscles including the respiratory ones, artificial respiration (or intermittent positive pressure ventilation — I.P.P.R.) has to be taken over by the anaesthetist, usually through a cuffed endotracheal tube.

On the other hand, by employing local anaesthetic drugs (such as lignocaine, prilocaine, articaine and others) around nerves or groups of nerves not only sensory but also motor conduction can be abolished and muscular relaxation achieved. Appropriate examples are Epidural (or Spinal) analgesia, subarachnoid block (spinal analgesia) Brachial Plexus block and others. When a mixed block has been successfully achieved, there is no pain sensation from the surgical field and consequently, the patient may remain conscious.

Advantages of General Anaesthesia

The production of unconsciousness (including general anaesthesia) is, however, not without danger to the patient. The protective reflexes are obtunded (depressed) and the airway may be

jeopardised.* Vomiting or regurgitation of acid gastric contents presents a special problem. Inhalation of even small amounts of highly acid gastric contents can lead to bronchospasm, cyanosis and cardiovascular collapse. (This was described by Mandelson and is called "Mendelson's syndrome"). Larger quantities of gastric contents and/or other foreign materials inhaled by the patient may lead to either immediate respiratory obstruction (and anoxia, death if not corrected quickly) or less dramatic pathological changes such as pneumonia (lobar or broncho), atelectasis or abscess formation. In any case, it is imperative that in the care of the unconscious patients, the most important aspects are

- i) the provision and maintenance of a free airway,
- ii) continued respiration (either by the patient or by artificial means) and
- iii) sufficient oxygen in whatever the patient is breathing.

Meticulous attention to all the details associated with the patient's respiration and other vital aspects are the groundstones on which proper patient care of unconscious patients and those under G.A. are based. Failure on the part of the attendant to spot and correct speedily any deviations from this rule may have disastrous consequences. There are, in addition, other dangers of major or minor significance.

Risks of Local Analgesia

Local and regional analgesia for surgical procedures, although it may interfere less with the patient's airway and respiration is also not entirely free from risks or danger. Local analgesic drugs by themselves may have toxic effects on the cardiovascular or central nervous system or both and also allergic reactions. The particular anaesthetic procedures may lead to complications, e.g.

Spinal — arachnoiditis, paraplegia, headache, blood pressure drop (due to sympathetic block), respiratory paralysis (due to "total spinal"), injury to cord, injury to intervertebral discs.

Epidural — similar to spinal, but less headache. On the other hand abscess formation, anterior spinal artery syndrome and broken catheters are among many complications reported.

Brachial Plexus Block — intra-arterial injection, puncturing pleura and lungs and others.

It can therefore be seen that, like in all other spheres of human endeavour and activities, in anaesthesia there will be danger and complications also. Our solemn duty towards the patient is, by our actions, skill and knowledge to reduce all risks to an absolute minimum. This can only be achieved by living up to the exhortation by Dr. J. Alfred Lee who enjoins us "never cause any harm to the patient" and "Eternal vigilance is the price of Safety".

I am grateful to the Hon. Director of Medical & Health Services, Hong Kong for his kind permission to publish this paper.

* The tongue may drop back against the pharyngeal wall causing respiratory difficulty and obstruction.

First Prize Essay

The Medical Defence Union Essay Competition

1976

THE RIGHTS OF THE PATIENT AND THE RIGHTS OF THE DOCTOR

Jonathan Chick
Edinburgh University

The Rights of a Doctor

As well as his relationship with his patients, a doctor also has a relationship with the state. Certain legal and moral claims arise out of both these relationships. There seem to be two main rights which derive from the doctor's contract with the state:

The Doctor's Relationship with the State

The doctor must pass certain examinations before being allowed to practise medicine. Once he is granted the right to practise and accepts explicitly or implicitly the ethics of his profession, the state undertakes to guarantee his rights as a physician.

The first, which is guaranteed by statute, is the right to protection from unauthorised practitioners. The Medical Act 1956 enables the public to distinguish between qualified and unqualified practitioners by prescribing penalties for the unlawful use of certain recognised titles such as doctor of medicine.

The second right the state guarantees the doctor is protection from improper interference, direct or indirect, either with his right to practise or with his professional relationship with his patients. At times, however, the state itself interferes with the doctor's professional relationship, for example, when a court orders a doctor to divulge in public details confided to him in his surgery and which the patient does not wish to be disclosed. Three years ago, the Law Reform Committee "did not consider that doctors should be given the statutory right to refuse to answer in civil proceedings questions which might violate the Hippocratic Oath"(1). Some years earlier, Lord Dawson had

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lamented lawyers' tendencies "to think that the vindication of the Law is always the supreme interest of the state", whereas, "in reality, occasions occur on which other considerations properly override those of the Law"(2).

The Doctor's Relationship with his Patient

When the doctor accepts a patient he agrees to furnish professional services and to use diligence and skill in effecting a cure. This duty of care is generally held to be independent of the existence of a contract, the law of torts stating that

"one who enters on the doing of anything attended with risk to the persons or property of others is held answerable for the use of a certain measure of caution to guard against that risk"(3).

However, unless there is "indolence or carelessness" or "gross ignorance and unskillfulness"(4) the doctor is not held responsible for unforeseen outcomes of his efforts to cure his patients. He pledges the use of his knowledge and skill but does not guarantee a cure. Thus, he has the right to "immunity from responsibility for equal consequences".

In general in Britain a doctor legally has the right to refuse to examine, treat or aid a stranger, whether in an emergency such as a road accident or elsewhere(5). This is not the case for a general practitioner working under the National Health Service. He is "under an obligation to visit a person in an emergency even though that person is not registered either with himself or one of his partners, provided that the person's own doctor or deputy is not available"(6). Similarly, the Health Service general practitioner does not have the right to refuse to take on his list a patient allotted by his Executive Council if that patient has been unable to gain acceptance from another doctor in the area.

In France a greater degree of public responsibility is expected of the doctor. Under the Code de Déontologie it is the doctor's duty to render assistance to any person in an emergency on pain of a prison sentence or a heavy fine(7).

The doctor has the right to withdraw from a case if he wishes, but only providing he makes other arrangements for the care of the patient and his withdrawal does not adversely affect the patient's health and well-being(8).

As spelled out in the "conscience clause" of the 1967 Abortion Act, a doctor has the right

to refuse to participate in treatment which he objects to on grounds of conscience. But if he is a general practitioner he apparently is not entitled to refuse to refer a patient seeking a termination. He "must fulfill his obligation to provide treatment for any patient on his National Health Service list and to refer her to hospital if necessary; alternatively, he may arrange for a competent deputy to take responsibility for the patient"(9).

The Rights of a Patient

The moral claims that patients have in the doctor-patient relationship will now be discussed.

The Right to Secrecy

The patient's right to expect that personal details given to his doctor will be regarded as confidential has already been touched on. It is fundamental to the therapeutic relationship that patients should not feel inhibited in talking to their doctor or revealing symptoms. Though on occasions the Law may override the right to secrecy, it has not been slow in condemning doctors who allow persons other than official bodies access to professional secrets. In the *Kitson v. Playfair* libel case, £12,000 was awarded against a doctor who discussed with relatives the adventures of his sister-in-law whom he had attended for an alleged abortion during the lengthy absence abroad of her husband. As Simpson has commented, "whatever the propriety of his feelings, (he) paid heavily for not observing the strict professional secrecy his sister-in-law had a right to expect from him"(10).

The Right to Protection from Negligent Treatment

A patient may also anticipate the Law's support where his doctor has failed to exercise the degree of skill and care that is reasonably demanded by the circumstances, i.e. where the doctor's conduct has been negligent.

If, as some say, patients experience excessive difficulty in establishing claims of negligence then there is a risk that this important right may in practice be undermined. This was the view expressed by the consultant surgeon who wrote to the *Observer* in November 1969 following an article describing a father's vain attempt to instigate an investigation into the circumstances of his son's death(11). An anaesthetist had failed to attach correctly the oxygen inlet to a ventilating machine and did not notice his mistake.

the letter read:

"Whenever it is possible to do so, liability is denied . . . Often, a patient attempts to obtain justice in the law courts. He finds, to his cost, that in order to establish his claim he needs powerful medical testimony. This is practically never forthcoming, and even if he gets such support he will only too likely find his 'expert' confronted by one equally eminent who will solemnly swear that the tragedy in question, though rare, and much deprecated by all concerned, is nevertheless a recognised risk."

In the 1880's, when the medical profession began to organise itself in order to protect its members from slander and litigation, it appears that attacks on medical practitioners were increasing in number . . . and many prosecutions, or suits of them, were animated by malice or based on frivolous pretexts"(12). Solidarity within the profession and financial support to those with legal expenses, though enthusiastic, was until then entirely ad hoc.

We have already listed as one of the rights of a doctor, the right to immunity from responsibility for equal consequences. It seems a possible risk that in organising itself to exercise this right the profession may become too powerful.

It seems probable that, as a reply to the Observer pointed out(13), the letter overestimated the extent to which this risk had become real. The reply denied that all allegations of negligence were unsuccessful and that those who succeeded concerned errors "too outrageous to defend". Nevertheless, the founding of a Patients' Association and the proposals for a Medical Ombudsman indicate that the public genuinely fear that the profession may become available.

Right to Refuse Treatment

The intentional interference with another person without legal justification amounts to assault.

As a legal principle in medicine, this has been summed up as follows:

"Every human being of adult years and of sound mind has a right to determine what shall be done with his own body, and a surgeon who performs an operation without the patient's consent commits an assault for which he is liable in damages.

This is true except in cases of emergency where the patient is unconscious and where it is necessary to operate before consent can be obtained"(14).

In particular, patients with religious beliefs concerning certain therapies are entitled to respect for their beliefs. The doctor is not justified in transfusing a member of the Jehovah Witnesses or the child of a member without first obtaining consent, though in cases where a child's life is at stake and where attempts have been made to persuade the parents, a blood transfusion without parental consent would probably be held to be justifiable(15).

The Rights of Psychiatric Patients

It has been held by some that man's most fundamental right is the right to freedom from interference, implying that no one should be coerced, even for his own good.

The insane and the subnormal are persons to whom this principle is not applied. Therefore there exist, in this country at least, certain safeguards to protect the remaining rights which these persons possess and to protect "normal" people from being deprived of their rights by being classed as subnormal or psychiatrically ill.

The Mental Health Act 1959 and Mental Health (Scotland) Act 1960 lay down a mechanism via which patients compulsorily admitted to hospital or their relatives may appeal against their detention. Provision is also made for protecting patients' property and in Scotland, an independent body. The Mental Welfare Commission investigates allegations of ill treatment and deficiencies in care and treatment in psychiatric hospitals.

The Right to be Told

Sometimes actions for negligence are brought against doctors because they have failed to disclose some matter to the patient or failed to give sufficient explanation to him of his condition or of the advantages and disadvantages of alternative forms of treatment.

Lord Nathan has presented a series of such cases and concludes that, from the legal point of view, when a patient does not wish to place himself unreservedly in the hands of his doctors he has a right to have his questions answered fully and accurately. In certain circumstances, however, the doctor appears to be entitled to withhold information or even give

false answers provided that he is "acting genuinely in the interests of the patient as he sees them"(16).

A frequent dilemma is in deciding whether to tell a patient with a fatal condition the nature of his disease. Most doctors bear in mind how far his patients needs to set business affairs in order. But it is usual for doctors, while not denying in principle that a person has a right to be told if he is dying, to argue that for all but a small minority of "stable" individuals, it is seldom best for the mental state of the patient for him to be told the truth.

In fact, there seems to be no evidence apart from the anecdotal kind that patients either prefer not to be told or, except in the immediate moment of realisation, react in a distressed way to being told, providing that they are assured of comfort and support. It is ironical that when doctors or lay people are questioned both groups alike tend to state that if they had advanced cancer they would prefer to be told and yet recommend that others with similar conditions should not be told. However, it is now being documented that a sizeable majority of patients with advanced cancer in hospitals where it is the policy for patients to be told their diagnosis think that cancer patients should know the truth. As well as helping them to understand their illness and providing some peace of mind, the knowledge is said to help them plan their further medical care, their religious and their family life (17).

The defence organisations are unlikely to be faced with allegations against doctors who have withheld knowledge from the dying. Dying patients do not sue and in most situations the doctor 'covers' himself with respect to the relatives by informing them of the prognosis.

It is a man's final dignity to be able to face death with understanding and some serenity. This is hardly possible in an atmosphere of deception and simulation. Doctors experience anxiety in discussing dying with their patients and often feel ill-prepared to give emotional support to dying patients. It is tragic that their understandable limitations receive ratification from false assumptions and are reinforced by their early training in hospital. It may be that doctors do not have the **right** to withhold this knowledge from their patients.

The Right to Decide One's Own Death

There are situations in which the doctor must decide whether or not to comply with his

patient's expressed wish to die. This **right** challenges the doctor's most fundamental **duty** to preserve life. In discussing the patient's **right** it seems important to raise some of the **issues** in suicide and in voluntary euthanasia.

For some doctors, including for **example** members of the Catholic faith, suicide is **wrong** because it violates the natural law. The **remainder** of the profession seem to rationalise their denial of the patient's right to **commit** suicide by a tautologous argument: no man in his right mind would wish to kill himself, therefore the suicidal person is mentally ill; if he is mentally ill his reasoning is not normal therefore he does not really want to commit suicide.

Of course, many suicidal persons show symptoms of psychiatric illness or can be seen to be reacting to temporary external stress. **But** this is not to assert that **no** man has the right to decide to commit suicide.

There is also a social argument why an **individual** does not have the right to **commit** suicide, namely that the act is too disturbing and disrupting for society: it allows people to opt out of their responsibilities, it causes distress to the immediate social nexus the suicide leaves behind and it reminds that community of its failure to support its weaker members. However the doctor must not be over concerned with the requirements of society. His duty, according to his **oath** is to his patient. The dilemma is rather whether his obligation to preserve human life overrides the loyalty he owes to his patient as an **individual**. In general, it seems that doctors think it does.

