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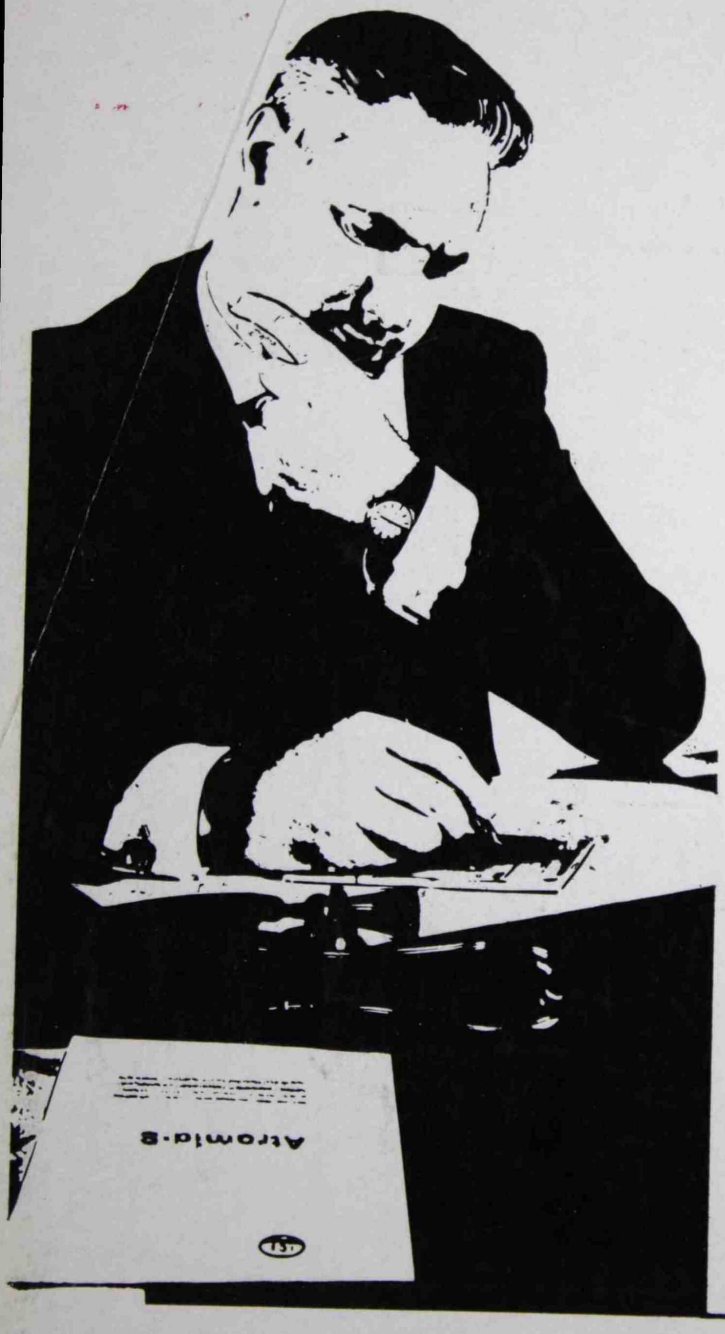

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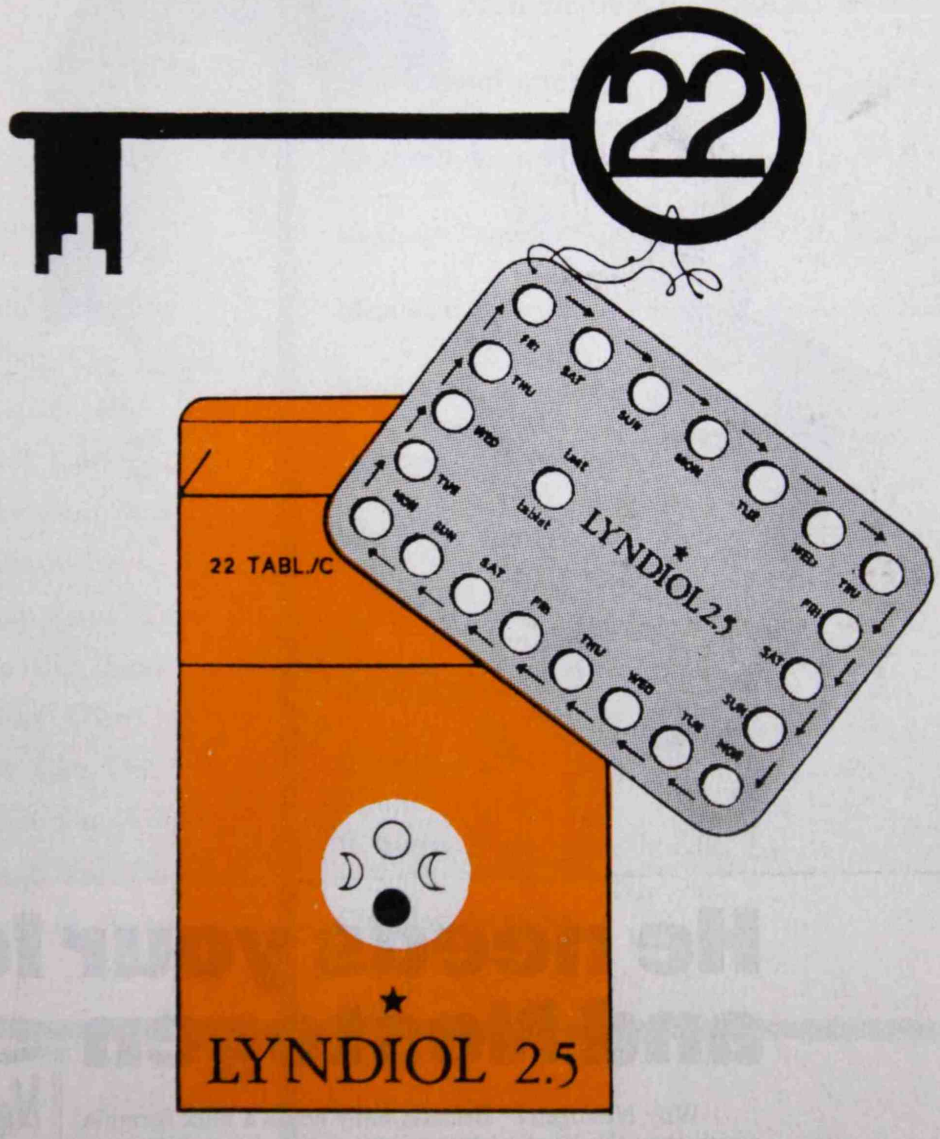

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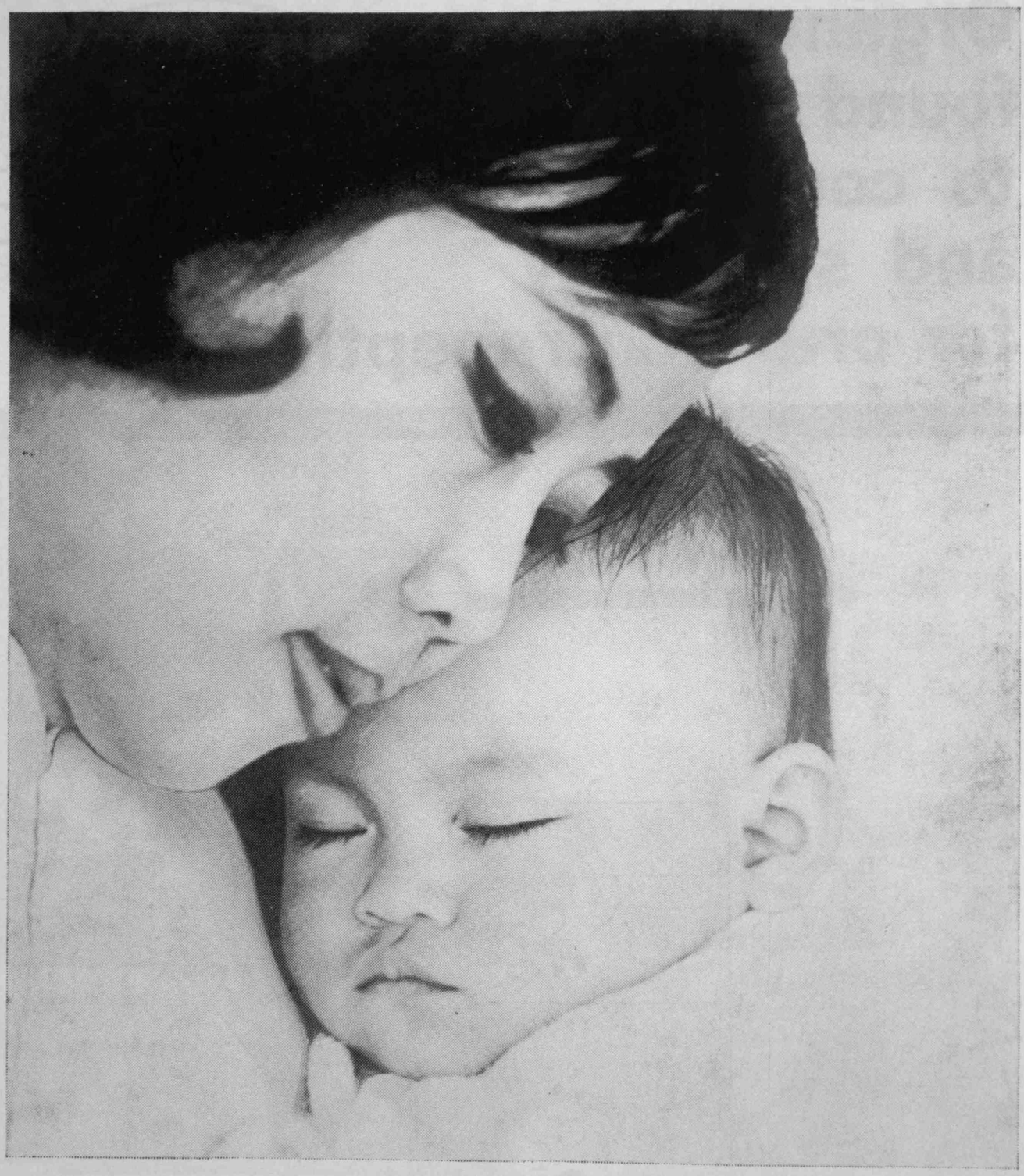

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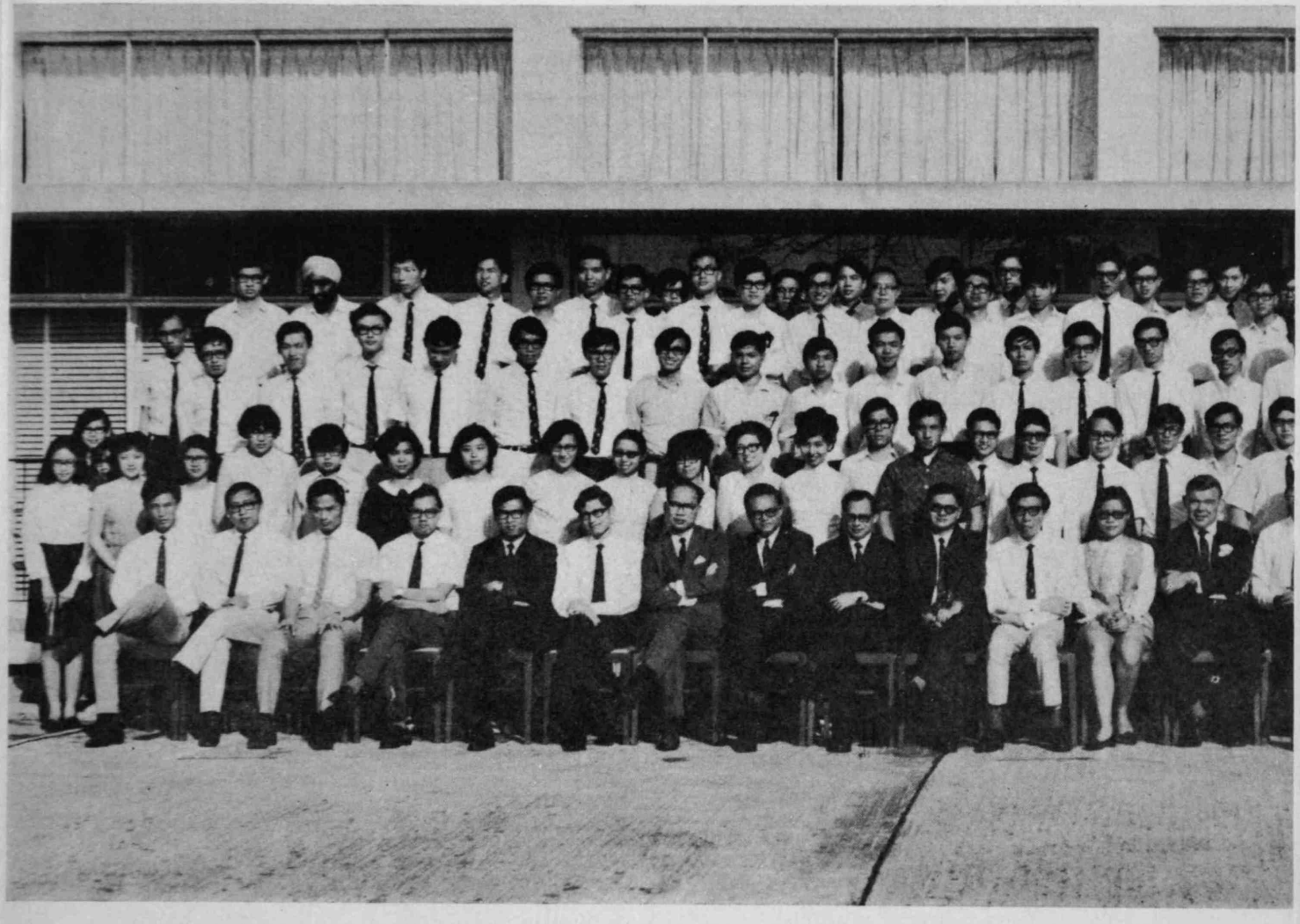

Group Pho

HONG KONG UNIVERSITY ME

Editorial

The first two cases of kidney transplant has caused a considerable amount of excitement locally. Not only do they offer new hopes to patients with renal diseases, but they also provide witness of the high standard of medical practice in Hong Kong.

Technically speaking, the chance of survival of the kidney in the new host depends on its speedy removal and expert skill in the operation. Tissue rejection is a nasty foe to deal with, and so are the possibilities of infection and post-operative complications. However, the greatest problem that besets the surgeon is not the technique, but the ethical considerations.

To determine the time of death in a potential donar patient has a modern meaning in face of advance in surgical transplant. In the Declaration of Sydney adopted at the 22nd World Medical Assembly it is decided that, to determine the time of death, "no single technological criterion is entirely satisfactory in the present state of medicine". However, it is "the legal responsibility of the physician and should remain so." Vague in details and elusive in instructions, the Declaration has recommened that two or more physicians should decide the point of death and they should not be those who are immediately concerned with the transplantation.

The choice of the right patient to receive the transplant adds another strain to the doctor. Should wealth, background education, moral standard and age play the decisive factor? Or should one adopt the "first come—first serve" scheme? Further thoughts into the problem may demand one to inquire whether it is justified at the present stage to direct much of our money and manpower to this branch of experimental surgery instead of to the pressing need of the mass daily queuing outside the Outpatient Department.

The field of research in transplant is moving fast. The next stop we are heading is heterotransplantion; and the final goal to achieve will of course be synthetic substitutes. These advances will lift away many of our present problems, but they will dig up a more fundamental question, namely, the problem of being and of self-identity. When the face of the earth is abound with shoals of "semi-synthetic men", the question of "Who am I" and "Why do I live" will be most pressing.

Y. C. M.

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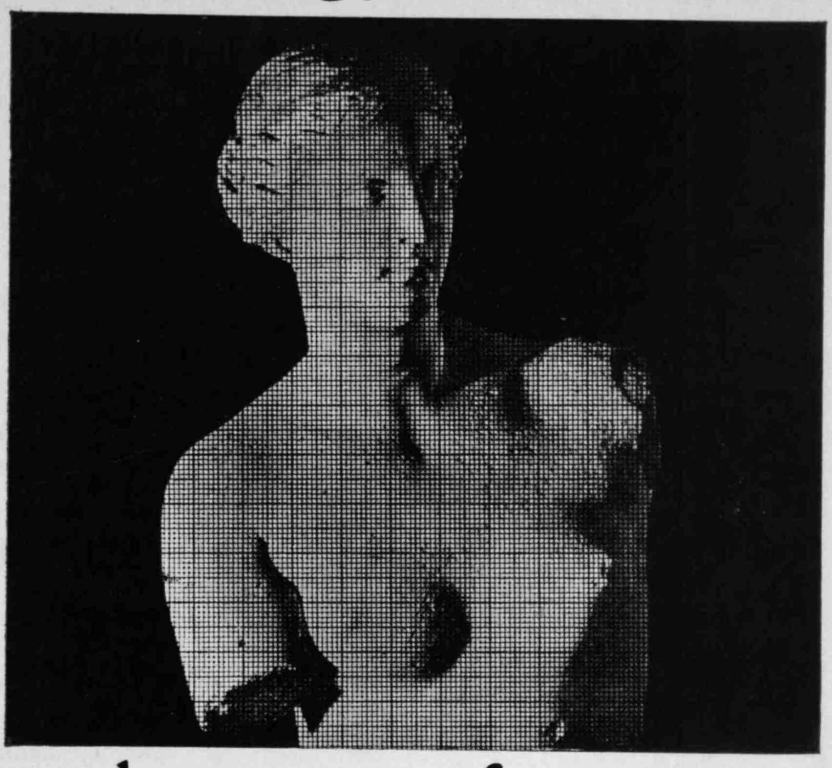

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GEOGRAPHICAL PATHOLOGY SEEN FROM HONG KONG

by

Prof. JAMES B. GIBSON,

M.D., F.R.C.P. Ed., F.C. Path., M.C. Path., Aust.

Wherever we work we become familiar with a certain pattern of disease, and now and then we should remind ourselves that the pattern is not universal. Geographical Pathology is the study of this sort of variation, but its real lesson is that diseases are not real or relatively static entities like animal species, but are in fact general types or ranges of the body's reactions to external conditions. They are modified by variations in external conditions and influenced by genetic, cultural or nutritional differences in particular populations. Sometimes Geographic Pathology casts light on particular problems. It is in any case a sort of cost-free medical tourism that widens our horizons and gives us some kind of objectivity in thinking about our work.

Diagnostic Facilities

In reading accounts of disease in places where we cannot assess on the spot the local conditions and standards, we need to be doubly careful not to misinterpret the background or imagine that it is necessarily like our own. One obvious way in which populations differ is in the availability of adequate diagnostic and other facilities: some people never see a real doctor throughout their lives. Published data on the incidence of diseases in China are for a number of reasons, woefully scanty and unreliable and we must beware of applying them to Hong Kong. Some observations that continue to be quoted were made in quite localised areas of China by individuals seeing only the highly selected group of the population who were prepared or able to consult them, or on Chinese immigrants to other countries.

Available data, for instance, suggest that the incidence of brain tumours is low in Chinese (Steiner, 1954) as it is in Japan (W.H.O. report 1952). Perhaps the incidence is truly low, but we must keep in mind that the chances of making correct diagnoses have been small in China in the absence of access to good pathological, neurosurgical and radiological services. In any case although brain tumous are not uncommon in children, many of them appear at an age above that of the average life expectation that most Chinese enjoyed at the time when most of the observations were made.

Even in areas where access to hospitals is good, statistics are difficult to assess. The range of diseases we see in hospital is not necessarily a representative one. People come into hospital because it is thought that something can be done for them there or for other selective reasons which are not all connected with diagnosis; they do not come solely because they have a serious illness. In Singapore, for instance, where both free Government Hospital and paying beds are open to all, the admission rates of common racial groups are remarkably different—96 per 1000 per annum for Pakistanis, 87 for Indians, 52 for Chinese and only 20 per 1000 for Malays (Shanmugaratnam and Muir, 1967). Because of additional elements of selection, figures derived from autopsies are even more misleading, but treated with proper respect figures from both hospital records and autopises have a lot to teach us.

Age Structure

Perhaps the most striking difference that we should consider here between Hong Kong and European countries in general is the age structure of the population. When the percentage of each 10-year age group in the population is graphed, we find that in European countries there is a fairly even distribution over all decades except the eighth. In developing countries in general, the population in the first decade is the greatest; and the numbers fall off regularly in later decades. This pattern is true also for the population of Japan above 9 years of age (Fig. 1) but in addition there is a relative scarcity of persons of 9 years or less in that country. In Hong Kong, the first decade contains the highest percentage of any and the percentages in subsequent decades are less: there is a marked scarcity of persons of 60 years or over; but a special peculiarity lies in the 3rd decade which contains a lower percentage of the population than the 4th. There are relatively few war babies in Hong Kong.

In Hong Kong the general conditions of public health are good and the death rate is one of the lowest in the world (D.M.H.S. Annual Report, 1968). This is partly due to a low infant mortality but also to the age structure of the whole population. The majority of the inhabitants of Hong Kong are at an age when death is often preventable with modern medicine and relatively few are vulnerable yet to the lethal conditions that beset old age. The problems of a population with a high percentage of old people are not just those of a higher death rate but include many aspects of care in prolonged disease and other incapacities. Unlike European countries, Hong Kong has not yet had to provide for a high proportion of aged in the community, but if the death rate continues to be low these problems will become ours too, in due course. They are perhaps as much social as medical problems but their medical aspects are formidable.

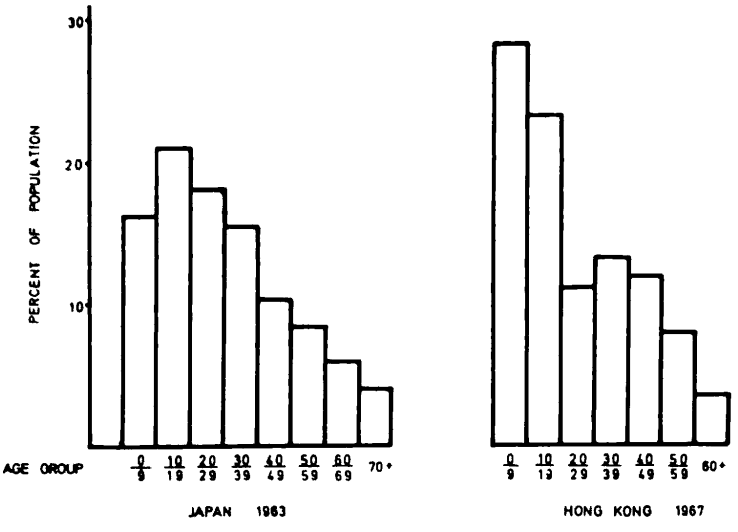

Fig. 1—Percentages of the population in each decade in Japan and in Hong Kong: data from Segi and Kurihara (1966) and D. M. & H. S. Hong Kong (1968).

The percentage of old people in the population has an important bearing on the pattern of disease in any community and this bearing may be misinterpreted. The infrequency of conditions which occur exclusively in older persons such as carcinoma of the prostate may be due simply to the scarcity of persons who have reached an age of susceptibility or it may be related to a racial or other factor. Carcinoma of the prostate is not always very aggressive; not infrequently it progresses more slowly and is more amenable to treatment than many other cancers, but it is so common in the West that in the United States it has been suggested that it will affect every man who survives long enough. It is uncommon in Hong Kong and also in Japan but then so, relatively speaking, is old age.

By mathematical manipulations we can compensate for this peculiarity of the population and compare not the total incidences of the disease in the two countries but the actual incidence in one country with what the incidence would be in the other country if the age distribution of the population was the same in both. On a comparison of such "age-adjusted figures" it emerges that the incidence of carcinoma of the prostate in Japan is one of the lowest in the world (Segi and Kurihara, 1966). Possibly then this low incidence is a racial trait but that is not the full explanation, for when we make this comparison over several years we find that the age adjusted incidence has been rising very sharply recently. This rise may be due to the increasing resemblance of life in Japan to life in the West. Rather similar remarks probably apply to chronic lymphatic leukaemia although the figures are not so readily accessible.

World Population Explosion

Population graphs like those in Fig. 1 emphasise a situation which we share with the whole world. The total and relentless increase in population everywhere in the world—the result very largely of better medicine and better hygiene of all sorts allowing more young people to survive—presents difficulties which appear intractable at present. This planet, depite atom bombs and all the rest, has at last become a really safe place for *Homo sapiens* to live on. As a corollary it has become increasingly unsafe for any other species except a few which have been domesticated for food. The world population is now growing at 2% per annum and the rate of growth has been getting faster over the years. After man emerged from among the other primates, a million years passed till in 1830, there were, I understand, 1000 million of us. By 1930, this figure had doubled but it took only another 30 years for the total to reach 3000 million in 1960. Within two centuries without any acceleration in the present 2% rate of increase there will be 50 men for every one now alive (McElroy, 1969).

The human population is in fact in a logarithmic growth phase with no effective natural limiting factors on its expansion in numbers: in fact man can be compared in this respect to a *staphylococcus* freshly plated out on blood agar. Many of the advances in medicine and hygiene which have played such a big part in brigning about this increase in population have been directed towards the control of our environment. From a biological point of view man is not the dominating element in the environment. Perhaps the growth rate can be limited. Perhaps even, man might be subcultured onto another planet, as a bacteriologist subcultures organisms onto another plate. The choice seems to lie between such alternatives and in awaiting exhaustion of the available nutriment on this planet when the human race will wither and dwindle like the *staphylococcus* left on the original plate when the logarithmic growth phase has passed.

Without looking so far ahead an obvious inference for the citizen of Hong Kong is to realise

that however crowded conditions appear to be here now, they are not in general going to become any less so. Living conditions are getting very crowded in many parts of the world. We and our descendants have to perfect the art of living in cities and so we ought to make it as agreeable as possible.

Medical advances have not made life potentially any longer and I doubt whether they ever will or even should do so, but they have procured longer life for more people and they have made life better and reduced suffering at all ages. Among the dangers that we have reduced most are those diseases spread by animal vectors and by contaminated water supplies. Control of typhoid, cholera and malaria alone have contribute immensely to increasing human life in Hong Kong, even although success has not been complete.

Streptococcal and Tuberculous Infections

In a crowded world and particularly in this crowded city, direct person to person spread remains important and relatively uncontrolled. Streptococcal infection and tuberculosis are mostly airborne infections in this sense and they continue to plague us. Fortunately, improved methods of treatment have contributed a good deal towards curing established cases.

A drop in the death rate from tuberculosis has occurred here as in other countries. Even the rate of infection and development of new cases is falling because drug treatment reduces the period of time in which patients are capable of infecting others and because new infections can be diagnosed and treated sooner: persistent open cases can be isolated. The problems are not intractable although the slowness with which the rates of new infections are falling here shows that the difficulties are still considerable. Streptococcal disease presents other difficulties in control because depsite its sensitivity to drugs the *Streptococcus* can survive as a commensal in the throats of perfectly healthy people and furthermore some of the illnesses it causes are trivial. Streptococcal infection is worldwide but the more severe complications of streptococcal disease show a good deal of variation. Some of this variation may be due to the geographical distribution of particular strains of *S. pyogenes* such as the serological type 12; infections with this type are particularly liable to be followed by nephritis. Another complication of *S. pyogenes* infection is not however attributable to any individual type and that is acute rheumatic fever. Acute rheumatic fever was once thought to be a disease of the industrialised zones of the temperate regions of the world and the tropics were thought to be little affected, but the disease has been recognised with increasing frequency in the tropies in the last 30 years. During this period, urbanisation of the population in the tropics has been a more intense process than in the West. Urban overcrowding is now a marked feature of many underdeveloped countries in the tropics (Davis, 1967). At all events, acute rheumatic fever was uncommon in Hong Kong 20 years ago. Now it is as common in Hong Kong as it was in Edinburgh 30 years ago, and we can hardly fail to associate the increase here with the parallel increase in population and overcrowding that has taken place here.

Thrombo-Embolic Phenomena

Perhaps the most stiking difference that one encounters in working in pathology in Hong Kong in comparison with U.K. is the infrequency here of thrombo-embolic phenomena such as pulmonary infarcts and even myocardialy infarcts. Thrombosis and its complications account for a surprisingly high percentage of cases seen in Pathology departments in Britain and they are relatively infrequent here. The reason for this is unknown, although one can think of a number of possible explanations. This is a field of general pathology which is wide open for research, but it is a field which may perhaps become obscure, if under the westernising influences of life here, this situation should undergo a trend towards what is happening in the West.

Racial and Individual Differences

Racial and even individual differences in metabolism must vary the body's responses to disease, for we are not all endowed with exactly the same complement of cellular enzymes, and many conditions are now associated with inborn errors or variations in metabolism, but before concluding that differences in the distribution of a disease are explicable in this way it is well to consider other possibilities. Thus disseminated sclerosis, a fairly common neurological disorder in Eruope is said not to occur in Chinese. What protects Chinese from disseminated sclerosis? No one knows, but it may be relevant to recall that most of the population in China live South of the 35th parallel of latitude which runs at a level just north of Kiangsu and Honan Provinces. The whole of Europe lies north of this parallel and so do the most populous parts of the U.S. In the U.S. it is common to advise patients with disseminated sclerosis to live in the South where the disease is infrequent and where relapses are fewer, so perhaps it is a geographical, or if you like, an environmental difference that is important and not a racial or inborn one.

There is a good deal of evidence to suggest that racial and even familial predispsoition to cancer exists, but it is more profitable to consider factors which we can alter, and much of the search for causative factors in cancer is devoted to environmental factors.

Environmental Factors

Cancer of the stomach for instance has a higher incidence among poorer sections of the population in the U.K. than in the wealthier sections.

Its incidence has declined with improvements in diet in many countries of the world and I know of no country in which the incidence is increasing. Even in Japan, which has long had the highest incidence of carcinoma of the stomach in males, the incidence is beginning to come down, perhaps because of a rise in the standard of living. Standard of living is not however the only important element. The incidence of carcinoma of stomach in Hong Kong is, I imagine, much about the same as in the U.K. and much lower than in Japan, but the overall standard of living is not higher here. The high incidence in Japan may of course be due to particular elements in

the diet as is apparently the case in Iceland (Dungal, 1961).

Hepatocellular Carcinoma

A disease of major importance in Hong Kong is primary carcinoma of liver in both its forms. The high incidence of liver-cell carcinoma in countries such as China and Japan and in Africa, South of the Sahara is puzzling. In other hot counteis, such as India and those in South America this high incidence is not seen. Despite much research there are few indications of why this or any other place should have a high incidence of primary liver cell carcinoma. Cirrhosis is common here and although the high incidence of cancer cannot be explained on this basis only, some relationship clearly exists. Comparisons with other places emphasize the role that cirrhosis plays as a predisposing condition in Hong Kong. A remarkably high percentage of cases of cirrhosis coming to autopsy in the Queen Mary Hospital are also affected by hepatocellular carcinoma—52% of males with cirrhosis and 24% of females—so this complication of cirrhosis is much commoner in Hong Kong than in Europe and America where the equivalent figures lie between 3.3 and 14.5% (Higginson, 1955). In China as in Hong Kong many cases of cirrhosis are complicated by hepatocellular, the highest figure given in the review of Liang and Tung (1959) being that of 39.2% for Changsha in Hunan. In natives of Africa generally the figure is given as 42% by Steiner (1960): in Thailand the figure is 23.4%, in Bangkok (Bhamaparapravati and Virranuvatti, 1966). People in Hong Kong with cirrhosis then tend to develop hepatocellular carcinoma with unusual frequency. The peak incidence of deaths in cases coming to autopsy in the Queen Mary Hospital is in the 5th decade and this is true also in respect of cirrhosis. The peak age incidence in our autopsy cases as a whole is in the 6th decade, if neonatal cases are excluded. However this peak incidence may be influenced by the age structure of the population, it is interesting to note the same coincidence of peak incidences in 251 cases of hepatocellular carcinoma and in 155 cases of cirrhosis diagnosed by liver biospy in Bangkok (Bhamaparapravati and Virranuvatti, 1966).

Hepatocellular carcinoma is nearly 7 times as common in men as in women in our records while cirrhosis is only 3 times as common in men as in women. Men are not only more susceptible to cirrhosis but also more susceptible to the malignant change: no dobut there are other factors promoting hepatocellular cancer. It is not clear yet what these are, whether they are racial or environmental or why they should have such marked effects in certain countries.

Cholangiocarcinoma

Another type of primary carcinoma of the liver is common here also and that is cancer arising in the bile duct epithelium as distinct from the liver cells. This cholangiocarcinoma causes deaths at a later age than the hepatocellular variety—the peak is in the 7th decade, and although it affects men more than women, the preponderance of male cases is not so great as in hepatocellular carcinoma being only 2:1.

From a first glance at the figures it does not appear that cholangiocarcinoma is unduly common in Hong Kong for in the Queen Mary Hospital autopsy figures, only 17% of primary liver carcinoma is of the cholangiocarcinoma type. This ratio of 1:5 is the same as that prevailing in the world as a whole (Stewart, 1931). Cholangiocarcinomas form 21% of primary liver cancers in autopsies in Canton (Liang and Tung, 1959) and 24% of primary liver cancers seen in autopsies in Bangkok while the figure for biopsies is 20% in that city (Bhamarapravati and Virranuvatti, 1966). Yet when we compare these distributions of 1:4 or 5 with those of other countries where hepatocellular carcinoma is common, we find a very different situation. The ratio in Java is one cholangiocarcinoma to 56 hepatocellular cancers (Snijders and Strabu, 1923), 1-38 in Africa generally (Steiner, 1960) and 1-24 around Taipei in Taiwan (Yeh, 1965). We can only explain these divergences by conceding that here, as in Canton and Bangkok we have a high incidence not only of hepatocellular but also cholangiocarcinoma. In searching for an explanation of the frequency of cholangiocarcinoma in these places in comparison with its rarity in Java, and in Taipei as well as in Africa, an obvious factor which we must consider is the common occurrence of liver fluke infections in Hong Kong, Kwantung and Thailand and its virtual absence from the other places.

