

Madras Medical

College Magazine

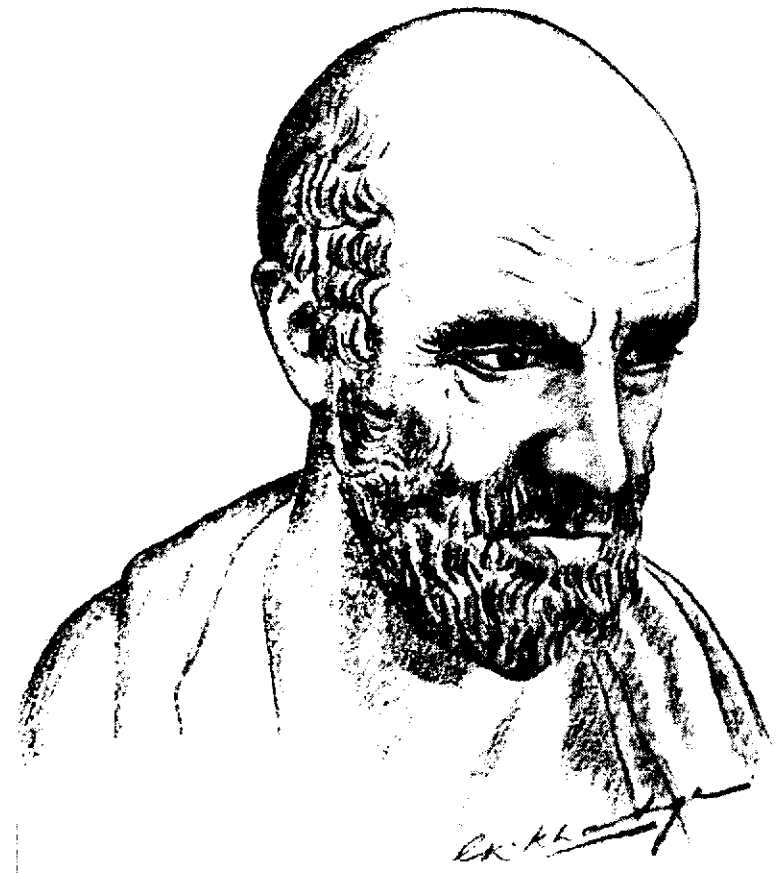
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Dr. Sir A. Lakshmanaswamy Mudaliar,
B.A., M.D., LL.D., D.Sc., D. C. L., F.R.C.O.G., F.A.C.S.,
Vice-Chancellor, Madras University
First Indian Professor of Gynaecology and Obstetrics.
First Indian Superintendent of Maternity Hospital.
First Indian Principal, Madras Medical College.

ACKNOWLEDGEMENTS

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M/s. Klein & Peyerl for their advice and also for the excellent blocks they have given us.

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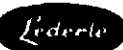
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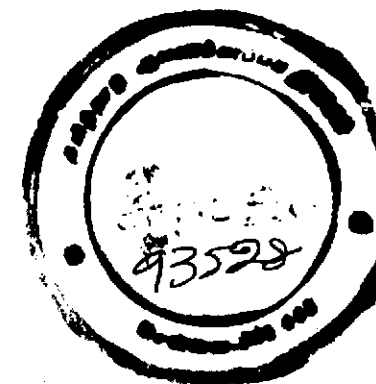
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Editorial

Another year with its trials and tribulations, its failures and successes, its hopes and disappointments has merged imperceptibly with the past, but looking back for a moment we are astonished to note the spectacular changes that have since taken place.