Similar problems arise over whether an **individual** has the right to request euthanasia. The arguments are numerous, depend on metaphysical viewpoints and cannot be discussed in the space available. Legislation permitting voluntary euthanasia in Britain seems unlikely to be passed, partly for religious reasons and partly because of the practical difficulties in ensuring against abuse. However, for doctors, it is possibly less important to debate whether a **self** man has the right to request euthanasia than to ponder why he should ever in fact feel in need of it. Hinton has reminded us:

"It seems a terrible indictment that the main argument for euthanasia is that many **suffer** unduly because there is lack of preparation and provision for the total care of dying."(18)

The Right of the Doctor to Make Decisions about Death

It seems appropriate that the final section of this essay should concern the ultimate contingency of the relationship between doctor and patient, the doctor's role in making decisions about life and death. For centuries, obstetricians and their forebears have taken upon themselves the decision not to resuscitate deformed neonates. Recently, however, new kinds of power over the lives of patients have become available, in particular with the advent of artificial means of replacing the functions of the vital organs. Ventilating machines and haemodialysis are nevertheless in limited supply and although medical considerations play the largest part in allocating facilities, value judgements have to be made.

The confusing issues of resuscitation and "turning off the machine" have drawn special attention to the doctor's role in making decisions about life and death. Emotive discussion of heart transplantation has caused the public to lose some trust in doctors and to challenge their right to decide, for example, that even though a per-heart is functioning that person can be treated as dead if his brain is diagnosed to be "irreversibly damaged". Professor Calne in his recent book seems to argue that doctors **should** be entrusted with these decisions on the grounds that these decisions are analogous to others they make in their allotted profession:

"When a surgeon advises a routine operation, the patient trusts him to have made a correct decision and to operate skilfully to the best of his ability.

Exactly the same trust is involved in the care of the dying, diagnosis of death and organ removal"(19)

The analogy does not seem completely valid. For one thing, the patient who has undergone an operation can appeal if he feels his treatment has been unethical, just as can the man who has been sentenced, in his view unjustly, to imprisonment. However, the patient, and the doctor, who have received a death sentence spend comparatively little time if any to demand a second hearing. It is worth noting that our society, in deciding to abolish hanging, has abdicated its right to decide whether an individual should live or die.

This discussion seems far removed from practicalities. We may or may not hold that the doctor has the right to decide whether a patient should be offered, or continue to be supported by, certain expensive life-saving procedures. However, even if society sets up legal mechanisms and safeguards, the prime responsibility will in practice lie with doctors. Also, the public alarm over heart transplantation may have been less about whether doctors have the right to transfer a living heart from one body to another than about the motives of doctors involved in this work. If it is suspected that personal ambition, professional acclaim or other selfish motive have displaced the doctor's obligation to his code of ethics, his very right to practise medicine is in doubt. The right to be a doctor is forfeit whenever indifference towards a patient dislodges compassion.

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* * * * *

With the Compliments

of

Mrs. Chow Mo Ching



Message from the Chairman

It has been my greatest pleasure to write a few words in this issue of the Elixir to all the members of the Medical Society, serving as a channel to promote better understanding among us.

With the intake of 150 medical students this year the Society has been better equipped with manpower which must be directed towards fostering a spirit of comradeship and professional unity amongst our members.

I have always been objecting to the idea that the pressure of academic work is too heavy for medical students to participate in other activities. The actual problem is towards which field our extra effort must be devoted. The medical training we are receiving now better enables us to help in improving the local health situations. The health project last year was a sign to show that medical students were getting out of the ivory tower and were doing something beneficial to the community. This spirit that begins to emerge needs to be encouraged and it is towards this aim that the Society moves.

It is time for us as students to show our concern towards the community and our willingness to offer the best of our ability to serve the public. I would like to emphasize this: Let us try to make our 5-year stay in the university a memorable, worthwhile and meaningful one. Once gone, it will never return again.

Wan Ho Yue

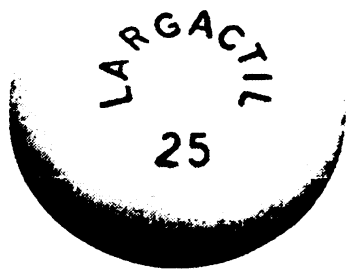
January 1971



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HONG KONG UNIVERSITY MEDICAL SOCIETY

ANNUAL GENERAL REPORT - 69-70

The session 1969-1970 of the Medical Society began on October 28, 1969 and ended on November 16, 1970. The following were the office-bearers:

Chairman	: Mr. Stephen Ng
General Secretary	: Mr. Ambrose Ng
External Affairs Secretary	: Mr. Wong Shou Pang
Financial Secretary	: Mr. Vincent Leung
Social Secretary	: Miss Grace Tang
Sports Secretary	: Mr. Wong Chun Chung
Internal Affairs Secretary	: Mr. Andrew Ho

During the session, one Extraordinary General Meeting, 6 Council Meetings and 4 Emergency Council Meetings were held.

Broadly reviewing the traditional activities of the society, all were being carried out with the exception of two functions. The Medic Ball netted \$4000 plus to add to the Elixir Loan Fund. The Omega Rose Bowl was retained by the society. The Presidential Address, the Medic Nite and the Medic Barbecue were all held with success. The Elixir and the Caduceus were published regularly. The launch picnic was cancelled owing to poor response. The interclass debate was cancelled because of low attendance last year.

New activities and developments were considerable. The most remarkable of these was the extension into the field of Community Health Care by the setting up of a Standing Committee on Health and the launching of a Blood Donation Publicity Week in conjunction with the HKFS. The constitution was revised at an Extraordinary General Meeting. A TV set was purchased by the society and installed in the Residential Common Room in Medical Students' Centre. The society also took part in the Union Carnival and the 2nd University Open Day.

Despite these and other achievements, it must be stressed that newer ways and means must be devised in order to deal with the various new problems that will likely arise with the expanding faculty and the extending Medical Students' Centre.

The following is a summary of the events during the past year:

STUDENT WELFARE:

Faculty-Student Relationship: The Dean's Undergrad Committee continued to serve as an effective channel for students to discuss and to suggest solutions on problems concerning students' welfare. Students were represented in the Faculty Appeals Committee and the Medical Library Committee.

Elixir Loan Fund: This year \$8300 were loaned to 7 medical students.
\$1500 each to 3 students.
\$1000 each to 3 students.
\$ 800 to one student.

Canteen & Co-op:

The canteen contract was renewed. It offered food to students at the same price as before in spite of the generalised inflation in Hong Kong. The co-op were stocked with various items of stationary, society souvenirs for sale to the society members. The society also provided ties and car badges for sale to its members.

4. Medical Fraternity Committee:

The committee organised a series of activities with the aims of promoting the better understanding of the freshmen on the society affairs and of providing help to them in their studies. Among the functions were a picnic, a sale of old books, skeletons and microscopes. Under the Fraternity scheme, 3 to 4 first year students were assigned under the guidance of third or fourth year medical students.

SOCIAL ACTIVITIES:

1. **Medic Barbecue:** The BBQ was held on 8th December, 1969 in the University Sports Centre. It was attended by over 100 members and over 25 staff. The traditional singing competition highlighted the evening. The championship was won by the final year class. The evening concluded in the presentation of souvenirs to the Past President-Professor Gibson, Past Vice-President-Dr. Leong, Past Hon. Treasurer-Dr. Langenberg; and the Past Associate Member Representative-Dr. Frank Cheng.
2. **Christmas Carolling:** Two carollings were organised, one on 19th December, 1969 to Grantham Hospital and another on 23rd December, 1969 to Sandy Bay Children's Convalescent Home. Donations were collected from the society members to buy gifts for the children.
3. **Union Carnival:** The medical society took part in the Carnival on 13th December, 1969. A stall was set up in the fair in the University Sports Centre and the second prize was won in decoration.
4. **Medic-Arts Get-Together:** The social gathering was held in January 1970 in the Medical Students' Canteen. There was an overwhelming attendance by our society members.
5. **Medic Ball:** The annual ball was held on 6th June, 1970 in the Mandarin Hotel with all the profits going to the Elixir Loan Fund. Around 100 couples attended the function. A sum around \$4000 was netted for the Elixir Loan Fund.
6. **Launch Picnic:** The annual picnic scheduled on 18th September, 1970 was cancelled because of poor response.
7. **Medic Nite:** The light drama competition was won by the final year class (70-71). Then sports awards were presented. Mr. York Chow was awarded the title Sportsman of the Year (69-70) of the Medical Society. The Braga Cup was presented to the 4th year class for the interclass championship.
8. **2nd University Open Day:** The Medical Society participated in the Union Open Day on November 7, 1970. The program consisted of a guided tour, an exhibition on Physiology, an exhibition on Biochemistry and an exhibition on Medical students' life and the extension of the Medical Students' Centre.

SPORTS:

1. **Interfaculty competition:** The medical society again proved supreme in the field of sports retaining the Omega Rose Bowl — symbol of interfaculty championship. Out of 10 kinds of games, our teams managed to secure 6 championships and one runners-up.
CHAMPIONS : Lacrosse, Lawn tennis, Squash, Badminton, Hockey and Softball.
RUNNERS-UP: Table-tennis.
2. **Sports Awards (69-70):** Our society members won many highest sports awards of the University.
Sportsman of the year : Mr. James Hwang — 4th year.
Sportswoman of the year : Miss Therese Chan — 4th year.
University Colour (Badminton) : Mr. York Chow — 5th year.
University Colour (Lacrosse) : Mr. Wong Chun Kuen — Graduate Class '69-70.
3. **Interclass Competition:** After a series of matches in 9 kinds of Men's games and 3 kinds of Women's games, 4th year emerged as the overall champion.

	II	III	IV	V
Men:	Badminton:		2nd	1st
	Basketball:	1st	2nd	
	Lacrosse:		2nd	1st
	Hockey:		2nd	1st
	Soccer:		2nd	1st
	Squash:		2nd	1st
	Table Tennis:	2nd	1st	
	Tug-of-War:		1st	2nd
	Volley:	1st		2nd
Women:	Badminton:		1st	2nd
	Netball:	2nd	1st	
	Table Tennis:	2nd	1st	

ACADEMIC & CULTURAL ACTIVITIES:

1. Residential Address: Professor C.T. Huang delivered an address 'Pet, pest & pestilence — infections transmitted from dog to man' as President of the Society on May 28, 1970 in the Physiology Lecture Theatre. Light refreshments and a group photo were taken before the address. At the occasion, souvenirs were presented to the staffs who were leaving the faculty room.
2. Talk: A talk on Doctor-Patient Relationship was arranged by the Medical Fraternity Committee on January 30, 1970. The speakers were Professor Field, Dr. Todd and Dr. Paul Yue.
3. Debates: Three first year students represented the Medical Society in the interfaculty debate competition and managed to capture the Runners-up.

EXTERNAL RELATIONS:

Asian Regional Medical Students' Association:

- a) Close liaison was maintained by the External Affairs Secretary with the Association.
- b) Asian Students' Conference: Two of our members represented the ARMSA to observe at the Conference held in August, 1970 in Chung Chi College.
- c) The society decided to send one delegate and one observer to the 5th General Assembly which would be held in 1971 in Australia.

Visitors: In March, 1970, our society was visited by a delegation of students from University of Malaya.

In April, 1970, a group of Malaysian medical students visited Hong Kong and was entertained by our society members.

PUBLICATIONS:

Elixir: 2 issues of the society magazine were published with all the proceeds going to the Elixir Loan Fund.

Visitors: In March, 1970, our society was visited by a delegation of students from the University practitioners and medical schools abroad.

COMMUNITY HEALTH PROJECTS:

Standing Committee on Health: On May 6, 1970, a Health Officer and an Assistant Health Officer were elected to the Standing Committee on Health with the aim of promoting medical students' consciousness in society health problems.

Blood Donation Publicity Week: From May 9-13, 1970 in conjunction with the HKFS, a Blood Donation Publicity Week was held with the aims of improving the public's knowledge on blood and also blood donation. The program included an exhibition on the knowledge of blood, a poster competition, talks and film shows in various secondary schools and a TV talk on the knowledge of blood.

To conclude, the Hong Kong University Medical Society is very much indebted to Professor Huang, Dr. K.H. Lee, Dr. Paul Yue, Dr. L.K. Ding and the Dean of Faculty, Professor Madzcan for their kind support throughout the year.

November 16, 1970.

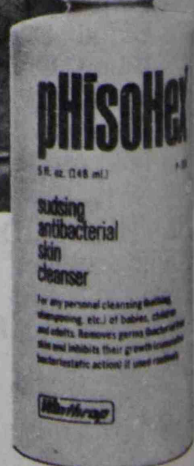
Sd. Ambrose Ng
General Secretary

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THE UNIVERSITY ARMS

H. K. Ng

The conception of a university in Hong Kong, modelled on a British university, to serve the awakening China of the early 20th Century had long been in the mind of Sir Frederick Lugard (later Lord Lugard of Abinger), Governor of Hong Kong, 1907-1912, whose handsome but somewhat austere-looking bust stands justly guarding the entrance hall of the University library. His visionary university was only brought a step nearer reality by the generous pecuniary donation of Major (later Sir Hormusjee) Mody. Even so, it took Lugard much negotiation to remove the obstacle back home. Finally, however, the Colonial Office consented to the idea; and the foundation stone of the University of Hong Kong was laid on March, 16, 1910. The University Main Building was opened on March, 11, 1912. The University Arms were granted by Letters Patent on May, 13, 1913.

The Arms of the University of Hong Kong are probably more familiar to most undergraduates than the history of the University; but few perhaps know little more than how they look. As I often hear the Arms of the University being erroneously spoken of as the badge or, less frequently, but just as wrongly, the crest of the University. While it would be impossible in an article of this nature to dwell at length in the distinction between **arms** and **badge** and **crest**, let it suffice here to say that arms, badge and crest are three entirely different things. So the familiar **badge** of the university students is in fact the Arms of the University.