Clonorchiasis

In Hong Kong the fluke is *Clonorchis sinensis*. The simple infection is found in men twice as commonly as in women and since it does not by itself give rise usually to serious illness, the parasite survives for many years in the bile ducts. The incidence has varied over the years and at present is highest in male cases aged 60—69: 49% of male cases coming to autopsy in the Queen Mary Hospital are infected. The fluke has many years in which to exert any carcinogenic influence it may possess on the epithelium of the biliary passages in which it lives and if we assume that these carcinogenic effects are cumulative, then we can understand the tendency of cholangiocarcinoma to cause death at a relatively late age with a peak incidence in the 7th decade.

Clonorchis does not survive indefinitely in the bile ducts and the infection may sometimes die out before death occurs from cholangiocarcinoma. Nevertheless we find signs of clonorchiasis, nearly twice as often in cholangiocarcinoma cases as in hospital autopsies matched for age and sex. This association does not hold good for hepatocellular carcinoma in which deaths tend to occur at a younger age and in which clonorchiasis is rather less frequent than in hospital autopsies as a whole.

Clonorchis sinensis is the commonest liver fluke in man but it is relatively restricted in its geographical distribution. For instance it is virtually absent from the parts of Taiwan around Taipei (Kuntz *et al.*, 1961). It is common in China, however, especially in the South and is found in Japan and Korea also. To the North and West of China in Siberiaan other fluke—the

cat liver fluke *Opisthorchis felineus* infects man: it is similar to *Clonorchis* in its structure and in its behaviour. Infection with *O. felineus* has been reported in Russia and Eastern Eruope in association with cholangiocarcinoma (Ruditzky, 1928).

It is probable that the same is also true of *Opisthorchis viverrini*. Infection with this liver fluke is very common in North East Thailand (Wykoff *et al.*, 1965). The incidence of the infection is probably less in Bangkok, but its association with cholangiocarcinoma there is striking and in their series of autopsies Bhamarapravatti and Virranuvatti (1966) noted opisthorchiasis in 78.5% of 14 cases coming to autopsy with cholangiocarcinoma and not in any of 33 cases of hepatocellular carcinoma.

Thus when we sift the background facts in this geographical review it appears that there is a good deal of evidence from elsewhere to support the view that clonorchiasis in Hong Kong promotes the formation of one form of primary liver carcinoma. Perhaps comparisons on similar lines may eventually suggest why the incidence of liver-cell carcinoma is also high, or perhaps this problem may be solved only by a different type of investigation.

Conclusion

With rapid communications of all sorts and with the marked and rapid trend of the world's population to dwell in cities, there are many problems that we share with others, but the world is not yet uniform. It is both fascinating and informative to look around to compare another man's way of doing things with our own and to see how this may condition the pattern of disease.

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SURVEY

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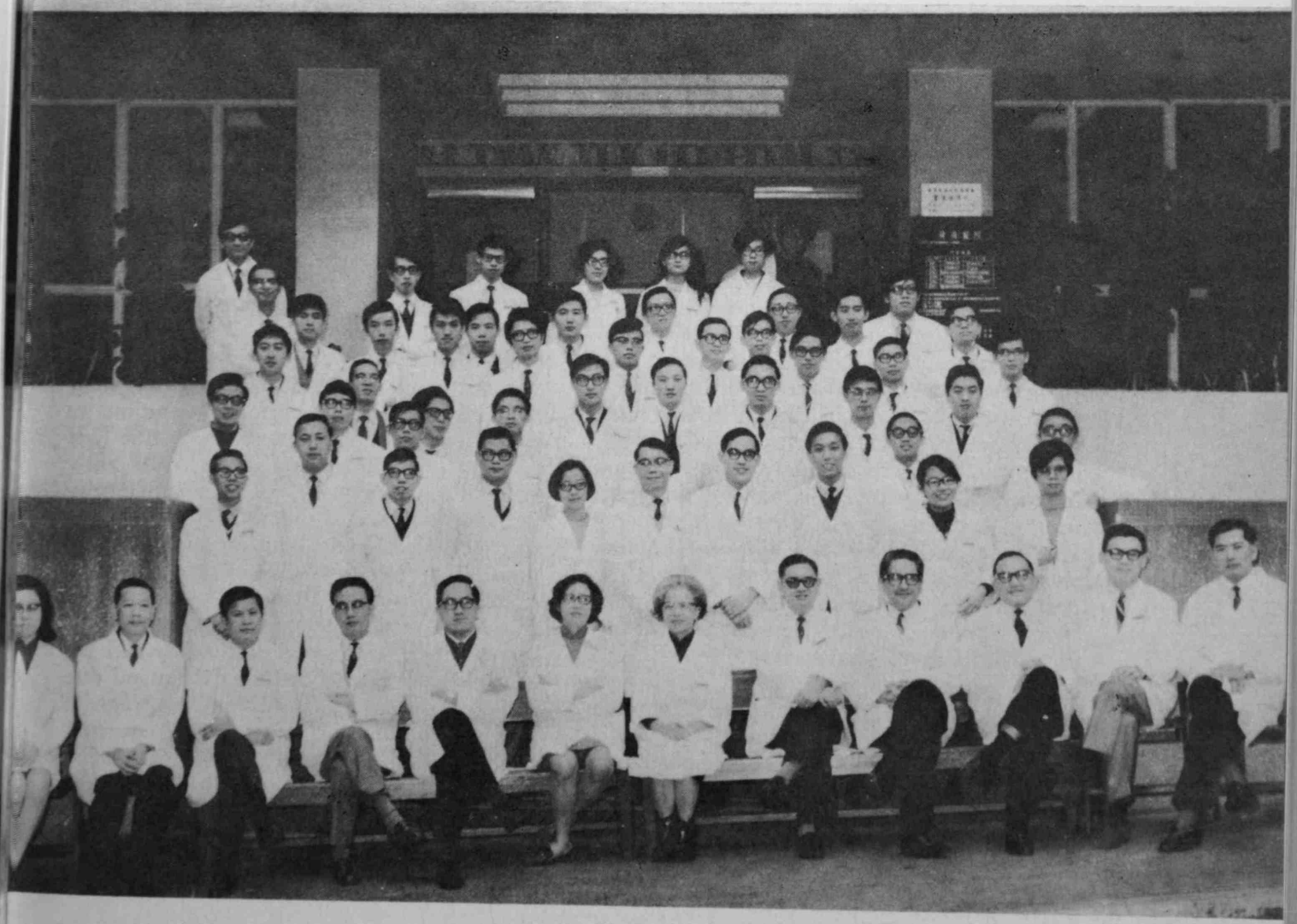


Message from the Professor

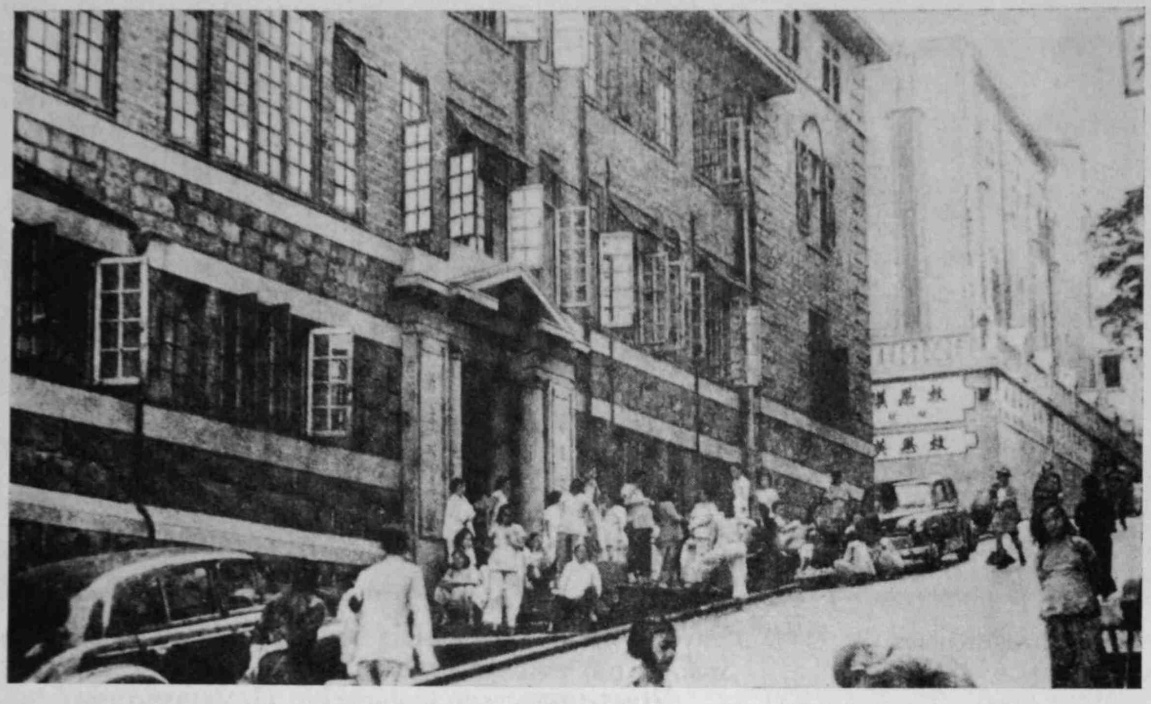
In these days of specialties in the medical and other fields, obstetrics and gynaecology are commonly associated with deliveries of infants and hysterectomies. These procedures and operations, although important, constitute only minor roles in the practice of the combined specialty. A clear cut distinction cannot be drawn between obstetrics and gynaecology, for the two actually constitute one field—that of human reproduction and the complications of the female genital tract. Obstetrics is, however, far more important for the simple reason that multiple lives are involved—the patient's and that of her baby. Pregnancy and labour are physiological processes, but the complications of which often bring about serious consequences to both mother and child. In many instances a mother may suffer such permanent injuries as chronic pelvic infections, genital prolapse or urinary fistulae.

In the United Kingdom, it is mandatory that a doctor, after graduation, must work in an obstetric unit for at least six months before he is permitted to take care of obstetric cases or to supervise practising midwives. The six months postgraduate obstetric training serves to familiarize the doctor with the techniques for detecting early complications, so that treatment can be given in time to prevent a tragedy. Hong Kong has not yet instituted this requirement. As a result, many of the medical practitioners who take on obstetric patients or attach themselves to a maternity home often rely entirely on the knowledge they acquired in their undergraduate days. Quite often patients are sent to hospital only when they are gravely ill owing to the fact that early complications (often without warning) were not detected until the patients were in a critical condition. I cannot over-stress the urgency of instituting this requirement of 6 months postgraduate obstetric training, for the sooner it is introduced, the better it will be for the maternity service of Hong Kong. Meanwhile, our obstetric clerks must not be satisfied with just the proficiency of normal deliveries and they must be trained to be vigilant in the observation of obstetric patients so that early complications will not remain undetected until it is too late for adequate therapeutic treatment. The observation of pregnant patients should begin as soon as a patient becomes pregnant and should continue throughout pregnancy, labour and puerperium.

Detection of early complications associated with pregnancy commences in the antenatal period. It is important to detect such complications as heart disease, anaemia, toxaemia, haemorrhages in pregnancy, etc., so that appropriate treatment may be given. During labour, recognition of early uterine inertia, cephalopelvic disproportion, foetal distress etc. should be borne in mind. Whenever these signs are found, the patients should be sent to well equipped hospitals. Careful management of the third stage can reduce substantially the incidence of postpartum haemorrhage which ranks as the most predominant cause of maternal mortality in Hong Kong.

In the gynaecological field, good obstetric management reduces many gynaecological illnesses. It is important to recognize acute abdominal emergencies due to ruptured ectopic pregnancy, torsion of ovarian cyst, peritonitis and intestinal obstruction, so that the patient can receive prompt treatment in hospitals to prevent grave consequences or even death. Gynaecological cancer is the second most common cause of death in women. Early diagnosis by various methods of early detection and thorough pelvic examination can pick up early cases for treatment and improve the survival rate.

In conclusion, I do not expect a graduate without specialist training to treat complicated deliveries or perform operations to correct gynaecological conditions, but it is imperative to learn how to recognize early complications in the case of maternity patients and acute abdominal emergencies or cancer in its early stage in gynaecological patients. Prompt treatment can yield gratifying results. It is important to bear in mind that due to poor obstetric management a mother may become an invalid for life. A baby that is mentally deranged due to physical trauma is a permanent tragedy. Irregular hours and night work frequently deprive an obstetrician and gynaecologist from enjoying an easy and regular life but the specialties offer much in the way of satisfaction and reward.



An everyday scene at the old Tsan Yuk Hospital
1922 - 1954

The New Tsan Yuk Hospital

Professor R.E. Tottenham
M.D., F.R.C.P.I., F.R.C.O.G.
(1924-1935)

Professor W.C.W. Nixon
M.D., F.R.C.S., F.R.C.O.G.
(1935-1937)

Professor Gordon King
O.B.E., F.R.C.S., F.R.C.O.G.
(1938-1956)

"The Arches of the Years"

1887 Nethersole Hospital, then known as the Alice Ho Miu Ling Hospital, saw the foundation of the Hong Kong College of Medicine. The curriculum entailed Midwifery, Anatomy, Chemistry, Botany, Physiology, Materia Medica, Surgery, Dental Surgery, Medical Jurisprudence, Pathology, Opthalmic Surgery, and Hygiene.

1912 The University of Hong Kong was established into which the Colloge was incorporated as the Faculty of Medicine.

1922 Chairs of Medicine and Surgery were formally established.

1924 The Chair of Obstetrics and Gynaecology was set up, the first occupant being Professor R.E. Tottenham; both subjects were taught at the Government Civil Hospital.

1926 Obstetrics began to be taught also at the Tsan Yuk Hospital where the students on duty had to sleep on the verandah of the operating theatre.

1935 Dr. D.K. Samy administered the Department for 6 months on the retirement of Professor Tottenham.

1935 Professor W.C.W. Nixon was appointed to the Chair. During his two years' stay, he effected the re-organization of the Department. The Queen Charlotte Maternity Hospital classification of obstetric cases was introduced.

1938 Appointment of Professor Gordon King was made and he occupied the Chair until his resignation in 1956 when the University of Western Australia invited him to be their first Professor of Obstetrics and Gynaecology. To mention but a few of his many accomplishments: Within a month of his return to the Colony in 1945 after the Pacific War, Tsan Yuk Hospital was again in use as a teaching hospital; as soon as the Navy vacated Queen Mary Hospital in 1948 the Gynaecological Unit was set up there; the planning of the new 200 bed Tsan Yuk Hospital with quarters for resident staff and medical students and, thanks to the Royal Hong Kong Jockey Club's financial assistance, the building of the same. "This hospital has few equals", declared visiting Professor N.J. Eastman in 1956.

1956 Professor Daphne Chun was appointed to the Chair. A year later, the annual admissions at the Tsan Yuk Hospital exceeded 10,000 with resultant overcrowding. Although it was our policy to turn nobody away, some restrictions, however, had to be reluctantly imposed. From 1958 therefore, only elderly primigravidae, or patients with previous or immediate history of medical or obstetrical complications, or those with over four children were admitted. This measure had the result of bringing the annual figures down to approximately 6,000. With the closure in 1968 of the obstetric ward in Queen Mary Hospital however, figures have risen again to 7,000.

To cater for the increased number of doctors and students, the Royal Hong Kong Jockey Club once again came generously to the rescue donating a further floor to the Tsan Yuk Hospital: the old resident quarters were replaced by a midwifery school and an additional 50 beds, bringing the total up to 250 beds.

Maternal and perinatal mortality rates in the last two years had been happily reduced still further to 0.22 and 20.50 per thousand respectively.

1967 The Unit's teaching facilities at Queen Mary Hospital were immensely improved by the addition of an entire teaching floor, a new gynaecological operating theatre, and further beds for patients.

After inspection by the R.C.O.G. Hospital Recognition Committee in 1957, recognition was accorded by the Royal College of Obstetricians and Gynaecologists to the Department for trainees of the M.R.C.O.G. examination. We now have fairly adequate research facilities, most of the equipment having been provided by China Medical Board, New York. Currently the following research projects are under way:

1. Radio-immuno assay of human chorionic gonadotrophin for the study of highly malignant trophoblastic disease.
2. Induction of ovulation.
3. Hormonal imbalance in menstrual disorders.
4. Chemotherapy in choriocarcinoma.
5. Reversibility of tubal patency in monkeys after laparoscopic sterilizarion.

During the past twelve years about sixty papers by members of the department have been published in British, American and local journals; a chapter on trophoblastic disease has been contributed to Professor R. Kellar's "Recent Advances in Gynaecology", published by the University of Edinburgh, in 1968; a bilingual "Textbook of Practical Midwifery" is under preparation.

	Maternal mortality rate per 1,000 live births	*Perinatal mortality rate per 1,000 live and stillbirths*
1926—1941 (prewar in old T.Y.H.)	6.72	61.75
1945—1954 (postwar in old T.Y.H.)	0.84	37.00
1955—1968 (new T.Y.H.)	0.59	24.90

Portraits

THE STAFF

Professor Daphne Wai-chan CHUN, O.B.E.; M.B.,B.S.; F.R.C.S.E.; F.R.C.O.G.

Professor Chun graduated from the University of Hong Kong in May, 1940. After serving as a House Obstetrician in Tsan Yuk Hospital, she became the Second Assistant to the Professor of Obstetrics and Gynaecology in Hong Kong.

Seven months after the Japanese occupation, she left the Colony for Chungking, and there she was Senior Medical Officer in National Central Midwifery College. About a year later, she left China and went to London, where she stayed working as gynaecologist and obstetrician in four different hospitals successively. When the war was over, in July, 1945, she became a member of the Royal College of Obstetricians and Gynaecologists. She then persued her career in Surgery until 1949, when she returned to Hong Kong. Meanwhile she was admitted to Fellowship of the Royal College of Surgeons of Edinburgh in 1948.

After her return to Hong Kong, she became a lecturer in Obstetrics and Gynaecology. She was promoted to Senior Lecturer two years later, and was elected a Fellow of the Royal College of Obstetricians and Gynaecologists in 1957. She was appointed to the Chair of the Department at the same time and has been in that position ever since. She is a consultant in Obstetrics and Gynaecology to the Government of Hong Kong.

Apart from the above-mentioned posts, Professor Chun was the President of the Hong Kong Chinese Medical Association in 1964—66. For many years, she has been President of the Family Planning Association and of the Obstetrical and Gynaecological Society in Hong Kong, as well as a Member in the Hong Kong Government Midwives Board.

Professor Chun has published many articles in well-known medical journals. She has already had twenty-four publications up to 1967. At present she is preparing 'A Short Textbook of Practical Midwifery' with Dr. K. H. Lee.

Dr. Ho-Kei Ma, M.B., B.S., (H.K.), M.R.C.O.G., Senior Lecturer

Dr. Ma has since graduation in 1958 been a member of Department of Obstetrics & Gynaecology. She was awarded a British Commonwealth scholarship which enabled her to do some of her postgraduate work in University College Hospital and Hammersmith Hospital in London, 1962-1964. After obtaining membership of Royal College of Obstetricians and Gynaecologists, she spent several months studying endocrine cytology and applications and techniques of radioisotope work in medical research.

Dr. Ma was appointed Buswell Research Fellow of State University of New York at Buffalo as well as World University Fellow, 1966-1967. During the 16 months she spent in Buffalo, she carried out experiments on growing benign and malignant trophoblasts in tissue culture. She also took part in the analysis of the results of International Trophoblastic Disease Studies (our department included) sponsored by International Union Against Cancer.

Dr. Ma is especially interested in various aspects of trophoblastic disease and in infertility. Since her return from U.S.A. she has helped improve the gonadotrophin assay technique and start radioimmunoassays for quantitative measurement of gonadotrophins. She will soon study the immunological aspect of trophoblastic disease.

Dr. K. H. Lee, M.B., B.S., (H.K.), M.R.C.O.G., Senior Lecturer

Dr. Lee graduated from Wah Yan College, Hong Kong, in 1952. He studied medicine at the University of Hong Kong on a Government Scholarship. After graduation and internship, he was Clinical Assistant in Obstetrics and Gynaecology for one year before joining Government service.

During the subsequent 8 years in Government service, Dr. Lee had been working mainly in Tsan Yuk Hospital and the Gynaecological Unit of Queen Mary Hospital. In 1964, he took study leave in England on a Government Scholarship. After obtaining membership of Royal College of Obstetricians and Gynaecologists, he returned to the University Department of Obstetrics and Gynaecology. He was Honorary Clinical Lecturer and Medical Superintendent of Tsan Yuk Hospital until January 1969 when he took up the post of Senior Lectureship vacated by Dr. Carol Braga.

Dr. Lee has published more than ten articles on various subjects in Obstetrics and Gynaecology. He is the co-editor with Professor Daphne Chun in publishing "A Short Textbook of Practical Midwifery" which is under preparation.

His interests are mainly in obstetrics. He is currently engaged in research on amnioscopy and foetal blood sampling in the diagnosis of foetal distress, suppression of lactation, bacteriuria in pregnant women and the use of the vacuum extractor.

Besides academic interests, Dr. Lee has zealous enthusiasm in table-tennis. During his undergraduate days, he was the Chairman of the Hong Kong University Table-Tennis Club for three years. Now, he is still looking for a medical student who can beat him in table-tennis.

Our Water Marrow—
Dr. K. H. Mok

Dr. T. Y. Chau
以一敵二，吾何患焉

Dr. K. H. Lee and Dr. L. C. Wong
The invincible pair

Difficult, er?
Even harder
than a hysterectomy,
Dr. Soo?

Dr. H. N. Soo, M.B., B.S., (H.K.), M.R.C.O.G.,

Medical Superintendent, Tsan Yuk Hospital,
Honorary Clinical Lecturer, University of Hong Kong.

Dr. Soo matriculated from Wah Yan College in 1952 and graduated from the University of Hong Kong in 1958. After internship, he was appointed Clinical Assistant and Assistant Lecturer in Obstetrics and Gynaecology for one year each before joining Government service.

In 1965, he took study leave on Government Scholarship to England where he obtained his M.R.C.O.G. degree. After returning to the University Department of Obstetrics and Gynaecology in 1966, he was appointed Honorary Clinical Lecturer. He has also been Medical Superintendent of Tsan Yuk Hospital since January 1969.

Dr. Soo's interest is mainly in clinical obstetrics and gynaecology and has published several papers in both fields.

He is an enthusiast in boating and fishing.

Dr. Tse-Wen Wu, M.D. (China), M.B., B.S., Part-time Lecturer

Dr. Wu, after completing the middle school education in 1939, studied the premedical course at Soochow University in Shanghai. Due to the Sino-Japanese War, he went to Chengtu of Szechuen in 1942 to take up the medical course at West China Union University where he graduated with the degree of Doctor of Medicine in 1948. He then joined the University of Hong Kong as Demonstrator in Pathology under the late Professor P. C. Hou.

After further studies at University of Hong Kong Dr. Wu, upon passing the final examination, was awarded M.B., B.S. in 1953. He has since graduation been Consultant Pathologist to Hong Kong Sanatorium & Hospital as well as in private practice. He is now Part-time Lecturer in Exfoliative Cytology.

Dr. Paul Cheong-Fat Wong, L.A.H., M.B., M.R.C.O.G., Hon. Clinical Lecturer

Dr. Paul Cheong-Fat Wong, Head of the Department of Obstetrics and Gynaecology in the Nethersole Hospital, was appointed honorary lecturer in February 1969. He was a graduate from Dublin, Eire, where he spent more than eight years. His desire to remain in this peaceful Emerald Isle was so strong that he amassed a string of diplomas while prolonging his stay there. He has two diploma in obstetrics, one in Child Health and a license from the Apothecaries Hall, the latter entitles him to register as a pharmacist in Ireland.

He returned to Hong Kong in 1962 and worked in various Government Hospitals and the Nethersole Hospital before he went back to England to sit for the membership examination in July 1966.

Dr. Wong wishes to point out that the trip actually cost him only £220. It was the fare for immigrant offered by an airliner. The job in England enabled him to live and pay for the examination which shows that it does not require much hoarding to send oneself abroad for higher degrees.

Dr. K. K. Yeung, M.B., B.S., (H.K.), M.R.C.O.G., Lecturer

Dr. Yeung graduated from the University of Hong Kong in 1960. After internship, he joined the Government Medical and Health Department as Medical Officer and was posted as a trainee in the Department of Obstetrics and Gynaecology at Tsan Yuk and Queen Mary Hospitals. He received further training in England in 1967 and obtained M.R.C.O.G. in the same year. On his return, he joined the University of Hong Kong as Lecturer.

Dr. S. K. Yip. M.B.. B.S., (H.K.), M.R.C.O.G., Lecturer

Dr. Yip graduated from the University of Hong Kong in 1961. After his Housemanship he joined the Department of Obstetrics and Gynaecology as a Medical Officer. In 1967 he obtained his M.R.C.O.G. degree and in the same year was appointed Lecturer.

Dr. K. H. Ng, M.B., B.S., (H.K.), M.R.C.O.G., Lecturer

Dr. Ng graduated from the University of Hong Kong in 1961. After serving internship he was Registrar in Obstetrics and Gynaecology for 5 years in Queen Mary and Tsan Yuk Hospitals. In 1967, he went to England for higher study and obtained M.R.C.O.G. degree. He was appointed lecturer in 1968.

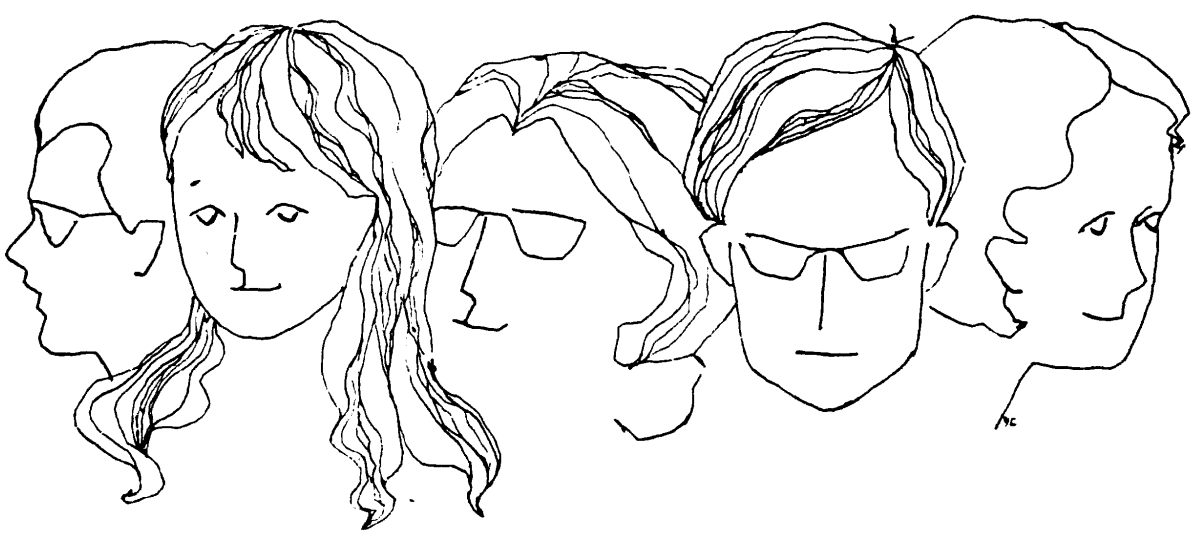
Dr. P. L. Chan, B.SC., M.D.,C.M., M.R.C.O.G., Lecturer

After graduation from King's College, Hong Kong, Dr. Chan went to study at McGill University, Montreal, Canada where he obtained his B.Sc. and M.D.,C.M. In 1963, after a year of internship, he returned to Hong Kong to join the University Department of Obstetrics and Gynaecology where he received postgraduate training.

In 1967, Dr. Chan went to England on a grant from the British Council, and passed his M.R.C.O.G. examination. He returned in 1968 to resume his teaching post.

Dr. Effie Chang, M.B., B.S., (H.K.), M.R.C.O.G., Medical Officer

Dr. Chang matriculated from Diocesan Girls' School in 1959 and graduated from University of Hong Kong in 1964. After one year of internship, she joined Government service and undertook training at the University Department of Obstetrics and Gynaecology. In 1968, Dr. Chang took study leave on a Commonwealth Scholarship to England where she obtained the M.R.C.O.G. degree. In March, 1969, she returned to Hong Kong and resumed clinical and teaching duties at Tsan Yuk Hospital.



RECURRENT PYOGENIC CHOLANGITIS*

G. B. ONG,
O.B.E., F.R.C.S., F.R.C.S.E., F.A.C.S., F.R.A.C.S.

'Recurrent pyogenic cholangitis', a term first introduced by Cook, Hou, Ho, and McFadzean (1954), is a disease entity prevalent in Hong Kong. Stock and Fung (1962), in referring to this condition, called it 'cholangiohepatitis'. This word was coined by Himsworth (1947) when describing the inflammatory changes that took place in the intrahepatic ducts and liver parenchyma secondary to obstruction of the extrahepatic bile-ducts by an impacted stone or tumour. The confusion in terminology of this disease is now clarified and the generally accepted term used in Hong Kong is 'recurrent pyogenic cholangitis'. This is appropriate, for the principal feature of the disease is a recurrent inflammation of the bile-ducts caused by enteric bacterial infection. The liver parenchyma is secondarily involved.

Attention was first drawn to its occurrence in Hong Kong by Digby, who, in 1930, described 8 cases. This condition is characterized by chill, fever, pain, and jaundice. There may be several attacks extending over a period of years. It may either end in biliary cirrhosis or terminate fatally in liver failure in one of the acute episodes.

INCIDENCE

It is one of the most common causes of acute abdominal emergencies admitted to hospitals in Hong Kong.

These patients belong to a lower-income bracket and their food is of a poor quality with insufficiency in protein and fat.

The incidence of recurrent pyogenic cholangitis is equal in both sexes (Cook and others, 1954; Ong, 1962; Chou and Gibson, 1967). A similar sex incidence is the conclusion arrived at by Rufanov (1936) in his studies on intrahepatic stones. When the stones have a high bile-pigment content, like those found in Japan (Maki, 1961), the sex incidence is also equal. The stones described by both authors are similar to those found in recurrent pyogenic cholangitis.

The disease is most prevalent between the ages of 30 and 40. In one series (Ong, 1962) the youngest patient was 12 years of age and the oldest was 78.

CLINICAL HISTORY

A typical history is a recurrent attack of chill, fever, pain, and jaundice. The fever is usually ushered in by chill or rigor. This is followed by pain and jaundice. It may last for a few days and then gradually subside. There may be several attacks before the patient seeks admission to hospital. The period of remission varies and the interval between each attack may be as long as a year. With each episode, the severity of each symptom is increased and the period of remission is shortened. The fever is moderately high, reaching a level of 101°F., but occasionally it may be as high as 104°F. or 105°F.

Pain is a frequent complaint. The severity varies. It is usually described as gnawing or cutting in character. Sometimes it is colicky. It may be located in the epigastrium or right hypochondrium and radiating to the back or referred to the shoulders. Referred pain to the shoulders is present in over 40 per cent of cases.

Jannudice may be mild and limited to a yellow tinge of sclerae. Extreme jaundice is also met with on occasions. In the majority of cases, it is quite obvious and is noticeable to the patient himself. The urine is always dark, but clay-coloured stool is an unusual feature.

Vomiting is present in over 80 per cent of cases. It is never very severe, and vomitus at first consists of food taken but later may be described as greenish fluid.

* *Reprinted with kind permission from Medical Annual, 1968.*

FINDINGS ON PHYSICAL EXAMINATION

Examination of the upper abdomen is often difficult due to the rigidity and tenderness. However, gentle palpation may reveal an enlarged gall-bladder in about one-third of cases. Sometimes in a thin subject outline of the gall-bladder can be seen to move with respiration.

The enlarged liver is palpable in 59.5 per cent of the cases, while the spleen is felt in 26.5 per cent (Ong, 1962).

BLOOD EXAMINATION

Leucocytosis is always found. The elevation of polymorphonuclear leucocytosis is not usually high but in an occasional case a white cell-count of 30,000 per c.mm. may be encountered. This leukaemoid response is seen where the infection is unusually severe. Flemma, Flint, Osterhout, and Shingleton (1967) reported a similar finding in heavy infection of the biliary tract by Gram-negative organisms. A similar response is seen in fulminating secondary infection of the biliary tract in heavy *Clonorchis sinensis* infestation (McFadzean and Yeung, 1965).

Alkaline phosphatase estimation is invariably raised. The range varies and in some cases will remain high for as long as 6 months before finally reverting to normal. This occurs even in cases which have undergone successful surgical treatment.

Bilirubin is raised in all cases with an average of 6.8 mg. per cent. Serum amylase was raised in 24 out of 192 cases or 12.5 per cent. Estimation of the blood for other tests of liver function is normal.

Urine usually shows an increase of urobilinogen and presence of bile. Stool examination reveals presence of *Clonorchis* ova in 25 per cent, while *Ascaris* ova is demonstrated in 12.9 per cent.