On the international arena we should take cognizance of the fact with great pride and satisfaction, that our country's prestige has been notably enhanced on account of the impartial and prudent manner, in which our diplomats have expressed their views with regard to certain international debatable points like the Suez issue and the Hungarian problem. Eminent statesmen from other countries have paid us visits during the last year and have unanimously reaffirmed their faith in the Panch Shila as propounded by our beloved Prime Minister as one of the ways to peaceful co-existence. The recent trip made by our Prime Minister to America has served to strengthen the bonds of friendship between the two countries. The world is at present tottering at the brink of a deep chasm, under the oppressive weight of atomic and hydrogen bombs possessed by two rival nations having different ideologies. It is a matter for deep regret that no conclusive plan has yet been accepted to put an end to this arms' race which is both dangerous and futile. It is distressing to note the type of treatment that is meted out to our fellowmen in nearby Ceylon and distant South Africa is not based on principles of liberty, equality and human values but rather on suppression and intolerance. Nothing seems to deter them from pursuing their own selfish ends. In our own country, for that matter the disturbances that followed in the wake of the S.R.C. report, clearly indicated the necessity for overcoming petty-mindedness and the urgent need to discard from our minds feelings of caste, creed and race, if we were to progress along the path of prosperity. The Kashmir problem still proves to be a thorn in the side—Viewing all this, one is filled with apprehensive thoughts of the future. But there is the brighter side of the picture—With the conclusion of the first five year plan we have embarked on the second plan with a greater degree of confidence. Gigantic irrigation projects like the Hirakud Dam, with the benefits accruing from the same, the Atomic Reactor at Trombay, to be utilised for peaceful purposes and many other projects indicate the phenomenal strides that are being taken in the industrialisation of our country. The establishment of the All India Institute of Medical Sciences at Delhi fulfils one of the pressing needs of a first class post-graduate college with adequate facilities for research.

We are extremely happy to bring out this issue as a Special Number in view of the Centenary celebrations of the University of Madras. We are proud that this institution, older than the University, has kept up a glorious record, as an integral part of it, during the last century, in turning out men and women who have brought credit to the *Alma Mater*. Dr. A. Lakshmanaswami Mudaliar, our distinguished Vice-Chancellor, is an

alumni of this college, and we are sure, that with him at the helm of affairs the name of the University will reach still higher pinnacles of fame. We are also proud of the fact, that Dr. Sivasubramania Mudaliar, another eminent alumni of our college has distinguished himself as the Deputy Registrar of the University. We take pleasure in mentioning that a number of students from our college have volunteered to participate in the Centenary Exhibition at Guindy. We earnestly hope that our contribution would be truly representative of our endeavours to educate people in matters pertaining to health.

August 1956, was a month, when one witnessed profound changes in the dress of our students, on the clinical side. Subsequent to an order passed by the College Council, all the students, both men and women were seen on the college campus, garbed in white overcoats, the men students sporting a variety of ties, while the fairersex, deprived of their flowers, displayed a hair style, reminiscent of the Ajantha frescoes. An artist in two of the pages within has tried to depict the advantages and the dis-advantages of both.

The oft repeated cry for a Hostel has been unquestionably heard and it is gratifying to see the foundations being laid on the Pachiappa's school ground, with the assurance that the first block will be ready for occupation in the course of another year.

The first batch of internee students passed out in December '56 and will be Doctors next year.

The Medical Relief Wing is doing wonderful work in Paddapai, a village about 24 miles from Madras. A camp was organised at Pakkam during September '56 when our students stayed at the camp for a period of 12 days, during which they educated the villagers on Personal Hygiene and also rendered medical aid.

More than two months labour had been necessary for the preparation of this issue. It has been a unique experience for both of us. We have had to contend with many difficulties the chief of them being the non-availability of material for publication in time. We wish that people who contribute articles to the magazine would realise the aggravating circumstances in which the Editors and the Printers are placed when the articles are not despatched on time. It would be very nice if students should come forward on their own initiative, rather than wait to be coaxed and prevailed upon to write articles. There is a conspicuous absence of technical articles from the students in this issue. We sincerely hope that they will come forward in good numbers for the next publication.

This issue has been enriched by diverse contributions by people of eminence but though we have entertained views on various topics, we would like to state that they do not in any way reflect the Editorial policy.

Permit us to strike a personal note here. We have had to take up the work of collecting advertisements for the magazine this year and it is a matter of justifiable pride that we have broken all previous records in the collection of advertisements. A prize has been awarded for the best general article written by a student (this has been done with a view to bring out the latent literary talent of our students) and we hope to make this a permanent feature of our magazine.

Dr. Subba Reddy, M.B.B.S., M.Sc., Professor of Physiology, erudite scholar and an authority on the History of Medicine has retired after a distinguished record of service and has gone to Vizag as Professor of History of Medicine. We wish him all the best.