The Arms of the University of Hong Kong are blazoned: **Per pale Vert and Azure an open proper bound and edged Or inscribed with Chinese characters Sable on a chief Gules a lion passant guardant Or.**¹ The above blazon is the official description given to the writer by the College of Arms; this blazon also appears in a commemorative postcard issued by the University on the occasion of its Golden Jubilee in 1961.

The main component of the University Arms — as are all coats of arms — is the **shield**, which is of the so-called 'heater-shaped' variety. The shape of the shield is of little significance in heraldry and is not specified in the **blazon**; it often varies according to the whim and taste of the particular heraldic artist. But this type of heater-shaped shield seems to be most popular, at least among British heraldists, in the present century. On the shield are various devices which are the important part of the Arms. These devices are called **charges** in heraldry. An open book and a lion form the main **charges** of the University Arms.

The **field** of the shield on which the various **charges** appear is divided vertically into two halves: green on the **dexter**² half; blue on the **sinister**³ (blazoned: Per pale Vert and Azure).

Books are often used to symbolize learning and knowledge. It is, therefore, only natural to find books being used as **charges** in the arms of schools and universities. The Arms of Oxford University, which dates back to the early fifteenth century, have an open book as the main **charge** (**Azure between three open crowns Or an open book proper leathered Gules garnished and having on the dexter side seven seals Gold and inscribed with the words Dominus Illuminatio Mea**). (fig. 2) A book also figures in the arms of the universities of Cambridge, London, Leeds and Liverpool,

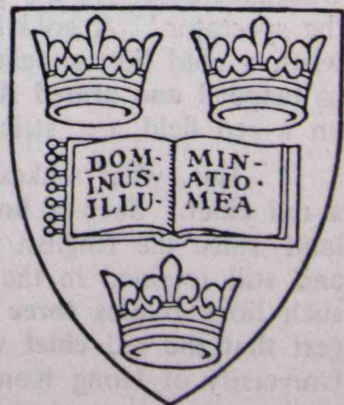


Fig. 2 Arms of Oxford University

¹ College of Arms Record: Gts LXXXII/164

² Right side from the point of view of the bearer of the arms

³ Left side from the point of view of the bearer of the arms

and, probably, many others. The Arms of the University of Hong Kong is no exception. Placed centrally on the divided **field** of the University Arms is an open book, which is bound in gold, with its leaves also edged in gold (blazoned: bound and edged Or). Upon its open pages are inscribed in black four Chinese characters: **ming-te ke-wu** (明德格物) written in **li-shu** (隸書), which is a style of script in vogue during the Han Dynasty. The two characters **ming-te** (明德) used in the University Arms have often brought comment, being of somewhat unusual form. There is a number of variant forms in this style for the two characters; the forms used, according to the University authorities, are taken from some of the most highly-regarded Han inscriptions.

Fig. 3
Royal Arms of
England

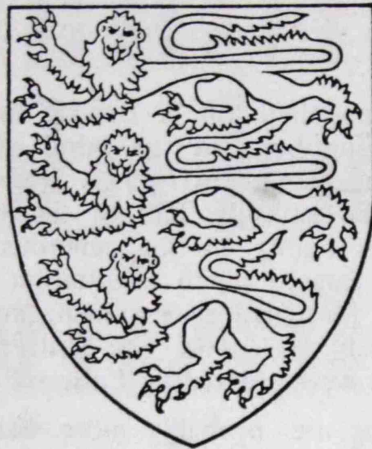


Fig. 4
Arms of
Sir Frederick
Treves



TREVES

The four characters in the University Arms are a combination of two phrases from the Confucian classic **The Great Learning** (大學); they may be translated thus: **ming-te** — bright virtue **ke-wu** — the investigation of things. These two phrases come close in meaning to the Latin motto

Occupying the upper third of the shield is the red **chief**, which is what is known in heraldry as an **ordinary**, regarded also as a charge placed 'on' the shield. It is important to stress the word 'on' because in heraldry there is the so-called Rule of Tinctures which maintains that a **colour** (red, blue, green, purple and black) cannot be placed **on** a **colour**, nor a **metal** (gold or yellow silver or white) **on** a **metal**. Since the tinctures of the **field** of the University Arms are two **colours**, viz. green and blue, and that of the **chief** also a **colour**, viz. red, obviously the Rule of Tinctures is violated in this case. But why is the Rule deliberately violated? The answer perhaps can be sought from the lion on the **chief**.

Almost occupying the whole area of the red **chief** is a gold lion. The lion, unlike many heraldic animals — such as the unicorn, the phoenix, the griffin — which are mostly mythical, is known in natural history. It is regarded as the king of animals and is known for its ferocity and prowess. Ever since the advent of heraldry the lion had been adopted as a regal symbol, befitting of only kings and queens. Today the lion is still to be found in the arms of the Royal Families of Great Britain, Norway, Denmark, Sweden and Belgium. The lion appearing in the University Arms is described as a **lion passant guardant**. A **lion passant** means a walking lion; it is by convention walking toward the **dexter** side, with its right forepaw raised, and the tail curved over the back. **Guardant** describes the position of its head and means 'with its face turned to face the front, that of the spectator.' A gold lion in heraldry conventionally has its tongue and claws coloured red. But when a gold lion appears on a red **field** it is painted with blue tongue and claws (described, therefore as **langued and armed Azure**), as in the University Arms. Any other representations of a gold lion on a red field are, strictly speaking, incorrect.

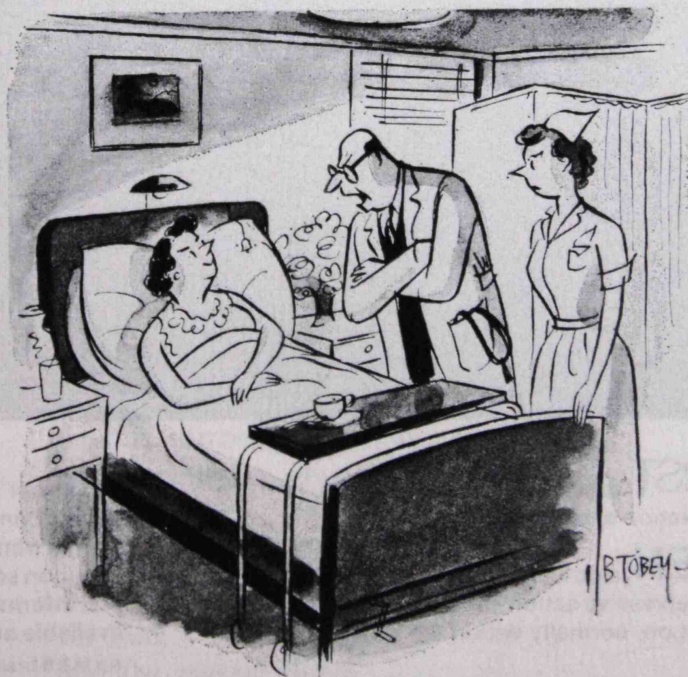
But, what makes the gold lion of the University Arms interesting is that it happens to lie on a red **chief**. Such a **lion passant guardant Or** on a red **field** is what may be called a 'lion of England' since the English Royal Arms, first used by King Richard I in 1195 in his Second Great Seal and still retained in the first and fourth quarters of the present British Royal Arms, consist of three such lions (**Gules three lions passant guardant in pale Or**). (fig. 3) It is therefore tempting to suggest that the red **chief** with the gold lion in this case is meant to denote Royal patronage of the University of Hong Kong, of which Her Majesty is the Patron. That, besides, will also explain why 'red' is used, in contravention of the Rule of Tinctures, as the colour of the **chief**. In fact, a lion

of England in chief (that is, the same chief as that of the University Arms) was granted as an augmentation of honour (fig. 4) to Sir Frederick Treves, Bt., Surgeon to King Edward VII (and who is remembered today for an operation named after him — Treves' operation), to signify the deep pleasure of the King. A red chief with a lion passant guardant Or also figures in the Arms of the City of Canterbury, alluding to its situation on what was once crown land. We have seen, then, that a lion passant guardant Or on a red chief is often used to symbolize a connexion with the crown or the monarch. However, the College of Arms was unable to confirm this theory of the writer. But, then, why has a lion passant guardant Or — of all charges — been chosen for the University Arms? Why not, say, a red lion on a gold chief? That would also leave the Rule of Tinctures unviolated. Could it be merely for aesthetical reasons that a chief of England was incidentally adopted in the University Arms? The exact reason probably will always remain unknown since the reason for choosing the charges is not stated in the grant of Arms. But, then, one can always conjecture too!

The motto of the University is: **Sapientia et Virtus**. It is borne on a scroll placed beneath the shield. **Sapientia** is the Latin for discernment and wisdom. **Virtus** is a distinctly Roman quality which, like so many other Roman qualities such as **constantia**, **gravitas**, **severitas** etc., is not readily translatable into English without suffering some diminution of its rich meaning. We may take the **virtus** to embrace manhood, integrity, valour, courage, heroism and virtue. So, if I must make a simple word-for-word translation of the University motto, I will, at the risk of being derided by the knowledgeable, but it as: Wisdom and Virtue. It may interest the readers to know that the motto originally used by the University was a much more ambitious and less introspective one: Light from the Orient.⁴ A Latin version of somewhat similar aspiration — **Lumen ex Oriente** — in fact was used as the motto of Lugard Hall prior to its amalgamation into the Old Halls.

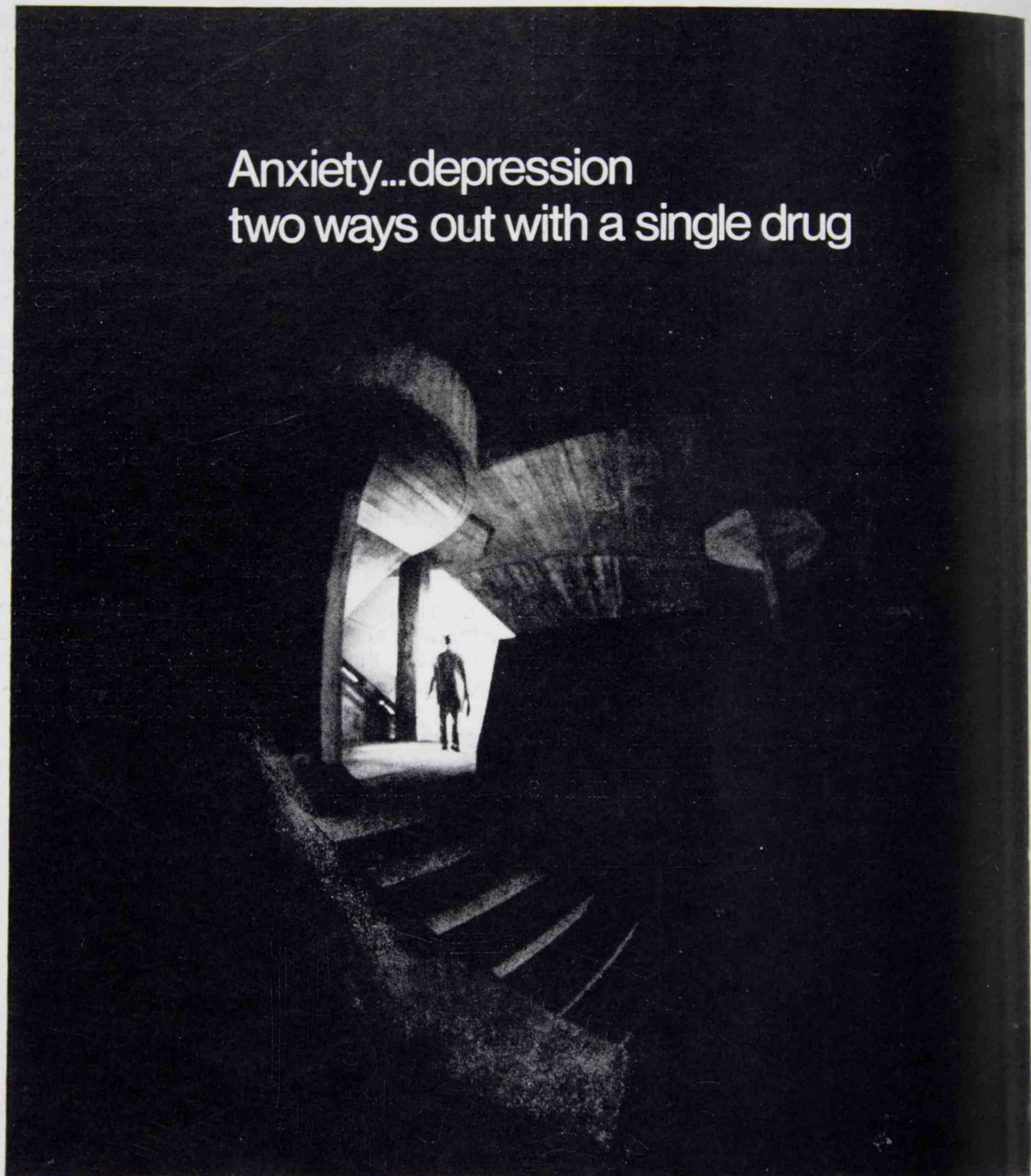
To conclude this study of the University Arms it may be worth mentioning that the University Arms probably created heraldic precedent by having as charges four Chinese characters, which, all likelihood, were unknown to European armory before. Thus in the University Arms we see the art of Chinese calligraphy so harmoniously blended with the European art and science of heraldry. Perhaps nowhere else can one see the confluence of two great Cultures so eloquently symbolized. It only remains for this University to live up to this aspiration.