Bile is usually infected with enteric organisms. A positive culture is found in 88.2 per cent. The most common of the enteric organism is *Escherichia coli*. In 4 per cent of recurrent pyogenic cholangitis, *Salmonella* is the causative organism (McFadzean and Ong, 1966).

X-RAY EXAMINATION

Plain X-ray of the abdomen does not as a rule show any abnormality. Air may at times be detected in the biliary tract. There has been much discussion concerning the presence of air in the bile-ducts. It is believed by Fung (1961) to be the result of infection by a gas-forming organism. This is mere speculation, for he did not demonstrate the presence of any such organism. On the other hand, a fistula between the lower end of the common bile-duct and duodenum, and in some cases an incompetent sphincter of Oddi, have been shown to be the cause of this air in the biliary tract (Ong, Lee, Low, and Iu, 1962).

Oral cholecystography does not as a rule show any concentration of the dye in the gall-bladder. However, intravenous cholangiography with a 40 per cent dose of biligrafin (Scherring) in some cases may reveal a dilated biliary tract with radiotranslucent stones as filling defects.

FINDINGS AT OPERATION

1. Liver

The liver is usually found to be enlarged at operation, although sometimes on clinical examination it may not be palpable. Adhesions between the superior surface of the liver and the diaphragm are found in almost all cases. This will account for the high incidence of referred pain to the shoulders. Congestion of this organ may be marked but scarring in it of varying degree is a common finding. The small bile-ducts proximal to these scars may be dilated. Sometimes concretions can be felt in the dilated ducts.

An operative cholangiogram may show stricture of the intrahepatic ducts. It may be in any one of the main ducts but more frequently it is the left one that is involved (Fig. 1). This is also the observation of Huang, Huang, Liu, and Yang (1962). The cause of the stricture is believed by these authors to be ulcerative cholangitis.

While this may be the possible cause, it is more likely to be the result of parenchymal inflammatory reaction around the ducts. This is followed by local hepatic necrosis and scarring which leads to constriction around the main duct.

Examination of biopsy specimens shows distinct features. There is an increase of fibrous tissue in the portal tracts especially around the bile-ducts and portal radicles. Proliferation of the bile-ducts is always present, while inflammatory cellular infiltration is found not only in the portal tracts but also in the lymphatics and the liver parenchyma. Leucocytic reaction in the liver parenchyma diminishes near the central vein. In more severe cases this inflammation undergoes suppuration and abscess formation. Thrombophlebitis of the portal venous radicles may be observed.

2. Gall-bladder

This may be greatly distended and attain tremendous size. The serosal surface in the majority of cases appears normal and no adhesions are noticed. At times with repeated infection of the gall-bladder it may become contracted with dense adhesions. Such a gall-bladder may contain stones of the mixed variety. The mucosal lining in almost all cases shows some changes. There is ulceration and in extreme cases the lining may be completely denuded of epithelium.

a. Extrahepatic Ducts.—The common bile-duct may be very much dilated. It is quite usual to find a duct with a diameter of 1 in. The largest of these may be 3 or 4 in. across. Some of these ducts have thin and elastic walls, but in the majority the walls have become permanently dilated with an increase of fibrous tissue. This dilatation extends all the way to the sphincter of Oddi. Such ducts are rigid and never revert to their original size even after all obstructions have been removed.

b. The Sphincter of Oddi may undergo inflammatory changes and in some of them adenomatous formation takes place. When inflammation of the duodenal papilla is present, spasm of the sphincter occurs and any stone in the common bile-duct may become impacted at a point just above it. This can lead to pressure necrosis at the lower end of the common bile-duct and the stone may be dislodged into the duodenum (Ong and others, 1962; Shiu, 1967).

c. Stones.—Radiotranslucent stones with high pigment contents may be found in any part of the biliary tract. In the intrahepatic ducts they are more frequently found in the left main duct and when they are deep in the substance of the liver parenchyma may not be palpable. This can only be detected by carrying out operative cholangiography (Fig. 2). At times their shapes may be moulded by the dilated intrahepatic ducts (Fig. 3).

About 50 per cent of the stones are found in the common bile-duct while about 15-20 per cent are found in the gall-bladder.

The pathogenesis of stone formation in recurrent pyogenic cholangitis is still not completely understood. Parasitic remains of *Ascaris lumbricoides* and *C. sinensis* have been shown to be a nucleus for stone formation.

Teoh (1963) examined 40 stones and in 16 he found remnants of *Ascaris* while in 8 cases he could demonstrate the remains of *C. sinensis*. Maki (1961), using a different technique, demonstrated parts of *A. lumbricoides* in about 50 per cent of the stones found among the Japanese.

It is generally agreed that stone formation does occur when parasites live in the bile-ducts, as in *C. sinensis*, or inadvertently migrate into the bile-ducts, as in the case of *A. lumbricoides*. However, secondary infection must also be present, for it is only when *Clonorchis* is incubated with *Esch. coli* and polyphenols that dark precipitates occur (Ma, 1966, 1968). In experimental clonorchiasis, bile salt content is low and, because of this diminished detergent property, may lead to stone formation (Ma and Chen, 1967).

Thus there may be several factors at play when stones are formed in recurrent pyogenic cholangitis. Chou and Gibson (1967), on the basis of 28 autopsy studies, believe that recurrent pyogenic cholangitis is the result of biliary-tract obstruction by

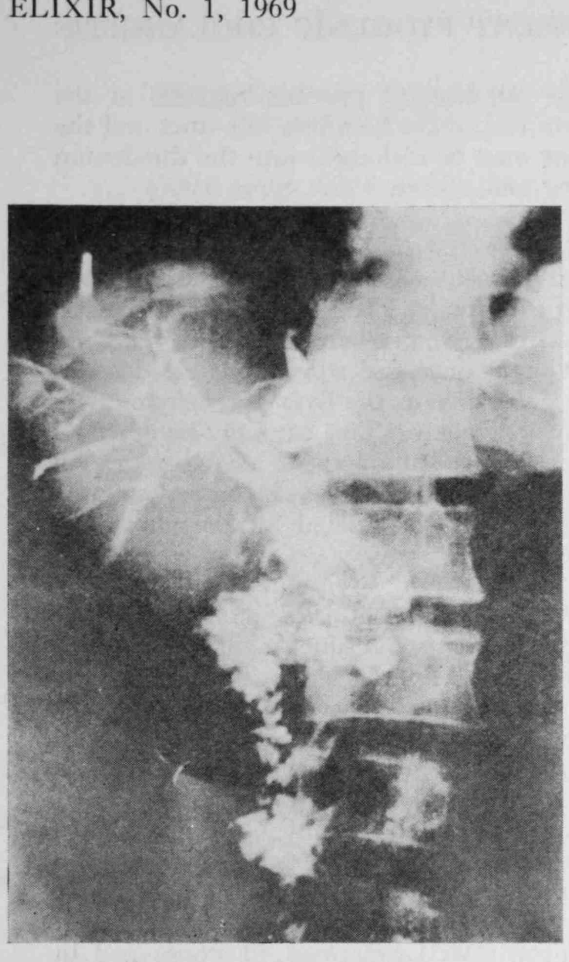


Fig. 1—Cholangiogram showing stricture at the left segmental duct.

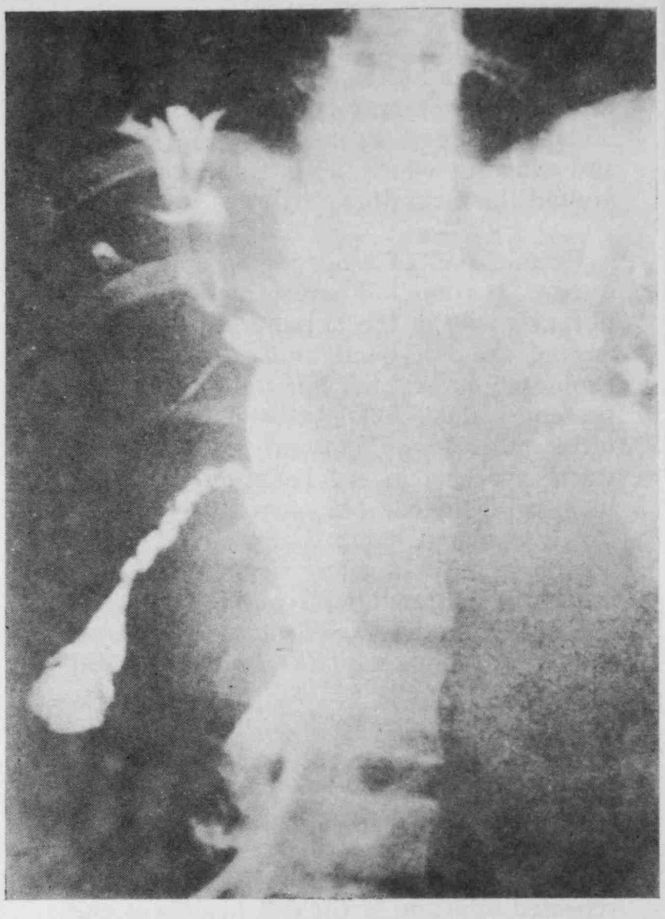


Fig. 2—Stricture of left segmental duct with multiple stones proximal to it.

Fig. 3—Post-mortem specimen of the liver showing pigment stones which are moulded by the dilated intrahepatic ducts.

stones or 'biliary mud'. That this is not so is shown by the fact that in some cases with proved cholangitis no obstruction can be demonstrated by operative cholangiography.

COMPLICATIONS

1. *Liver Abscess.*—This may be single or multiple. One or both lobes of the liver may be studded with abscesses. These are usually not connected with the bile-ducts. They are the result of infection via the portal vein. Some of these may coalesce and form one large abscess. At times the abscess formation results from rupture of the obstructed smaller bile-ducts. The abscesses may rupture in the subdiaphragmatic space and at times through the diaphragm into the pericardial sac or pleural cavity. Suppurative pericarditis is a rare complication.

Empyema thoracis or lung abscess may develop as the result of the subphrenic abscess.

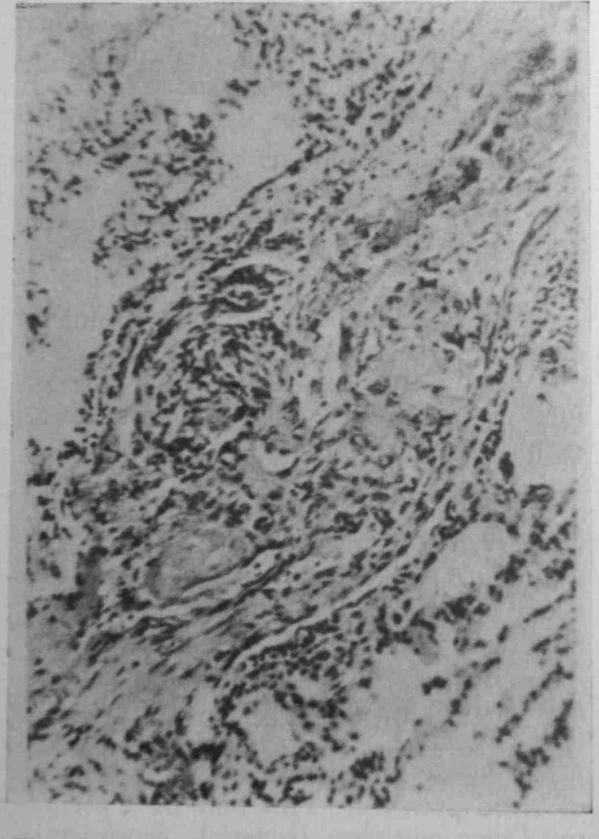


Fig. 4—Organized septic embolus in a pulmonary arteriole, H. and E. (x 120)

2. *Rupture of Gall-bladder.*—An empyema of the gall-bladder may develop which may rupture, giving rise to generalized peritonitis.

3. *Pancreatitis.*—This complication occurs in about 12.5 per cent of cases. Very few of these are fatal when adequate and prompt treatment of the diseased biliary tract is undertaken.

4. *Gram-negative Septicaemia.*—This is a serious complication and may end fatally unless prompt treatment is carried out. Decompression of the obstructed biliary tract should be done. Clinically, this is manifested by shock. Usually a short period of hypertension occurs before the onset of shock. Positive blood culture can usually be obtained. Flemma and others (1967) believe that overdistension of the smaller bile-ducts may cause a break in the epithelium and that this may cause the organism to gain entry into the blood-stream.

5. *Thrombophlebitis* of the hepatic veins may on rare occasions give rise to septic emboli which may be lodged in the pulmonary arterioles (Fig. 4). This may result in pulmonary hypertension. This observation was first made by Lai, McFadzean, and Yeung (1968).

DIAGNOSIS

With a history of upper abdominal pain, fever, and jaundice which may at times be mild, a tentative diagnosis of recurrent pyogenic cholangitis may be made. Examination may show an enlarged liver or the gall-bladder may be palpable. Urine will show the presence of bile. Raised alkaline phosphatase is suggestive of the disease.

When successful, an intravenous cholangiogram not only confirms the diagnosis but also shows the state of the bile-ducts and the presence of stones. A percutaneous cholangiogram should be restricted in its use for it may provoke acute septicaemic shock. Even if septicaemia does not develop, leakage of infected bile will lead to peritonitis.

Needle biopsy of the liver in selected cases may establish the diagnosis when all other ancillary methods have failed.

Among the conditions that may be mistaken for this disease is viral hepatitis. This is especially likely when jaundice is found to be persistent and there is mild pain. Blood chemistry in certain cases may not be of great help. Here a percutaneous cholangiogram, despite its risk, will be an aid in establishing a diagnosis.

During an acute attack, ruptured liver abscess may be mistaken for recurrent pyogenic cholangitis. However, there is, as a rule, no jaundice and a plain X-ray of the abdomen will show an elevated diaphragm. There may or may not be previous history of amoebiasis. The differentiation may not become obvious even at operation, for the cause of peritonitis in ruptured amoebic abscess may be missed by the inexperienced surgeon. In such cases, the superior surface of the liver must be explored and the abscess found. The rest of the liver and the extrahepatic ducts will appear normal.

Ruptured primary carcinoma of the liver may be another condition that is often confused with recurrent pyogenic cholangitis. This is very likely to occur when the rupture is of a slowly leaking variety. Spasm and pain of the upper abdomen may be present without any sign of acute blood-loss. The liver may be palpable and nodular in primary carcinoma of liver. This is unlike the palpable liver in recurrent pyogenic cholangitis in which the edge is sharp and smooth.

When jaundice is mild, diagnosis of perforated peptic ulcers may be erroneously made. Free gas in the abdominal cavity, when demonstrated by X-ray, makes the differentiation between the two conditions possible. In a small percentage of cases when the perforation has been sealed off and no free gas can be demonstrated, the history and careful examination will be of greater help in the differentlal diagnosis than laboratory methods.

Acute appendicitis that has ruptured with peritonitis may mimic recurrent pyogenic cholangitis. This error in diagnosis is much more likely to be made when the latter is complicated by empyema of the gall-bladder or pancreatitis. Here a detailed history and careful physical examination are of much more help in arriving at a correct diagnosis than ancillary aids. When the condition is so acute, even with doubt in the diagnosis, exploratory laparotomy ought to be undertaken.

TREATMENT

1. Conservative Management

In the majority of cases, remission of the condition will take place with conservative treatment. This consists of intravenous fluid administration. Pain is controlled by small doses of pethidine. An hourly chart of pulse-rate, temperature, and blood-pressure is kept. Vomiting is relieved by aspirating the stomach through a nasogastric tube. A 30-mg. dose of intravenous vitamin K is given daily. Antibiotics are given in adequate doses. In most cases, penicillin and streptomycin may be sufficient to control the infection. Other broad-spectrum antibiotics like terramycin of chlor-amphenicol may be used. The newer antibiotics like ampicillin should be reserved for cases of severe infection.

It is desirable to induce a remission of the disease as this will give the surgeon time to prepare adequately the case for definitive treatment.

Intrahepatic stones may be found at operation. During emergency operation, the state of the patient may not warrant further extensive surgical procedures required to deal with these stones.

Indications for Surgical Intervention.— Conservative management must be abandoned and emergency surgical measures taken under the following conditions:—

a. Severe colic with a tender and palpable gall-bladder not relieved by analgesics.

b. Rising pulse, with a steady elevation of blood-pressure. This may be a prelude to Gram-negative bacterial septicaemia. Unless decompression of the biliary tract is carried out, septicaemic shock from which

recovery may not be possible is likely to take place.

c. Signs of generalized peritonitis.

2. Operative Treatment

The aim of surgical treatment is to remove, where possible, all stones and establish drainage of the biliary tract.

a. External Drainage—Choledochostomy and T-tube Drainage.—In acute surgical emergency treatment, when stones are obstructing the common bile-duct, choledochostomy is carried out and T-tube drainage established. This may be all the treatment that is necessary when the dilated common bile-duct is thin-walled and elastic. After removing the obstruction, the common bile-duct in such cases will revert to its former dimension.

In some desperately ill cases with septicaemic shock, the surgeon may be forced to decompress the bile-duct under local anaesthesia. Even if there is a stone impacted in the common bile-duct, its removal, when difficult, is not necessary. Insertion of a T-tube for decompression may be all that needs to be done. The stone that is left is removed as a secondary procedure.

McFadzean and Yeung (1965) reported 11 cases of fulminating *Esch. coli* infection in heavy clonorchiasis which presented with hypoglycaemic coma. One of their 2 cases recovered when subjected to surgical treatment. The other would have recovered but for secondary haemorrhage. All the 9 cases managed medically died in septicaemic shock. They concluded that treatment of their cases would not be effective without relief of obstruction of the biliary system. Similarly, this is our experience of septicaemic shock in recurrent pyogenic cholangitis.

b. Internal Drainage—Choledochoduodenotsomy.—This can be carried out either through the transduodenal route or at the supraduodenal portion of the common bile-duct.

Transduodenal choledochoduodenostomy: It was first performed by McBurney in 1891. The indications for this operation in recurrent pyogenic cholangitis are:—

When the common bile-duct is permanently dilated and fibrosed so that it loses all elasticity.

This dilatation extends down to its retroduodenal portion.

As a secondary procedure for removal of stones left behind either intentionally, as in septicaemic shock, or when a postoperative cholangiogram reveals that a stone at the lower end of the common bile-duct has been missed.

This procedure can be done either as a transperitoneal or extraperitoneal approach.

A right transrectus incision is made in all cases. Exploration of the abdomen with particular attention to the biliary system and liver is carried out. The second part of the duodenum is entered by making a longitudinal incision through its anterior wall. Identification of the duodenal papilla usually presents no difficulty. When it is not inflamed and stones are not impacted, it can usually be felt by palpation. Squeezing the gall-bladder will cause the bile to drain out and this helps its localization.

Incision of the sphincter is best done with scissors and the cut is made as lateral to the common bile-duct wall as possible. As each cut is made the duodenal and common bile-duct walls are anastomosed till the largest diameter of the dilated common bile-duct is reached. Stones and sludge can be removed through the stoma of this anastomosis. Intrahepatic stones will need a separate incision in the common bile-duct for their removal.

The duodenal incision is closed in two layers of catgut. A T-tube is inserted through the choledochostomy opening into the common duct and the abdomen closed.

The extraperitoneal approach has the advantage of avoiding the dense and vascular adhesions following repeated surgery. It has also the advantage of early convalescence and recovery together with the ease of the operation.

However, it has the disadvantage of limited application, for exploration of the abdomen and the liver is not possible. Hence it is only suitable as a secondary procedure for removal of stones lodged at the lower end of the common duct.

A transverse incision is made midway between the xiphisternum and the umbilicus. The muscles are cut in line of the incision. The peritoneum is stripped from the right kidney which forms the landmark to the second part of the duodenum. The anterior wall of the duodenum is opened by a longitudinal incision. The rest of the procedure is similar to that carried out in the transperitoneal choledochoduodenostomy. The incision is closed in layers with drainage of the extraperitoneal space.

Supraduodenal choledochoduodenostomy: Digby (1930) operated on 1 case in which he transected the common bile-duct, closed the lower divided end, and anastomosed the upper end to the duodenum. Stock and Tinckler (1955) modified this procedure and made a side-to-side anastomosis between the common bile-duct and the duodenum.

The latter procedure works when the dilatation of the common bile-ducts stops at its supraduodenal portion. The effect of such an anastomosis will be similar to the result of the end-to-side anastomosis as performed by Digby. However, when the dilatation of the common bile-duct extends all the way down to the sphincter of Oddi, drainage of the biliary tract will only be brought about as a spill-over. The dilated duct below the anastomosis will form a cul-de-sac where stasis will lead to further stone formation.

The results of these three procedures vary. Provided there is no reflux and adequate drainage is obtained the result will be good.

Reflux poses two dangers:—

1. It sets up a serious persistent cholangitis so that at subsequent operation the common-duct mucosa can be seen to be covered by granulation tissue.

2. Reflux of duodenal contents into the intrahepatic ducts which are stenotic may cause stasis and lead to development of liver abscess. This complication often leads to a fatal termination.

Choledochojejunostomy.—This operation is carried out when the common bile-duct is dilated and irreversible fibrotic damage has taken place. It may be combined with cholecystectomy or segmental resection of the liver.

A Roux-en-Y anastomosis between the divided common bile-duct and a loop of jejunum is made. This presents no difficulty as the calibre of the duct is almost equal to that of the jejunum. For good results, the vertical limb of the jejunal loop must be at least 18 in. long. A one-layer anastomosis of interrupted catgut is preferable for this will prevent constriction at the anastomosis.

In carrying out this procedure mobilization of the divided upper duct must not be too extensive as this will interfere with its blood-supply. After all the stones are removed, temporary external drainage of the biliary tree is done by transhepatic tubes or T-tube.

The result of choledochojejunostomy in the treatment of recurrent pyogenic cholangitis is superior to any of the other procedures. Excellent results are obtained in over 80 per cent of cases. Long-term follow-up of over 10 years has shown symptom-free remission to be a constant finding.

Cholecystectomy.—In this disease, 'the gall bladder is more sinned against than sinning' (Cook and others, 1954). We subscribe to this conclusion. The gall-bladder often recovers following removal of obstructing stone. However, under the following conditions, cholecystectomy is done:—

1. Empyema of the gall-bladder with threatening or actual rupture.
2. Contracted gall-bladder.
3. Multiple stones in the gall-bladder.

The stones may be either radio-opaque or translucent without involving the rest of the biliary tree as shown at operative cholangiogram.

Segmental Resection of Liver.—This is necessary when the intrahepatic ducts are strictured and multiple stones are formed proximal to the ducts. It is also indicated when the liver parenchyma has been destroyed as the result of disease.

This operation is usually combined with one of the drainage procedures described.

SUMMARY

Recurrent pyogenic cholangitis is a disease entity very prevalent in Hong Kong. This term is preferable to 'cholangiohepatitis'. It is the result of recurrent infection of the biliary tract by enteric organisms. The disease is manifested by Charcot's intermittent biliary fever. Stones are usually found with strictures of the intrahepatic ducts. The diagnosis can be very difficult despite the application of various ancillary diagnostic aids.

Treatment is indicated in every case and is initially done with a conservative approach. Definitive treatment is carried out by removing all obstruction and establishing drainage of the biliary tract.

Drainage can be effected by external drainage with a T-tube or internally by one of the choledocho-enteric anastomoses.

Cholecystectomy or segmental resection of the liver may be necessary.

The results of surgical treatment can be expected to be good if all the stones can be removed and drainage of the biliary tract is successfully done.

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STUDENT PARTICIPATION IN MEDICAL RESEARCH

Investigation of Asymptomatic Bacteriuria in Chinese Pregnant Women

By S. L. et al

Introduction:

The presence of asymptomatic bacteriuria, which is not necessarily associated with pyuria (Brumfitt and Percival, 1964) or with inflammation of the bladder mucosa (Fairley, Bond, Adey, Habersherger and McCredie, 1966) is a frequent finding in pregenant women. Interest in this condition was stimulated by the studies of large groups of individuals by Kass (1956) who reported in 1967 a prevalence of 6% among 6,000 such patients in Boston, Massachusetts, and also by Little in 1966 an incidence of 5.3% in 5,000 women attending two London antenatal clinics. The reports showed an increased incidence of acute pyelonephritis and premature babies among women with bacteriuria and also suggested that bacteriuria was associated with, or might progress to, chronic pyelonephritis which could be avoided by the eradication of the bacteriuria in early pregnancy.

It is not the purpose of this short article to go into the details of asymptomatic bacteriuria in pregnancy, but rather it is intended to give a factual description of how a research programme for investigating this condition is being carried out in Tsan Yuk Hospital under the direction of Dr. K. H. Lee of the Department of Obstetrics and Gynaecology with the assistance of the Department of Microbiology and the help of some obstetrical specialty clerks.

The purpose of this research programme is to find out the incidence of asymptomatic bacteriuria among Chinese pregnant women. Since it is no longer justifiable to obtain catheterized specimen of urine for culture (Brumfitt, Davies, and Rosser, 1961) midstream specimens are taken and those containing 100,000 or more organisms per ml. of urine are termed "significant bacteriuria" (Kass, 1956).

Procedure:

We started our project on the 14th of May, 1969, a Wednesday booking clinic day at Tsan Yuk Hospital. Thereafter, patients are chosen every Wednesday until a substantial number of patients had been collected for adequate assessment of results. Ten patients were taken from each Wednesday booking clinic, preferably those who were in the first or second trimetser. They must have no urinary symptoms and no other complications which might influence the results.

To begin with, the obstetric clerk asked the patient questions such as "Do you have any pain during micturition?" "Do you have loin pain?" (applying pressure at the same time over the renal angle of the patient) "Do you have suprapubic discomfort or pain?" (Pointing to the Patient's suprapubic region) "Do you ever pass red urine or have blood in the urine?" If any of these preliminary questions received an affirmative answer, the patient was discarded.

The actual collection of midstrean urine was a tedious and difficult job because if it is not properly collected, the specimen would be contaminated (especially when it comes to medical students who feel so uneasy whenever sterile apparatus and techniques are used and required). The patient was asked to go into the lavatory in the admission room to wash her hands clean with soap and water and wipe dry with a clean towel. One obstetric clerk stayed with the patient inside the cubicle where the midstream urine was to be collected. (One can appreciate how a female medical student is most indispensable and convenient in this situation!) After removing her underwear, she was asked to stoop down. She was instructed to separate her vulva with one hand and use the other hand to hold the

sterile cotton wool swabs soaked with distilled water. She swabbed her vulva from before backwards four times with four different cotton wool swabs. With the vulva still separated, she was given a sterile kidney dish held by its bottom (to avoid contamination of the rim) and the midstream urine was collected. About 15 ml. of the urine was put into a sterile bottle, labeled and stored immediately at 4°C in the refrigerator for subsequent bacteriological studies. A separate portion of about 5 ml. was sent to Tsan Yuk Hospital laboratory to be tested for protein and for white cell count by a haematological counting chamber with Neubauer ruling.

The refrigerator specimen of urine were taken to the Microbiology Department. Q.M.H. immediately after the collecting session on the same day. In the laboratory, one ml. of each specimen was diluted with 9 ml. of distilled water. Five further dilutions were made. One ml. each of the last three dilutions, namely 1 in 10,000, 1 in 100,000 and 1 in 1,000,000 was mixed with nutrient agar and poured on to the plates.

Another 9 ml. of the specimen was centrifuged and a loopful of the centrifuged deposit was inoculated over a MacConkey agar plate and a blood agar plate.

These procedure were carried out by the obstetric clerks under the guidance of Dr. F.W.T. Wong of the Microbiology Department.

The culture plates were inoculated at 37°C overnight and the results read on Thursday morning. Those specimen containing 100,000 or more bacteria per ml. had the organism identified and sensitivity tests performed.

Patients with significant bacteriuria were treated with antibiotics according to the sensitivity tests and the whole procedure was repeated after treatment. They would also have their urine examined repeatedly during the rest of the pregnancy and in the puerperium. Intravenous urography would be carried out after delivery.

Patients whose urine contained 10,000 to 100,000 organisms per ml. were asked to come back and have another specimen taken.

It is of course not surprising to mention that there are many sources of contamination such as from the vagina and perineum of the patients, the hand of the nurses and medical students and faults in the bacteriological techniques. However, we hope to reduce these contaminations as we become used to the technique.

At the moment, this study is still in progress at Tsan Yuk Hospital. We are hopeful that our efforts will contribute to the successful outcome of this project. It shows that medical students can play an active and useful role in assisting and participating in clinical and laboratory research. We hope that this close cooperation between staff and students will spread to other departments.

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A CASE REPORT OF CHORIOCARCINOMA

By D. Chan

Introduction:

Choriocarcinoma is a form of trophoblastic neoplasia in which trophoblastic tissue invades maternal tissue and no chorionic villi can be demonstrated. Often, a case of choriocarcinoma can be seen in the gynaecology unit of our university.

Interest in trophoblastic diseases was revived after the discovery of Li and Hertig in 1956 that methotrexate is effective in the treatment of choriocarcinoma. This discovery concerns gynaecologists in Asia particularly where the incidence of choriocarcinoma and other trophoblastic diseases is high as compared with that of the rest of the world. In Hong Kong Chan (1953-1961) reported that the incidence of choriocarcinoma is 1:1331 deliveries whereas the incidence of mole being 1:242 deliveries. Similar figures were reported by Acosta—Sison of Phillipines and Tow of Singapore. The rate of molar pregnancy in European countries is around 1:2000-2500 deliveries.

This case report is chosen because the patient concerned presented with classical symptoms of choriocarcinoma, gives a typical history of having a molar pregnancy 6 years ago and can serve my point of illustrating the importance of preventing development of choriocarcinoma after molar pregnancy.

Case Report Summary:

Patient aged 38, first seen on 8th August, 1968 when she was referred to the University Gynaecolgy Unit from Queen Elizabeth Hospital, complaining of brownish stained vaginal discharge, chest pain, cough productive of blood streaked sputum and dyspnoea on exertion for the past two months.

She was mother of five children, ranging from 9-17 years old and her last pregnancy was in 1962, which turned out to be a mole. Her molar pregnancy was subsequently terminated in Kowloon Hospital by dilatation and curettage.

She attended the follow up clinic for two years before she defaulted. She remained well in the past six years and did not have any other pregnancy as she was on contraceptive pills throughout that period. Her present complaint began on 28th June, when she first noticed brownish vaginal discharge. She also noticed blood streaked sputum when she coughed; in addition to these, she also complained of chest pain and dyspnoea on mild exertion.

An X-ray film of the chest was taken, which showed up the snow storm appearance which was suggestive of pulmonary metastasis.

The patient was subsequently referred to Queen Elizabeth Hospital where a diagnostic dilatation and curettage was done. Choriocarcinoma was diagnosed on histological grounds and the patient was then referred to the university gynaecology unit.

On admission, physical examination revealed nothing contributory to the diagnosis save an area of dullness in the right lower zone of the chest. Human chorionic gonadotrophin in urine was assayed and the level was up to 219000-292000 i.u. per 24 hours. Intensive chemotherapy was decided upon as the treatment of choice and was started after the general condition of the patient showed improvement.

The patient showed marked response to the first three courses of methotrexate. X-ray film of the lungs showed marked resolution of metastatic lesions. H.C.G. assay showed a marked drop in titre to 3040-6080 i.u./24 hours at the beginning of the fourth course of methotrexate.

However, after the fourth course of methotrexate, response to chemotherapy seemed to level off. X-ray film subsequently taken showed increased nodular shadows suggesting increased activity of pulmonary deposits. The patient had probably developed resistance to methotrexate then. There was no response to the fifth course of methotrexate.

The patient was then switched over to Actinomycin D. Response was dramatic. After the third course, the H.C.G. titre dropped to 1600 i.u./24 hours. The secondary deposits in the lungs were almost completely cleared.

Before the fourth course of Actinomycin D. was started, H.C.G. level rose again to 3744-7488 i.u./24 hours. X-ray film of the lung remained clear. Metastatic sites elsewhere resistant to Actinomycin D were suspected.

On her final admission, patient complained of incapability of balancing, vertigo and dyspnoea. One week after admission, the patient became comatose and she died on 2 March, 1969.

Postmortem examination confirmed the diagnosis of choriocarcinoma; lesions were found in the uterus, in the cerebellum extending into the midbrain. The lung was practically clear of deposits.

The immediate cause of death was due to bleeding from the metastatic tumour in the brain stem, causing coning of the medulla endangering the vital centres.

Discussion:

Park and Lees (1950) calculated that patients with molar pregnancy before have 2000-4000 times greater chance of developing choriocarcinoma than if she had had a normal pregnancy. Hertig (1950) also reported that amongst women developing choriocarcinoma, 50% of them were preceded by molar pregnancy. A definite relationship between molar pregnancy and subsequent development of choriocarcinoma was therefore suspected. Choriocarcinoma developing from mole varies from 1.5% (Coppleson 1958) in Australia, 2.5% in U.S. (Hertig and Sheldon) and 13.5% in Singapore (Tow 1966). In the University gynaecology unit, basing on an analysis of 265 cases admitted between 1953-1961, Chun et al reported an incidence of 8.6% choriocarcinoma and 21.5% residual trophoblastic diseases.

Hence, to reduce the incidence of choriocarcinoma, proper management of molar pregnancy with a view of prevention of malignant changes needs no further emphasis.