Dr. Ramachandra Iyer, M.B.B.S., M.Sc., Professor of Biochemistry, has also left us and we send him our best wishes for his future. In his place has come a very charming and modest man Dr. Ninan Verghese, M.B.B.S., M.Sc. He is reputed to be an excellent teacher and our students have taken an immediate liking for him. So we are happy, to see that the traditions passed down by Dr. Ramachandra Iyer are being maintained.

With heavy hearts we bid good-bye to Dr. Madhavan, M.D., M.R.C.O.G., Superintendant, Women & Children's Hospital, Egmore, who retires after meritorious service. In his retirement we have lost a brilliant teacher.

We congratulate Mrs. Abraham, M.D., on her being appointed to the same post and wish her all success. Our hearty felicitations to Dr. Francis, D.G.O., M.D., on his being transferred to R.S.R.M. Hospital as Professor of Midwifery.

Dr. Sadasivam, M.S., Dr. K. P. Sarathy, M.B.B.S., M.Sc., and Dr. Anandhan, M.B.B.S., M.Sc., have proceeded to the United Kingdom on a study tour. We eagerly await their return from abroad to benefit from their experiences.

Dr. S. A. Kabir, M.B.B.S., has been selected under the Colombo plan for advanced studies in Anaesthesiology. Our best wishes go with him.

Our sincere compliments to Dr. Anguli, M.D., and Dr. Ranjan David, M.B.B.S., on their being appointed as heads of Pathology departments, at Madurai and Stanley Medical Colleges respectively.

We are given to understand that our beloved professor Dr. S. T. Achar, M.D., F.R.C.P., has been invited to serve as a member of the W.H.O. expert advisory panel in Child health for a period of five years. We take great pride and pleasure in informing the readers that we have just received news that he has accepted the invitation.

We thank our predecessors Mr. C. A. Alexander and Mr. Shamshuddin for the legacy (Rs. 600) which they have kindly left behind at the end of their term.

In conclusion, we extend our grateful thanks to our Dean, Dr. C. K. Prasada Rao, M.D., and to Dr. M. G. Prabhu, M.D., for all the guidance and help they have given us in bringing out this issue.

Editors.

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The Growth and Development of Obstetric and Gynaecological Teaching During the Centenary

By

DR. SIR A. LAKSHMANASWAMY MUDALIAR,

B.A., M.D., LL.D., D.SC., D.C.L., F.R.C.O.G., F.A.C.S.



Of all the subjects dealt with in the field of medical science, perhaps developments in the teaching of obstetrics and gynaecology during the century have a special significance. It is true that many specialities have developed particularly within the last quarter of a century but, compared with the unfortunate position of obstetrics and gynaecology practically for three-fourths of the century, the progress made in this line would appear to be phenomenal, although much remains yet to be done. It was in the year 1842 that the first maternity hospital was established in the city of Madras. For a long time, the hospital catered to the requirements of the very poor for in those days, there was a considerable amount of conservatism among women to attend hospitals in general and particularly maternity hospitals. This was the position all over the country and the records will show the number of neglected cases, the amount of suffering and the alarmingly large number of death rates among women, particularly young girls who were still in their early teens.

Up to the year 1875, women students were not admitted to the Medical College for any of the degree courses and it was in that year, by a special order of the Government, the Madras Medical College threw open its doors for admission of lady students, while no other medical college in India was admitting them. It is significant that among the first batch of students was a lady who was the first lady Superintendent of the Victoria Caste and Gosha Hospital, now known as the Kasturba

Hospital, and who later practised in London as one of the foremost of the specialists. Her name is Dame Mary Scharlieb.

The progress in regard to obstetric education was very slow. A certain amount of training was given to the students no doubt but it was not as well ingrained owing to various difficulties in getting suitable material for this purpose. It was not till the beginning of this century that important steps were taken for improving the training in obstetrics and gynaecology. Among those chiefly responsible for reorientation of the type of training and for improvement in the facilities of a maternity hospital may be mentioned the name of Major-General G. G. Giffard. He it was who, in 1912, persuaded the then Government of Madras to build a school of obstetrics which was fittingly named as "Giffard School of Obstetrics." He also enlarged the hospital and increased the training facilities both for students as well as for midwives.