Lugard: The Years of Authority, Vol. II P. 371, by M. F. Perham



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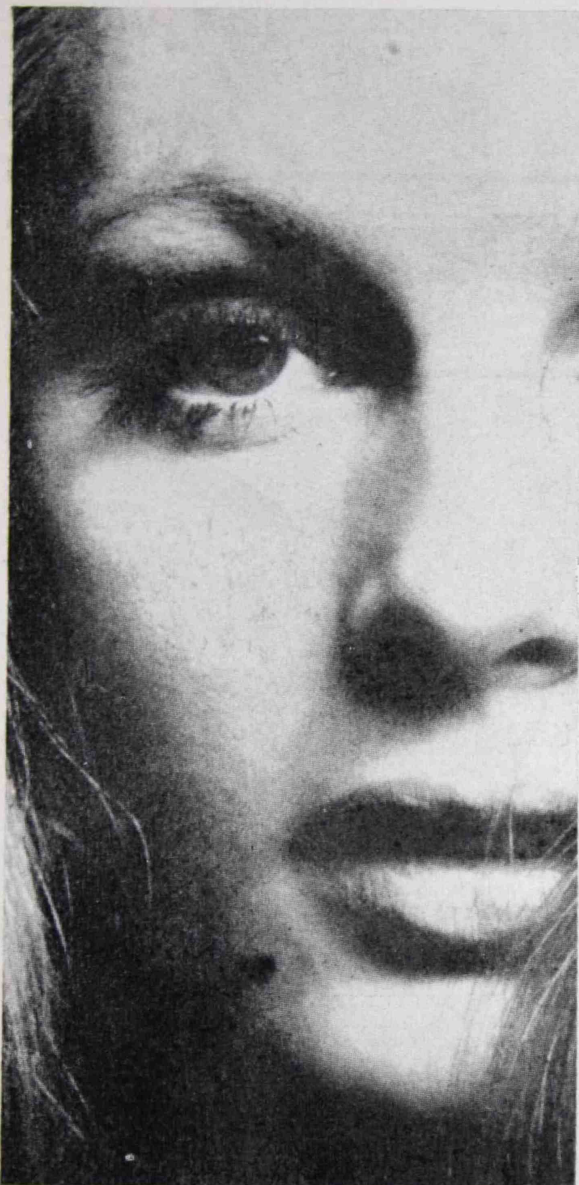
Dagenham Essex RM10 7XS
England



Death of A Dream

— Clement Ho

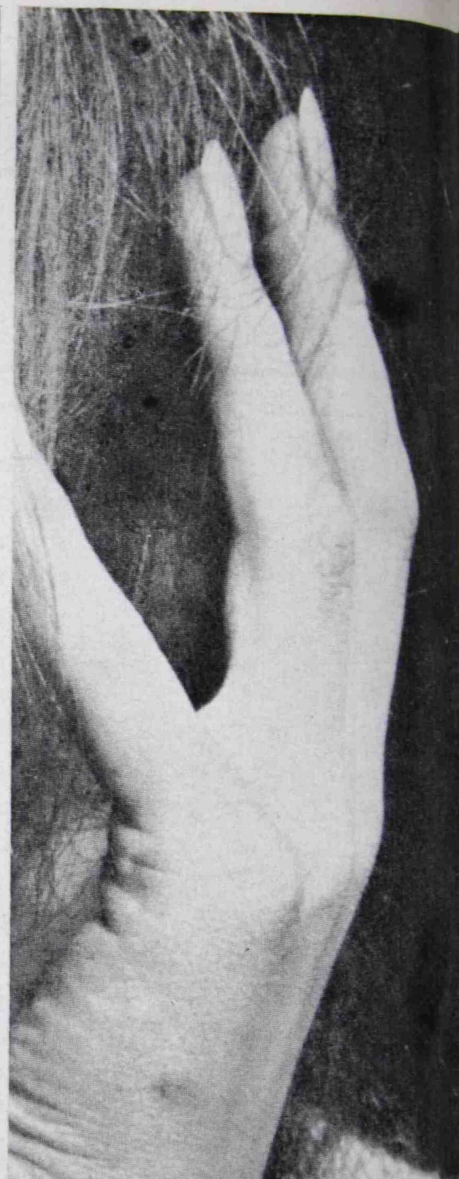
Somewhere
last night
in the wilderness of the city
There was
a funeral march down the road
And I was there
My crying was
the muted music of the funeral band
And my many shadows
the long trail of bereavement
the whole procession was me
Something beautiful
had gently passed away
A dream of the highest order
died a victim of circumstances
And a scapegoat of a thousand wrongs
I was the executioner
Yes I pained so much
As I walked it to its burial
Grieve not for it's now dead
be content for it once had lived
After a flower withers
A flower grows again
when the next season comes
So this beautiful dream of mine
though now lost forever
Will be conceived
and be reborn
in other forms
Someday
At this sorrowful moment
of mourning in my life
I only knew
I must bear the hurt
And through these misty eyes
I'll look
into the eternal depth
of the ocean
in the sky.



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A HOUSE OFFICER'S REFLECTION

by Victor Goh

It is now some 4 months after we have received the good news of the MB BS Final results, most if not all of us are well settled in our newest venture, or shall I say adventure — that House Officer's post in a hospital. Did I say 'well' settled? Let me qualify it further.

Graduation found all of us jubilant at the completion of a milestone, the first major step in our career. We were of course very excited about the forthcoming experiences of being able to assume some responsibility, be it big or small, on our own. Most of us were on our jobs well before the 1st of July (whether this was wholly on account of enthusiasm is beside the point). However, Enthusiasm soon gave way to Frustration as we became caught up in the hustle and bustle of the everyday ward routine — there were various different kinds of forms to be filled for sending investigation material to the laboratory. In those early days, wrong forms were inevitably used now and then again, and we had the 'pleasure' of receiving notification from the laboratory technicians of our mistake. Notifications were at least better than having the specimens sent back altogether. Then there were always the various 'unavoidable' mishaps involving specimen bottles on the way to the laboratory, which testified strongly to the need for achieving close co-operation with all members of the staff — it is surprising how a round of drinks satisfies not only thirst but a lot of other things besides.

I must not forget to mention the practical difficulties of Venepuncture which are immensely aggravated by blunt, over re-used needles and fat, chubby individuals with tons of subcutaneous fat obscuring the view; and God help you if you're not successful at the first attempt, because your patient will usually cause a second failure besides having to endure the cursing and muttering of the individual concerned—usually a fat sow at that!

Then comes the Night Calls. I never knew the joy, the utter bliss, of undisturbed sleep now, and if this isn't the cure for Insomnia, I don't know what is!

Perhaps the most difficult job of all is having to inform a patient's relatives that there is no hope of recovery, or worse still, of having to break the bad news itself to them. There is always a sense of guilt that you haven't done enough, and after you have said the crucial few words, how I wish you had a truck load of Tissue Paper on hand to quell the ensuing deluge.

A very strange experience is to meet members of the older generation, and to have them call you 'doctor' now, whereas you were probably known by some much more juvenile term previously. In fact, it is much better to try and avoid bumping into some well meaning relative than to have them spill your usual nickname unintentionally. Come to think of it, things haven't really changed that much since graduation, have they?

Experiences and Thoughts of A Radiotherapist

— A GRADUATE

My first impression when I joined radiotherapy was that everything was gloomy. All the patients seemed in very low spirits, as though they were just waiting to die.

The impression has changed quite a lot during my few months' practice.

All the inpatients suffer from malignant diseases, with the exception of a few cases of thyrotoxicosis, the commonest being nasopharyngeal carcinoma, carcinoma of the cervix in the second position. The rest include carcinoma of larynx, lung, and oesophagus, leukaemia, melanoma, and so on. The patients are admitted when they are in poor general condition or when their treatment has to be under close observation. Those in good general condition are treated as outpatients.

At first I found it hard to believe that at least about half of the patients do not live the impression that they are suffering from a malignant disease. For instance, some of the patients coming back for follow-ups are gay, and leading normal lives, free from all their initial sufferings, having no complaint whatsoever, and say that they have returned only because they were told to do so. Of course, these are the luckier ones who are considered to be cured.

But, for another group, the treatment offered is mainly palliative. These include secondary metastases causing a lot of pain; secondary enlargement of lymph nodes, secondaries to skin, dyspnoea in ca larynx and ca lung, dysphagia in ca oesophagus. All these cases are referred to us as inoperable, but, no one can ever say for sure how much longer they have to stay in the world. Radiotherapy and chemotherapy can offer quite a lot by way of palliation with minimal trouble to the patient. The bone pains may subside com-

pletely; lymph nodes shrink to normal size; ulcerative areas stop bleeding, swallowing no longer leads to pain or to an obstructive sensation; and the whole lung may respond and dyspnoeas disappear.

These patients are full of gratitude, hope and the determination to live, realizing that as sciences progresses everyday, every tomorrow holds a new future.

The third group are those undergoing their first course of curative treatment. Since they are not yet sure of their future, they are always worried at the beginning, but, as treatment continues they feel better and their suffering is relieved. Confidence and hope grow every time they come to see us. In fact, I have the same feeling inside and pray that my efforts may not be in vain.

Of course, there is also the group of terminal cases that are nearing the end of their lives in a matter of days. For these all we can do is to give them heavy sedation and strong analgesia to relieve their suffering.

And it is this last group that draws the best out of a doctor, the best of his loyalty to the patient and to the Hippocratic Oath. It cannot be overstressed that a patient with a malignant disease in his terminal stage deserves just as much attention as a patient that offers extremely good prognosis. My acquaintance with this department has prompted me to end my short story with a quotation from the Hippocratic Oath.

“. . . I will give no deadly medicine to anyone if asked, nor suggest any such counsel . . . with purity and with holiness I will pass my life and practise my Art . . . ”

THE TRAINING AND EXPERIENCE OF THE ANAESTHETISTS

by Z. Lett, M.D., F.F.A.R.C.S. (Eng.) & (Ire.), D.A.

Although the well trained anaesthetists by use of their knowledge, skill and experience may for some aspects of their work, be very fully engaged outside the operating theatres, (to be mentioned later), it is mainly in the operating theatres that the major part of their professional duties will be carried out. The main object of anaesthesia is to render surgical procedures (operations and investigations) free from pain and safe (for the patient and also all the attending staff). It would be beyond the scope of this article to go into a detailed description of pain. Suffice it to say that pain at best is a very unpleasant sensation that, in the case of surgical procedures, might well become unsufferable.

There are, basically, two ways in which this pain from surgical interventions can be alleviated.

- (i) by the employment of local anaesthetic drugs. Injection around a nerve — motor and sensory — will abolish temporarily conduction along a nerve blocked in such a manner, the patient may remain conscious.
- (ii) by the use of drugs acting on the central nervous system (general anaesthesia). The patient is rendered unconscious and so oblivious to the pain.

It is a matter of history that anaesthesia was first used in the 1840s, when Dr. W.E. Clark of Rochester, N.Y. gave ether for a dental extraction in 1842 and Dr. Crawford Williamson Long removed a tumour from the neck of his patient under ether anaesthesia a couple of months later in Jefferson, Georgia. However, the credit for putting anaesthesia on the map is usually attributed to Dr. William Thomas Green Morton. This gentleman administered ether (in the now famous "ether dome") in the Massachusetts General Hospital in Boston on 16th October, 1846 to a patient named Gilbert Abbott. The surgeon,

Dr. J.C. Warren was so impressed, as he was painlessly removing a tumour from the patient's jaw, that he exclaimed in amazement "Gentlemen, this is no humbug!"

Originally the only drugs available for the production of anaesthesia were ether and chloroform (introduced by Dr. James Young Simpson on 4th November, 1847 in Edinburgh). Later other substances were being introduced until today the anaesthetists have at their disposal a variety of drugs acting on a variety of anatomical and physiological levels.

As, from the earliest days of anaesthesia, it was the production of unconsciousness and the subsequent care of the unconscious patient that anaesthetists had to achieve, it was not surprising that they became more expert in their field than other physicians who by the nature of their duties look mainly after conscious patients. Unconsciousness of any sort, however (including ordinary sleep), may embarrass the free airway by the tongue falling back and the deeper the coma (anaesthesia) the more danger to the airway. Furthermore, the risk of inhalation of vomited or regurgitated stomach contents and/or any foreign bodies increases during anaesthesia when the patient's protective reflexes are depressed. It became, therefore, more essential to secure the freedom of the airway by the passing of endotracheal tubes. Although the earliest record of this being done in human patients was in 1878, when Macewen in Glasgow introduced intratracheal intubation through the mouth, endotracheal intubation was an art and skill that only very few acquired, and in those earlier days, when endotracheal intubation was considered necessary, it was not uncommon for the E.N.T. surgeon to be requested to come to the operating theatre just to place the tube into position.

This situation persisted till the 1914-1918 World War. During the warfare in France, the number of casualties, including facio-maxillary

injuries, was very great. This encouraged two British anaesthetists, Dr. Ivan Magill (Now Sir I. Magill of the Magill's tubes fame) and Dr. Rowbotham to develop their "blind naso-tracheal intubation" technique. Even this requires considerable experience and skill and there were not too many who became proficient in this.

The introduction of the "muscle relaxants" by Griffith and Johnson in 1942 in Canada and later Gray, Halton and Patterson in the U.K., by producing paralysis, made endotracheal intubation easier and all anaesthetists are now taught and trained to become experts in this field.

Production of generalized paralysis by the use of these "muscle relaxants" added, however, a further dimension to the duties and cares of the anaesthetists — the maintenance of the patient's respiration. This was done by ventilating the patient usually with a mixture of Nitrous Oxide and Oxygen (although air and ether has also been successfully used as advocated by Sir Robert Macintosh) through a cuffed endotracheal tube, using intermittent positive pressure respiration (I.P.P.R.) Originally it was the anaesthetists' hand that supplied the motive power by squeezing the reservoir bag on the anaesthetic machines. Gradually, however, various mechanical respirators were being introduced for this purpose, utilizing various physical principles. By employing mechanical respirators, the anaesthetists may be relieved of the actual physical or mechanical work of squeezing the bag, but this has, of course, led to the necessity of brushing up and mastering their knowledge of physics (as there are as many as 60-70 models of respirators on the market today).

The tendency to operate on the more sick and elderly patients has also brought with it the necessity to employ more monitoring equipment in the operating rooms.

As more numerous and powerful drugs are being employed even before the patients come for anaesthesia and surgery, the interaction between them and between the drugs (and methods) used in anaesthesia must be understood and evaluated and taken into account. A thorough and extensive knowledge of pharmacology becomes mandatory. As patients needing surgical intervention will often be suffering (in addition to their surgical condition) from one or more derangements of their systems, ranging from metabolic conditions, diabetes, to endocrine disorders and obstetrical complications, a knowledge of these and other numerous condi-

tions and diseases is also essential.