Benign trophoblasts can invade surrounding tissue. Trophoblastic emboli spread via systematic circulation during labour and delivery. Maternal defence mechanism presumably can deal with the normal amounts of trophoblastic emboli. However, theoretically maternal antagonism may fail if the original trophoblastic emboli were too much or the defence mechanism becomes inadequate. Termination of molar pregmancy therefore, should aim at removal of as much trophoblastic tissue from the body as possible with minimal dissemination and for patients whose defence mechanism seemed less adequate (The high-risk group), special management should be instituted.

The high risk group of patients are around or over 40 years old or grand-maltiparitic when they develop molar pregnancy The patient in this report, age 38, with five children belong to this group. This grouping is based upon an analysis of the age and parity of patients with choriocarcinoma Tow (1964) pointed out that malignant change of molar pregnancy increases with age and parity of patient.

Primary hysterectomy is the method of choice for termination of molar pregnancy in this high risk group of patients. Hysterectomy though a major operation however, saves the patient from going into labour and reduces the chance of dissemination of trophoblastic tissue. Tow in 1966 reviewed 400 cases of molar pregnancy of patients in the high risk group. 200 of them had their uterus conserved, and subsequently 27 of them developed choriocarcinoma and ten of them died, while in the other 200 patients, primary hysterectomy was performed and again 27 of them developed choriocarcinoma, but only three of them died. All the 13 deaths of choriocarcinoma were initially treated with their uterus conserved. Tow therefore concluded that primary hysterectomy is the most effective means of combating malignancy and mortality incidence of mole in high risk patients.

The university gynaecology unit also carried out this radical approach to terminate mole pregnancy with high risk patients. Among the 26 cases so treated, 11.5% developed choriocarcinoma (Chun et al 1964). Between 1961-1965, primary hysterectomy was performed for another 24 patients and none of them developed choriocarcinoma after a 2-6 years follow up, though four of them develop residual trophoblastic diseases.

With patients not at high risk who want to preserve their uteri for future pregnancies, termination of pregnancy can be achieved through medical induction of labour with syntocinon infusion. In 1964, Chun et al reported on 56 cases induced by pitocin infusion. Results were encouraging, bleeding was minimal during expulsion of molar tissue. The incidence of subsequent trophoblastic diseases was only 7.1%. Syntocinon infusion from 10-200 i.u. with gradual increase in concentration in 500ml. of dextrose at 20 drops/min. was the method employed. A further 104 cases of molar pregnancy were admitted into the wards of the Gynaecology unit between January 1962—December 1965 and fifty of them received Syntocinon infusion either for arrest of bleeding or for induction labour. The overall incidence of trophoblastic diseases was 26% and of choriocarcinoma 10%. As for the control group of patients who received no syntocinon infusion at all, only one of them developed infiltrative mole.

From autopsy findings, Antwood and Park (1961) reported on the increased trophoblastic emboli in patients who died during labour, eclampsia and in shock. They attributed their findings to the fact that excessive uterine activity in such circumstances causes embolic dissemination. Syntocinon infusion definitely causes increased uterine activity and may aggravate trophoblastic embolic spread.

While thus disillusioned about the use of Syntocinon for the termination of molar pregnancy, Brandes et al offered new approach to the problem and reported on their successful application of suction for the evacuation of mole. This may be the future method of treatment should it stand further clinical trials.

Whilst the adequate management for the termination of molar pregnancy is still under speculation, the use of prophylactic chemotherapy after molar pregnancy has been brought up by the success of chemotherapy in the treatment of trophoblastic diseases. However, "since chemotherapy itself is potentially lethal, it is axiomatic that it should not be undertaken unless there is high degree of certainty that the patient's disease is more lethal than treatment." (Bagshawe 1963 a). Since only 21.5% of hydatidiform mole develops residual trophoblastic disease after molar pregnancy in Hong Kong, routine prophylactic chemotherapy is justified only when the mortality from such treatment is less than 25% of that of the disease.

With biological assay method, Hobson (1960) was able to show that patients with persistent H.C.G. level for four weeks after evacuation had residual trophoblastic tissue. On furhter analysis of the 265 cases of mole reported by Chun et al in 1964, it is found that 62.5% of patients with persistent high H.C.G. level for four weeks after evacuation of molar pregnancy subsequently developed choriocarcinoma. Hence, in the University Gynaecology Unit, if a patients H.C.G. level persisted to be high 4 weeks after termination of molar pregnancy, Chemotherapy should be instituted. At present, prophylactic methotrexate is given in 6 doses, twice weekly and in 3 week's time. The dosage is based on body weight, 0.6 mg/Kg i.m.i.

Despite all measures taken to prevent choriocarcinoma, a good follow up service is all the more important in detecting the earliest signs of residual trophoblastic diseases and choriocarcinoma. After molar pregnancy, a patient should be followed up for at lease two years. In the first three months, the patient should visit the clinic weekly, and in the next three months at fortnightly intervals. If no abnormalities are detected, the patient is advised to come back at least once a month for the next one and a half years. Choriocarcinoma usually develops within six months after molar pregnancy though it may develop up to 7 years after the previous mole. Hence with this follow up regime, most of the choriocarcinoma developed can

be detected early and treated early. Choriocarcinoma treated within four months of the disease has a much higher rate of remission. (85% Hertig).

In each visit, questions are asked about the regularity of menstrual period, the amount of vaginal discharge and whether the patient develops pulmonary symptoms. Urinary H.C.G. level is also assayed. If H.C.G. level is raised, thorough investigations are performed to locate the site of the tumour.

Amenorrhoea should be regarded with apprehension, and not simply as another pregnancy, though in such conditions, pregnancy test may be positive. Amenorrhoea may well be caused by increased H.C.G. activity, causing suppression of ovulation of the ovaries and hence it is an early symptom of significance. Luteal cysts if they persist after evacuation of molar pregnancy should again be regarded as a reflection of trophoblastic activity elsewhere and should H.C.G. level be raised, the patient would need proper treatment with chemotherapy.

Cockshott and Hendrickse et al reported on the use of pelvic angiography for the detection of trophoblastic tumours. Dilatation of vessels supplying the adnexia of the uterus, occasionally arterio-venous shunts through tumour deposits and, with serial photographs, the stasis of dyes in pelvic vessels are all signs of trophoblastic tumour as shown up in pelvic angiography. However, the greatest drawback of pelvic angiography is that it fails to show up extrapelvic trophoblastic activities and cannot detect choriocarcinoma at all if the primary lesion in the pelvis is minimal and metastatic lesions predominate. This investigatory method therefore, is not routinely employed in our mole clinic.

Conclusion: With proper management of molar pregnancy, prophylactic chemotherapy given when residual trophoblastic tissue is detected, and regular follow up of patients after discharge, it is hoped that the incidence of choriocarcinoma may be reduced in the years to come.

★ ★ ★ ★ ★

ECHOED REFLECTIONS

CLEMENT HO

Quietly there goes the evening bells
light gradually deserts the sky
As the first ray of the dying sun dims
darkness begins its reign
—Night has fallen.
Young people at the cross roads
groping puzzledly and undecidedly
Which road to follow
or where to go . . . . .
Illusions pave their paths
Confusions lead their way . . . . .
Already the night of their lives?
But time allows for only a short hesitation
age then impatiently urges them on
and makes them march,
timidly,
backwards,
to the future!

MEDICAL EDUCATION IN KOREA

Mr. Won Kyu Lee of the Severance Medical Students Association, and a graduate this year from the Yonsei University College of Medicine, Seoul, Korea, visited us on his way back to Korea from the Annual Meeting of World Student Christian Federation in Bangkok in March this year.

In an interview with the reporter of the Elixir, Mr. Lee depicted the general existing situation in the field of medicine profession in Korea.

Q. **Mr. Lee, could you tell us something about medical schools in general in Korea?**

A. Well, there are eight medical schools in the whole nation, out of which one is for women, the others being coeducational. Two are run by missionaries while the rest are run by government. The one where I come from, the Yonsei University College of Medicine, is the one with the longest history. Enrolment nevertheless is small, being only 80 in the freshmen year. Not all medical schools have good teaching hospitals. Students there have no chance for clerkships, and learn chiefly, from lectures without much practical experience.

Q. **What system is employed in your medical education?**

A. I should say it's a complete copy of the American system cut down to six years. These include two years in the premedical school where basic sciences are taught. Then in the medical school freshmen year we have anatomy, biochemistry, histology, and so forth. In the second year we begin on pharmacology, microbiology and pathology, while in the third year we have general surgery or medicine internship. In the final year there is no lecture at all, only clerkship in hsoptals. At the end of each semester there is an examination. The degree conferred on graduation is MD. This year only six-two graduated.

Q. **Do you have textbooks in Korean, and what is the language used in your lectures?**

A. They are all American textbooks and mostly the same ones you use here. We speak Korean in lectures, but we still have no translation of the English medical terminologies in Korean. For these English is used.

Q. **Does that create any undue difficulty for the students?**

A. It does. The nuisance of the whole fact lies in that we write in English so that nobody can read what is written. I think we have to develop our own lauguage in order to achieve greater communication between patients and doctors.

Q. **During your internship do you practise in all departments?**

A. Yes. That is one of the problems that many medical students complain about. Another complaint is that the salary during internship is terribly low, about US$30.00 per month, which is equivalent to the salary of the guard at the hospital!

Q. **What are the usual careers of your graduates? Do you have much facility for further research work?**

A. The most graduates go to the United States. They wish to have further

training there, and, if possible, the stay there the rest of the life. All the women go there enough after the ECFMG Examination*, but the men have to serve in the army for three years before they can leave the country. So far no government effort has been made to halt this 'brain-drain'. The rest of the graduates either receive further training in the hospitals or work in the basic sciences as professors. The professors themselves are particularly active in research work. Facilities for such research work are plentiful, particularly in our College, mostly on funds from the States.

Q. **Mr. Lee, is there any 'doctor-shortage' existing in Korea?**

A. It is a rather difficult question to answer. In one way there is. Most of the practising doctors concentrate in urban areas where doctors are in excess competition among themselves is high. There is in fact a deterioration of the profession's prestige in these areas. On the other hand rural areas are short of doctors.

Q. **Can you tell us something about student activities in medical schools and in a nation-wide sense?**

A. Of course there are the usual clubs like Tennis Club, Music Club and so on. And we have an annual drama competition in our College. Academically we have seminars and the Annual Research Seminar, run by students who have the chance to do research work during their vacation under the auspices of the professors, chiefly in fields of basic sciences, pathology or biochemistry. The students prepare their own papers and have a chance to give lectures to the others. One of the chief activities in summer vacation is the particupation in 'Mobile Clinics' for the 'doctorless' rural areas. These mobile clinic teams include professors and residents from hospitals while the students do the organizing and preparation. On the national-wide scale, we have the annual sport games among the medical schools and the Annual Research Seminar.

Q. **Can you tell us something about Korea's participation in international medical student movements?**

A. Well, I must say that it's a pity we are rather slow there, in spite of our efforts. One main handicap to our participation in international activities is the Government's strong restrictions on foreign travels. However we shall be joining the ARMSA very soon, and this will be our first step towards activities in this aspect.

Q. **Finally, Mr. Lee, what is your impression of the Medical Faculty here in Hong Kong?**

A. In general my impression is that it is a very wonderful university and the students have a very high standard of learning in medicine. And the greatest difference between medical students in Hong Kong and Korea is the former's active participation and initiative in study and discussions. Korean students are usually very passive and calm in discussion and do not express their ideas very well. I think your participation is very wonderful, very sharp, and having very good presentation. Another great difference would be of course the difference between an American and a British system of medical education.

*ECFMG: *Educational Council for Foreign Medical Graduates, All foreign medical graduates must pass this examination to qualify for the licensure examination in the United States.*

KINDEY TRANSPLANT

The Editors

I. ANATOMICAL ASPECTS

The old anatomists named the kidney *viscus eligantissimum*, that is, the most elegant organ, and that it is indeed. From the gross appearance to the fine microscopic structure the kidney dominates the other organs by the number of its aesthetic motifs and its elegance.

Position

The kidney is a retroperitoneal structure. The right kidney is lower and a little further away from the median line. The surface marking may be regarded as opposite a point on the anterior abdominal wall at a finger's breadth medial to the tip of the 9th costal cartilage, and the line joining the two hila is opposite the disc between the first and second lumbar. From the hilus, the ureter descends to the pelvis.

Lobulations

The kidney is divded into three lobes on both anterior and posterior surfaces by deep interlobar clefts which may sometimes be indistinct. These lobes are further subdivided into altogether 7 lobules by slightly shallower interlobular clefts. The three primary lobes are named from up downwards upper, hilar, and lower lobes, and the lobules, anteriorly and posteriorly, respectively. The anterior lobulation is separated from the posterior ones by a lateral longitudinal groove which marks between the anterior 2/3 and the posterior 1/3 of the substance of the kidney. This groove is known as Brodel's Line.

Blood Supply

The renal arteries are two large trunks arising from the aorta immediately below the superior mesenteric artery. They lie between the renal veins and pelvis and in addition the left lies behind the splenic vein, the body of pancreas, and usually the duodeno-jejunal flexure. Owing to the presence of the inferior vena cava on the right side of the aorta, it is slighlty easier to get a longer length of renal artery on the left. So that this kidney is usually preferred in transplants.

One or two accessory renal arteries are frequently found, especially on the left. Instead of entering at the hilus, they ussually pierce the upper or lower part of the kidney.

The renal artery divides at or in the hilus into five branches to supply the various lobules, or segments. They are, the apical, upper, middle, lower, and posterior branches.

It is important to realise that the inter-segmental arterial anastomosis does not exist, and such anastomoses occurs only in the capsular and extra-capsular tissues. This fact is of surgical and clinical importance. The absence of inter-segmental anastomoiss renders it an advantage whereby the surgeon can define the segment concerned by dye-injection into the particular segmental artery. Again the capsular and extra-capsular arterial anastomosis must be kept intact during the necessary vessel ligations in the transplant in order to maintain viability of the segment. Failure to do this leads to necrosis of the segment. However, owing to the small diameter and their relatively few number, the functions and importance of these anastomoses are still much doubted.

The venous system presents a different picture. There are large and numerous intrarenal veno-venous anastomoses present. The venules drain into three veins—upper, hilar and lower, on both anterior and posterior aspects of the kidney. Hence the venous system does not present difficulty to any appreciable extent in the transplantation.

Fine Structures

The kidney is a compound tubular gland enclosed in a strong cuapsule of connective tissue that contains a few unstriped muscle fibres. When cut open longitudinally, the kidney is seen to consist of an outer cortex and an inner medulla; both of which consist of closely-packed uriniferous tubules, the amount of interstitial connective tissue being very small in the cortex and rather more in the medulla.

The functional unit of kidney is the nephron which consists of a glomerulus and its tubule.

Nerve Supply

The renal plexus is continued into the kidney around the branchs of the renal artery to supply the vessels and the renal glomeruli and tubules. It is libale to be damaged in the operation. But this is of little importance. The function of kidney tubules in maintinaing electrolyte equilibium is regulated by hormones instead of nerves.

II. PHYSIOLOGICAL ASPECTS

Normal Physiological Function

The kidney is a versatile organ whose physiological functions include such important processes as pH regulation, electrolyte and water balance, excretion of metabolic end-products, selective reabsorption and maintenance of blood pressure. In renal failure, all these functions are impaired, i.e., homeostasis is disturbed and 'uraemia' results with acidosis, hyperkalaemia, cellular dehydration and failure to excrete nitrogenous waste products. Such an abonrmal state of the blood threatens life and the use of an artificial kidney may be required for the dialysis of blood. This may be achieved by the use of peritoneal dialysis or extracorporal dialysis. Nevertheless, this is but temporary. In such cases, kidney transplant is rendered necessary as a definitive treatment.

The kidney is an ideal organ to be transplanted because it is paired, its functions can be easily assessed and its vascular supply is relatively uncomplicated. Consequently, once satisfactory method of vascular anastomosis had been developed (Carrel 1902), renal grafts were made possible.

It is true that the kidney is prone to damage by ischaemia which inevitably occurs during transference from donor to recipient. Clamping the renal artery of a dog for as short a period as 15 mins. will result in proteinuria and defective urea concentration. This disturbance is associated with other gross and microscopic morphological changes. However, renal autografts performed show that renal function will return to normal gradually once vascularization is re-established. Hence ischaemia of kidney for *a short period of time* presents little problem to renal transplantation.

Function of a Transplanted Kidney

With adequate perfusion, the transplanted organ soon begins to function, and urine is formed within 90 minutes of the anastomosis.

However, in kidney transplant, as in all other homorgafts, the transplanted organ rarely functions for long, ie. they will soon be rejected by the recipient. The substances that provoke the immune response to homografts are called "histocompatibility antigens" and they are determined by dominant genes. The quantity of donor antigen appears to be related to the degree of renal damage: the longer the period of ischaemia during transplantation, the greater the tissue damage and the larger the amount of antigen detected in the renal vein plasma. The individual groups of antigen vary greatly in the strength of the barrier they present to the transplantion of tissues.

In renal transplant done in dogs, survival of 60 days and 30 days have occurred; but even then, there are changes in gross appearance and morphology of the transplanted organ (from autopsy). These occasional prolonged survivals are probably due to chance genetic compatibility of the donar and recipient, the transplant not possessing any strong histocompatibility genes which are lacking in the recipient.

In several species there is a close association between the genetic determinants of histocompatibility and those which de-

termine red cell antigens. In man the ABO system is of importance in tissue transplantation in that the strong haemagglutinating antibodies that follow appropiate immunization may profoundly influence the fate of the graft. Renal homografts from donor whose major blood group is other than O frequently fail to function within minutes after transplantation into recipients of an incompatible group.

Theories for the Induction of Rejection

Although there is no doubt that the rejection of allogeneic renal homografts is an immunological reaction, the precise mechanism of induction of the recipient's immune response is unknown. However, manifestation of the immune response usually occur after a latent period. Information about the foreign antigen may reach the recipient's lymphoid tissue in one of several ways.

1. It is possible that antigen from the homograft is quickly conveyed to the spleen and lymphoid nodes, where it enters the endothelial cells of postcapillary venules and arterioles. Small lymphocytes, as they traverse these cells in the normal process of recirculation, may there interact with the antigen and be stimulated to transform and enter into a proliferative phase. Such transformation of sensitized lymphocytes is known to occur both in vivo and in vitro. Later, specifically activated cells would return from the lymphoid tissue to the transplant.

2. Another possibility is that circulating lymphocytes, after early contact with the antigen of the homograft, leave by way of the blood stream, enter the recipient's lymphoid tissues, and there transform into large proliferating cells. The progency of these cells then return to the kidney via the lymph and blood stream.

Results from experiments have been found to be compatible with either the first or second hypothesis.

III. IMMUNOLOGICAL AND PATHOLOGICAL ASPECTS

An account of the pathology on the transplanted kidneys in various conditions is given. Effort is made to correlate the pattern of pathological changes with existing theories.

Untreated Transplants in Dogs

In a kidney transplant in dogs, the kidney usually ceases to function in 4 to 8 days if no drugs are used. When explored, the kidney is swollen to 2 or 3 times in weight. The capsule and perirenal tissues are thickened. The cortex is wider, pale and swollen. There may be petechiae scattered throughout the kidney, mostly in the medulla. Microscopically, there is infiltration of lymphocytes and a variety of cells with pyronine-positive cytoplasm, first in the cortex, then progressive into other parts of the kidney. Later the cells diffusely infiltrate the interstitium. Electron microscopy shows adhesion of such lymphocytes to endothelial cells lining the peritubular capillaries and venules in the cortex. Intimate association of these infiltrating cells with the endothelium is followed by disruption of the capillary walls. There is also swelling of the endothelial cells lining the arterioles and small arteries. The glomeruli undergo few changes, but the tubules are necrotic. There is shedding of the superficial part of the proximal tubular epithelium into the lumens. In more severe cases, there is widespread interstitial haemorrhage and oedema; polymorphs and macrophages are plentiful. The arterioles and small arteries undergo fibrinoid necrosis with plugging of their lumens with fibrin, platelets and cells. In cases where rejection occurs more slowly, there is tubular atrophy, interstitial fibrosis, far less cellular infiltration and fibrous obliteration of many peritubular capillaries, arterioles and small arteries. Some larger arteries also undergo fibrous intimal thickening.

Untreated Transplants in men and Uraemic Patients

In a renal homotransplant of man, if no special treatment is given, the transplant stops functioning very soon and the same pathology exists as in those cases in dogs in which rejection occurs rapidly. In uraemic patients, the homografts survive much longer, one even to 176 days. The pathology in these cases resembles cases in dogs with prolonged survival.

The failure of the above renal homotransplants is due to two events. First there is disruption of peritubular capillaries and venules caused by infiltrating host cells, and secondly there are endothelial swelling and vasoconstriction of arterioles followed by fibrinoid necrosis of the walls of these and larger arteries. As a result of these, there are interstitial oedema, haemorrhage, ischemic necrosis of the proximal tubules and functional arrest of the transplants.

Evidences suggest that the peritubular capillary damage is mediated by cell-bound antibody, whereas the fibrinoid necrosis of arterioles and arteries are caused by circulating antibody. They are normal reactions of the host in response to foreign antigens in the form of a transplant.

The reason why chronically uraemic patients do not reject their homografts so easily may be that their immunologic capacity is suppressed, both in delayed-type hypersensitivity and in the production of humoral antibodies.

Treated Patients just after Rejection Episodes

In patients who are treated with immunosuppressive drugs and just pass their rejection crises, the pathology of the kidneys resembles that in untreated dogs with a more prolonged course. Thus the kindeys are enlarged. Capsules are thickened, stripped easily. There are petechiae on the cortex and congestion in the medulla, and tiny areas of infarct. Microscopically, there are fibrinoid necrosis in arterioles and interlobular arteries, swelling of endothelial cells lining the arterioles, fibrin and platelet deposits on the intima of interlobular arteries, fibrous intimal thickening of these vessels, deposition of fat in the deep intima, reduplication of the internal elastic lamina and its rupture, and occasional thrombosis of small veins. Similar cellular infiltration is present but less severe. Tubular necrosis with active repair and protein casts are present. Some lymphocytes are found in the tubular lumens. They may be the cells that appear in the urine at the height of rejection. The interstitium shows oedema, some fibrosis, haemorrhage and collection of fibrin. There are little glomerular changes.

When the life of a kidney transplant is prolonged by immunosuppressive drug treatment, arterial and arteriolar lesions which are relatively minor and late features of the unmodified graft, become important features. The reasons for this may be that in patient receiving renal transplants, chronic uraemia and treatment depress but do not halt the immune reaction by the host against the transpant, and that with continuous existence of the graft in the host, the humoral aspect of the host's response becomes more important. This leads to antigen-antibody reaction in the arteriolar walls to cause damage to the intima and swelling of the endothelial cells. Prednisone administered during this time may suppress such reactions. The damage is reversible at the stage of endothelial swelling and even fibrinoid necrosis of arterioles. After these, the interlobular arteries are damaged and intimal change leads to platelets and fibrin deposition and healing is by fibrosis. The internal elastic lamina is ruptured and is never repaired.

Treated Patients Long After Rejection Episodes

Changes in transplants that have undergone rejection long ago are quite similar to those during an acute episode except that cellular infiltration and obliterative vascular lesions are very slight. This shows that if rejection is recognised promptly and treated, at least half of the patients will have no permanent arterial or arteriolar damage. Some of the damage of tubules may be due to Actinomycin C itself. Some of the transplants show thickening of the glomerular tuft capillary basement mem branes similar to membranous glomerulonephritis. This may be due to ischemia plus deposition of antigen-antibody complex on the glomeruli.

Treated Patients without Rejection Episodes

Some patients never show any signs of rejection after homotransplantation. Microscopic appearance of these kidneys show early signs of infiltration of peritubular capillaries with pyronine-positive cells whereas some may show intimal fibrosis, of interlobular artery and fibrin or platelet deposits on the intima. These patients in

fact either are starting to develop rejection or have in the past developed a subclinical rejection episode.

Homografts with Ischaemia

Some transplants fail because of ischemia in the donor's kidney. Mild temporary ischaemia results in brief anuria and transient proteinuria. In one series, the transplants never function after ischemia for 85,124, and 137 minutes. The kidneys in those cases are slightly swollen, soft and pale. Microscopy shows massive tubular necrosis with regeneration, affecting especially the proximal part of the nephron. Protein casts are present in tubular lumens. Interstitium is oedematous with infiltration of lymphocytes plasma cells and occasional ploymorphs. Glomeruli are usually normal. Damage is lessened if the kidney is ccoled during the time its blood supply is occluded. Thus another series of seven transplants all function well with a mean ischemic period of 144 minutes.

Homografts with Incompatible Blood Group

Transplants into recipients with incompatible blood group result in cyanosis in the transplants within a few minutes and failure to excrete urine. grossly there are dark colour and haemorrhagic zones at the cortico-medullary junction. Microscopy shows aggregation of red cells in the glomeruli and small arteries. The rules governing compatitibility are compareable to those for blood transfusion. It seems that renal parenchymal cells possess the same blood types as erythrocytes, and haemagglutination would occur within the graft in a mismatch.

IV. SURGICAL ASPECTS OF RENAL TRANSPLANTATION

This is a brief outline presenting the Pre-operative, Operative and Post-operative considerations of this procedure.

(I) Pre-operative Management

(*a*) For the *Living* Donor:

He should preferably be less than 45 years old, but not too young either because a young person should retain both kidneys in case one of them becomes diseased byond repair.

He must have the same or compatible blood group as the Recipient and should also be histocompatible by Tissue Typing.

He should have no past Cardiovascular, Respiratory or Chronic infectious disease.

He should have 2 healthy kidneys. Therefore assess his BLOOD UREA NITROGEN (BUN), Blood Creatinine, do an Intravenous Pyelogram and multiple urine cultures. Also do an Aortogram for his renal artery anatomy to see whether it poses any technical problems for transplantation. These investigations should all be done preoperatively.

For the *Cadaveric* Donor:

He should have had no infections or malignant disease before death.

He should have had good kidney function (assessed by IVP and Creatinine Clearance).

A Consent Form must have been obtained from his relatives.

His death should be certified by a doctor who is not immediately concerned with the transplant operation, before any surgical procedures are taken.

The Warm Ischaemic Period (ie the time between which the heart stops and the kidney is removed and cooled) should not exceed 60 minutes.

(*b*) For the Recipient:

In order to be considered for renal transplantation he should not have any incurable disease or other generalized disease e.g. Lupus Erythematosus.

Dialyze him to relieve uraemia and restore fluid and electrolyte balance, until he is fit for surgery.

His diseased kidneys should be removed before transplantation if possible.

(II) Operative Procedure

(*a*) *On the Donor:*

Usually the Donor's kidney is removed and placed in the iliac fossa of the contralateral side in the Recipient. Thus a right kidney from the Donor would be transplanted to the left iliac fossa of the Recipient. This is done because it simplifies the subsequent anastomotic connections between the graft and the host's organs.

Once the Donor kidney is removed, it is perfused with 40-degree Centigrade heparinized Ringer's solution in order to flush out remaining blood, and preserve the kidney throughout the inevitable time of ischaemia before it is installed. It is also placed in an ice pack and stored in a refrigerator until it is transferred to the Recipient.

(*b*) *Site of Transplant:*

For a recipient in kidney transplant, the hollow of the iliac fossa, being a retroperitoneal apace, is a favourable position. The hypogastic artery here provides an excellent blood supply. The kidney is well supported here; and protected under, by the abdominal musculature and fascia without fixation sutures and other extra nephropexy techniques. The contents of the peritoneal cavity being sufficient to keep it immobilized.

Because of anatomical considerations the transplant is placed on the opposite side of the body relative to its original side and rotated through 180° so that its former anterior surface is now the posterior surface. The vein-artery-ureter relationship from front to back in the original site is exactly suitable for the ureter-artery-vein (front to back) relationship necessary when the kidney is placed in the iliac fossa.

(*c*) *On the Recipient:*

First the selected iliac fossa is cleared to make way for receiving the homograft. The Donor's kidney is then placed in the most comfortable position, and its renal vein stump is anastomosed to the side of the Recipient's external iliac vein. Meanwhile the Recipient's hypogastric artery is divided and the homograft's renal artery stump is attached at the divided point. The Donor's ureter is then sewed at an angle to the Recipient's bladder. This achieves a valve-like effect at the point of connection. The completed operation.

V. CLINICAL MANAGEMENT OF RENAL TRANSPLANT

I. General Immediate Post-Operative Management

(*a*) Observe as for all patients who have undergone major surgery.

(*b*) Isolation of patient in a sterile room to prevent and reduce the sources of infection because of the poor reaction of the patient to infection as a result of the associated immuno-suppressive therapy and also because uraemics are prone to infection.

II. Management of Renal Function

(*a*) The majority of transplanted kidneys function almost immediately after surgery. Usually urine forms within 90 minutes of the anastomosis.

(*b*) A few do not function after surgery but enter into a phase of actue tubular necrosis—the management here is supportive, in the form of haemodialysis to tide the patient over this phase until the kidney regains function.

III. Problem of Rejection

Rejection invariably occurs and this can be discussed under the following:

(*a*) Prevention of rejection
(*b*) Diagnosis of rejection
(*c*) Management of rejection

(*a*) Prevention of rejection.

Since it is an immunological response, prevention of rejection can be attempted by altering the immunological capacity of the host. This can be done in several ways:

i. Total body irradiation—with the aim of suppressing the antibody producing cells of the recticulo-endothelial system which would reject the kidneys grafted. This method is not used nowadays because of the difficulty of achieving a dose sufficient to suppress yet not too toxic or excessive as to depress too much the antibody-producing cells which would leave the body defenceless against infections.

ii. Thymectomy—This is still experimental and under study and arose from the observation that no antibody response resulted on challenging with a new antigen in newly born rabbits whose thymus glands had been removed. It was found that thymectomy would have to be applied to newly born infants to effect transplant acceptance.

iii. Use of a "Lymph Fistula"—By cannulating the lymphatics in order to divert the flow of lymph to and from the transplanted kidney. (The lymphocytes are thought to be the cells which induce the 'rejection phenomenon'). This is not used clinically yet.

iv. Splenectomy—Being an organ of the recticulo-endothelial system, the spleen produces antibodies. It also filters and removes cellular elements from the blood and this fact was found to be of practical imimportance when immunosuppressive drugs were used. These drugs depress the marrow function and splenectomy helps in one way by keeping up a normal platelet and white cell count.

v. Selective irradiation of

a. kidneys

b. lymph

c. blood

Selective and local irradiation destroys the antibody-producing cells as they are invading the kidneys to reject them.

vi. Use of anti-lymphocytic serum (globulin)—This is used and as the name suggests, acts by selectively destroying and neutralising the body's lymphocytes. (It has played a substantial part in the tiding over of the several crisis in the second South African heart transplant).

vii. Use of drugs

a. Cytotoxic drugs e.g. Immuran (a imidazolyl derivative of 6-mercapto-purine). The exact mechanism of action is not known, probably it acts by interfering with nucleic acid synthesis. Immuran alone cannot prevent the rejection crisis which appears in an average of 13 days, at which time prednisone and Actinomycin C are added.

b. Steroids—acts by suppressing lymphoid proliferation.

(*b*) Diagnosis of Rejection

The significant signs are:

i. Deterioration of renal function appearing as

a. decrease urinary output

b. increase blood urea

c. increase blood creatinine.

ii. Elevation of blood pressure.

iii. General body reaction—increase temperature, pulse etc.

iv. Urine examination, showing—

a. cells—lymphocytes in the urine.

b. significant amount of casts and red cells.

v. Haematological changes

a. increase in white cell count

b. marked decrease in platelet count.

(*c*) Management of rejection

The general principle in treating rejection is to intensify the methods which have been discussed above for preventing immunological response.

Current measures reaused:

a. increasing the dosage of steroid.

b. increasing dosage of Immuran in the presence of a still functioning kidney.

c. Use of Actinimycin C—which has been found to intensify the action of Immuran.

d. local irradiation.

Other measures include

a. dietary restriction and fluid regulation.

b. Anti-hypertensive drugs in presence of hypertension.

c. antibiotics should be used for the slightest form of infection.

Fortunately, after a successfully treated rejection crisis, a state of host-graft adaptation usually develops. The mechanism for such an immunological tolerance is unknown, but may be related to the presence of a very large amount of the antigen and the use of suppressive therapy. However, if rejection is severe, the transplanted kidney can be removed and a second transplant prepared.

PROGNOSIS

The *One-year survival rate* for *Living* Donor homografts is 80-85% because a Donor who is related to the Recipient can be chosen, and Tissue Typing has been done before hand to select the most compatible Domor. So many of these cases may go on to a longer survival than one year.

For the *Cadaveric* graft, the prognosis is improving as technical advances continue to be made in this field. Presently it is 50%. Some have survived 5 or more years, but the true long-term prognosis must await longer follow up of more cases.

* * *

ACKNOWLEDGEMENT

Tissue transplants is attaining an increasing importance in the field of Medicine and Surgery, and many workers had devoted and are devoting their lives in unrevelling and solving the problems of tissue transplant, We have, in this issue of the Elixir, endeavoured to give a brief outline of the Anatomy, Phisiology, Pathology, Surgery and the Clinical Management of transplantation of the kidney. Our knowledge is limited and wanting, our ability to express deficient and inexperienced, and we like to thank those who had given us invaluable advice and guidance in writing this article—

PROF. G. B. ONG
DR. K. S. LAI
DR. G. KOO
DR. C. H. LEONG
DR. W. C. CHAN

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MESSAGE FROM THE CHAIRMAN

WONG KWOK KEE

The strength and indeed the existence of any Society's life is to be found within its members. The Medical Society today consists of 576 potential doctors, who between them, hold in their hands the establishment of traditions and patterns of professional dicipline that future generations of Medical undergraduates can consider their heritage.