The training of midwives had been carried on for a long time in this hospital as in some of the other hospitals in India. It was a voluntary course which lasted for 12 months. There was no necessity for a preliminary training in the art of nursing and, although some of these midwives had a practical training in nursing, they could not be said to have possessed all the necessary qualifications for being utilised either as nurses or as midwives. In course of time, this was improved. So far as the training of medical men and women was concerned, energetic steps were taken in this

direction and as the quality of the work in the hospital improved, many others sought admission. It might be said that the Government Hospital for Women and Children was the pioneer hospital to establish a sound form of training for nurses and midwives so that they could ultimately fulfil the double responsibility of nursing and serving as midwives.

Before 1920, the training of medical students in this important branch, namely midwifery, was very deficient. Owing to the social prejudices existing in most parts of the country, maternity hospitals could not be utilised for the training of medical students and in practically all the medical colleges then existing, practical training was very unsatisfactory. The only exception to the rule was the Madras Medical College and the Government Hospital for Women and Children. To a lesser extent, Bombay had started then to remedy the position but it was not till much later that the facilities were completely satisfactory.

During the First World War, 1914-18, a number of medical men were recruited to serve in the Army and, on demobilisation, the question of confirming them in the Indian Medical Service came up. It was then found that most of them had no training in midwifery worth mentioning and that their training was confined only to the theoretical classes when they had passed out of the various medical colleges. The authorities felt that such candidates could not possibly be confirmed until they had a period of training in maternity practice. And so it happened that from the year 1921, for about ten years thereafter, successive batches of officers enrolled in the Indian Medical Service were sent to the Government Hospital for Women and Children for a period of three months to get their training in midwifery and gynaecology. Usually, batches of ten were posted for this purpose.

At the same time, the General Medical Council raised the question of midwifery training for medical students in India as the degrees granted by various Universities could not be recognised unless the Council was satisfied that

the training was adequate. Consequent upon this insistence, many of the Medical Colleges from other parts of India were compelled to send their students to the Government Hospital for Women and Children in batches for a month at a time. Thus the students of the Medical Colleges of Lahore, Lucknow and Rangoon and the licentiates under training at these centres and in Nagpur and other places were all posted to the Maternity Hospital where they were given effective training. It may be stated that during this period, the Hospital was humming with activity with post-graduates who were members of the Indian Medical Service, with undergraduates of the Medical Colleges and with licentiates of the Medical Schools. With the large influx of students from all over India and the natural spread of information of the great facilities available at this Hospital, graduates from many other Universities flocked into the Hospital for post-graduate training. Thus, during the period 1920-1930, graduates from several Universities in India, from Malaya, from Hong Kong, from Burma, from Kahmir and other places sought admission and had their training in midwifery and gynaecology at this Hospital, which had by that time established a great reputation as a very prominent centre for training in this field.

It was in 1930, however, that the first great step was taken to give systematic training in this field and to recognise by a suitable qualification the training thus obtained by the post-graduates. It was not an easy job in those days to get the somewhat conservative Board of Studies in Medicine to accept the position that a post-graduate qualification can be given in the institutions concerned. The first post-graduate qualification established in the University of Madras for students undergoing systematic training in a particular speciality was the Diploma in Gynaecology and Obstetrics. To-day, there are a dozen such Diplomas in the Faculty of Medicine and more may be necessitated in the years to come. But those who had to fight for the introduction of the first Diploma know how conservative

was the atmosphere which they had to contend against. The institution of the Diploma in Gynaecology and Obstetrics (D.G.O.) naturally led to a great demand from post-graduates not only of the University of the Madras but of other Universities in India and elsewhere to seek admission and to get the training for a year with a view to sit for this examination. Rich were the facilities available and great was the interest shown in those days by the staff of the Hospital to train these candidates effectively. In fact, both in obstetrics and gynaecology, there was a wealth of material available for effective training of post-graduates.

Nor should it be forgotten that the undergraduates of the University of Madras during this period were given special training. Thanks to the Indian Medical Council's insistence, whatever may have been the reason for it, the University of Madras was the first to introduce the system of internship compelling every Final Year student to spend a month within the precincts of the Hospital and thus be available to watch and see all important complicated cases of obstetrics. This system of internship was also required for the undergraduates of other Universities who came for training at the Hospital. It was not only the post-graduates awaiting confirmation in the Indian Medical Service that sought admission but other medical men and permanent members of the Indian Medical Service came over to spend one or two months at the Hospital to refresh their ideas and to know something more of the practical side of obstetrics and gynaecology.