Many surgical patients are either in shock before they come to the operating theatre or may develop it during the operation. Here a thorough working knowledge of fluid replacement and electrolyte balance and blood gases is important.

For the successful placement of local analgesic drugs a good idea of topical anatomy and landmarks is also required.

Training & Qualifications

In the British system of training as anaesthetist the medical practitioner starts after becoming registerable. There are no house-officer appointments in anaesthesia. Training is carried out in all Teaching Hospitals and a number of other Hospitals. These latter have to be recognised as training hospitals by the Faculty of Anaesthetists of one of the Royal Colleges. The highest qualification obtainable in this field is the Fellowship of the Faculty of Anaesthetists in one of the Royal Colleges (F.F.A.R.C.S.). There are four Royal Colleges with Faculties — England, Ireland, Australia and South Africa. The examination consists of the Primary and Final. The Primary comprises Anatomy, Pharmacology and Physiology. As from 1971, Physics is likely to replace anatomy as a major subject in the Primary. The Final F.F.A. comprises Medicine, Surgery, Applied Anatomy and Radiology, and, of course Anaesthesia in all its forms and aspects.

As a matter of interest, the Royal College of Surgeons has recently published the following notice regarding the Primary F.F.A. examination:—

"In the Primary F.F.A.R.C.S. Examination there will be one three-hour essay paper in which candidates will be required to answer three questions with a choice of one question out of three in each subject of the examination, namely (a) Physiology (including the relation of structure to function), (b) Pharmacology, and (c) Physics and the principles of Clinical Measurement and the principles of Clinical Chemistry with special stress upon those general principles which concern anaesthetists.

The multiple-choice question paper will last for three hours and will consist of ninety questions covering these three subjects."

There is also another examination for the Degree of Diploma in Anaesthetics (D.A.)

Similar but not quite as extensive and thorough knowledge will be required as for the Fellow-

With all this training and experience, where does the sphere of action and duties of the present day anaesthetists lie?

In the Operating Theatre —

Here the anaesthetists is completely in charge of the patient's anaesthetic requirements and also respiration, where appropriate. The anaesthetists will also, in consultation with their surgical and other colleagues, be responsible for the patient's circulation, temperature (when hypothermia is used) fluid and electrolyte replacement positioning and protection of patients against anything harmful (e.g. burns, nerve damage due to over extension of arms, etc.). The choice of the method of anaesthesia as well as the drugs to be used will fall largely within the anaesthetists' responsibility.

The recovery room which is usually adjacent to or within the operating theatre is used to keep the patients under surveillance and treatment after operation until they are considered fit by the anaesthetists to return to their wards.

Outside the Operating Theatre —

- a) In the wards anaesthetists will often be consulted about the patients' pre-operative preparations, premedication, cardiac and respiratory derangement and any other factors that may adversely affect his progress later.
- b) Intensive care unit: here the anaesthetists have also a prominent part to play in dealing with patients in moderate to severe cardio-pulmonary derangements and deficiencies.
- c) Anaesthetic outpatients clinics: in many countries these clinics, where the anaesthetists can see patients who are due to be admitted for surgical operations can order various investiga-

tions and treatment thereby saving valuable hospital beds and time, are becoming popular.

d) Pain clinics: patients with intractable pains, for whom other modes of treatment have proved unsuccessful, may be referred to this clinic where anaesthetists can block the nerves leading to the painful area thereby rendering the patients' lives more tolerable especially in incurable malignant disease.

As can be seen from the foregoing the anaesthetists are deeply involved in many aspects of patients' treatments and care. And the patients, by placing their lives and well-being into the hands of the anaesthetists are putting a very great and burdensome honour on the Anaesthetists' shoulders. The anaesthetists in turn will by their knowledge, skill, constant vigilance and attention ensure that the patients' confidence will be fully justified.

Many advances in our knowledge of physiology, pharmacology and respiratory and other care and resuscitation stem directly from better understanding and realisation of the lessons learned in our care of the unconscious and anaesthetised patients. The extension of the surgical possibilities depends, to a large measure, on the ability of the anaesthetists to keep patients alive during surgical procedures and manouvers (as in open heart surgery, organ transplant surgery etc.) The anaesthetists' contribution to the well-being of the community is being progressively more realised and appreciated. The late philosopher, Prof. C.E. Joad in one of his latest books "The Recovery of Belief" has this to say about anaesthesia "There is a time-honoured controversy as to the most important single discovery of the human race. Some opt for fire, some for the invention of the wheel, some for the growing of corn. For my part I would give my vote to the invention of anaesthetics." I am grateful to Dr. Gerald Choa, the Hon. D.M.H.S. Hong Kong for his kind permission to publish.

* * * *

Stresses of The Medic Student



Dr Sabardikary examines the part played by stress in creating this problem and lists the stresses to which medical students are subject.

1. The feeling of helplessness in relation to the instructor's power.
2. Examination strain.
3. The initial experience with the cadaver.
4. Difficulty in adjustment to the transition from preclinical to clinical year.
5. The initial experience with the physical, gynaecological or rectal examination of patients.
6. History taking, representing as it does an invasion of the patient's privacy.
7. The encounter with psychiatry with its own emotional problems and conflicts.
8. Autopsies, venereal and leprous patients.
9. Fear of error in diagnosis.
10. Fear of contagion and acquiring disease.
11. Death of a patient.
12. Discovery that the physician is not omnipotent and he is studying for uncertainty.
13. Isolation, the effect of limited recreational and social outlets.
14. Long-term conflict over the dependent role the student must assume.
15. Protracted sexual conflicts.
16. Nosophobia. Medical students are prone to fears of ill health.
17. War with the faculty-concern with impressing or failing to impress the faculty and concern about his ability to absorb all of the material in the given time. He usually has too much to learn but is given little guidance to select the important things.

Because of these stresses many students will require some psychiatric guidance and help and therefore a student health service must be staffed with psychiatrists and clinical psychologists.

— Adapted from *Intermedica* Vol. XI No. 1, 1969

After Two Years In The Department of Physiology

by E. P. K. Cheng

In the past two years, I was asked hundred times by my former classmates, friends, colleagues and students why I joined the Department of Physiology. I wish the following paragraphs will serve as a sort of answer to this question.

Frankly speaking, I think it is a shame that few of our medical graduates join the preclinical departments. It seems that the University itself indirectly discourages such a move, for reasons explained later. Also, preclinical teachers are generally not respected by medical students (especially when they have passed their 1st M.B. examination), or by their clinical colleagues. The latter appear to think that we are the failures of the medical profession; they think that we take up physiology because we are not good enough to do medicine, or we take up anatomy because we cannot do surgery. They forget that the basis of the practice of medicine is the knowledge of the structure and function of a normal human being and that this knowledge is in the main explored and broadened by the members of preclinical departments. The desire to search for such knowledge is the reason for my decision to take up my present post.

Medicine to-day is still far from being a science. It is as yet mainly the application of empirical formulae and the excision of diseased portions of the body. A patient is seldom cured in the sense that the cause of the disease is completely eradicated and the whole body is restored to the original state before the illness. To achieve the latter end, we require a complete understanding of the functioning of the human body under various conditions of external environment. There is still a long long way to go before we can apply the word 'complete' to our knowledge of the human body, and it is even

probably that we shall never be able to achieve the goal. But the hope that I might contribute a fraction of an inch in the march towards this goal made me choose a laboratory rather than a hospital ward as a place to work.

Physiology is a challenging career. You have to design new experiments and new techniques every day. It is also an interesting career. The field is so broad that you can almost do anything that interests you. The daily work is never like routine ward duties. Unexpected results and discoveries are frequent, and you will have a wonderful time in analysing and explaining them. Then you put the results together into a paper, and the satisfaction when you see your own paper published in a learned journal is beyond description. In a preclinical department, the working atmosphere is very friendly, for it is not necessary to try to push your fellow colleagues down in the competition for the scholarship or fellowship to go abroad for the membership examinations. Your sole competitor is Nature who hides the secret of the truth that you are seeking.

From the above description, it seems that I should be one of the happiest man on earth. The cruel fact is, I am not. I have my unhappy days and these come once every month, at the end of each month, around the pay day. How would you feel if you know that your former classmates, with the same qualification, working in the same faculty of the same university, and teaching the same students, are paid much better than you? The immediate feeling when I first learned of the differential treatment was that I was betrayed and made an outcast by the medical profession. What bothers me is not the discrepancy between the clinical and preclinical scales but the fact that there are two different

scales. In most other universities, there is no discrimination between preclinical and clinical medically qualified teachers (for example: University of Manchester, University of Malaya, University of Auckland and University of Zambia, etc.). In some, there is a special allowance for medical qualification (for example: University College, Cardiff University of Glasgow, University of Newcastle upon Tyne, University of Adelaide, and University of Otago, New Zealand, etc.). So I keep on asking myself whether it is worthwhile to remain in the Physiology Department and continue to receive a salary five to ten thousand dollars less a year than a clinical lecturer, or to shift back to a clinical career. It is due to the fact that I like experimental research so much that I have finally decided to stay on at least for a few more years. But our other medical graduates apparently do not think this worthwhile. I believe

that this is the main reason why so few of our medical graduates join the preclinical departments.

The above is just an account of my thoughts, views and feelings after working two years in the Physiology Department. As a conclusion, I have a piece of advice to all doctors-to-be. If you can afford it financially, (for you will join a preclinical department as an assistant lecturer with a salary of less than two thousand dollars a month), a couple of years spent in research in basic medical sciences is not a waste of time. You will be trained to be more observant to small deviations from the accepted normal, more critical of other people's views and more rational in drawing conclusions. All these will be very beneficial whether you will eventually take up clinical practice or preclinical science as your career.

* * * *

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the experiences of a flight surgeon

dr. won kyu, lee

The development of aviation medicine starts from full recognition of the almost insurmountable human problems imposed by modern military aircraft. It is the primary mission of the flight surgeon to make it possible for the pilot to adapt to the conditions created by the greater speed, higher altitude, extended range and increased complexity of operation which characterize the aircraft of today and tomorrow. The flight surgeon, therefore, has to have the capability to pursue the art of practice of aviation medicine by the full utilization of all available knowledge.

The principal objective of the flight surgeon's activity is the continued maintenance of the pilot in the highest possible state of fitness under all circumstances. So, selection of the flyers falls within the domain of the flight surgeon. Reviewing the history of aviation medicine, the primary motivation for organizing the Aero-medical Society in the States after the first world war was to set up the criteria for the selection of flyers. With the advent of supersonic jet flight, more critical selection of flyers is necessary so much so that the flight surgeon has to have more accurate and expert experiences.

In addition, the flight surgeon has not only to manage the probable accidents induced by the stress of flying, but also to prevent untoward happenings which may occur when then unfit fly. Adequate administrative control of flyers is therefore necessary and this is never an easy job. It takes a lot of time and energy to accomplish the goal of the flight surgeon.

Critical problems are probably encountered in the area concerned with the protection of the flyers against the hazards and stresses of flights. The complexity of these problems is readily recognized when one briefly considers the many hazards and stresses encountered by the aircrew of modern operational aircraft. In high altitude

flights, exposure to hypoxia, dysbarism, temperature extremes, ozones, cosmic radiation and visual problems are inevitable. The very high speeds produced by acceleration forces — linear, angular and radial produces extremely high temperature and also poses certain important visual problems.

The occasional necessity for the flyer to abandon his aircraft in flight presents many problems of escape, such as high speed and high altitude. Inevitable crash landings and ditchings make it necessary to consider the problems of crash deceleration forces and the protection of the individual against these forces. There are also many special stresses which may plague the flyer, such as exposure to toxic substances (including those associated with aircraft operation and those of unconventional warfare), vibration, sound, ultrasound, hazards of many types of projectiles, fire, and circumstances which induce sensory illusions of flight. The solution of all these problems may be found in the proper application of three programs: survival training, equipment and physiological training and medical indoctrination. But most important of all the flight surgeon should make a close observation on and establish rapport with the pilots.

The flight surgeon is the key figure in the success of these important activities. The day's work begins with line visit of the assigned squadron in early morning, listening to briefing of their daily mission, observing the physical and psychological conditions of each pilot, giving them chance to consult him on their problems, and finally advising the commander on medical aspect of validity of their mission.

Sometimes the flight surgeon also join in the flight, in fact, he is required to maintain certain amount of flying time in order to be able to meet with the problems of the flyer properly. Another important requirement connected with

the medical aspects of flying safety is in the training of the flight surgeon in handling emergency crash and casualty. The investigation of aircraft crashes is a first consideration in the flight safety research program; and the flight surgeon's part of the investigation is often invaluable because of the high incidence of human factors in the causation of accidents. This is the reason why flight surgeon must always be ready for the emergence call to arrive on the spot of aircraft crashes as soon as possible.

Every medical school graduate in Korea has to experience the army life once. Many are frustrated to drop in the three year delay but if we think it is our inevitable duty to serve in the army for our national defence, will it not be a wonderful chance to be a doctor of the sky enjoying life with the flyer?

* * *

The author, Dr. Won Kyu, Lee, a 1969 graduate of the Yonsei University, College of Medicine, a member of the World Student Christian Federation Asia Committee, 1968-1972, is



now working at the research laboratory in the Aeromedical Centre, Korean Air Force, South Korea. He has visited the University of Hong Kong in March 1969 and again in April 1970.

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Degree Congregations

Thursday, 26th November, 1970

At the Seventy-sixth Degree Congregation held on Thursday, November 26, 1970 at 10.30 a.m., the following degrees were conferred by the Acting Chancellor, the Hon. Sir Hugh Norman-Walker, K.C.M.G., O.B.E., J.P.