The aim of our Society as stated in the constitution is "to foster a spirit of comradeship and professional unity amongst its members and to promote the well-being of the Hongkong University Medical School and of the Medical Profession as a whole". It is along these guiding principles that the present Council is striving to serve the Society.

A state of unity and an atmosphere of fraternity prevailing among the members of our Society are vital. Each shall become colleague in the Medical profession in future, and there is no better time to develop that sense of duty towards fellow doctors. The Society can do no more than to initiate the movement and it is up to the effort of each individual to achieve the final goal.

Student welfare has always been and still is one of the most important aspects of university life. The Elixir Loan Fund for needy students must be expanded if the intake of 150 students of our Medical School is to be realized in the near future.

Another aspect of student welfare is staff-student relationship, which I am proud to say, is extremely cordial among the Medical Faculty. Indeed more ice shall be broken with the introduction of the Dean's Undergraduate Committee. We anticipate that with closer unity among the members of the Society and better co-operation between the university and medical undergraduates a bright future would await us.

In conclusion, I would like to wish every member of the Society to make use of the golden opportunity of the days of schooling to develop the moral code of medicine that began with the Oath of Hippocrates—that five types of ethical duties must guide your life—duties to your teacher, to society, to your patient, to your colleagues and to yourself.

THE ELECTIVE POSTING AND EXCHANGE CLERKSHIP

By Kevin Loh, *President, ARMSA.*

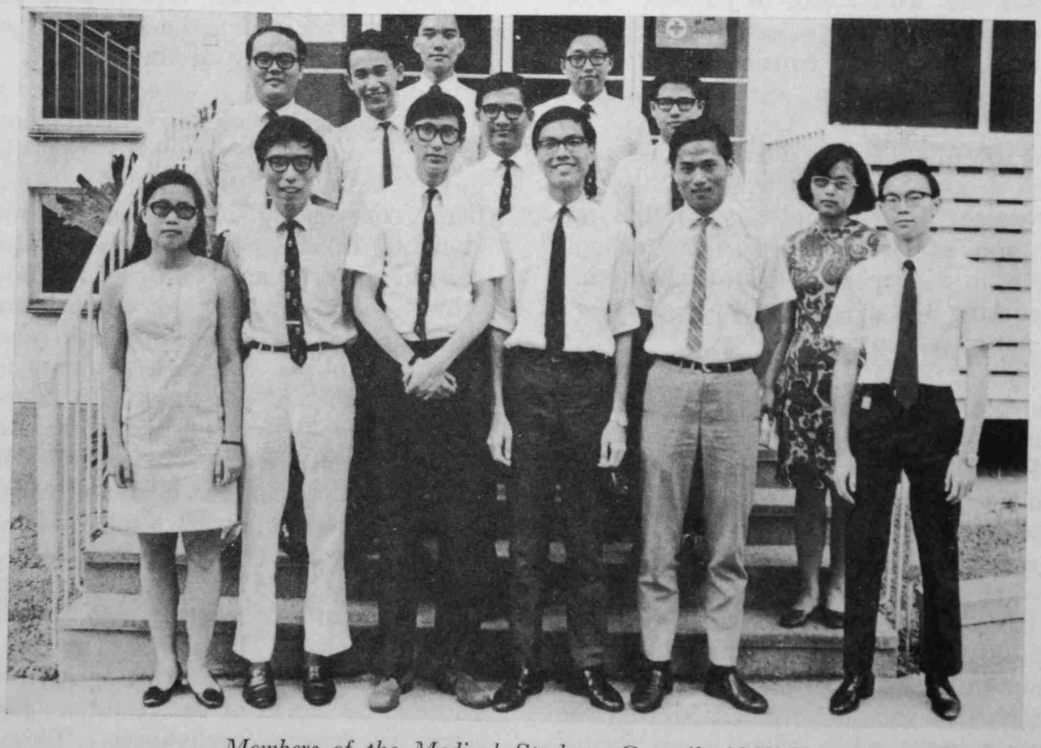
An Elective Posting is a period in the medical curriculum, preferably about 2 to 3 months, during which a student can freely choose a posting on his own. The main advantages of such a system are that it provides an opportunity for the student to spend more time in one special field in which he intends to specialize after graduation, or to revise some subjects in which he is lagging behind. This system will add much flexibility to our present curriculum, and more importantly, the student has a chance to pass his own judgment as to the kind of education he would like to receive. The Elective Posting is not a new idea. It has been established with considerable success in the curricula of many European medical schools. The present trend in Asia is moving towards the same change. Australian medical schools enjoy such a posting, and it has recently been implemented into the curriculum of Malaysian medical school. Students in Singapore and Hong Kong are still working for a suitable programme in their particular curricula.

I do not propose to exhaust here all the technical difficulties that will have to be solved to establish the elective posting, but I believe the greatest obstacle in Hong Kong will be to find a suitable period to place such a posting. The ideal should be at a time when the student has already acquired some basic knowledge of all fields of medical education, that is, after the specialty clerkships, or at least after the senior clerkships. Secondly, this should be placed during the summer months when there is no formal lecture. It will be difficult to cut out 2 or 3 months from our already tight-scheduled clerkships, but taking one term from the preclinical period or shortening the duration of the junior and senior clerkships may be practical solutions. As far as possible, the scope of choice for the elective posting should not be restrictive. Besides all the departments in the medical faculty, postings may be arranged with special units in general hospitals all over the colony. This will solve the overloading problem for any particular department if too many students apply for it. In some places, students can even attach themselves to general practitioners in private practice. At present, the training of the medical student is conducted in the exclusive environment of the teaching hospital. Students generally lack the opportunity to study how other hospitals operate, what problems de the clinics in the rural areas confront, and the refined art of private practice. An elective posting will certainly broaden the mind and enrich the medical training of the student.

Exchanging clerkship with another country is the step beyond the elective posting. Without the latter, the former can hardly take place. It is many a medical students' dream to be able to spend a few months in another country to study the education system and the clinical material in that country. Finance will be the greatest problem for most students undertaking such an exchange. In European countries, where travel expenses are minimal, the International Federation of Medical Student Association has been able to arrange 5,000 exchanges every year. The other problems, such as clerkship vacancies, board and lodging, and current information on foreign medical schools, can be solved readily enough. In my discussions with foreign medical students during A.R.M.S.A. conferences, most of the countries are very eager to receive exchangees. This spirit of international cooperation to promote better understanding among medical students through exchanges is very wide spread. To solve the financial problem in Hong Kong, the Medical Society can establish an Exchange Fund, or to set up Exchange Scholarships bearing the name of the sponsors. There is already a move in A.R.M.S.A. to establish a central

A.R.M.S.A. Exchange Fund. The International Federation and A.R.M.S.A. have done quite a lot to promote exchanges in the past, and will certainly continue their efforts in the future. The International Federation publishes a booklet — 'How to go Abroad' every year, and A.R.M.S.A. has stationed National Exchange Officers in all member countries to arrange exchange clerkships. The greatest problem in Hong Kong is still the lack of an elective posting during which this sort of exchanges can be conducted.

The recent survey on elective posting and exchange clerkship conducted by the Medical Society clearly showed the vast majority of students in favour of both these schemes. In this present time when students all over the University are asking for reforms, I have no doubt that officials of the Medical Society, both present and future, will continue their efforts towards implementation of both the elective posting and exchange clerkship in our curriculum.



Members of the Medical Students Council, 1968-69
(Left to Right)

Back row: *Chan Chok Wan* (**3**rd *year Class Rep.*), *Yim Chi Ming* (*Chief Editor, the Elixir*), *Lam Wah Kit* (**2**nd *year Class Rep.*), *Kevin Tong* (*final year Class Rep.*), *Kevin Loh* (*President, ARMSA*), *Choy Ping Fun* (**1**st *year Class Rep.*).

Front row: *Grace Tang* (*Financial Secretary*), *Paul Lam* (*External Secretary*), *Wong Kwok Kee* (*Chairman, Medical Society*), *Crowford Chung* (*General Secretary*), *Wong Shou Pang* (*Internal Secretary*), *Della Chu* (*Chairman, Fraternity Committee*), *Stephen Ng* (*Social Secretary*).

"GAMES" OF MEDICAL STUDENTS

by P. C.

Most people tend to have a special affinity for money. This phenomenon has lead to the development and flourishing of various forms of gambling, lawful or unlawful.

Medical students are no exception, and, gambling, takes the most peculiar and ingenious forms so invented to suit every hour of the day, every day of the week, every year of the course of medical education and in fact, every circumstances —adaptation to environment!

The first year student is the best example: although there is a lot of work to be done, there is no immediate fear of examinations. Three consecutive morning lectures *are too* much to bear especially when the voice of the lecturer is monotonous mind you, skipping lecture may end in the tragedy of getting caught when the lecturer is in the mood of taking a roll-call (this learnt from painful experiences). The best way of entertaining youself as well as the good friend next to you is a little friendly game in which you can either amuse yourself by winning a few dollars or amuse the good old neighbour by giving him some.

But how? There is that old Chinese saying that "there are golden buildings in books"—yes books! The most suitable is Johnston's Synopsis of Anatomy—not too thin, not too thick, easy to handle and always at hand.

There are at least three ways that I can remember in using the book in this respect.

The first one simulates a card game. Each player opens the book at random and note the page number and add the digits together; if the number so obtained is greater than 10, subtract 10 from it; if it is greater than 20, subtract 20 from it and so on. The one who gets the greater number will win; suppose you get 132 and your friend gets 186, then you win, getting 6 against his 5. (Who says that medical students are poor in mathematic?)

Next comes the use of the book for playing Bingo. Each player writes down on a piece of paper 10 numbers, 0 to 9 (they can be repeated). Then the books is opened repeatedly and with similar calculations as in the first game, a number is obtained; if you get the number you can cross it out (if you have written down this number more than once, you can only cross out one of them, the other can be crossed out if you get the number again). Naturally the first one to cross out all the number is the winner.

The last one is an example of the mathematics of medical students—a little erroneous I must say. One player opens the book repeatedly and whenever he turns to a page whose number adds up to a value of 10 or its multiples, he loses one dollar (or if you would prefer it, 10 units) and at all other times he wins 10 cents (or 1 unit) each time—wrong probability even if the distribution of these numbers on the book is even.

So with such clever inventions, three dull morning lectures can be changed into a morning of enjoyment and laughter in the back seats of the lecture theatres.

Histology lectures and practicals on Tuesday Mornings are most charming in the variety of ways you can spend it. The lecturer is a most kind-hearted fellow who will not take any roll-call if you do not press him too far, so there is a good 4 hours from after the first lecture to 2.00 p.m.

Well, you can stay in the Locker Room (Our Common Room) where you can play any kind of games you like—Poker, Black Jack, Russian Poker, anything, provided that you do not cause too much disturbance to others to cause their intervenion. This has the advantage of being just in case the lecturer's temper has been driven too far.

Another place you can go to is University Hall where the common room is large and

comfortable and where you can play anything and make as much noise as you like.

Or you can go up to the Student Union Building where you can have a game or two of billiard, or join in with your friends from the Arts Faculty in a friendly game of Poker in the Card Room.

But, don't all of you sneak away, some to stay behind—nevermind, you can always have the book.

Lunch time provides the most enjoyable hours at all times, even in examinations. In the canteen, while awaiting your lunch or while you are enjoying it, a simple and easy game can be played with a few coins, which you are sure to have in your pocket. With two in a table, you can each take out a number of coins. One will arrange them in a column at random and the other will choose between heads or tails. If he chooses heads, then all the coins with heads facing up will be his and the others his opponent's. Fair, isn't it? With three at a table another game can be played; each will take out a coin and put it on the table covered by a hand. On uncovering the coins, the odd one of the three will win—naturally if all have the same side facing up, it would be a draw.

After filling up your stomach, there is usually an hour or two before afternoon work begins. The 'Common Room' is a good place to stay in but in hot summer days the lecture theatre with good air-con ditioning is a better place. Here, you can play a game called 'thirty-cents' which originates from St. Paul Boys' School. One will throw three coins on the table after the others have put up their bets. You can bet on Heads, Tails, All, heads, or All tails. Betting on Heads, you will win if 2 or all 3 coins comes down head facing upand the win is 1:1. Similar for Tails. For All, you will win if all the coins come down all heads or all tails and the win is 1:3. If you like to win more you can bet on All heads or All tails, in which the win is 1:7. More complicated variations may be introduced if more coins are used, but being simple people, medical students are satisfied with three.

2 p.m. is the time to go to the Dissection Room and start working on the cadavers—poor chaps. Life in the Dissection Room is miserable. The smell of formalin is the worst kind of smell that one can imagine, the cadavers are ugly-looking, and the work of dissection is most boring. However, in a table of six, there is always someone who is eager enough to do the job, and so the others can relax a bit and work on the book and coins

When the clock strikes five, relief! A day's work is finished. Subsequent programme will of course depend on individual preferrence but gambling is not an uncommon choice.

So these are the ways of life in the First Year as I know it some years ago. As the world is always changing, I am not sure how life is like in the First Year now. But I am sure that with the genius of medical students there must have been many new inventions now,—afterall this is how man can improve.

★ ★ ★ ★ ★

BON MOTS

Your duty to society is to be idealists, not hedonists: as physicians, to accept your profession as a service to mankind, not as a source of profit; as investigators, to seek the knowledge that will benefit your fellow beings; as clinicians, to alleviate pain and heal the sick; as teachers, to share and spread your knowledge and always because you are imbued with an ideal of service and not the ambition for gain. Thus will you maintain the dignity of our profession as a social science applied to the welfare of mankind.

— *To be a doctor, by Felix Marti-Ibanez*

MY FIRST EXPERIENCES IN THE MEDIC CENTRE

By YFAK.

Author's note: Minor distortions of facts are intended here to relieve the nervous incubus in medical training. We are so much snowed under with work that if we have not found something "way-out", we would probably have collapsed or gone wild.

To become a scientist and particularly a doctor had always been my adamantine volition. I am still questioning myself how it came into my mind or why it rooted itself there so deeply. I think I must have read somewhere that there was such a thing as "devoted life" and been sophistically preoccupied to want to taste it, no matter what it was. Anyway, the reasons for its development are gruesomely obscure. I had included myself in a group of men and women, cap-a-pie in white, who puffed here and there with nothing more troublous to do with their hands than run the stethoscope over chests and palpate formicant pulses. I had also pictured myself prescribing medicine to a crowd of succumbing females whom I always managed to redeem from the verge of death. Being a normal (but not psychomaniac) male, young females always prevail in these ludicrous mirages. I was not a bit concerned with the members of my own sex.

All these distortions stayed with me and incited me to undergo a vicissitudinous "metamorphosis" of my life, despite every single deterrent dumped upon me by my mother. Mother is very sensitive. Doctors in her mind adumbrate nothing but bleeding moribund casualties and horrible cadavers. She was still not very compromised till somebody assuaged her with the inevitability of a handsome income and a hard-to-earn homage from others. But Father is an optimist. Though whenever I am concerned, he reproduces Mother's ideas and sentiments as unequivocally as a Rank Xerox, he felt much happier.

Lady Luck is capricious and nobody knows to whom she will dispense her largess. When my family learnt that the university had deemed me worthy as a student of medicine, our only reaction then was one of shock. Mother's teeth gritted; Father's eyes widened noticeably, while mine must have been positively froglike.

IT WAS THE FIRST DAY that I attended Medical School. The building which would be my bivouac for future in the next five years is an ordinary one, no different from the many secondary school buildings in the Colony. But it is famous for its training of doctors, and to be more, for the fact that it loses money on them.

I went in through the main door. Under the chiding eyes of the late Doctor Li Shu Fan, I pushed open the door of the Anat theatre and must confess that I was startled. Right beside me and displacing its teeth in appalling grin of welcome and hospitality was a dangling half-set of genuine skeleton. I held my breath and seated amidst the other greenhorns. I felt the little caress of coldness along my spine————maybe it was due to an over-functioning of the efficient air-conditioning system.

It was a big class. We sat in the lecture theatre awaiting our professor We glanced and smiled at each other; we delved into the knack of how to leave by the back door without others' notice; we scrutinised the masterpieces engraved on the desks. Some of them were foul words; I did not like them. But I cannot deny that many boys have grown enamoured of foul words———— it soothes you everything when you fling them out, or write them down.

"I am not sure if I really want to study medicine!" A lisping hysterical voice, with a pitch so high that to distinguish the sex of its owner was an impossibility . . . . . (But I suppose it belonged to one of the fairer sex, because I cannot forgo the illusion that more stoicism is expected of

the male, since they are presumably the big tough guys of the race.) . . . . . "I just know I'll give somebody the wrong medication. O, I could kill someone . . . . . " Her voice dropped; her sangfroid melted, as though the fault was already committed and she was repenting with other criminals in the bounds of a large cell waiting for the executioner to come in.

Our professor, a retiring character renowned for his brilliant lectures replete with unselfconscious and impromptu humour and music, finally made his appearance. He did not deliver a lecture on that day; he just talked about the recondite life we would soon be involved in. His words were ones which never failed to make an impression. To him, we were no more than blocks of juvenile stones to be carved into sophisticated humans with deep acumen and inexhaustible energies. It was no simple job; it was one laden with latent misery which it was his onus apart from sheer teaching somehow to preclude. He knew that we, 120 in all, were not accoutred to defense or guide the fate of human birth and death, growth and decay,————or even of ourselves.

But the sculptor was ready and the work had begun.

I slipped into the human anatomy museum.

It was an entrancing sight for a layman. Segments of human bodies, male and female, preserved in large crystal-clear boxes. When I left the room, my blood pressure must have registered considerably above normal.

It was another hot October afternoon. We were ushered into the dissecting room by the demonstrators. Hung on a wall near the entrance was The Hippocratic Oath which, unluckily, most of us did not care to read. There were twenty tables and on each lay a genuine, dead human body. There was a musty combination of odours: miledew balm and lachrymatous formalin from the cadavers, sweat from our living bodies, and a soupcon of chemicals from the biochem lab two storeys below.

Soon we were to learn that our dissection was not quite redolent of scenes in an abattoir. We did not grasp something like a cleaver, remove the sheet of polythene wrapped round the dead body, shout "Hit the deck, Glory Guys!" and rend the once-alive victim's viscera open for inspection. Contrarily, we used a dissecting scalpel to make an incision in the skin and fascia in the region to be dissected, and each layer of muscle and tissue was then cautiously cut and examined. Later I realised why most of the seniors were not so interested in this afternoon schedule; because I found that after the first few avid experiences, it began to pall and became an insipid routine, resembling any other systemised process. There was nothing different other than that new parts of the body were dissected and studied.

120 restless youths divided into 20 groups with six in each: that was what we were. And such an opportunity for establishing social contact and our pre-professional relationship did not escape our notice. We grasped it. We were mighty in volume and soon such a "plethora" of autobiographies was soaring roofwards to an ultramundane height that the demonstrators began to frown and veered their attention from our rheumy eyes to their afternoon comestibles

The arrival of the professor insinuated itself into our conversation and woke some from their reveries. Serenity and peace were at once restored. But on his departure, mad pranks such as tissue-throwing resumed their long-established customary courses.

My first day in the Medic Centre continues to dominate my dreams to the exclusion of any other days I know. The tears were so poignantly shed———because of the formalin; the fingers were so painfully imbrued in blood———due to careless manoeuvring of the scalpel; the laughter was so badly needed———when you see some dead tissue getting into somebody's mouth; and above all, human structure and life were so abstruse and so requisite to be observed, explored, studied, and learnt from. . . . . .

END

CALSS REPORTS

FIRST YEAR

Starting the term after the longest vacation ever is a welcome change for all, especially when meeting all the people and seeing and doing everything is a new yet wonderful experience.

We did our best to help in the Open Day: drawing up posters and helping to show visitors around. Very unfortunately, we could only stand "guard" over specimens in the museum and assure people they are eal. We know too little to give comments.

The Medic Night witnessed another of our effort when we staged our comedy "It's a Mad, Mad, Mad World" after weeks of co-operative preparation.

"All work and no play" make us dull boys and girls. A fine day in November and we were off for a launch picnic plus barbecue. Somewhere along the coast of Junk Bay we anchored and went ashore. It was late at night that we headed home. Some time later, we had a tea party in the Sports Centre, in which Mr. Low, our guest-of-honour, conducted our lucky draw. We ate a lot and had a lot of fun.

In anticipation of Christmas, we held a social gathering with St. Stephen's Girls' College at the Jordon Memorial Library. We were honoured by the presence of Professor and Mrs. F. Chang. Another class outing was organized some time in March. This time we headed for Tai O Mun, a lovely spot where we had a lot of fun.

Many participated in the Medic BBQ held in the Sports Centre. Our singing group did very well in their "Old Black Joe". We also got many of the lucky prizes-a lucky one even got second prize!

The Inter-Faculty Debates were another challenge to which we stood our best. Very unfortunately, we ended up with being a runners-up, but with such motions as "That one country should not interfere with the internal affairs of another country" and "That the female sex should take the initiative in courtship", one couldn't get very much farther, I suppose.

Dismayed at the news that Professor F. Chang will be leaving us soon, we compiled a class-signed letter to him, asking him to stay. Professor thanked us for our "sweet" letter but expressed his regret that staying would be impossible. So we can only wish him every happniess.

Shortly after its formation, the Commission to the Medic Society paid us a visit prior to distributing questionnairs. We had an hour of discussion during which our class-members voiced their opinion and made many enquiries and suggestions.

Now that the term is rapidly drawing to an end, we look forward to another year of prosperous activity, a year that we will recall with pride and satisfaction, a year that is in every respect like the one we have had.

SECOND YEAR

It is true that the 1st M.B. exam. never fails to threaten and haunt all second year students. Nonetheless, our tension was lessened considerably by various events since the new term began.

The Medic Nite was a day of triumph for us. The Braga Cup, which we so proudly won this year, symbolized our achievements in sports as well as the co-operation of the class as a whole. To celebrate this great event, our class committee has generously treated us with a sumptuous lunch in a Chinese restaurant.

The Medic Barbecue provided us with a suitable pretext to get away temporarily from our books. The two songs "Happy Wanderer" and "1st M.B." so fully expressed our feelings at the moment that we were crowned first in the singing competition.

18 months of hard work found its worth when the battle of 1st M.B. was fought. The prize winners were Mr. Chan Ki Tak and Miss Connie Leung. They got the prizes but we got the money, because they had to treat their fellow classmates handsomely, as the tradition goes.

This year 2 social gatherings were held: one with Maryknoll Sisters School during the 1st term and the other with Maryknoll Convent School after the exam. The Maryknoll girls are getting popular, eh?

A lot of 'get-togethers' were arranged after the exam. to ease our tension. An informal class picnic at Miss MaryLily Chiu's house at Shatin proved so successful that a barbecue was organized soon after, at the same place. We regret much that some of the classmates were not informed in time (as it was in the holidays) to share the great fun.

As soon as our boys have regained their vigour after the exam., a soccer match was arranged with the staff and technicians of the Pathology Department. The score was 4-3 in favour of the staff. The occasion was indeed graced by the presence of Professor Gibson.

On the Sports Centre Presentation Day, our 2 sports-captains, Mr. James Hwang and Miss Therese Chan were awarded the University Green (athetics) and the title of the Sportswoman of the Year respectively. No wonder we are the proud owner of the Braga Cup this year.

The class dinner, inviting all staff of the preclinical departments, was held on April 18 at Madarin Hotel. The light heartedness of all who attended, the cosy atmosphere, the delicious (tho' not very substantial) meal, the fancy dresses of the ladies and the solemn suits of the gentlemen—all added glamour to the occasion. The highlight of the evening was the Paper Dress Fashion Show which surpassed both time and space. The evening ended with a group photo taken just outside Mandarin Hotel.

THIRD YEAR

Within the period from October to June, there were altogether three social gatherings, two barbecues, and a self-organized sport event.

23rd November—Social gathering with St. Margaret's Girls' School.

20th December — Barbecue on St. Stephen's Old Boys' Beach.

21st December—Social gathering with Commercial classes of St. Paul's Convent School.

25th April—A friendly football match with Pathology Department. Skillwise, we are never worried by inferiority complex. Unfortunately, the Pathology Department got the upper hand (as it always does in examination) due to our physical handicap.

16th May—Barbecue with the staffs of Bacteriology, Pathology and Pharmacology Departments in Middle Bay. Undaunted by the threat of drizzle or rain, We managed to heighten both spirit and flame.

16th June—Social gathering with the Commercial classes of Sacred Heart Canossian College.

4TH YEAR

This year sees the splitting up of the class into 5 specialty groups and hence class activities have been limited to group or intergroup activities.

Since January, 1969, 2/5 of the class were required to reside at the Medical Students Centre and 1/5 left us to be 'confined' in Tsan Yuk Hospital. It was also a strange feeling that 2/3 of us were absent especially on tuesdays and thursday morning lectures when the Medical specialties left us for grand rounds and the Obstetrics clerks were, as usual, not able to attend. Attenance at 8.30 a.m. lectures became very meagre. However time passes quickly and we all settle down to the most out of our last clerkships.

Owing to the rift between staff and students because of the unfortunate publicity produced at the Union and magnified by the press, we decided in our own way to bridge the generation gap. This resulted in a series of staff-students informal gatherings. Group I invited the Gynaecology and Obstetrics Department to a barbrcue in Middle Bay and this was followed by group 2 who extended their invitations to the Surgeons, the Orthopaedicians and the Anaesthetists. Group 3 decided to spend their outings in the New Territories with tea at Dr. T. C. Yu's country residence and they were counter-invited to a sumptuous dinner at Shatin by the staff of the Medicine department that evening. Group 4 who led us all in these gatherings had a joint function with the staff of Paediatric department (joint financially!), this being a barbecue. Group 5 isolated in Tsan Yuk Hospital had numerous table-tennis competitions with the staff of the hospital usually ending up in snake-soup snacks. By the way, the staff of the hospital claimed themselves to be ever-victorious in table-tennis. All in all, I think everyone concerned thoroughly enjoyed the various functions and we did get to know our teachers better.

However, we did not neglect each other and we held private meetings between groups in the form of foot-ball, basket-ball or hockey matches. Group 1 challenged Group 4 to a friendly football match, then Group 4 challenged group 2. The results were not important but lots of fun and mirth resulted from these games. Group 5's open challenge of mahjong and card games (Hearts, Bridge, Poker) still receives no answer. When this article is being written, the Medical Students Centre residents and Group 5 are planning to hold a driving competition to Shek O. (Alert: casualty doctors).

All too soon, 10 weeks passed and another 10 were half way through. Seeing the Final year students plodding away at their books, many of us were scared into peering at ours, realising that our time was not too far away.

FINAL YEAR CLASS REPORT

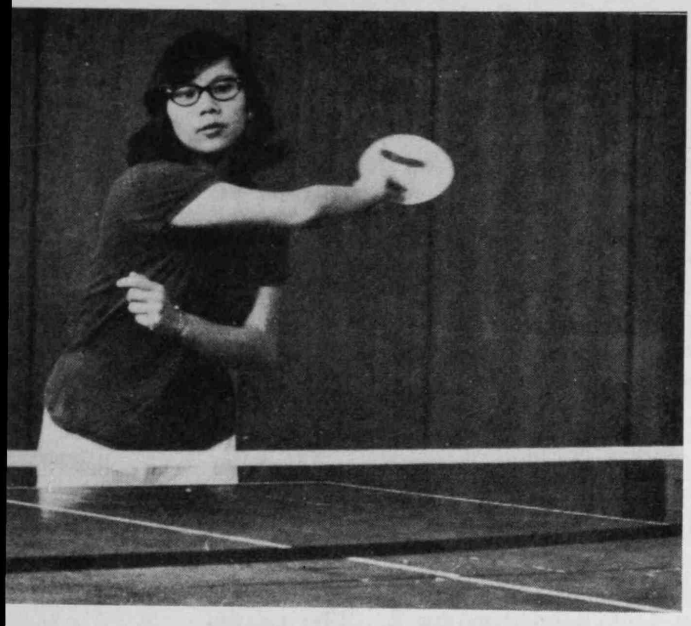
We had a busy year, with exams. in January, April, and May. Nevertheless we still managed to support most of the functions of the Medical Society. Our drama 'Nothing but the Truth' led us to the champion title in the Medic Nite. Our 'spirit' was manifested in the inter-class debate—which was held at the same time as our examination board meeting, i.e. a few minutes before our result was out. On May 21st we held our graduation dinner at Mandarin. Meanwhile a Tai Wan trip in June is under plan.

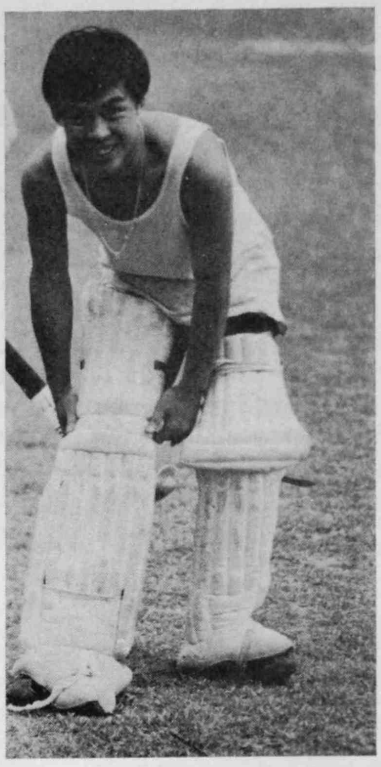
We paid high tribute to the Dean's Undergrad Committee. We forwarded suggestions on curriculum changes and raising the intern's salary.

We are very grateful to our Dean, Professor McFadzenn, for his deep concern and interest in us.

ACTION IS OUR PORTIO

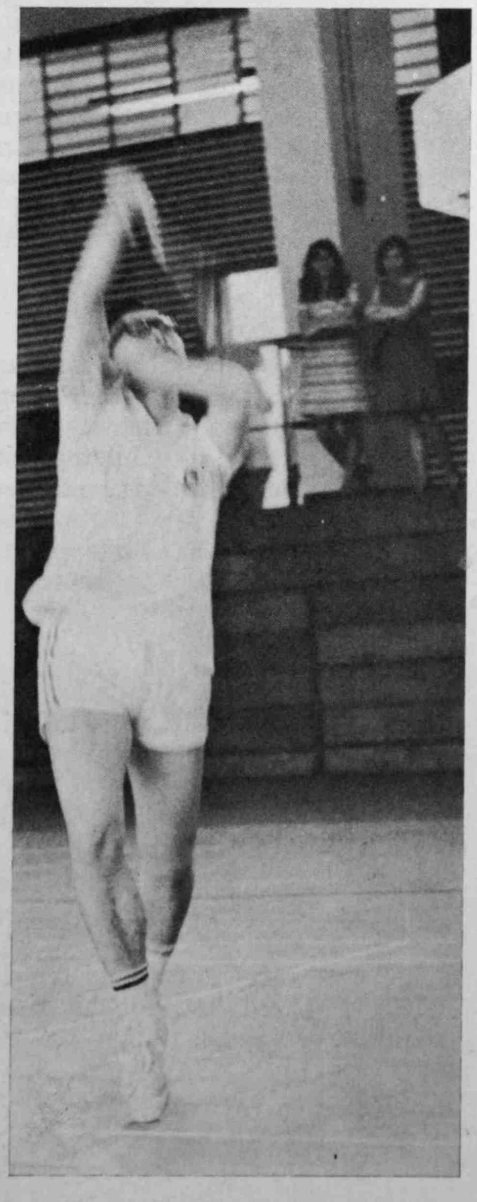
Deadlier than the male.

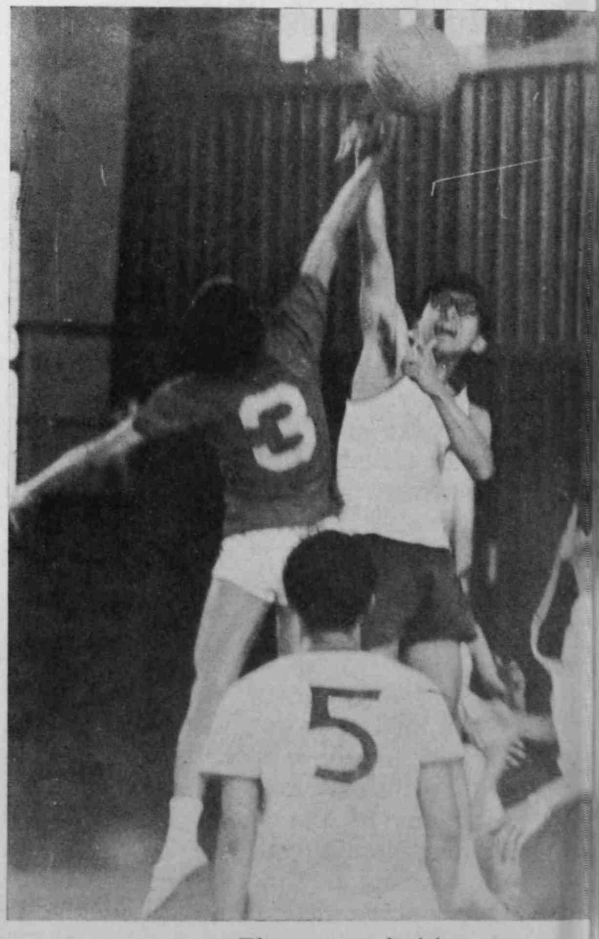




Put your little foot, Fl
your little foot right then

e Medics won't lose.
u know why? Just look
per in the picture.