Simultaneously with the development of the Diploma, the University took steps to reorganize its courses for the higher degrees of M.D. and M.S. This had its own effect on midwifery training. The qualification of Doctor of Medicine in Obstetrics and Gynaecology could be availed of only by those who had put in at least 2 years of active practice in the Hospital in a responsible capacity after having finished a year of house-surgeoncy. This was a natural stimulus for those who had the energy

and the capacity to appear for these examinations and so it was that subsequent to this period, a number of candidates obtained the doctorate of Medicine in midwifery and gynaecology.

The name of the Hospital spread far and wide during this period. The visit of some of its Professors to various countries outside and their contribution to the discussions on this subject in international conferences made people aware that even in a so-called backward country like India, there was a Hospital which could well be taken note of for purposes of undergraduate and postgraduate teaching. About this period, 1930, another important innovation took place. For the first time, the University of Madras granted research fellowships to medical graduates and it is significant that in those years, some of the best students took up research work in the University and contributed materially to the advancement of knowledge. It is good to recollect that to-day, such persons are occupying the highest positions in the field of obstetrics in different Universities in India.

The next great step was taken on the report of a Committee appointed by the Government of India in 1948-49 to visit different institutions and to suggest such of the institutions as could be upgraded so as to function as all India institutions for the training of medical men in the particular speciality concerned. The Government Hospital for Women and Children, with its high reputation, was naturally one of the first to be thought of for this purpose and the upgrading of this Hospital took place about six years ago. The Upgraded Department was expected to function as a training centre for post-graduates from all over India who were given special stipends to come and reside for a year or two and to obtain the higher qualifications of the University. At the same time, the Department was considerably strengthened in that adequate assistance was given for pathological, biochemical and bacteriological investigations along with such other assistance as may be required in the administrative discharge of the functions of the Department.

ment. Recurring and non recurring grants were given and a Hostel was built within the campus of the Hospital so that the post-graduates might reside in the locality and be always available for observing the cases.

The ever increasing number of confinements in the Hospital and the rush for admission in all sections necessitated the extension of the buildings and it is gratifying to note that the first big extension was done through the philanthropic efforts of various persons. Talking of buildings, it may perhaps be mentioned that one of the most important additions made during the time of Giffard was the opening of a large Nurses Home called the Lady Lawley Nurses Home, just opposite the Hospital, which accommodated all the nurses and which was a greatly felt want. This was in 1914. To-day, there are many maternity hospitals opened in South India and in many others parts of North India. One, who has had an opportunity of touring extensively in India, feels gratified to note that many of the institutions are manned by those who had their training in the Government Hospital for Women and Children and under the auspices of the University of Madras.

Other hospitals have sprung up which can compare with the Government Hospital for Women and Children. The Raja Sir Ramaswami Mudaliar Lying-in Hospital, situated at the other end of the city in Rayapuram, has been completely rebuilt in a new site and affords excellent facilities both for the patients and for the students and interneers. Likewise, other hospitals have been established both in the city and in the mofussil centres. And to-day, it can well be said that so far as the State of Madras is concerned, trained midwives, nurse midwives, doctors, post-graduates and specialists are not wanting effectively to practise in this field provided amenities are made available and they are given a living

wage so that they can settle even in the most rural parts.

One aspect that has not been touched upon is research. To a certain extent, research was a much neglected field in this as in so many other disciplines connected with the faculty of medicine. Except for a stray bright example, very little of achievement has been possible. Research was started in this Hospital 25 years ago and if the staff can devote some time and have the necessary inclination for research, the material available is abundant and with the new facilities now placed at the disposal of the staff at this Hospital, there can no longer be any justification for not carrying out research programme activities.

It is our hope that in the future at least, the staff of the Hospital, as indeed the staff of the Medical College as well, will devote an increasing amount of attention to research activities in the several disciplines of the faculty. May I, as one who has spent forty years of his most fruitful life in the practice of this speciality in the two Hospitals, the Raja Sir Ramaswami Mudaliar Lying-in Hospital and the Government Hospital for Women and Children, and as one who has seen the successive stages of development in the practice of midwifery and in the training that was being imparted to the students of the subject, express the hope that this University and the Hospitals attached to the training institutions will be centres where many will be attracted both for practical training as well as for research purposes. The staff at present functioning in the Hospitals will no doubt do their level best to see to it that this Hospital, which has gained a great reputation abroad, not only continues to maintain its reputation but considerably to enhance it and to make the institution one of the main centres of research and training for many a member of the medical profession coming from far and wide.