DEGREES OF BACHELOR OF MEDICINE AND BACHELOR OF SURGERY

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 Stephen Chow Wun Chung 周允中
 Frederick Choy Yuk Lun 蔡玉麟
 Chung Hon Wah 鍾漢華
 Fan Sik Man 樊錫文
 Fong Ka Man 方家聞
 Dominic Foo Kam So 傅錦蘇
 Fung Hoi Chu 馮海柱
 Fung Shiu Kee 馮紹基
 Desmond Fung Shun Sun 馮順燊
 Victor Goh King Man 吳敬文
 Ho Yiu Man 何耀民
 Ricky Ho Yuen Yau 何元佑
 Ip Pang Fei 葉鵬飛 (with Distinctions in Pharmacology and Pathology and Microbiology)
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 Kwan Po Yuen 關寶源
 Peter Kwok Po Wong 郭寶煌
 Steven Lai Cham Lun 黎湛麟
 Lawrence Lia Fook Ming 賴福明
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 Lai Kwan 賴焜
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 Henry Lam Hung Shun 林孔洵
 Lam Kam Hing 林鑑興
 Lam Wah Lit 林華烈
 Lau Kin On 劉建安
 Alan Lau Kwok Lam 劉國霖

Edward Lau To Hung 劉道洪 (with Distinction in Physiology)

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Yu Hon Chiu 余漢超

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一個畢業生的隨筆

——獻給夢滄——

從病房步回宿舍，剛是黎明時分，猛然一陣晨風拂來，夾着松枝露珠清新的氣息，畧帶微寒，深深吸一口氣，剎時覺得自己年輕了許多，做了實習醫生幾個月，已經許久沒有這種感受了。

人就是這麼奇怪的。做學生時候密鑼緊鼓，忙裏偷閒的辛酸苦辣，湧上心頭，記得的却往往只是快樂美好的片段。便算最難過的時刻，挨過後回想來反別有一番滋味。

人生到處都是考驗，在試場裏，球場上，病人前；還有，自己與自己內心的交戰。過去的已過去，前面還有多少，我不知道，不想知道，也不敢知道。比較起來，學校的考試實是最簡單的了。

謝師宴似乎是每年的例行公事，有同學認為太破鈔，也有老師認為這是活受罪；但大家看上去總是嘻嘻哈哈，熱鬧開鬧的。我記得以前看過一篇文章，說老師有如我們再生的父母，因為他們模製了我們的思想，灌輸給我們知識。這種說法我不敢完全同意。我覺得老師有如散種的人，至於他們散種子會不會發芽，却有不少影響的因素了。對於只問耕耘，不問收穫的農夫，他們的精神，是永遠值得我們敬佩和感激的。

我想我一生最快樂最難忘的，莫如畢業試放榜後到台灣的旅行了。說出來十分平凡，可是不知是不是因為心中沒有憂慮，不知煩惱；抑新鮮的旅程本身令人心曠神怡。所以雖然早上五時起床，奔波勞碌，風塵撲撲，心中一直且心不夠錢用，要不要挨大排檔，趕不趕得到下一班車等等，到

的，可是我却一點兒也不累，反覺精神異常，興緻極好。台灣的風景很不錯，但世界總有比它更美的地方，只是，要我再有同樣的感受，恐怕很難了。將來如有機會再到台灣，會不會有同樣的體會，我也不敢說。美好的東西，多是短暫而難以捉摸的。大概正因這樣，才更覺那些時刻珍貴吧。

實習醫生，哈，多少人羨慕。可是連最懂得利用時間的人，也不能不承認這一年是當相辛苦的。才開始的時候，一切未能適應，手忙腳亂，事倍功半，日以繼夜，天昏地暗，吃無定時，睡永不足，個中味道，沒有做過的人，是很難明瞭的。誰知道，將來回顧這一陣子多姿多采的呆板生活，不會又別有滋味在心頭？

畢業典禮是許多人早已在作準備的大慶典。記得麥花臣教授昨天在酒會中曾說：「每當一個畢業生從台上走過，他的家人都為他感到驕傲。但在場最感到光榮的，不是他們中任何人而是我。我每唸出一個名字，就多一個畢業的子女，我有一百多個兒女，誰能比我更自豪？」在此，謹謝謝我們的父母和老師們。那天，難得所有同學們都能齊集一道，我雖不是跟每人都談得來，但那種擠在一起的情形，令我有一種十分熟悉的感覺，一如舊日大家一同在課堂上課一般。後來，我企圖找回一兩個素心朋友聚聚，畢竟還是太苛求，人長大後總不能像以前一般無拘無束了，思之不禁神傷。晚上別人一組組的到各地慶祝，我却只有手中的六絃琴相伴。跟談不來的人打哈哈，倒不如靜靜的渡過這有意思的一天。假如我自己有車，很可能已獨自駕車出外作環島遊了。

畢業了，我們可能有一個受過教育的頭腦，但有沒有一個受過教育的心靈？我們能不能不怕外界的壓力，不怕內心的矛盾，不怕工作人事上的種種困難？能不能自始至終保持自己對理想的追求，對學習的愛好，思想

朋友看了禁不住齊聲哈哈大笑起來，在香港倒還沒有樂隊會上大嶼山等地表現呢。在花蓮的阿美族文化村裏，山地姑娘個個濃妝艷抹，香港去的女學生爲之失色，可惜他們用的粉牌子不好，過濃的香味有些刺鼻。

其實，在台灣，能引起香港旅客興趣的，不是園山飯店，不是阿里山的歌舞團，而是一些香港所沒有的景物。在我的目中，故宮博物館是最有意義的去處。該館位於台北近郊，是一座白牆紅瓦的建築物，面前是一條鋪了花磚的筆直長道。遠望過去，有些像北平的天安門，那裏有我二次的足蹟。第一次跟團體去，走馬看花的實在看不出什麼來，所以在自由活動時作第二次遊。博物館內的古代文物，琳瑯滿目，價值連城。每一件、每一樣都喚起我的激動情緒。我是一個有五千年歷史的優秀民族的後代，我爲此而感到驕傲，但是，在另一方面，我想到了我們這一代的中國人。我們又會有些什麼可以值得留下的？這是空白的一代，徬徨的一代，亂離的一代，想到這裏，不禁黯然。翠玉白菜，翡翠屏風這些無價寶充份代表了中華民族的智慧和精明，然而，這些就像死水一樣，在現代的中國，我們可有什麼更具代表性的？

另一處令我大開眼界的是台南的墾丁公園。縱然有人在遊覽後予以「搵丁公園」的別名，我仍覺得不枉此行。這是台省最大的天然公園，深深的叢林，曲折的小徑，在原始中加入了少許人工的塑造。我們經過狹谷，進過仙洞，處身於亂石屹立，樹木參天的森林間，彷彿作了拋棄世間俗念的出世隱士。三小時的步行，攀越固然累人，但亦值得之至。

在台灣大部份時間可以說是祇作名符其實的「觀光」。在景色的欣賞方面，對於素未遊過埠的我來說，有如處身山陰道上，目不暇給。不過遺憾的是在台灣十多天中，和當地人，尤其是學生的接觸甚少。團中有一位同學，有一次當大夥兒都登塔俯瞰風景時，他獨自坐在下面涼亭裏和一位老人攀談，以求藉此能認識到台灣較深入的一面。羨慕他有這份勁，自嘆缺如。所以在欣賞風景、名勝之餘，有這麼一點如隔履搔癢的不滿足。幸好，在離台前二天，在台北溜冰場遇上位升高三的女孩子，和她聊了一會，現在成了筆友，在交換地址時，看到她一手清秀有力的中文字，感慨起來，她却坦然的說：「你們的英文好不是更好嗎？」是嗎？我不知道。

由於大家言語不通，誤會百出，却也爲我們的旅程平添不少笑聲。有同學要買二斤香蕉，賣蕉的一聲應是便切了二根給她。有同學要蚊香而得了面霜。中國幸而還有統一的文字，否則情形會更壞。

台灣遊覽結束，遊覽車把我們載回基隆上船返港。車子在路上風馳電掣，從羅斯福路、經仁愛路、信義路便進入麥克亞瑟公路。面對窗外一列列向後移的房屋、樹木和街道，我對台灣留戀起來。一股強烈的反感使我害怕回香港。我突然覺得我們像是一羣無人管教，扔在一邊由你自生自滅的孤兒，各自祇爲私利爭奪，沒有一個共同目標。而當孤兒見到別人受到父母愛護時，便會聯想到自己身世的悽慘，如果這時祇有我獨自在的話，我會啣哭一場，爲自己，爲在香港的青年，爲中國……然而……：手指頭給咬得雪雪作痛，眼淚終於忍住了。

台灣輪漸漸遠離基隆港，而台灣二十日暢遊，也就在歡樂中帶有依依的惆悵氣氛中結束。



台灣小遊雜記

陳梅君

暑假放後才三天，便要匆匆作台灣之遊。不爲什麼，就祇想鬆弛，抖擻一下精神，見識一下，及得一些新的感受。

豪華的台灣輪航經一片無際的南中國海。在輪上的近三十小時逗留竟出乎意料外的舒適。第三天早上，在晨光曦微下，在薄霧中，輪船進入了基隆港。

踏上了這塊陌生的中國土地。一架大型遊覽車載着我們一團三十人經麥克亞瑟公路進入台北市。我坐在靠窗的位子上，貪婪地內外張望。映入眼簾的街道、房屋及店舖，在陌生中帶了些稔熟。在一塊中國人的地方，還會陌生到那裏去嗎？

我們依照預定的行程表，在台北遊覽了三天後，便作環島旅行。自台北南下，沿西岸途經的地方有台中、嘉義、上阿里山、台南、高雄直抵台灣南極端的鵝鑾鼻燈塔。再沿東岸北上經台東、花蓮、遊橫貫公路及經蘇花公路等地回台北。全程共爲十二天。

一路上足跡無數名勝古蹟如陽明山、烏來、日月潭、春秋閣、鄭成功廟、澄清湖等；睹及台灣數大規模建設如石門水庫，高雄煉油廠及馳名於世的東西橫貫、蘇花二大公路。

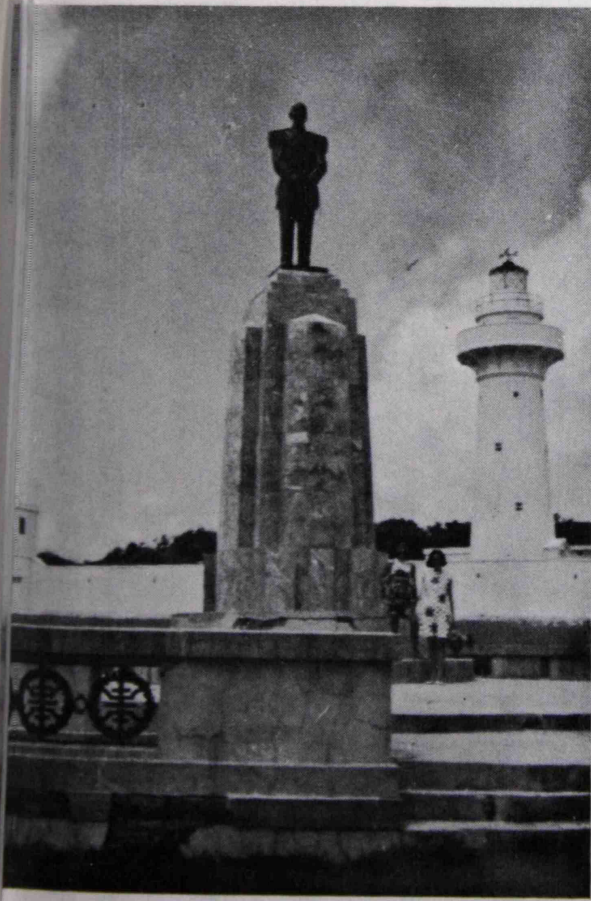
參觀大學是我們做學生的少不了的一門事。在台北我們瀏覽過台大校園，在聞名的「大聲公」吃及第粥。這個大牌擋位於台大後面，是學生們宵夜的好去處。在台中我們參觀了清華大學和東海大學。前者的校園綠草如茵，又有台灣唯一的原子爐，羨煞我們這班香港的學生。成功大學是台灣南部獨一無二的大學。我們在該校逗留了二天。成大校長親自接見我們，並款以茶點。我們真有點受寵若驚。在香港，不要說外地來觀光的學生，就是在校的，亦難得一見我們的總督校長。在成大宿舍留了二晚，回港後不再埋怨何東宿舍的一切等等。

除大學外，我們並參觀了高雄醫學院，在台北的國防醫學及榮民總醫院。二間醫學院前者由私人開辦，後者是國立，所以在規模及設備方面，都不能相併而論。港大醫學院則處於二者之間。在二間醫學院及榮民總醫

國防醫學院的學生有一個特徵。他們一律剪了「陸軍頭」，穿米黃式制服。跟穿白襯衫，西裝褲，拴領帶和拿占士邦噠的香港醫學生是樸素和奢華，還是落後和時髦的對比？

說起城市方面的建設，香港要現代化和繁榮得多。大概由於地理環境所限制，台灣的高樓大廈不多，新型建築物如體育館，旋轉餐館等也有所見，不過日本化的舊建築物更多，我們所住的酒店中，有一部份便是睡榻榻米的，（也算是一種新嘗試）。台北市最旺盛的夜市是西門町區。在那裏，熙來攘往的行人及燦爛奪目的霓虹燈可以媲美香港的旺角。然而，除了旺角，香港還有尖沙咀，北角及灣仔等區，台北除了西門町外，其他地區入夜後便寂靜如香港的九龍塘一般，我們又慕名往台灣第一流的酒店——圓山大飯店。這座酒店外牆用紅磚砌成，建於一山丘上，面臨松山機場。內部是宮殿式的佈置及裝飾，富麗堂皇。不過在來自香港的我們來看，也不過如此而已。

台灣比香港先進的地方也不少。我們上阿里山觀日出，當晚下榻於阿里山閣，看了一場歌舞表演。令我們目瞪口呆的是該歌舞團竟擁有一隊奏電結他、打鼓的樂隊，節目包括有披頭四的歌曲演唱。在坐的十多位同行