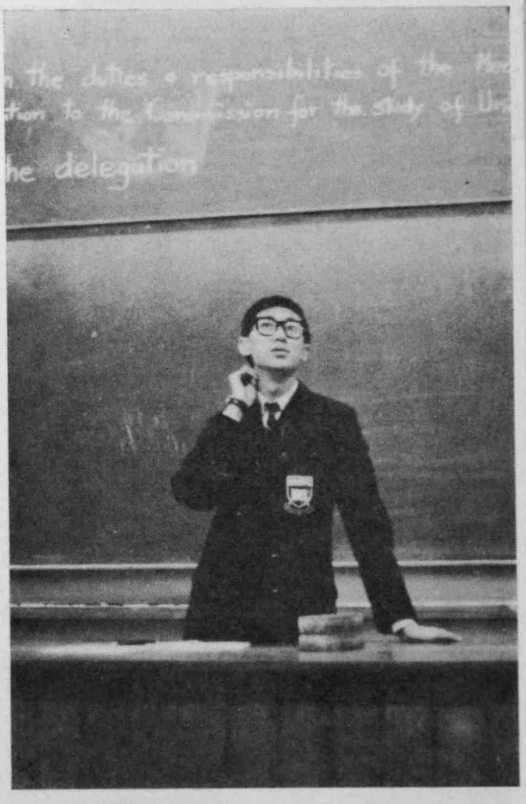
Eh—my wrist! !

ETINGS

CRING

ND . . .

I wonder what he's been talking all these three hours.

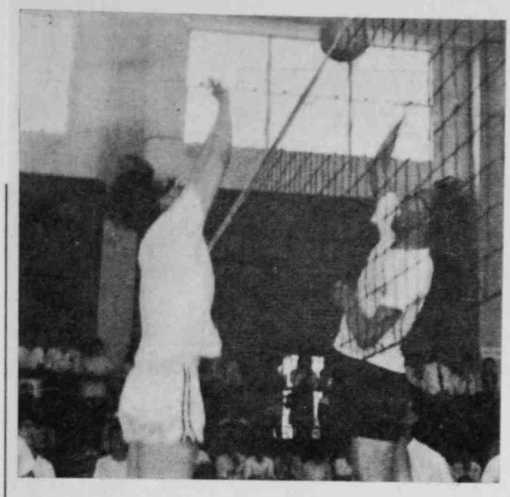


Who's that a-calling?

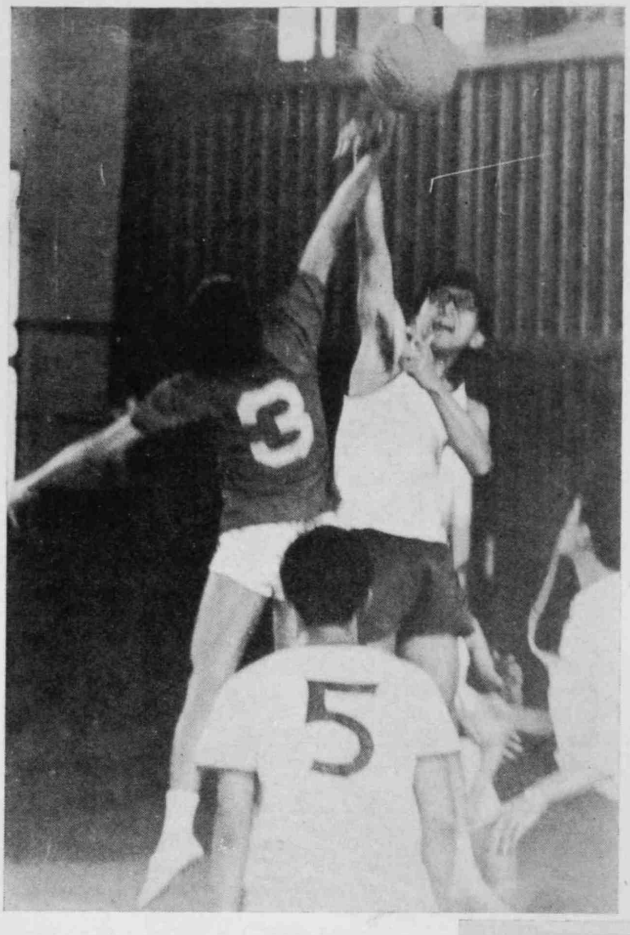
ETINGS

Y

Rest after the fight.



「更 高」



「更 強」

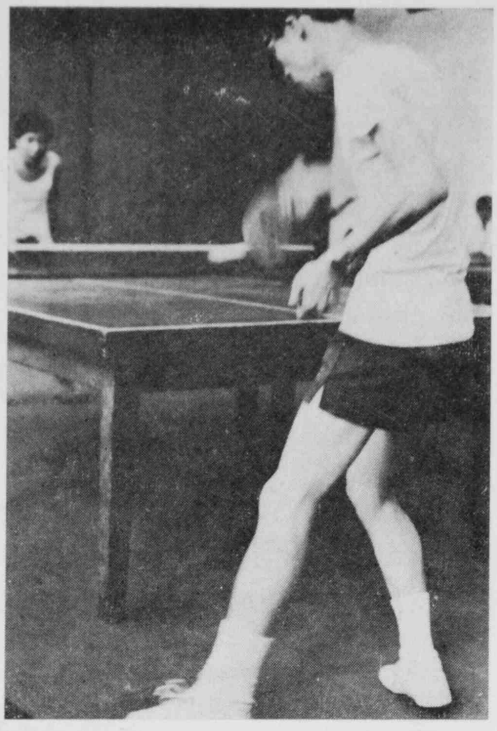
「更 健 美」

OMEGA CUP CHAMPION AGAIN

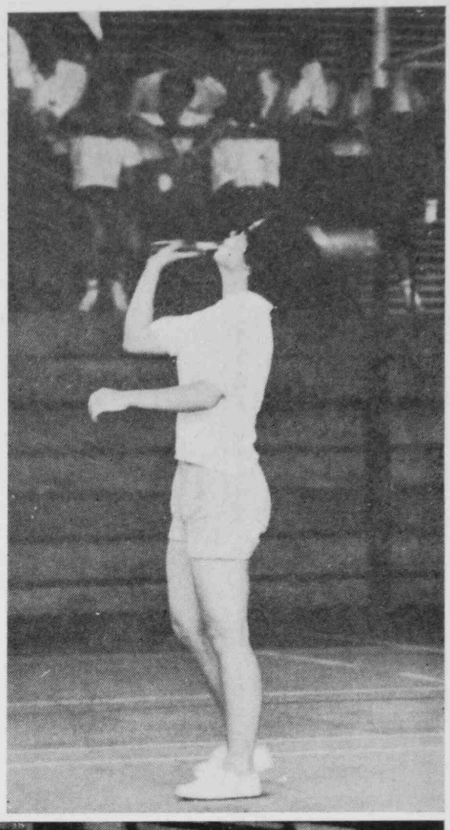
RAVO,

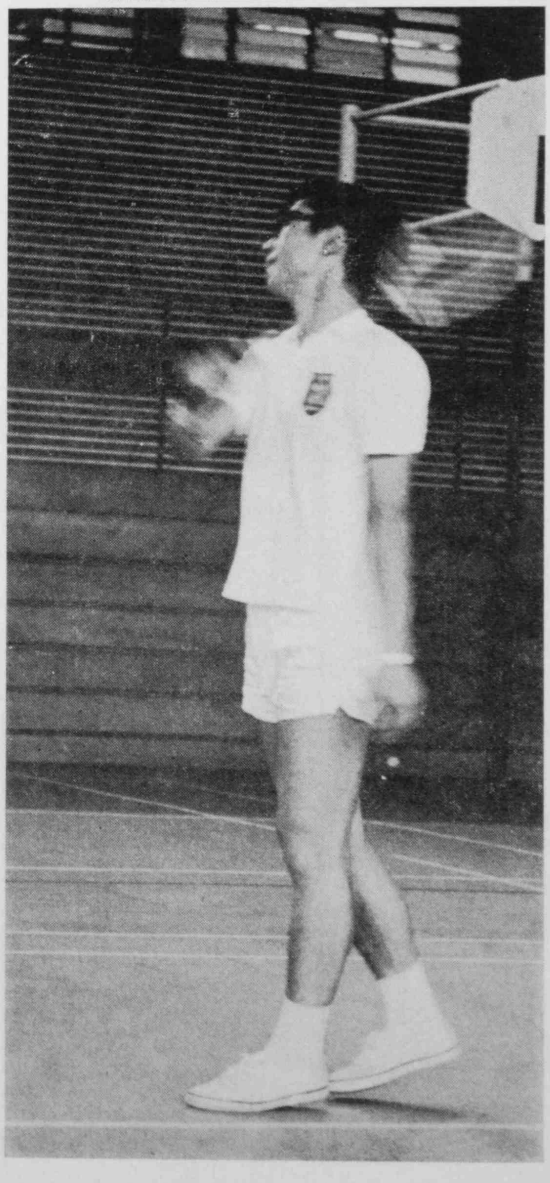
OOD

HAPS



Romberg Sign negative.

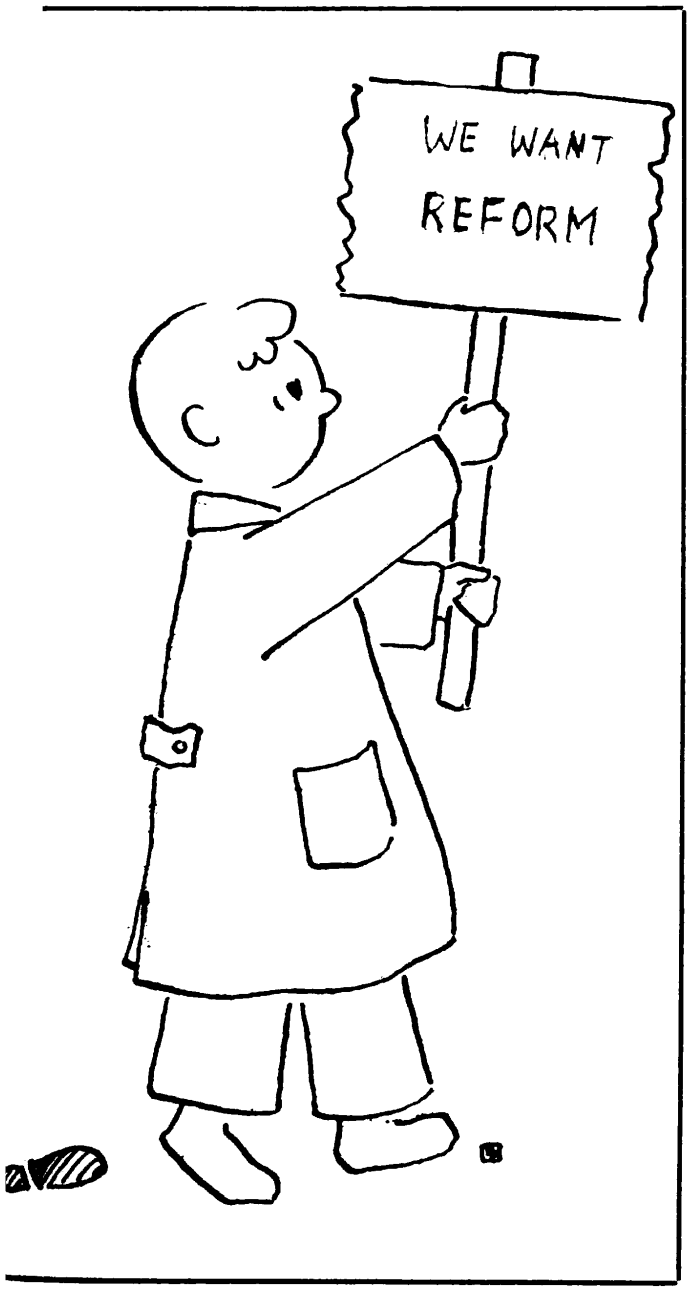




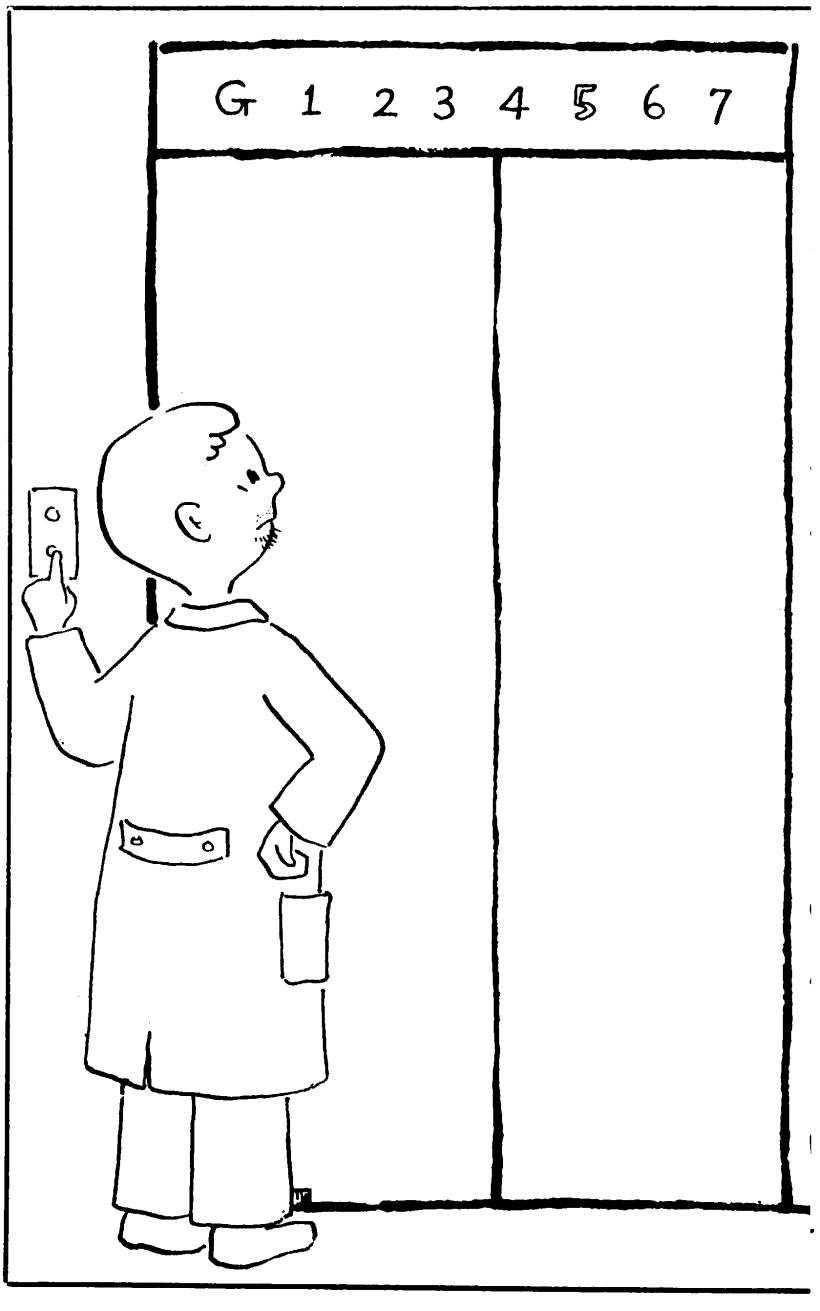
Now that I've found you, baby,
I won't let you go again.

ull, a little more and you will———.
mind, I known you've done your best.
athology Staff).

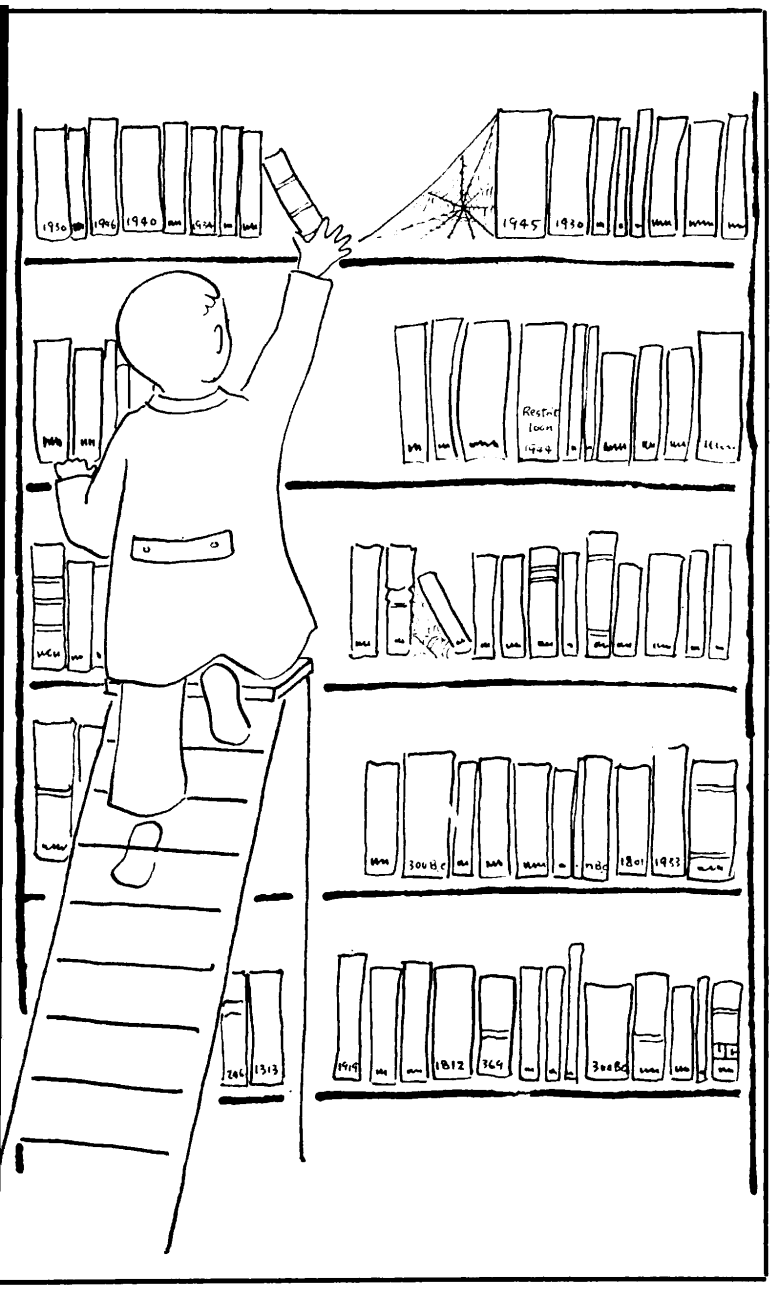
TREATISE ON UNIVERSITY REFORMS



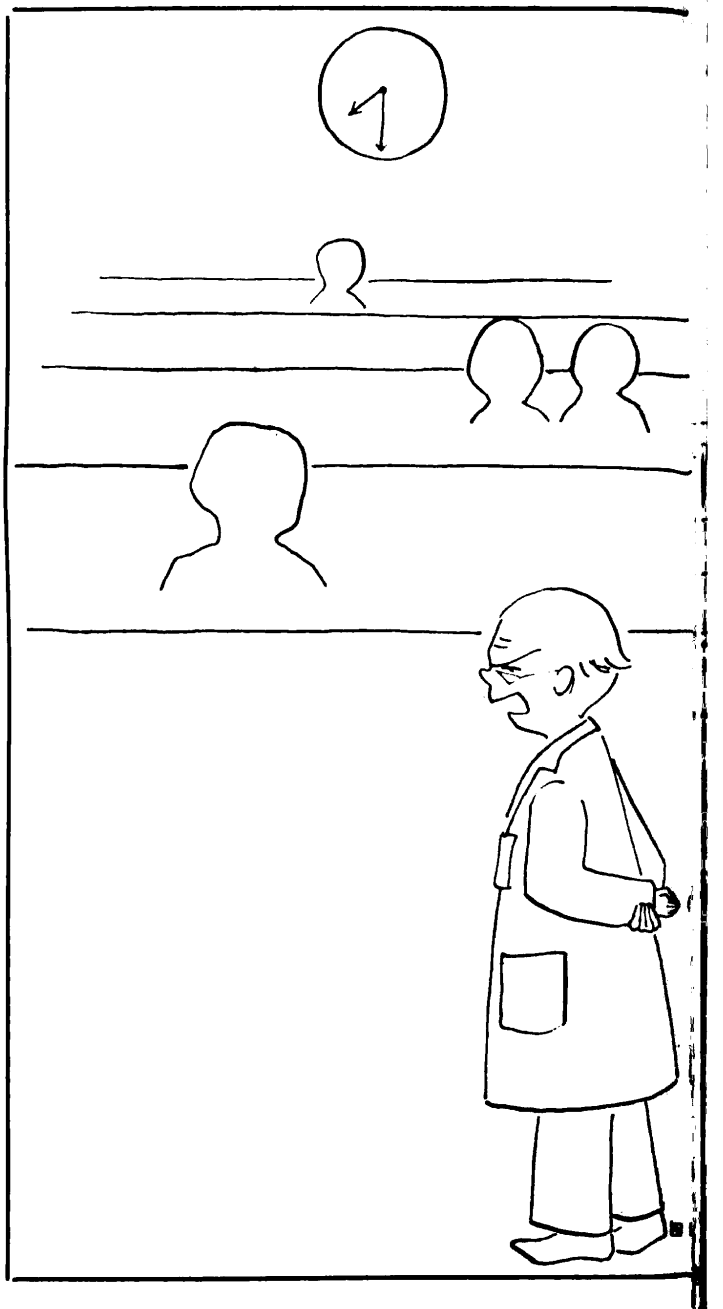
We want reforms.



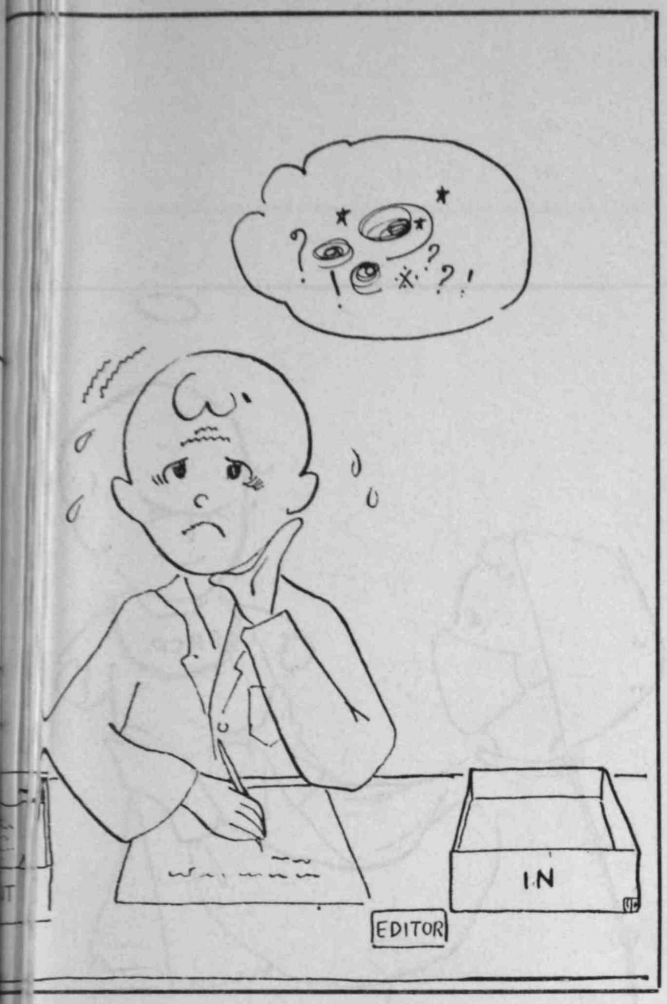
Let there be speed.



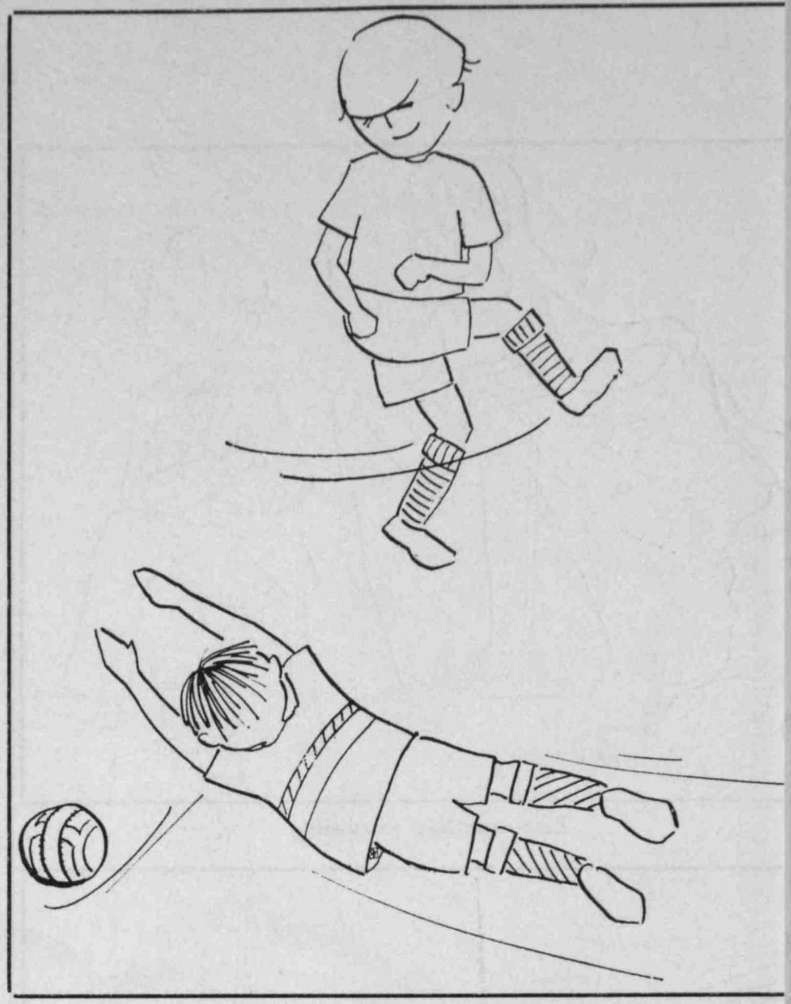
Let the new replaces the old.



Let there be punctuality (if they are turing up

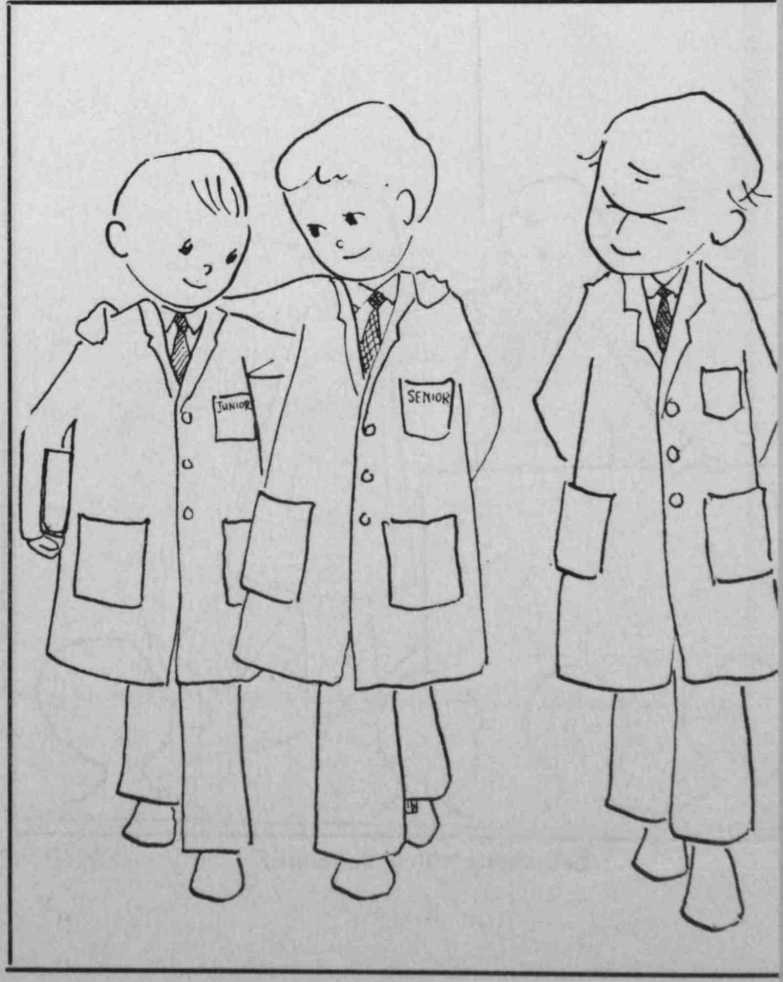


Let there be more contributions.

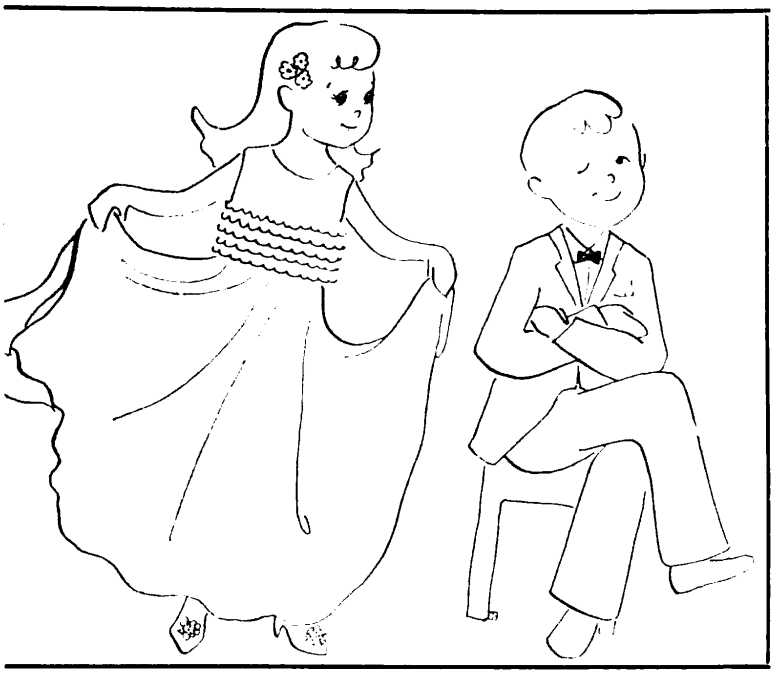


Let every heart stay young.

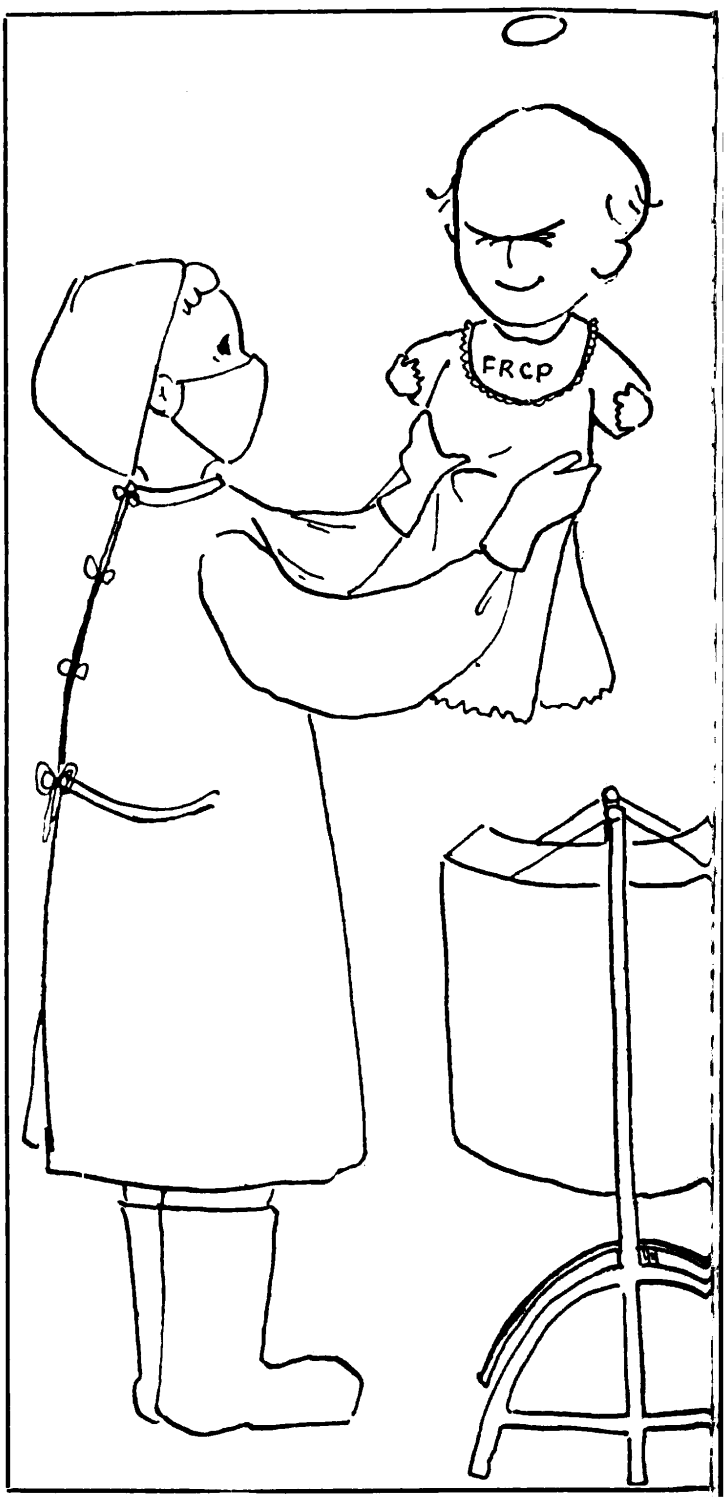
Let every one retain his halo.



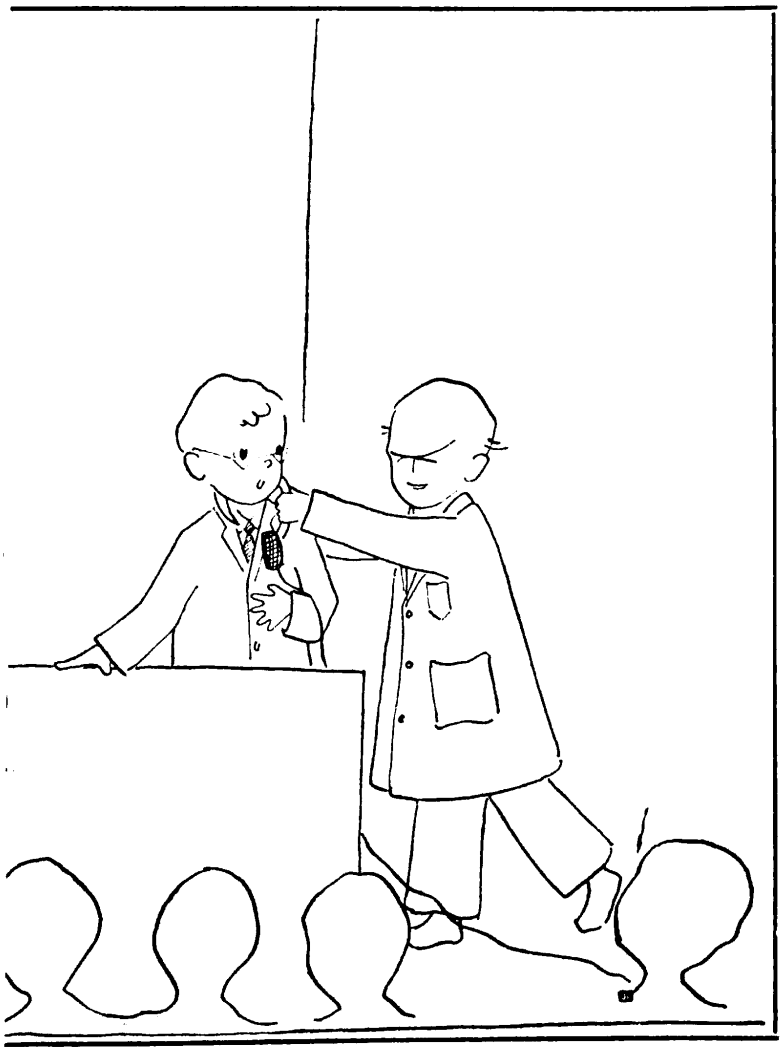
Let true friendship reigns, "You may use my car-park if you wish."



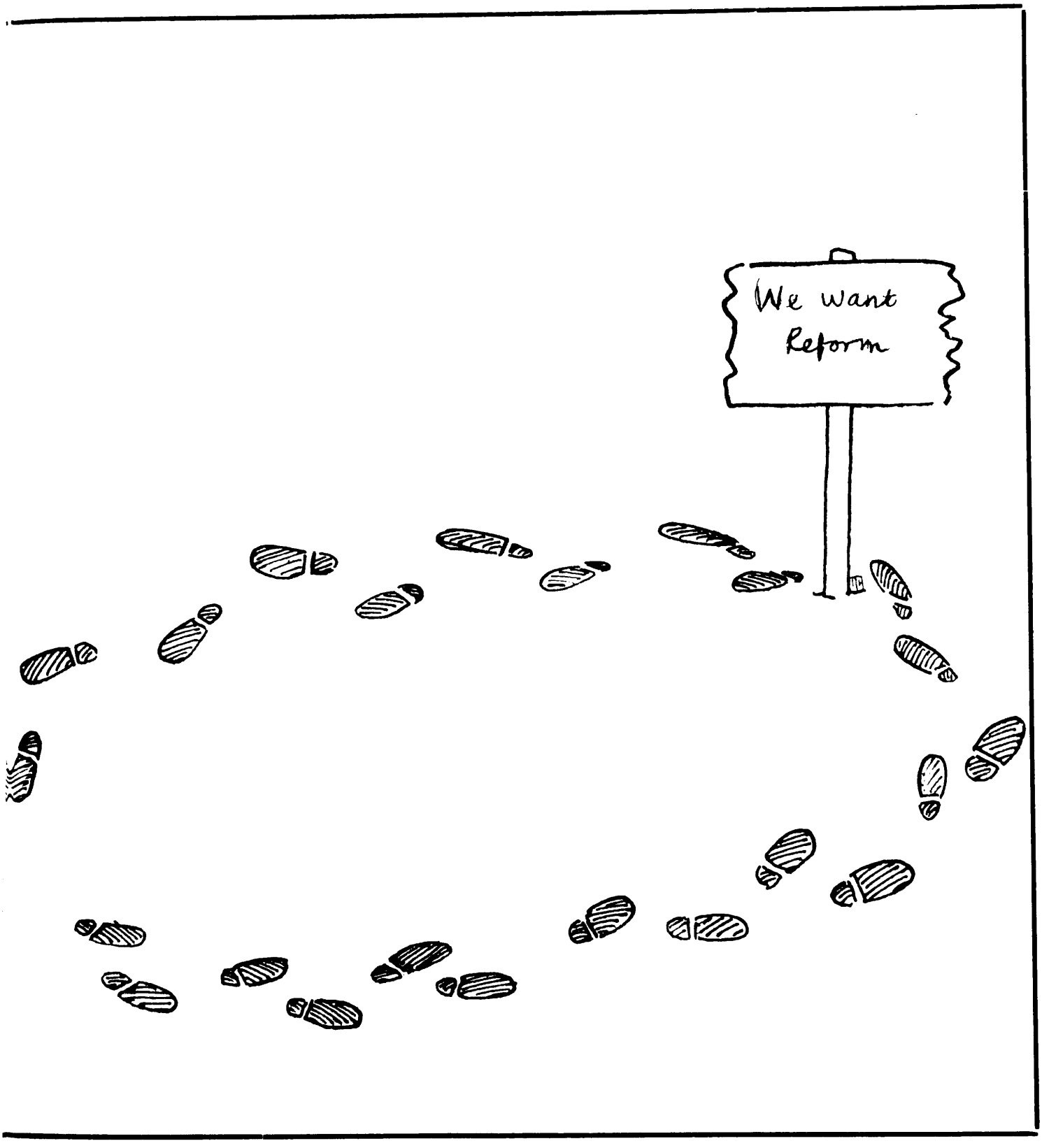
Let equality pervails.



Let more babies be delivered.

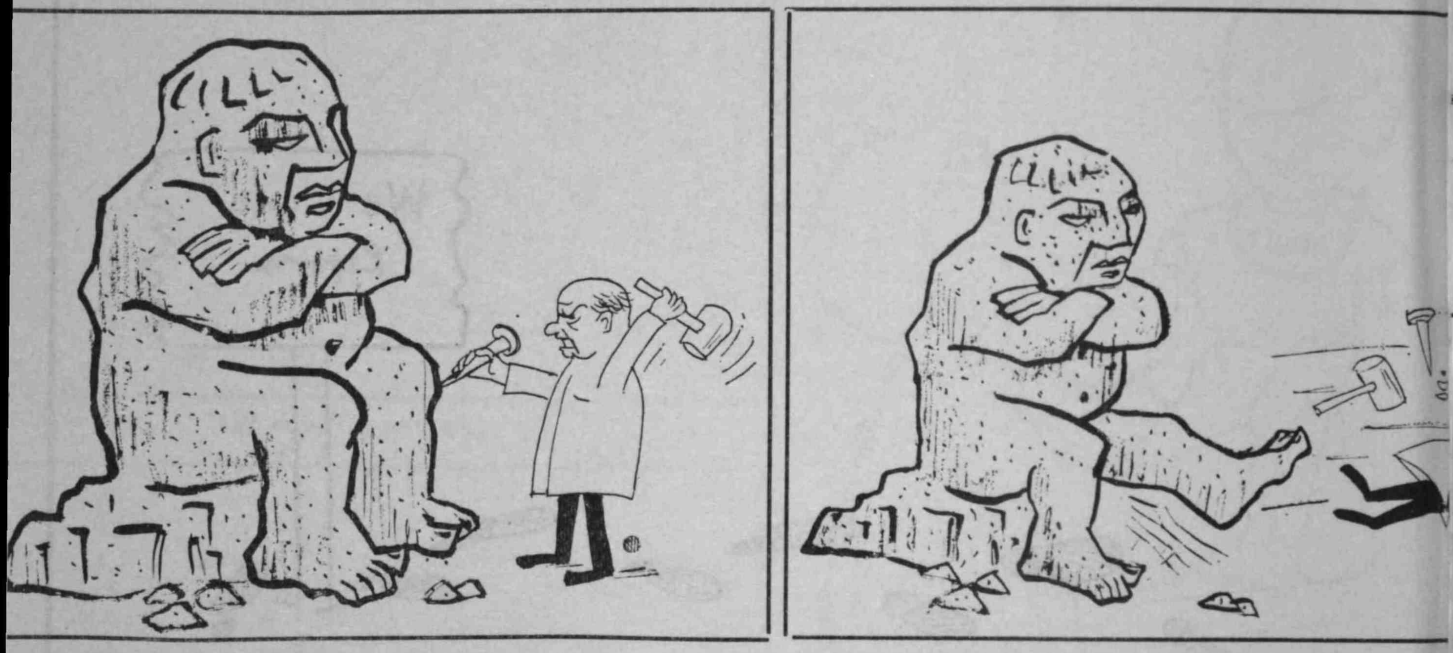


Let every voice be heard.

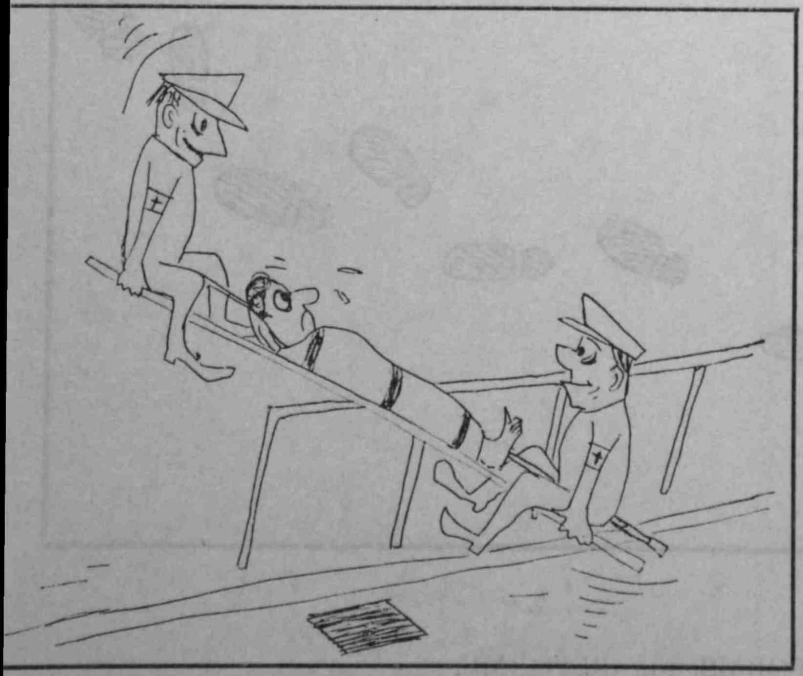


REFORMS, YOUR REFORMS, MY REFORMS,
VIVA REFORMS!

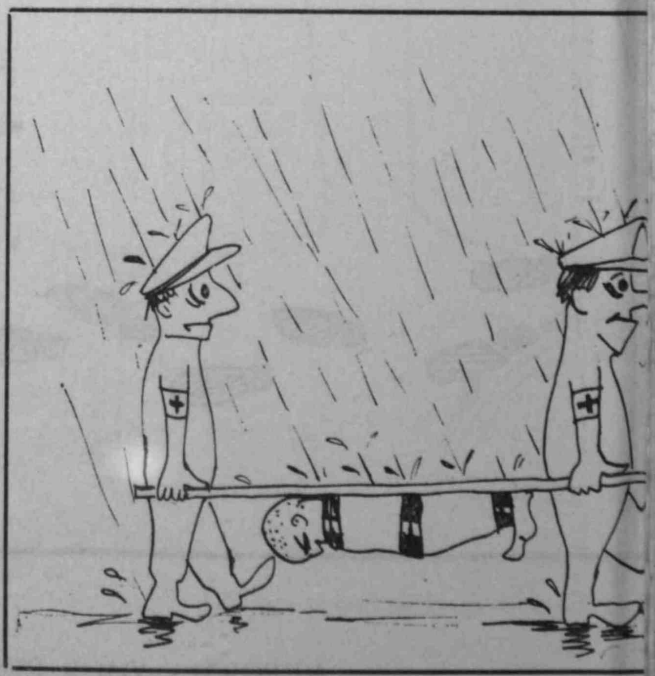
LEGENDARY MEDICS



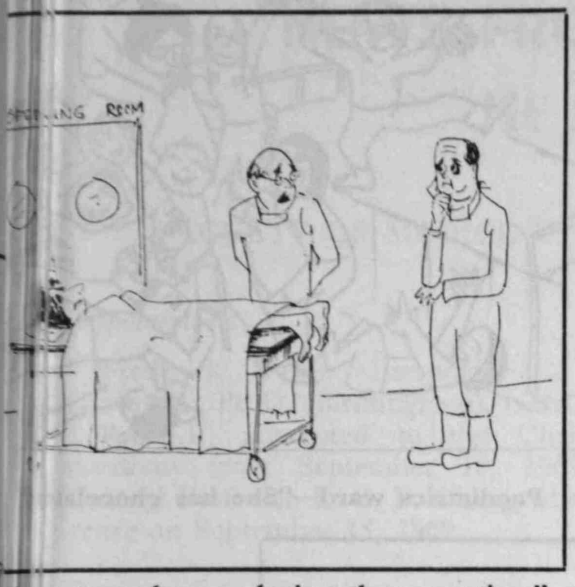
Yarns of the Stone Age.



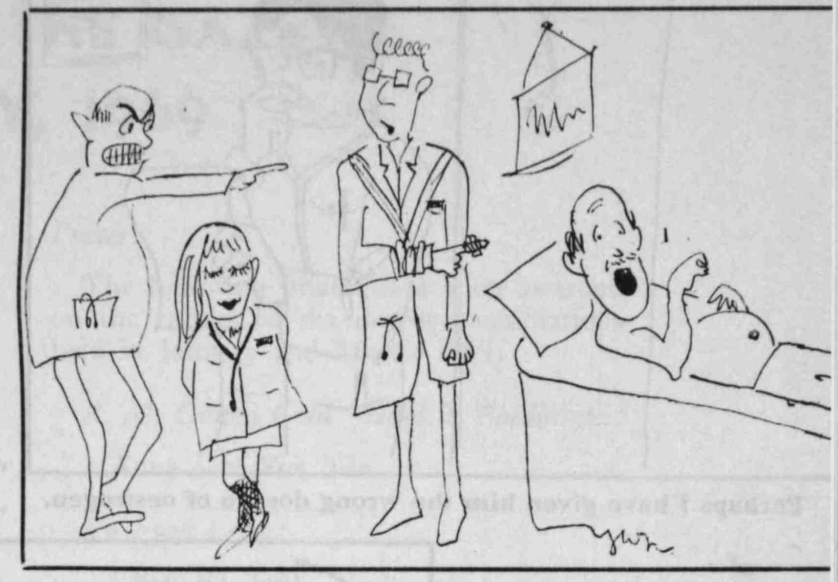
Young Hearts at work.



Rainy day first aid.

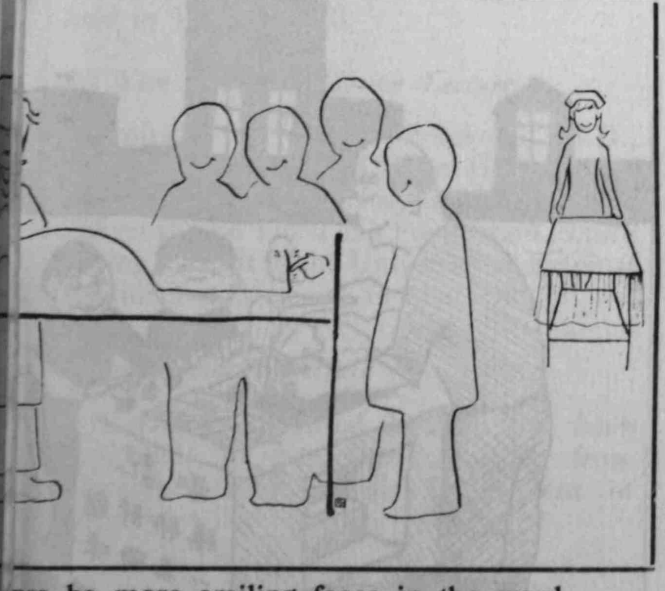


re turned over during the operation."

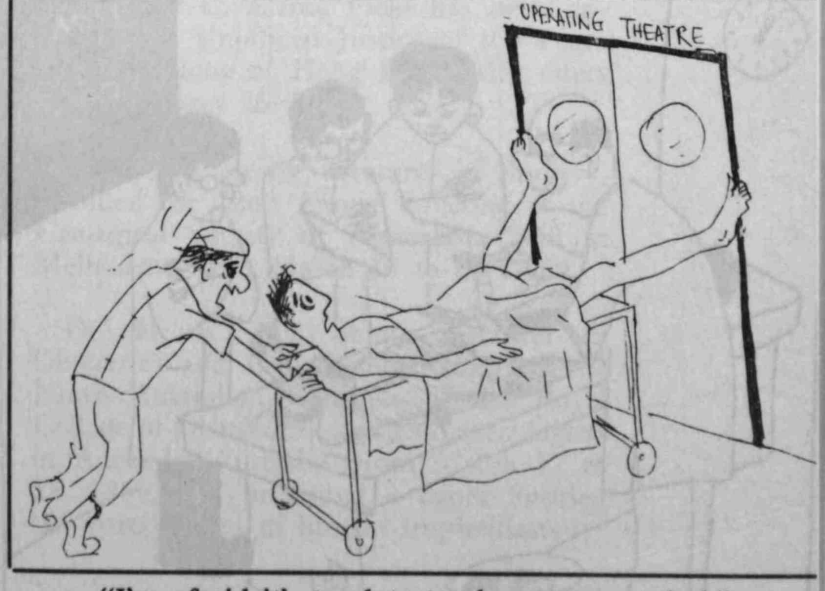


"If you don't put your finger in, put your toe in!"

"I know that you are dedicated to your work. But would you mind just stop for a little while?"



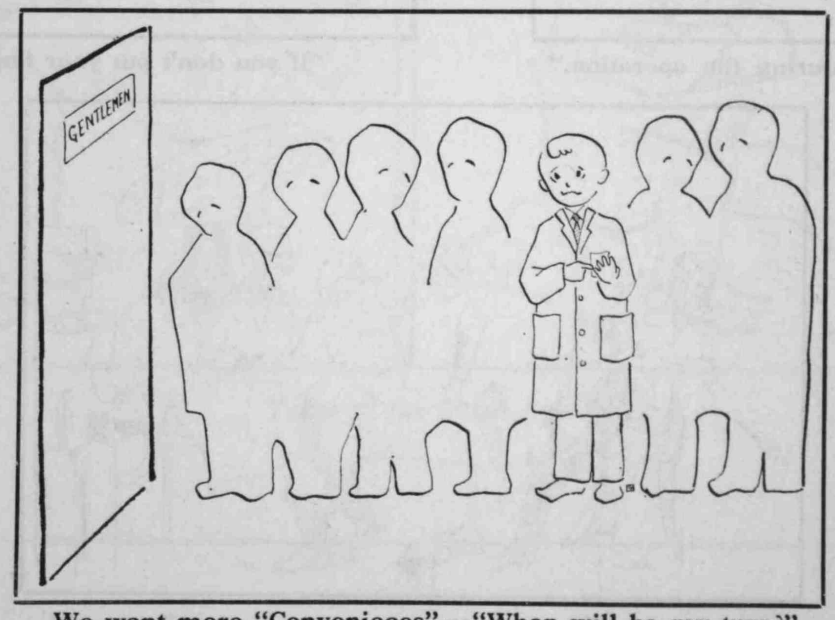
ere be more smiling faces in the ward.
cat-like).



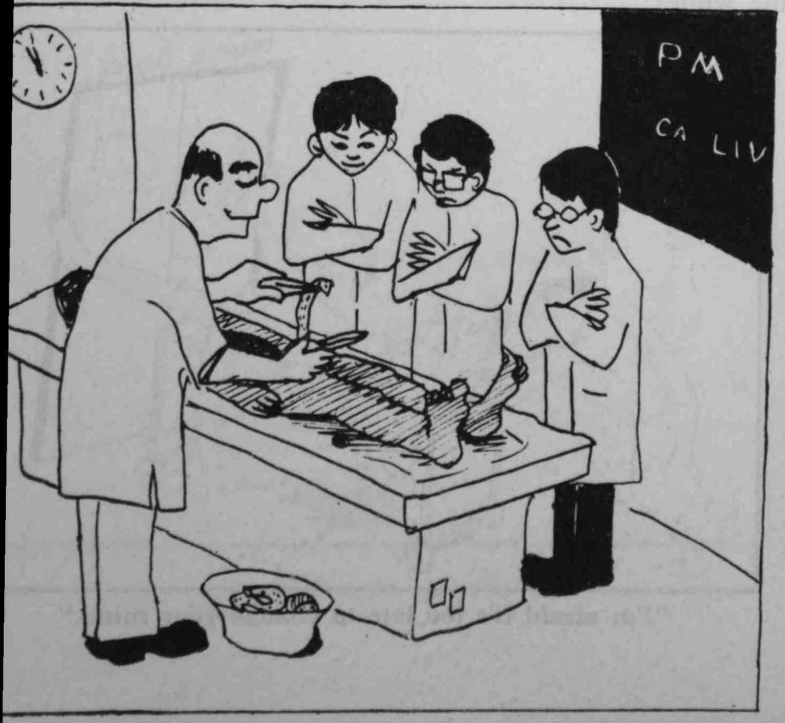
"I'm afraid it's too late to change your mind."

Perhaps I have given him the wrong dosage of oestrogen.

Paediatrics ward—"She has chocolates!"



We want more "Convenieces".—"When will be my turn?"



A way to make ends meet.

NEWS FROM THE GAZETTE
1st MAY, 1969

FACULTY OF MEDICINE

Appointments

Frederick Peter Lisowski, L. M. (Rotunda), Ph.D. (Birmingham), L.R.C.P.I. L.R.C.S.I., appointed to the Chair of Anatomy from September 16, 1969, to succeed Professor K. S. F. Chang who will retire on September 15, 1969.

Mok Che Keung, M.B., B.S. (Hong Kong), F.R.C.S. (Edinburgh), appointed Lecturer in Surgery from January 1, 1969.

Professor P. H. Teng, C.M.G., O.B.E. M.B., B.S. (Hong Kong), D.P.H. (London), re-appointed Professor of Preventive Medicine part-time to June 30, 1970.

Resignation

Dr. R. E. Boden, Lecturer in Pathology, from June 1, 1969.

External Examiner

Professor J. P. M. Tizard, M.A., B.M., F.R.C.P., D.C.H., Nuffield Professor of Child Health at the Hammersmith Hospital, London, appointed External Examiner in Paediatrics for the Final Examination to be held in January 1970.

Lo Yuk Tong Foundation Lecture

Professor T. A. J. Prankerd, M.D., F.R.C.P., Professor of Clinical Haematology at University College Hospital, London, will deliver the Lo Yuk Tong Foundation lecture during his visit to the University as External Examiner in Medicine in May 1969.

Digby Memorial Lecture

A Digby Memorial Lecture has been instituted, to be given annually from November 1969 in the Department of Surgery.

Prizes

The following prizes have been awarded on the results of the degree examinations held in January and March 1969:

R. M. Gibson Gold Medal in Paediatrics:

Anna Lee Yok Yee

Ho Fook Prize:

Chan Ki Tak

Ng Li Hing Prize in Anatomy:

Chan Ki Tak

The Janet McLure Kilborn Prize in Physiology and Biochemistry:

Connie Leung Chun Mau

The *Li Po Kwai Prize in Surgery* has been awarded to Dr. Frank C. Y. Cheng for the best essay submitted.

Personalia

Professor Daphne Chun attended the Central Medical Committee meeting of the International Planned Parenthood Federation in London on March 28 and 29, 1969.

Professor C. Elaine Field has been appointed an Unofficial Justice of the Peace for the Colony of Hong Kong with effect from February 26, 1969.

Dr. C. H. Leong, Lecturer in Surgery, attended the 22nd Annual Meeting of the Urological Society of Australasia held in Melbourne from March 16 to 20, 1969.

Dr. H. K. Ma, Senior Lecturer in Obstetrics and Gynaecology, attended the Ninth Australian Congress of the Royal College of Obstetricians and Gynaecologists in Adelaide, Australia, from March 17 to 22, 1969, and presented a paper entitled 'In vitro studies of human trophoblasts'.

SENATE

Joint Salaries Committee

Professor J. B. Gibson has been elected as the Senate's member of the Universities Joint Salaries Committee (a committee appointed jointly by the University and the Chinese University of Hong Kong).

Use of English examination

Among the minimum entrance requirements for admission to the University has been one requiring a pass in the Use of English immediately preceding entry. The Senate now announces that this requirement will be rescinded for entry in and after 1969. However, all candidates who wish to enter the University will still be required to take the Examination immediately preceding entry (i.e. in the year in which entry is sought), as selection for admission to a Faculty will still depend upon a satisfactory performance. Each Faculty will each year determine what is a satisfactory performance.

Undergraduate residence

The University has announced the adoption of a policy of voluntary residence as from the beginning of the academic year 1969-70.

FREDERICK PETER LISOWSKI

L.M. (Rotunda), Ph.D. (Birmingham),
L.R.C.P.I., L.R.C.S.I.

Dr. Frederick Lisowski, Senior Lecturer in Anatomy at the University of Birmingham since 1964, has been appointed to the Chair of Anatomy from September 1969.

Of Irish nationality Dr. Lisowski graduated with distinction from the Royal College of Surgeons in Dublin in 1947. Thereafter he worked as Demonstrator of Anatomy, first at Trinity College, Dublin, then at the University of Liverpool, before being appointed Assistant Lecturer at that university in 1953, and in 1954 Lecturer in Anatomy at the University of Birmingham. He was awarded the Ph.D. degree of the University of Birmingham in 1963 and was promoted Senior Lecturer in 1964.

From 1965 to 1968 Dr. Lisowski was seconded by the University of Birmingham as an Associate Professor to the Haile Selassie I University in Addis Ababa, where he was instrumental in setting up a Medical Faculty and in particular a Department of Anatomy. During this time he was a founder member of the Ethiopian Biological Association and a member of the Ethiopian Medical Association.

Dr. Lisowski's research has been largely in the field of comparative morphology and human biology. He studied anthropometic techniques under the late Dr. J. C. Trevor at the Duckworth Laboratory at Cambridge in 1951 on a grant made to him by the Egypt Exploration Society, and has since become an international authority on matters relating to comparative osteology and the diagnosis of human remains. In this connection his specialist knowledge has been brought to bear on investigations of the findings of archaelogical excavations in many parts of the world.

Dr. Lisowski is a Fellow of the Royal Anthropological Institute and of the Zoological Society of London, as well as being a member of several anatomical, anthropological, and medical societies and associations. He is a former member of the Committee of the Birmingham Branch of the British Medical Association, and has represented the University of Birmingham on the Association's Full-Time Medical Teachers and Research Workers Committee.

PUBLICATIONS

Department of Anatomy

M. C. Ip and K. S. F. Chang: 'A Study on the radial supply of the human brachialis muscle', *Anatomical Record* Vol. 162, No. 3, pp. 363-372.

Department of Obstetrics and Gynaecology

T. Chow: 'Chromosome anomalies in gynaecology', *The Bulletin of the Hong Kong Chinese Medical Association* Vol. 19, No. 1, pp. 61-66 (July 1967).

D. Chun: 'Clinical evaluation on the use of intra-uterine contraceptive device', *The Bulletin of the Hong Kong Chinese Medical Association* Vol. 19, No. 1, pp. 69-74 (July 1967).

A C. de Barros Lopes: 'Menopause', *The Bulletin of the Hong Kong Chinese Medical Association* Vol. 19, No. 1, pp. 55-59 (July 1967).

K. H. Lee: 'Ruptured uterus', *The Bulletin of the Hong Kong Chinese Medical Association* Vol. 19, No. 1, pp. 51-53 (July 1967).

H. N. Soo: 'Anaemia in pregnancy', *The Bulletin of the Hong Kong Chinese Medical Association* Vol. 19, No. 1, pp. 43-47 (July 1967).

Department of Orthopaedic Surgery

K. P. Chan: 'Painful parta-articular calcification', *Far East Medical Journal* Vol. 5, No. 2, pp. 58-61 (February 1969).

Department of Paediatrics

K. S. To, K. H. Luke, and H. P. Lau: 'Report of a haemoglobin study of children at Aberdeen, Hong Kong', *Bulletin* Issue No. 3, pp. 14-16 (December 1968).

Department of Physiology

K. K. Cheng, K. M. Li, and Q. Y. H. Ma: 'The mechanism of respiratory failure in ciguatera poisoning', *Journal of Pathology* Vol. 97, No. 1, pp. 89-92 (1969).

Department of Surgery

F. C. Y. Cheng (with J. Spencer, G. P. Burn, and A. G. Cox): 'A possible fallacy in the interpretation of the Hollander Test', *British Journal of Surgery* Vol. 55, No. 5, p. 389 (May 1968).

C. G. Koo and A. van Langenberg: 'Chyluria', *Journal of the Royal College of Surgeons of Edinburgh* Vol. 14, No. 1, pp. 31-41 (January 1969).

K. H. Kwong (with Yoshimasa Miyauchi): 'Hemodilution perfusion of cyanotic dogs—physiological studies', *Journal of Surgical Research* Vol. 8, No. 8, pp. 360-366 (August 1968).

G. B. Ong: 'Recurrent pyogenic cholangitis', *Medical Annual* Issue 86, pp. 25-36 (1968).

G. B. Ong (with Harry S. Y. Fang): 'Radical treatment of cervico-dorsal spinal tuberculosis', *Journal of the Royal College of Surgeons of Edinburgh* Vol. 14, No. 1, pp. 20-30 (January 1969).

G. B. Ong and C. H. Leong: 'Surgical treatment of primary liver cancer', *Journal of the Royal College of Surgeons of Edinburgh* Vol. 14, No. 1, pp. 42-55 (January 1969).

G. B. Ong and K. H. Kwong: 'The Lewis-Tanner operation for cancer of the oesophagus', *Journal of the Royal College of Surgeons of Edinburgh* Vol. 14, No. 1, pp. 3-19 (January 1969).

M. H. Shiu and A. van Langenberg: 'Adult vaginal hydrocele in Hong Kong', *Journal of the Royal College of Surgeons of Edinburgh*. Vol. 14, No. 1, pp. 56-61 (January 1969).

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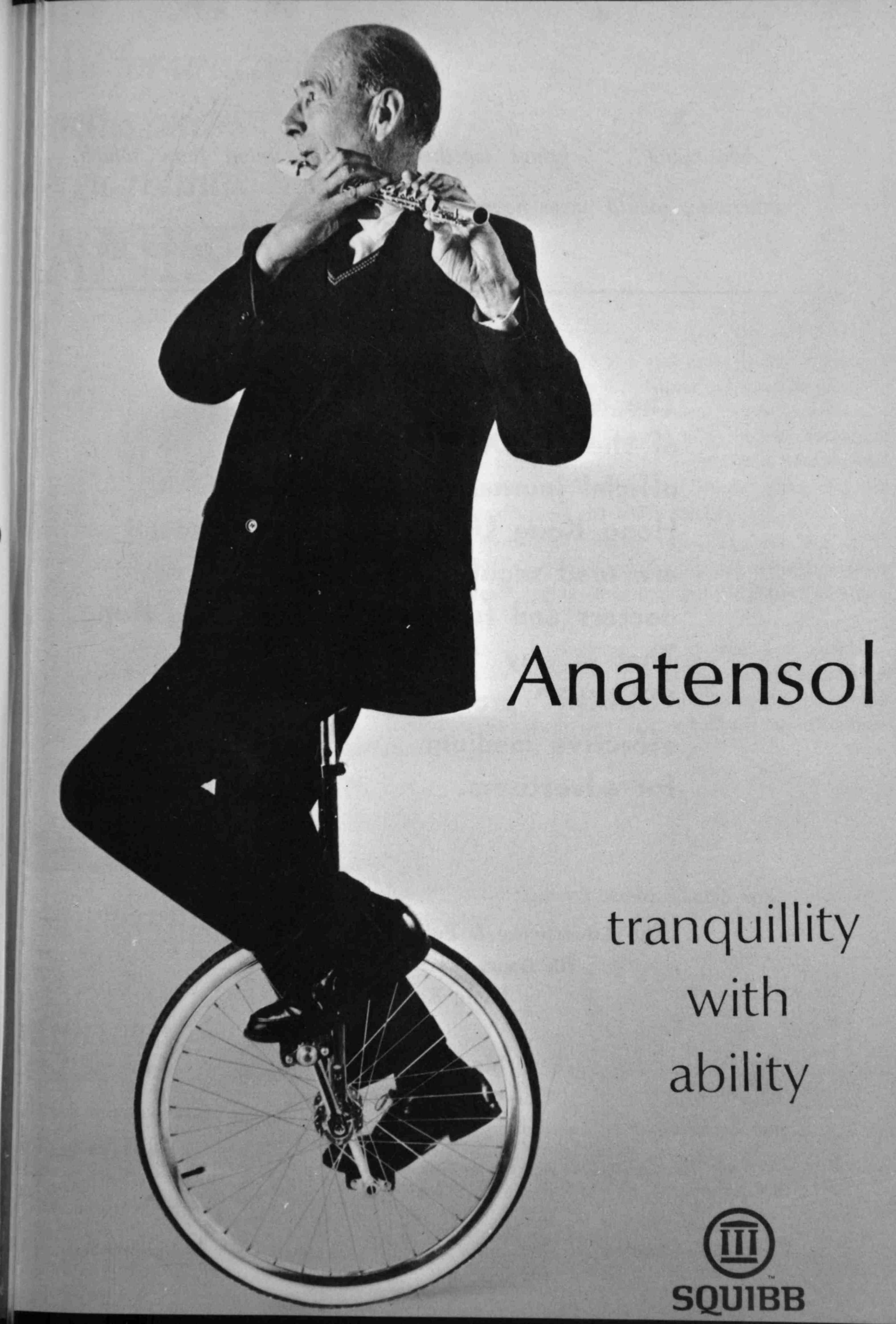
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REFERENCES:
Practitioner, **198**, 834, 1967. *Practitioner*, **198**, 711, 1967.
Br. J. Clin. Pract., **21**, 401, 1967. *Clin. Trials J.*, **4**, 781, 1967.