往事已成空

偉

風颯着，我又回到這個冷清清的海灘來，尋找一個已失去了的舊夢。雖然已屆深秋，但我絲毫不覺得一點涼意，可能我的感覺也已經一起離開了我。風颯得很大，可是阻不了我的決心，而我對這一個冷酷無情的世界是不會低頭的。徘徊了差不多半小時，才到來在亂石堆間的一塊平滑的大石旁。我默默地呆立着，思潮起伏，真是「剪不斷，理還亂」。帶着一聲幽幽的嘆息，望着遠處悠悠無際的天空。一陣冷淡的風，像在我耳邊嘲笑着我。漸漸我的視線模糊起來，兩點淚水滾落唇邊。不禁仰着深吸一口氣，以抑止一發而不可收拾的一腔情緒。

薇的家離這裏很近，祇不過三分鐘的路程。去年夏末時，我和她從她的家中走出來，漫無目的踱步到這一個被荒廢的海灘。那時的我，是多麼的快樂無慮呢。手指兒扣着手指兒，迎着清涼的海風，不知是人間何世也。偶然偷看她一眼，撩人的風正偷偷的吹起了她柔長的頭髮，我不以為爲散亂，而且很讚賞她。她的美，是超乎這大自然我所知的美，像幽谷中清雅的蘭花一樣。她的鵝卵似的臉，她的鼻兒，她的眼睛，她的一切，都是構成她的美的不可缺少的一部份。尤其是她的眼睛，閃耀着希望的光采。正當我呆得出神時，她察覺了我的傻態，她沒有怪責我，祇嫣然一笑。笑，是一樣多麼奇妙的東西，一笑不但可動人心，並可傾城，而笑更能表露個人的性格無遺。我癡癡地笑來回答她，不禁緊握着彼此的手。

我和她最後擇了這一塊石面坐下。和暖的海風，洶濤的擊浪聲，悅目的斜暉，像讚美着我們倆的小天地。我們半句話也沒有說，祇是靜靜的迷醉，享受，和融化在一起。在這優美的環境下，她不其然地哼起了她所喜愛的「夏日最後的一朵玫瑰」來。她的音韻實在是令人心醉的，我的身體動盪不已，我的心頭隨着和聲。不知道這是否預感，我突然顫慄了一下，恐懼起來，因為我知道，世界上最快樂的時光，從來不會太長的。我們太快樂了。我下意識地把她擁抱緊些。

這時，她停了歌，抬起頭來，說：「林，你會不會去外國的？」
我很奇怪她這樣問，但很坦誠的回答她：「我現在還在求學中，要等

兩三年才畢業。我對一個懂讀真，那樣迷迷的，
「林，你知道，我的父母現正考慮移居美國，昨晚他們會向我提及，查探我的反應，我已很率直的答覆他們，我希望能等到你畢業時，才和你一同到美國和他們團聚的。他們那時候沒有作聲。林，我很怕會有一天我們要分手的。」

「薇，我會勸服你爸媽的。妳可知道，我是不能沒有妳的。我相信我們純真的愛能打動他們的心克服一切困難，終於能建立我們的世界的。」
「我對你的情感不比你對我的淺。但天長地久有時盡，此恨綿綿無盡期。」

那時我不知要說甚麼才好，我從來未嘗試過心靈上的痛苦，思想就是那麼的未成熟。

不久，他真的離我而去。我沒有送別，雖然她走前曾央求我陪同她到機場的，但我不知怎的非常痛恨她，也許我太懦弱了，不敢面對離別最後一面的情景。不論怎樣，我現在後悔我爲什麼連這最珍貴的一刻也失去。

這一年來，我會努力以求忘記這段已過去的初戀，但我的情感已毫無保留的付出了，我的心，祇餘一個有形而無實的東西，內中有說不盡的空虛和寂寞，像沙中的小穴，永遠不能再填滿了。我對她的愛，是絕對的，也是唯一的，不論我對任何其他少女產生任何的愛，我對她的愛也是不能被磨滅的。至現在，我的心情，好像海浪似的，時起時落。最近我對她的懷念，又起了高潮，心中的漪漣，永遠不能平靜下來。憔悴的心，憂鬱的臉，蘊藏着一股煩悶的心情，在公園散步解悶時，每遇雙雙情侶旁若無人漫步着，陶醉在他們自己的樂園裏，或在彼此的眼神中尋找一個屬於他們的世界以外的世界，我便掉頭而去。偶拾詩詞文集閱讀時，對李煜亡國哀鳴之苦惱，竟然發出了以前所未有的共鳴，深深了解此失落自己的生命更甚的悲愁。昔日的歡笑，所留來的是甚麼，祇是一頁的陳跡，徒然刻劃在我心上一道創痕。正是：

人生愁恨何能免？銷魂獨我情何限！故國夢重歸，覺來雙淚垂。高樓誰與上？長記和晴望。往事已成空，還如一夢中。

曾經滄海難爲水，除却巫山不是雲。

孤雲楓影漸黃昏，獨徘徊頭懷舊識，北雁南飛春去也，苦教杜鵑傳心息。

心曲

大矣

我現在依然逗留在學校的宿舍裏，走廊四周靜悄悄的，洒下了一片清冷，祇有我在享受着這份孤獨和寂寞，同學們都回家歡渡週末去了。偶然祇有打掃地方的工友經過，他們都向我報以奇異的眼光，由他們去吧！陪伴我的，就只有在書桌上您的照片，向我掬着微笑，蘸着少女的純情與夢幻。您可知道在夢中，我常常看到您的微笑，永遠是那麼誠懇，那麼真摯！

又是那烟雨迷濛，春濃似酒的季節了。日子總是濕漉漉的，風雨欲來的時候，室內便盛滿了濃濃的幽暗，瀰漫於我的心宇，引起了似夢如愁，難以形容的惆悵！

您可還記得我的房間有一個向海的窗口吧！是的，我現在就是伏在那兒。遠處有一片密密的烏雲，雨絲過處，在灰灰的天空中，結了一張大網；網裏有我的夢，我的祝福，願這些憧憬與祝福，繞在您藍色的紗巾上，帶給您一串串玲瓏璀璨的夢境吧！



—my first murmur!



"I know, man, I know! Put it back in there!"

噢！我要告訴您，今天 BIOCHEM. 出榜了，我得到七十分，班中的第一名，高興嗎？您可知道我是多麼需要您的鼓勵和嘉勉！祇要有您在我身旁，我就如徜徉於百花盛開的早晨，感到無窮的喜悅和清新！然而，沒有您的日子，就好像塗上了灰色，顯得漫長而麻木，除了在 Gray's Anatomy 中打發日子外，我總是想起您。不過，我不會忘記對您的允諾：「我要做好我的 First M.B.」

在這些寂寞的日子中，您給我的信，我一直都好好地保存着，一讀，再讀。紙張上心靈的傾訴，使我聽見您心裏的共鳴，我彷彿聽到您的聲音，它帶給我一種安慰和無窮的溫馨！

數一數案頭日曆的日子，還有十多天，十多天後，我們又可手牽手漫步於花園道的幽徑，或者在靜靜的咖啡店的一角低低傾訴。您可知我現在

黃花崗後面是紅花崗。再往前走，便可到達前文所說的那個動物園。不是在經過華南醫學院門前時，總要探頭往裏面瞧瞧。生和學生，令我羨慕不已，希望自己也有這麼的一天。

驀然，我記起，我似乎聽過誰說的，在這兒，你不能有自己的理想。不知那來的勇氣，我猛地衝口而出：「媽，我們走吧！」

一個月後，我們獲得批准離去。

於是，我們把樓宇交給外婆和舅舅看管。然後，背上行李，揮手告別了我們的親友，也揮手告別了我們的家鄉。

那是一九五八年十一月二十八日。

離鄉別井，本是一件苦事。尤其是，當從此一去，就不知何日再回來。臨別的一剎那，家鄉顯得格外的親切，可愛。

然而，即使再壯麗的河山，再迷人的名勝古蹟，也阻不了我們的去意。為甚麼？

是的。為甚麼送行的親友，都羨慕我們能夠離開自己的家鄉？

這是一篇真實的回憶。裏面所寫的人，地，事，物，都是我童年時的親身經歷。我只是憑着記憶和父母的轉述（錯漏自然無法避免），把它以小孩子的語氣，淡淡地寫出來，毫不誇張，也沒有渲染。去國離鄉，自然愁難免。可是，因為當時年幼，未能深切地體會離情別緒。後來，讀着前人的作品，懷想過去，方才較為領悟個中滋味。罷了，寫得委實太冗長了。既然本文是以我父親的幾句作開始，那麼，就讓我也試擬幾句，粗劣地結束本文吧。

離家轉眼十二年，

往事如烟千百縷。

悵望河山強登樓；

不見舊時柳，

拂我頭，

夢鄉無處倍添愁。

怎得才重遊？

一九七〇年九月

DRUG APPEAL FOR EAST PAKISTAN

This was a project of the Medical Society to ask for donations from local drug firms for the survivors of the disaster in East Pakistan.

The following were collected:

Erthrocin	1,500 tablets
Humatin Kaps	200 x 16's
Chlorostrep Suspension	800 x 60 ml
Humagel	200 x 114 cc
Midicel Suspension	327 x 60 cc
Iberol	11,520 tablets
Dayalets-M	29,880 tablets
Chewable Calcium Tablets	75,000 tablets
Multiple Vitamins	5 Kg
Cash	HK\$500.00

The above were delivered to the Pakistan Government Trade Commission in Hong Kong, who had promised to deliver the drugs to Pakistan by the Pakistan Airlines.

Acknowledgement

The Medical Society would like to thank the following for their contribution to the success of the project:

Abbott Laboratories Limited
Parke Davis International Limited
Hoechst Chemical Products Limited
A. S. Watson & Co., Limited
Anonymous donor
Social Service Group, HKUSU

懂的在聽着。偶然聽到她們的輕歎聲，又似乎聽到，誰家的兒子被派到那兒，誰家的女兒又被調往何處等。

，後面又沒有隊員跟隨着。要是他瞧我幌幌斗大的拳頭又怎辦？於是，一下子洩了氣。要說的話也忙着嚥回肚子裏。但我不甘心，分明眼見他隨地吐痰，責之所在，怎能不了了之？於是，我便退回巷口，着一個隊員回校報告。自己仍回到巷裏，遠遠地監視着那人。很快，校方便派人領着一位派出所同志來。那人本不承認，可能他在閒談中，不經意地把痰吐在地上也不知。嘻嘻，在本小主人翁我力證之下，怎到你不認？而且，那口痰還好好的在地上。果然，那人便被帶走了，而我也被記了一次功。

其他如撲滅蚊蟲等運動，也頗收實效。不過，那趕麻雀的玩意，就難免令人暗覺兒戲。

不是嗎？在指定的那天早上四時，全市的人便要起床，走到天台上，露台邊，或者跑到街道上，拚命地敲着銅鑼、大鼓、臉盆，和一切可以發出刺耳聲音的東西，揮舞着預先紮在竹杆上的稻草人，稀哩嘩啦的，一齊向着麻雀宣戰，真的是喊殺之聲，直冲牛斗。小小的麻雀兒，只好暫時搬家。

雖然我們要參加種種活動工作，不過，如果舅舅有空，我們仍可照常遊山玩水，或者到那中山紀念堂公園，在那寫着「天下爲公」的大堂前，瞻仰國父的銅像。然後拾級而上，走到山腰上的紀念碑，沿着那螺旋型的樓梯，登上碑頂，俯視下面的河山。

或者沿着那兩旁油加利樹的先烈路，走到黃花園。這也是一個紀念公園。裏面最著名的建築，當然是七十二烈士之墓了。它就建在一個寬闊的廣場上。主要建築是一座用一塊塊巨石砌起來的紀念碑，成三角形的向着天空伸展。據說每塊石頭上都刻着一位烈士的名字及生平。碑頂上站着一個高舉火把的自由神像，雄視着大地。（來到香港後，從圖片中看到七十二烈士之墓原來的樣子，才知道這像是後來改建的。以前的碑頂，是另外一種標誌。）整座紀念碑，就高高地矗立着，直冲雲漢，令人覺得偉大，磅礴。碑的底層，正面有「國父手筆」浩氣長存」四個著名的大字，比成人還要高一倍。兩字之間，是一拱形的通道。墓的兩旁，遍植樹木，鮮花的碑石，數一數那碑頂自由神冠上的尖尖……

黃花園後面，是紅花園。再往前走，便可到達前文所說的那個動物園

漸漸，我們回到學校，似乎不再是爲了上課。環境也越來越令人不安寧。在市郊及鄉村，公社的制度正摧毀着家庭親屬間的維繫。物質的缺乏，我們早習以爲常。人們對所號召的勞動工作，只是憑着一股幹勁，跟本缺乏足夠的知識。所以，意外便會隨時發生。我便會親眼見過一宗建在人家院子裏的土爐爆炸後，那在旁工作首當其衝的人，血淋淋地被抬走的情形。從此，我就不大敢再接近校園內的土爐了。

賣晚報嗎？可也不如先前那麼容易。要賣完所分發到越來越大疊的報紙，就只好晚一點才回家。

有一次，不知道爲甚麼，報紙比平常更滯銷。已經望見海珠橋了，手中還是那麼的一大疊。再往西走便是西堤了。難道真的要直走到沙面，直走到市區的盡頭不成？往回走嗎？那末賣不完的報紙便得自己掏腰包。不然，明天怎向學校交代？我可不是躲懶不盡力呢。前幾天，那新來的女班主任已經在同學面前，責我讀書雖然用功，但對於勞動工作，則缺乏熱心。還是繼續走一會看看吧。

天竟然這末快便黑齊。已經是十月下旬的天氣了，日落後早已有點寒冷。路上行人稀少，都是些趕着要回家的人。誰又有閒情來買報紙！我本性怕黑，尤其是見過那宗血肉模糊的意外後。然而，我此刻却不能不咬着牙繼續往前走……