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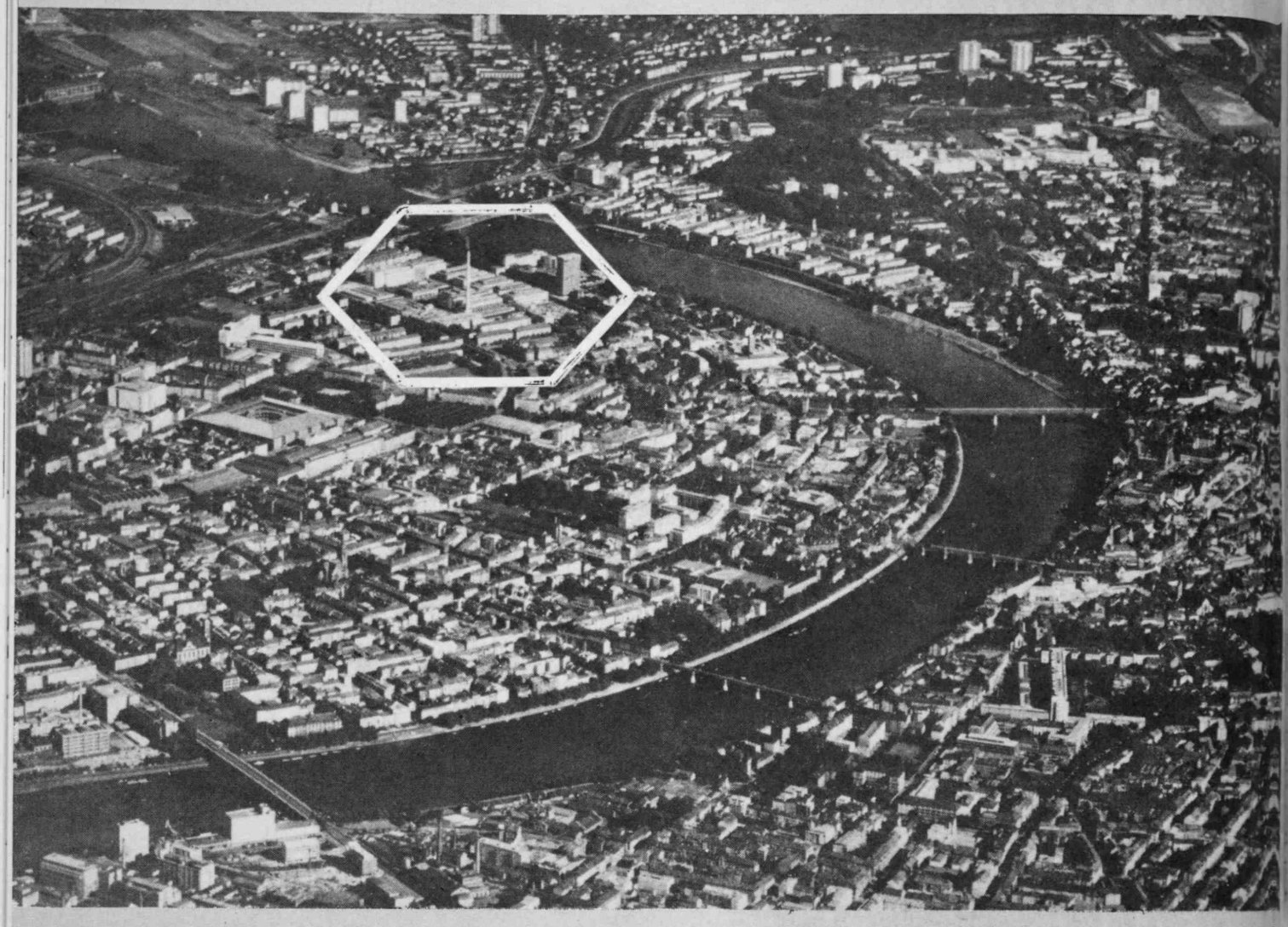

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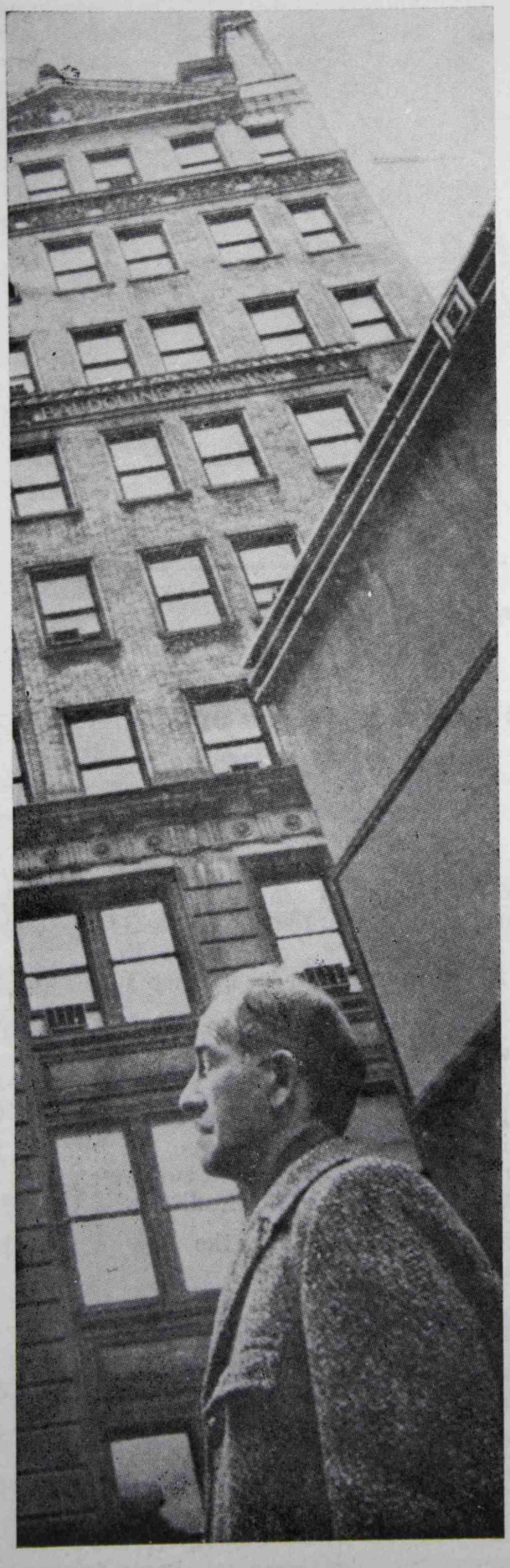

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ASTHENAL FORTE

Tonic-Food for the Nervous System

INDICATIONS

Asthenia — Anorexia
Fatigue — Overwork — Convalescence —
Depressions — Adynamia
Neurasthenic and psychasthenic syndromes —
Psychical involutions — Oligophrenia —
Cerebral or sexual insufficiency — Infantile bradyphrenia.

DOSAGE

2-4 tablets daily, divided in three doses administered after morning, noon and evening meals.

As a nerve roborant in the case of fatigue or if a particular effort has to be undertaken:

4 ASTHENAL FORTE tablets per day, for an 8 to 10 days period, divided in two doses, administered after breakfast and lunch.

Radical treatment: 3 tablets daily, divided in two doses administered after breakfast and lunch during 2 to 4 months, with a weekly free interval after each three week period.

SUPPLIED IN

Package of 50 coated tablets.

EACH TABLET CONTAINS

L — (+) — (natural) glutamic acid . . .	0.150 g
Vitamin B_1	0.005 g
Vitamin C	0.020 g
Mediaphos (*sodium salt of dimethylaminophenylphosphinic acid*)	0.030 g

Médial Geneva (Switzerland)

NOTE: ASTHENAL FORTE contains neither caffeine nor amphetamine or any other sympathomimetic agent.

Sole Agents:

GETZ BROS. & CO., INC.

Sole Distributors:

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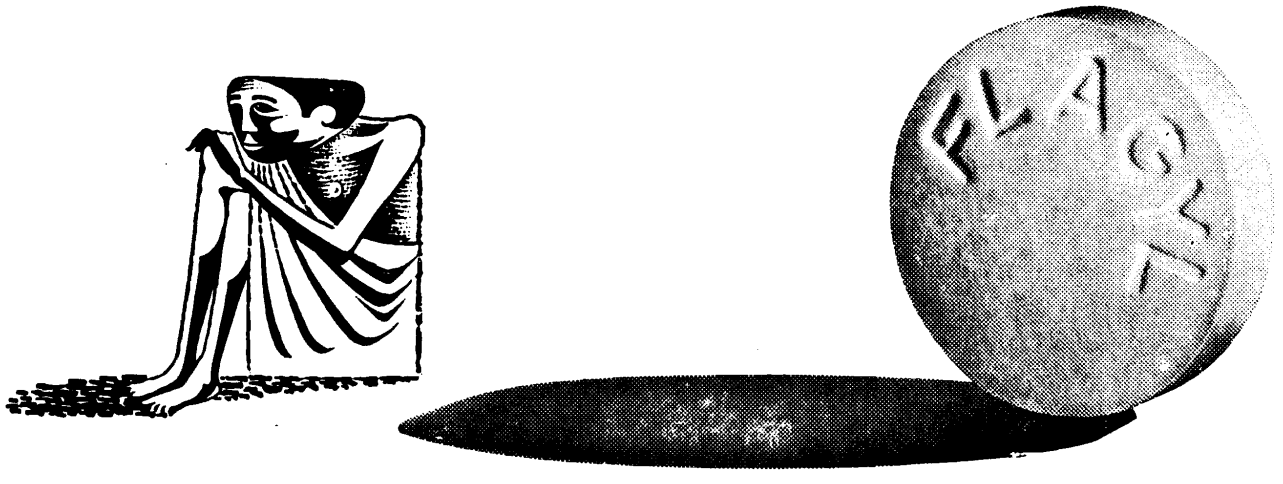
HONG KONG
TEL: 225447, 243397

Flagyl by itself

cures amoebiasis in all its forms



"There can be no doubt of the remarkable activity of this drug in amoebic liver abscess . . . it is unique in that a single dose is curative. One could hardly ask more of an amoebicide."
Med. Today, **3,** 85, 1969.

". . . because it is at present the only safe, well tolerated, non-toxic, single preparation possessing adequate activity at all the necessary sites, it is now the treatment of choice in amoebic dysentery."
Indian Practitioner, **21,** 696, 1968.

Flagyl* is available as Metronidazole Tablets B.P. 200 mg.

Full information available on request

*trade mark

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我們的見解

「書中自有黃金屋!?」
「萬般皆下品、唯有讀『醫』高!?」

陳嘉富

近日，不斷聽到社會人仕談及香港非常缺乏醫生，雖加上從外地聘來的，亦不敷應用。於是有人認爲政府應增加醫官的薪金，或是畢業生的服務應硬性延長，又或應以獎學金來鼓勵醫學生參加政府醫院。以上任何一點，均指出社會實在需要更多醫生，應付醫療問題；祇從海外聘取並非治本的辦法；既然醫生的需求是這樣急切，我們醫學生實無須顧慮到職業問題。這想法也許是太自私，但這確實給予我們很大的「安全感」。

大家都知道，醫生的生活是最安穩不過，一經政府承認，少有要爲生活担憂的。若不設立私家醫務所，亦很容易在政府醫院謀一位置；生活有了保障，醫生便可以安心工作了，在閒暇時，還可以旅行、散心、或玩哥爾夫球，調劑千篇一律的日常生活。在財富方面，一個私家醫生不比大商家差，在地位方面，醫生最受人稱譽的；這並不言過其實，醫生用學識來賺取診金，若用本利算式來計，幾乎是一本萬利的，單舉一個例子，稅務局估計某一醫生在幾年來，瞞稅超過二百萬，如此推算，他的收入比普通大商家要多幾倍呢！醫生除擁有財富外，還到處受人尊敬，他們的財富是以正當途徑得來，而醫治病人又是一件救人的工作，所以能獲得普遍的崇敬。

社會人仕既尊敬醫生，也同樣尊敬醫學生，而且政府很重視我們，因爲我們是醫院的「接班人」，由此我們可以得到很大的信心來完成學業。嘗有人以此爲笑語：「當讀到第四年的時候，就可以購定藥箱了」，這話是言之過早，但可見醫學生的前途是明朗的，祇要考試沒有問題，志願一定能達到。

我們的各樣好處，可使外人非常羨慕。連一般家長的心理，都很希望兒女能成爲醫生，若有兒子考取了學位，便比中獎券還歡喜。但我們的生活却並不輕鬆：整天都担心考試不及格，而這樣的心理最難受，因爲我們在考試上缺乏安全感。晝讀夜讀，亦一樣會「肥」，環顧其他學系，有的祇要幾晚通宵便可應付過去；別人平時隨處遊玩，我們却是在圖書館裏「啃書」；高年級時，連假期也少得可憐，功課繁緊，稍爲放鬆，卽有追不上的感覺，確實體驗到「學如不及，猶恐失之」的意義，苦處是不足爲外人道的，若問誰是最苦的學生，則非「醫」莫屬了。

不過，醫學生的辛勤又並非完全沒有報酬。在家裏，讀醫的兒子是寵兒；在路上，醫學生是昂首闊步的；想想打着醫學會呔在學生會的走廊上走，是何等威風的事；事實上，高年級的無不帶着一副威嚴的面孔，連低年級的看見了也要生畏，當然後者亦渴望着將來有這樣的一日。

美好的遠境，給我們很大的鼓舞，明確的目標，免去我們多餘的焦慮，深自慶幸我們已成爲醫學院的一份子。誠然，我們明白財富與地位不是最重要的，最要緊的是能够做一個有用的人。我們要盡力爲社會服務，爲人羣謀幸福，不要變成一副賺錢的機器，失落了人生的意義。

從「大學改革」說到「學生品質」

·晶瑩·

在世界各國大學生推行學運之際，香港大學也爆發了歷史性的「大學改革」，如今事隔數月，轟動一時的學運已成過去。在那羣「覺醒同學」奮勇鬥爭，氣焰高漲之際，筆者素以懦弱見稱，並未敢發一言。今見事過境遷，也不妨來一個談談感受。

世界各國所推行的學生運動，多各有其不同的性質，有不少是純爲爭取學生福利，有不少是存有其政治背景，也有乘亂世以做英雄。其性質雖有差異，而其共同點是：所有發生學潮的大學，都是處在自由民主的界域裏。香港學運之蓬勃，正好說明了社會言論自由，成爲了政府當局民主窗櫥的最佳陳列品。在香港，什麼也可以提出議改，甚至政府也可以拿來開玩笑，在極權國家的界限裏，能議改的，恐怕是自己的項上頭顱。

多年來，學苑中文版除了幾篇無病呻吟的文藝作品，幾首祇有作者自己才看得懂的新詩外，同學們都是三緘其口，對大學行政，不發一言。自「二月學潮」之後，數以百計的提議一窩兒走了出來；列入改革行列的事項。教師品質，大學行政方針，甚至行政立法兩局議席，也被列入改革範圍，諸如此類，不可罄數。在這改革運動的狂熱下，要找一樣未被議改的東西，是絕非輕易的。然而，其中一項最有討論價值，而從未被人提及的，就是學生們自己的品德。這是源於「醒覺同學」的疏忽，還是我們學生本身品德聖潔高超，不可褻瀆，或是感到自己行爲卑劣，不屑一談，尚未可知。

在港大胡混了兩三年，自信對港大學生也有相當認識。大體上，可分爲兩三種，其中雖有所差異，大多離不了些方程式。大多數人有試考時，便把頭往書本裏鑽，狂鋤數星期，隨了小部份做了犧牲者外，其他都多可以瞞天過海的。沒有試考時，便四出荒唐渡日，有時在「鷄房」玩兩手桌球，在休息室裏賭沙蟹，烟頭常把那些方形桌子燻個焦黑，每日例常在飯堂呆坐上幾小時：男的在那裏談女人，女的在搬弄是非，可是這裏也常是世界上最成功的婚姻介紹所啊！間中也有在佐敦紀念圖書館開一些社交集會。做社交專員的，總要有點方法：在中學裏弄來一羣小女孩，以供他們尋開心。年前，筆者也曾身歷其境，但見烏燈黑火，狂言四出，淫樂頻傳，男的搖著腰，女的扭著臀，與非洲土風舞大底是同一格調，筆者見聞淺薄，未知與黑燈舞苑有何異樣。當然這裏也少不了那一羣書獃子，整天呆在圖書館裏，躲在那不足十方尺的小格子內，終生願望：便是考取一級榮銜，只要圖書館不塌下來，那個做皇帝也不管，要他們花上一兩小時看看世界新聞，恐怕比割下他一塊肉還要苦。比較值得原諒的，便是每分鐘也想着如何去搶錢的一羣；有些確是家庭經濟上需要，不少却是忙於找尋供他們鬼混的老本錢。事實上，以上說的，任何人只要在港大站上一兩日，便也會明白。說上大半天，有良心的，也會自我檢討，撫心自問，自己究竟是屬那調子。

除了少數精明的學生領袖外，以這樣子的一羣大學生及他們對社會認識的膚淺，我以爲賦予學生過大的權力甚不適當；學生本身對權力過份要求更屬不智。香港的大學制度，當有不少未善之處，若能於適當情形下提供建設性的提議，當政者也不時會稍作修改，以娛衆意。然而，我總覺得學生本身的增進己學，檢討行爲，修養人格，實比改革大學行政猶爲當前急務。若以目前的港大學生，妄論進身高位，圖操行政之權，絕不會爲當局所接納，誠白費心力而已，未能修身而論治國，僅能暴露自己的愚昧與無知。

在這二十世紀的大學，身處在一幢十九世紀的建築物內，而受著十八世紀大學制度的薰陶，爲什麼不勇敢地自我批評，「我們自己到底是屬那一個世紀？」

乙：你是否想表示，腦可代表一個人，而我們面對某人時，本質上是面對他的腦，而不是面對他的面貌，形態等。

甲：可不是嗎？這在孿生的兄弟中猶爲明顯，當孿生兄弟的外型幾乎完全相同時，分別的要點是他們有不同思想的腦。

乙：我漸能把握你的思想方向，你是說，一個人的存在是腦的存在，而不是軀體的存在。但這豈非和宗教上的靈魂差不多？

甲：絕對不是。宗教的靈魂在人死後猶存，但人腦將隨死亡而分解。于是，我們可開始一個新的論點，就是，如何可使人腦不隨死亡而分解，假設現在是數十年後，科技已發展非常；而一個病人被送到醫院中，這個病人除腦部外，已盡爲癌細胞所侵，於是醫生將腦移出（或者，從另一角度看，是割除腦以外的器官），然後，再將這個腦放入「人造身體」中，與普通人一般，又可出院了。這個人的軀體，無疑已是死去，但我們都知道，他實際上仍然存在。

乙：你說，這不是十分難接受的理論嗎？

甲：是的，驟然看來，的確難以接受。然而，我們的社會實在已經接受了另一種同樣的比較簡單的手術：那些斷了手臂的，不是已經用人做手臂代替嗎？那些失去了心臟或腎臟的，不是正嘗試以人造心、人造腎替代嗎？那些追求外表的人將可滿足，因爲他們可申請一個「合潮流」的軀殼，男子將不再愁外貌，女子也將不愁曲線；或者，世人從此轉求內在美，亦不失爲一好處。

乙：現在我了解到，一個人可以換腎，換心，或者換掉整個軀殼，但腦不可以換以他人的腦，而只可以將他人的軀殼換掉自己的。我更想到，腦部以外的身體，可以用精密的儀器代替，而不必一定有人體的形狀，這對于熱心思想的人來說，是沒關係的；因此，譬如一個數學家生病，要換掉身體，而將腦部置于儀器中，使他可以繼續思想，只缺少了外表，我想，他是願意的。

甲：但有一點問題，你還沒有想到。就是，換掉人的軀體，只是保存一個「人」免跟隨軀體的疾病、損害、等等而死去，這只是醫學上的技術問題。但我們爲何不製造比人腦進步的人造腦？當然，在將來不是沒有可能的。因爲，生物的腦進化至人類大概已不能在腦的組織上更進一步，於是，可以製造比人腦爲佳的人造腦，正如人類製造了比人脚爲佳的汽車，比飛鳥翅膀爲佳的飛機等等，而飛機、汽車、都不是單靠有機體進步所可以達到。但隨人造腦而來，將有一個重大的問題，因爲人造腦比人腦優越，物競天擇的力量，將會使人類被淘汰了，但我們又有什麼可怨嘆呢？人類已不是在進化史上，淘汰了許多其他的生物？

乙：但這豈非與你初時的說話相矛盾？你起初不是說：人生在追求生命的意義，但設若人造腦淘汰了人類，則豈非便不能再知道生命的意義嗎？

甲：我於這點，也是迷惑不解。但或可以這樣假設，人類只是進化上的一個「站」，而進化並不會停止，「人製腦」也許會成爲進化的下一個站，但進化又會不會再繼續下去呢？或者，我們的人造腦憑它們的優越腦力，會爲我們解答，又何嘗說得定呢？我們的人猿祖先，不會思索牠們爲何生存；人類，考慮人生的意義而不能得；也許，我們的人造腦，會在我們被稱爲「祖先」之前，解答我們的問題吧！況且，正如我所說，我們現在的思想方法，很可能並不足以解答這個問題。我只能預言，在科學繼續發展之下，我們的思想方法，將會更趨完善，而解答這個問題的可能也是較大的吧。生物學上的進化論，物理學上的相對論，都幫助了我們對宇宙及對生命的了解，我們期望着像達爾文、愛恩斯坦等的智人出現，告訴我們更高深的理論，假設他們的說話，是能爲我們了解的話。

進化

——我思故我在——笛卡兒

鄧兆華

甲：讓我們討論，一個有關醫學技術，而又似乎是生物學或哲學上的問題。

乙：我是有興趣的。

甲：讓我先問，你對人生的看法如何？

乙：人對人生發生疑問，是基于有「自我」的知覺，因爲知道自己是眞眞實實的存在于這個世界，所以會進一步問，我爲什麼要存在？但當我們這樣考慮時，其實發出的疑問應該是：生命爲什麼存在。因爲人只不過是生命的一種形式，所以不能單單問「人」爲什麼存在，而不考慮其他的生命形式。在我而言，我覺得「人」只不過是生物進化史上的最複雜產品。生物從最簡單的有生命的有機化合物，進化到複雜的人類，完全是地球上環境的作用力，引導着，指揮着這個進化的方向。如此，則人類仍然像一個變形虫，出生，成長，衰老，死亡，他的子孫繼續重覆着這個過程。也許，在生活比較多姿多采的人，這個過程比較不易注意到，但畢竟還是存在的。生與死，實在是在原始生命形式中可看到。所以人的生存，是不能問有無意義的。也許有些人曾想過，自己死後的世界是怎樣的？自己會不會再到這個世界來？這種想法，實在是幼稚的；因爲你現在知道自己存在，是因爲會思想，而思想起源于你的腦細胞，這些腦細胞將隨你的死亡而分解，雖則構成這些細胞的原子分子還存在，但將又構成地球上的其他事物，「你」已可以說是烟銷雲散，或者樂觀地說是「無所不在」，因爲地球上許多新的事物將會有「你」的原子，或分子在內。但「你」已經永遠消失于世上矣。也許基于這點，人們認爲生命寶貴，但實貴並不能解釋生命有無意義。我認爲不能問「生命有甚麼意義」，要問時應該問世界或宇宙有什麼意義，但這已非生物的問題。

甲：我同意你所說「人」是生物進化的一種形式，一種會思想，會發覺自己是存在世上的形式。但你似乎忽畧了一點，就是生物的進化是否到了「人」便停止呢？在我的意見而言，我認爲生物進化至「人」的階段，已採取另一種方式，這就是捨棄了形態上的改進，而着重于腦部的發展，這在由猴子到人猿到人類的祖先，以至現代人類的腦部構造可以意會得到的。而腦部的進化產生了思維，當生物可以思維時，他便可以得到「形態進化」永不能達到的便利；譬如說：進化力量永不能使生物離開地球生存，但有了腦袋，有了思維，「人」便製造太空船等，可以達到形態進化所不能至的地步。又譬如說；進化不能產生能以超音飛行的生物，但進化產生了腦、思維，以致間接地產生超音速的交通工具。我的意思是說，「人」的腦將取代自然的力量去引導進化，於是，我認爲人生是每一個人去爲進化而努力的時期。你之所以認爲人生無意義，只是你忽畧了進化並未停止的道理。況且，你的立論是以現在的科學爲基礎，但自然科學的歷史還短得很，當基于一種還未算高度發展的智識而立論，又如何可算正確呢？我們應努力于科學，那麼，生命的謎，或許會被解答呢！或許在將來科學進展的年代，我們可以用另一種眼光對待人生。

乙：但你這些說話，和你起初所說謂有關醫學技術等的問題又有何關連呢？

甲：是有密切關連的。因爲以上我們討論所得到的結論是人類的腦將繼續推進科學，科學又發展了人類。所以腦子是人最寶貴的部份。腦足以代表一個人；身體的其他部份，是腦的附件而已。假設我的腦換轉到你的頭骨中，而你的腦則轉換至我的頭骨中，那麼，當我們各自返家，或返到我們的工作之處時；我們的家人、朋友、上司、下屬都認不得我們了，因爲我的外表是你的、聲音是你的、面部表情可有些分別，但我自己仍曉得自己存在于世上，當我詳細向家人、友人等解釋清楚時，他們也許會驚懼而避，但會曉得我仍生存。你的處境也與我相同。

七絕三首

微

落花

雨後隨風片片飛　東風何幸伴芳菲
孤高未許沾泥絮　願效寒梅傲冰霏

無題

其一

問君何處見殘英　謂伴清波映月明
處處人言花有意　却云流水是無情

其二

誰道清流最薄情　是花無意自飄零
設使武陵桃渡遠　斷紅何處覓棲停

七律一首

前人

暮春有感

榴花換了杜鵑紅　又是蟬鳴噪曉風
埋首三年盧扁學　盡遺一貫意殊鍾
苦期金榜榜名落　至謂求知知未通
質魯自慚明道少　希能奮力補愚庸

閒思

激流

早上天氣報告會預告午後會有雷雨，料不到雷雨却來得這樣快。未到十時，天色已黑得像晚上八九點鐘，氣壓低沉得使人覺得快要窒息。我無聊地坐在窗前，遠處天邊黑雲像一堆龐大的、滾動的、黑壓壓的棉絮，又像一張不斷擴張的大黑幕，轉眼遮蓋了整個天空。

一時間，一切活動像被凝結了一般，一切生物像在屏息靜氣；等待一轟天動地的變化。

一道藍光，劃破長空，霹靂一聲，隨着是不斷的巨响，像羣山在移動，地殼在裂開一般。雷聲過後，黃豆大的雨點，嘩啦嘩啦地响了起來。雨點密得像一塊半透明的布，從天上瀉下，將遠山，海岸，樓房及一切也遮蓋了。

我手上雖拿着一本魯迅的雜文，却無心閱讀，懶洋洋的看着雨點打在玻璃窗上，叮噹作响，陶醉在似夢還眞的景物中，不禁又想起白居易的詩句——山在虛無飄渺間——不禁暗暗叫好。正想學古人「風雅」一番的時候，突然想起應是到補習學生家授課的鐘點了，不禁興趣索然。在這大雨滂沱的時刻，撐一把小傘，要渡海到九龍學生家中授課，雖不至於要涉及膝之水，却少不免濕衣和沾得一身泥濘。然而爲了六七元授一小時課，好得減輕家中負担，却不能不去。想到此處，再也「雅」不起來。只好長嘆一聲，拋下書本，生活要緊，也無心再唸什麼山在虛無飄渺間了，反覺得大霧漫天會影响交通呢！

「風雅」，眞不是人人能「雅」得起，至少能付得起一有窗的房間，出入汽車，不用沾得一身泥垢，大雨中可不用出門等。否則，「饑來驅我去」，雨中走動，還易得到風濕呢！

新詩之頁

不要問我爲什麼沉默

激流

不要問我爲什麼沉默，
請問深沽的海洋，
靜靜地載着歷史奔流。
請問地心的熾燄，
靜靜地創造莊嚴的宇宙。
我已將一切哀哭及控訴的語言
吞下
化爲力量。
不要問我爲什麼沉默，
請問七旬的老翁，
當別人在火焰旁舉杯，
爲什麼尚蹲在人力車旁
等待？
請問枯癯的稚童，
當歡笑在操場上飄盪，
爲什麼尚坐在檔攤前
招徠。
我已將奮鬥與行動
填塞
說話的時光。
不要問我爲什麼沉默，
請問多少光輝的靈魂，
爲嘆息，失望，嗟怨所腐蝕？
請問多少燃燒的火，
爲生活，環境，私念所壓熄？
我已將一切虛僞的感情與無形的枷鎖，
擊碎，
拋諸腦後。
春雷一聲，
我將踏上生命的戰車奔馳，
在狂風中歡舞，
在暴雨中高歌，
迎接黎明。

我不願多談

前人

我不願多談，
對軟弱的自怨自艾，
對僞視一切的孤芳自賞，
對漠視羣體的個人發洩，
對空洞的卿卿我我，
對粉飾着利刃的「仁義」「慈悲」。
對追逐潮流的「理想」，
我不願多談。
若有說話，要是
以友愛砌成的責罵，
有原則的申斥，
以大衆爲前提的意見
眞誠的玩笑，
請光明磊落地
說吧！

社論

周易有言：天地之大德曰生。夫生生之德爲仁，仁人之術爲醫，故醫者習仁人之術，秉生生之德，斯所謂任重而道遠者乎？

我校既以明德格物立訓，則習術其中者，自宜誠敬以明德，謙虛以格物；庶幾不忝。蓋德之與物，如脣之與齒，互爲表裏。所謂君子進德修業；詩云：維予小子，不聰敬止；日就月將，學有緝熙于光明。佛時仔肩，示我顯德行。皆示人以德業竝重也。苟德不進修，則術雖至精，亦何補于國家社會哉？

今者普天之下，熙熙攘攘，無非爲利；外德業而不講，視欺詐爲當然。若某醫以貪汚枉法，而被訟于庭，若某醫以隱瞞稅捐，爲政府所徹查。聞訊之餘，不覺疾首。彼等固非生而如此，亦嘗于大學中，受教授諄諄善誘，與同學互相責善者也；何昔日之芳草，今直爲此蕭艾邪？詩云：大風有隧，貪人敗類。此之謂邪？意者彼初卽唯利是視，不本誠敬之意以求學，而欲挾其醫術，以漁大利。故罔顧校訓，無視醫德；是以其學益精，其德愈敗；貪婪放恣，非至身敗名裂不已。且使母校蒙其羞，醫界受其累。不猶可恨也邪！孔子曰：小人不恥不仁，不畏不義，不見利不勸，不威不懲，晉身大學，習大人之道，而德竟一若小人，寧非可恥之甚！

今夫學院之中，良士濟濟，然而此間醫生，猶供不應求者，何也？亦一利字之誤耳。蓋身在香江，而心存加、美者，不乏其人。生于斯，長于斯，受教育于斯；一旦羽翼成，而高飛遠逝矣。如此而求學，仁者之心邪？利而已耳！可望其無忝明德格物之訓乎？以市民稅捐栽培之大學生，而不獲其用，誠無怪人之抨擊大學也。易曰：莫益之，或擊之，用心勿恆；凶。實則天下同歸而殊塗，一致而百慮；又何必憧憧往來，朋從爾思也哉！

詩云：枝葉未有害，本實先撥。吾輩于大學中，苟存上述思想，則是敗其本也；而求他日造福社會，可邪？本之旣敗，枝葉雖存，又奚能久？歲月易逝，五載如飛，斯時不徹思猛悟，尚待何時？易曰：不遠復，无祗悔，元吉。不遠之復，修身之義也。夫士之弘毅，旣重且遠，斯又習仁人之術者，而可以不知也邪！