海關的鐘樓，敲出了九下清脆的鐘聲。這是堤岸地帶，不是住宅區，所以晚上便顯得更黑暗。周圍冷清清的，只有路旁的街燈，仍在竭力地，在黑暗裏，放出點點指引的光明。再走下去也是徒然，我祇好往回走。

那是我回家最晚的一天。

焦急的母親問明原委後，不禁嘆了一口氣。

「孩子，我以爲甚麼大不得了的事。幾份報紙，媽還替你買的起。反正你爸寄回來的錢，也只有閒放着。以後別那麼傻了，吃飯去吧。」

弟妹們早已熟睡了，只有外婆和母親在等着我回來。因爲夜已深，母親不便再亮上電燈，祇點上一盞火水燈放在飯桌上，偌大的廳子，昏沉沉的。

吃着飯的時候，外婆和母親在用她們的鄉音低聲地交談。我半懂半不懂的在聽着。偶然聽到她們的輕歎聲，又似乎聽到，誰家的兒子被派到那

又太對不起他。到底他是一位難得的老師。我讀初小時，他已經是我的導師，和我們一班同學早已打成一片，師生之情，非常融洽。

他黯然向我們辭別的那一天，整個課室充滿一片愁雲慘霧。同學們，無論平日怎樣，現在都一同爲失去良師而心傷。女同學在嗚咽，男同學在流淚。我坐在最前排，含着眼淚，望着面前的良師。他呆呆地坐在那兒，手放在桌子上，握着拳頭，眼望前方，緊閉雙唇，一動也不動。淚水却一滴一滴地掉下來，劃過他的面孔。

老師，您不是常教導我們，做人要有勇氣，無論怎樣，都不要向困難低頭？現實雖或殘酷，只要我們能咬着牙，挺着胸，大踏步前進；跌倒的，爬起來；低着頭的，昂起來。那麼，現實並不可怕。

而此刻，您却在流淚！

人，畢竟是感情的動物。到了那真情流露的時候，你便不能自己。

不久之前，我們才訪問過您的家，見過您那高年的母親，逗過您那學語的小兒。您的家庭充滿了天倫樂。現在，您却要忍心拋下自己的家庭，忍心離開我們一班同學，到那遙遠而又陌生的地方？

還有幾天，您便要拭淨夜來的淚痕，戴上笑臉，在歡送的人羣面前，告別爲您送行的親友，也告別爲您送行的師生。然後，一去不回！留下老母妻兒，去抵受那鮮有重逢的分手。

想到這裏，我再也止不住淚水。

老師啊，沒有別離的悲酸，怎顯得重逢時的喜悅？

祇有哭夠了的人，才會笑的最甜；

而您，却只有去的更遠，走的更促……

X X X

小孩子畢竟是小孩子，傷心的事總不會長記心頭。小孩子是不應該太早懂得替成人們分憂的。

此後，我們上午上課，下午爲學校做些勞動工作。別以爲我們會發愁，才不呢。我們可以把工作看作娛樂，看作消遣。我們不理會成果，只懂得趁熱鬧。

可不是？在鐵路旁的山邊掘黃土嗎？當火車快要經過時，大夥兒便伏在路軌下的斜坡上。火車過後，一窩蜂地跳起來，掏出小刀，沒有小刀的便拿起鐵片，鐵釘等，在那鐵輪剛走過的路軌上磨擦，生磁；然後較量誰的耐久。

那是一九五八年。我還未滿一歲，剛升上高小不久，擔任老師便被罷課。在烈日下，前後趕在樹蔭下，一會兒又趕在樹蔭下。大聲地談笑。

在溪中溝底，淘取沉鐵廢銅又怎樣？哈！這和嬉水有甚麼分別？

還有挺新鮮刺激的事呢。我們在校園內築爐煉鋼！爐子建好後，大家都搶着拉那風箱，或者過敏地留意加添煤炭，好不熱鬧。晚一點才回家又有甚麼相干？

販賣晚報也有趣。報紙由報社發給學校，然後分給學生，依着各自所指定的路線，沿途叫賣。輪到我時，不乘機走進那平日外婆不許進去的東校場才怪呢。怕甚麼？在營房前，看一回軍人們的操練。更可順道參觀白雲路兩旁的鋸木廠，瞧瞧廣九列車總站內擠擁的人潮。然後沿着東堤馬路走，可以望見對面的大沙頭二沙頭。來到長堤的時候，已是夕陽西下，報紙也賣得差不多了。正好趕及看那落日的餘暉，映紅了半邊天，也映紅了雄偉的海珠橋，和那珠江水上的桅檣……

我們雖然識字不多，却要參加掃除文盲的工作。站在街頭巷尾，拿着寫着字的硬紙塊，截着路人，隨手抽出一塊字來，要他們說出它的音義；要是遇着不識字的，對他們解釋清楚便是。雖然怪難爲情，但身爲少先隊一個中隊長的我，也得要硬着頭皮去幹。可不能給隊員們笑話！

提到少先隊，或者有人想知道多一點它的詳情。這在我也不十分清楚。不過，就我當時所知，少先隊即少年先鋒隊，俗稱紅領巾。當時，每間學校都有自己的少先隊。隊中有大隊長一位，佩三劃紅臂章；中隊長五位，佩兩劃紅臂章；小隊長若干位，佩一劃紅臂章；然後是隊員。每個學生，當他升上小學三年級時，便可以申請加入爲隊員。通常，隊長等都是由年紀較大或有領導能力的人擔任。大隊長爲全隊的總指揮。中隊長則分別策劃一項活動，例如政治，勞動，康樂等。小隊長則負責自己小隊的事，並執行所負的任務。我在班裏，年紀很小，不過因爲有一次，一時心血來潮，在課室裏寫過幾句讚美甚麼的句子。老師們稱之爲「詩」，並將之貼在壁報上。後來，我便被選爲一個中隊長，負責學習和藝文的事。

在禁止隨地吐痰運動時期，我們在街道上巡邏，勸告路人不可胡亂在地上吐痰。一天黃昏，我巡到學校附近一條巷子（大概叫做四聖里吧）。來到巷的盡頭，瞧見前面一間屋子門前，坐着兩個男人在抽水烟聊天。其中一人，赫然把一口痰吐在脚旁。呸！真斗胆。還不上前警告他待怎的？我正要走上去，忽然發覺，他是那麼一個大男人，我却是這麼一個小孩子

有時，叔叔也會陪着我們，到荔枝灣公園遊玩。那兒有很多人工湖，園內廣植荔枝，楊柳，紫荊，夾竹桃和各種花木；到處都是一泓澄碧的湖水，蕙花香發，清風陣陣，垂楊互接，荔枝相連……

偶爾也和同學們，在老師的帶領下，到那海角紅樓游泳，泳罷回來，順道看一看市中最高的愛羣酒店。

閒時，或隨着母親逛高第街，寶華路的百貨店，顧綉綉緞行等；或跟着外婆過河南，買幾對雛鷄回家飼養。

每逢神功佛誕，外婆總是帶着我們兄弟往那三元宮，六榕寺進香，參神，帶着轉團團的風車回家。

那位於市郊新建的動物園，往往令我們流連忘返。我們乘坐公共汽車或三輪車，沿着文明路，越秀中路，中山三路，中山二路，農林下路，先烈路等，便可直達動物園了。園子佔地很廣，仿照傳統的園林式樣建造，所以，除了動物外，還有亭台樓閣，拱橋流水，假山幽徑等。

進得園來，我們總是先瞧瞧那些猛虎，斑豹，雄獅，可惜，這些曾經稱霸原野的獸王，在籠子裏，竟是那麼懶洋洋的。難道牠們不習慣這新環境？難道牠們因被關起來而覺得氣悶？其實，籠子可也不小了，有整間房子那麼大，還有堅固的石屋供牠們休憩。可是牠們卻總是沒精打彩，或者木然地瞪着籠外的人羣，要不就索性躺在地上裝睡。

野狼却可厭。雖然被關在籠裏，仍然露着原來的兇相，拖着長長的舌頭，繞着籠邊轉，東瞧西嗅的。不時對着圍觀的人羣，張牙舞爪。呸！除了你身上的惡臭外，誰會怕你。

黑熊則有趣。別看牠那肥笨的身軀，攀爬的工夫，可真有牠的一手。孩子們總是喜歡看牠那人立的姿勢。嘿！牠那搖頭晃腦，一步兩搖三擺手的樣子，逗得人們哈哈大笑。

最吸引遊人的，倒要數那猴子籠了。籠很大，裏面有房子，假山，水池，砍短了的大樹。籠頂還吊着幾架小鞦韆。籠內大約住着二三十隻猴子。有老有幼，幾代同籠；也不分長幼尊卑，全都是頂頑皮的傢伙。個子小小，身手倒十分靈活，盪鞦韆啦，表演空中飛猴啦；要不就在假山的洞穴鑽來鑽去，要不就在鐵籠的四周攀上爬下；或者是相追相逐，或者是相偎相倚。更有趣的，就是猴媽媽也會替小猴搔癢，小毛猴也會向人擠眉弄眼，怪討人喜歡的。你只要在籠子旁邊經過，就免不了要停下來，看上一個老

比較罕見的，如長臂猿，長尾猿和其他我已忘記了名字的稀有猿猴類，都是分別關在較小的籠子裏，牠們也不會寂寞，同樣是門庭若市。

至於那些被鎖在樹上，祇有一個小木匣棲身的猴子，則顯得孤單可憐。當然，人們對牠們也似乎份外同情，紛紛把香蕉，甘蔗，甜橙等，往樹上拋，牠們可也身手敏捷，一落地接牢；毫不客氣地，就蹲在樹上大嚼，有皮的剝去了皮，有核的吐出了核。

他如大象的獸里獸氣，駱駝的老態龍鍾；還有長頸鹿，斑馬，羚羊，狐狸，野豬，刺蝟，松鼠，蟒蛇，珍禽，猛禽等，總之，難以一一盡述。因為園子大，動物多，每種動物都有可觀之處，所以，即使走上整個下午也祇能作局部遊覽而已。同時，事隔多年，園子的印象已糊塗了。

在市內另一處早已忘記了名稱的展覽館內，可以看到種種水族魚類，和那鱷魚，鯢魚，鯊魚等。而最令我難忘的却要數那副鯨魚的骨骼，白森森，完整地架在一間很深很寬的陳列室內，非常龐大，一根肋骨就要比我的手臂粗，牆上掛着一條紅布條，白色的字寫着：「世界上最大的動物——鯨魚。」館內還有製成了標本的大海龜，八爪魚和很多其他深海怪物，供人參觀。不過，在小孩眼中，這展覽館就遠不及動物園來得有趣了。

在同一展覽館的另一角落，是一所陳列着很多歷史人物的蠟像館。每一個或者每一組蠟像，都是陳列在室內兩旁離地約二尺高的小型舞台上，互相連接，中央是一條寬闊的通道。看上去，一幕幕的歷史劇，好像正在館內重演，劇中人物，衣服，容貌，動作，襯上時代背景，真的是栩栩如生。

現在，離開穗市快十二年。孩提時的生活情形，多已隨着時日的消逝而淡忘。祇有在偶然間，憑着一些紀念品，或者幾張舊時的相片，或可追憶一下從前的生活，緬懷一下舊地的風光。當然，能挑起人回憶的，該是些難忘的往事，不平凡的經歷。這些往事，這些經歷，免不了包括着甜，酸，苦，辣。或者有人會藉夢境去找尋那逝去的時光。然而，每一個夢，祇能帶來無限的惆悵；每一個夢醒了，帶來無限的悲傷。那麼，在我們回憶的時候，何不祇是重想往日的歡娛，甜意；忘掉昔日的苦惱，煩憂？

不過，有一件事，我却畢生難忘。

這是一九五八年。我還未滿十歲，剛升上高小不久，級任老師便被調

往事

· 初 ·



閒着無聊，偶然整理一下舊時的相片，發現父親在十多年前寄給母親一幀現已發黃了的相片後面，寫着這樣的幾句：

春意已隨流水去，

白髮翻從鬢裏添，

筆墨生涯又一年。

香城花落了，

去如烟。

珠海爐峯兩掛牽，

溫夢幾時圓？

孩提時的生活，不禁又在我腦海中，掀起一陣陣的漣漪，很快就湧出一個一個的思潮。

× × × × ×

我們本來住在廣州市的西關，在糧秣時期，沙面便是我常到的地方，一九五〇年，父親結束了在上海廣州等地的生意後，一家人便搬到市東一幢名義上仍然是屬於我們的樓宇，把地下鋪面和二樓租給別人，自己就住在三樓。幾年後，父親便隻身來到香港謀生。我們靠着一點點租金和父親的匯款過活，日子也算不錯，然而，一家人此後便兩地分隔了。

那時，我因為年紀小，非常好動。羊城的名勝古蹟，很多我都遊過。還記得，我曾經和同學們，在烈士陵園內的湖上泛舟，在那荷花中，拱橋下穿插；摘枝熟了的蓮蓬，把小舟划近岸邊，讓那柳絲輕拂着我們的臉龐，讓那垂楊遮擋耀眼的陽光。然後，剝着吃那苦中帶甘的蓮子，吃剩了的蓮蓬，就拋在湖裏，蕩起陣陣的波紋。

我也曾和弟妹們，跟着舅舅到這園內遊玩，在草地上追逐，打滾；撲那在花間雙雙起舞的彩蝶，撲那在草叢偷偷探頭的蚱蜢。也會在淺溪旁，伸手捉那黑墨的蝌蚪；弄濁了清澈的溪水，也驚散了悠然自得的小魚。倦了，有的是涼亭，石凳，可供我們歇腳；有的是雕欄畫棟的軒，閣，台，榭，讓我們小坐，閒談；更有的是青山，泉水，鳥語，花香……

越秀山的五層樓，也是我常到的地方。這是一座古老的城樓，後來改為博物館。我總愛走到陳列古兵器的那一層樓裏，看看那些刀槍劍戟，盾牌盔甲，也會不顧大人的制止，伸手敲敲那曾經激勵過無數軍心的戰鼓。然後，走到城樓外那幾尊巨大的古砲旁，跨在其中一尊上，遠眺越秀山的風光。