A PEN PICTURE OF COL. C. DONOVAN*

By

DR. R. V. RAJAM, M.S., M.D., F.R.C.P.



I deem it a privilege and pleasure to be asked to take part on this memorable occasion to commemorate the Golden Jubilee of the discovery of the parasite of Kalazar by Donovan. The pleasure is all the greater since I find myself as the only old student of Donovan who has had the good fortune to continue to be an active member of the staff of the Hospital and College.

No student of Donovan could easily forget that vivid and dramatic personality in spite of the lapse of years. At the time when we joined the college, way back in 1913, Donovan was on the staff of the Medical College as Professor of Physiology and not as Physician of the Government General Hospital, Madras, having been transferred some years previously to a non-teaching hospital - The Royapettah Hospital. In those days practising Physicians and Surgeons taught us the pre-clinical subjects and Donovan was one of them. Physiology was taught only in the second year of the medical course.

On a certain day in July 1914, when the college reopened after the summer recess, expectantly sitting in what is now the Anatomy Lecture Hall, the callow but eager sophomores, were tickled to death watching a tall apparition clad in academic robes, a little worse for wear, emerge from a side door followed by his two assistants in single file walk up to the dais in long strides with the lappels of the gown flying. That was Donovan, 50 summers old with a close cropped pate revealing a broad straight forehead, penetrating but quizzical

eyes, a mock serious face with a healthy tan and a bushy moustache only equalled or excelled by that of his assistant.

Donovan was the only professor who appeared and behaved and acted as a Professor is expected to do. The mischievous minded among the students used to circulate a canard that the gown which Donovan wore was a camouflage to conceal certain time-worn defects in the cotton check suit which he always wore. He lectured standing and spoke with a rich deep voice pacing the dais now and then with his thumbs tugging at the upper part of his waist coat. On the first day of the class the students were enjoined to possess themselves with a box of coloured pencils and a drawing book. They were told that they learnt as they drew. He had an inborn sense of the theatrical and the posturings and gesticulations accompanying the lecture were a source of delight to the students and revealed the Irishman in him.

He taught us Physiology by what is now known as audio visual method. He possessed long tapering sensitive fingers of an artist. His drawings, sketches and diagrams on the black-board with coloured chalk pieces executed rapidly and often with both hands delineating the histological structure of the various bodily organs were models of artistic excellence. His lectures were always enlivened with a certain subtle humour and the students always looked forward to his classes. He never attempted to cover the entire subject of Physiology during the short period of two terms but stressed only on the fundamentals,

* Address delivered on the occasion of unveiling of a Tablet to the memory of Col. C. Donovan.

teaching function through structure. He took a good deal of interest in the sporting activities of the college and rarely missed a Inter-collegiate match when the Medicos played. During the years when the speaker was an inmate in the Victoria Hostel, Chepauk, while doing his medical studies, Donovan was a member of the Advisory Committee of the hostel as well its medical officer. He was very popular with the students of the hostel and looked after them with special care and affection. I recall to my mind that on one particular night at about 11 o' clock the South African born English Warden of the hostel had rather a tough time with the hostel students when he came round on his usual night rounds. He was surrounded, heckled and abused by a large crowd of students who worked themselves into a fine frenzy over his supposed ungentlemanly behaviour to an Indian Professor of one of the Arts Colleges in the city on the occasion of the Inter University cricket match which was played between Bombay and Madras. It was Donovan on intimation by telephone who hurried to the hostel at that part of the night pacified the students, and rescued the Warden from an impending violence. I am mentioning this incident just to show the love and respect which the students had towards him.

He was a painter of no mean sorts and drew whatever he saw. He was one of the moving spirits of the Fine Arts Society of Madras and many of his drawings, sketches and notes are adorning the Welcome Historical Museum in London.

As an examiner a legend was built up that he was a tough and very difficult examiner to satisfy and often led the poor nerve racked examinee to his doom, by misleading the latter from one absurd answer to the next. During a viva voce examination he always sat opposite but with his head turned sideways and asked questions watching the examinee with corner of his eye never showing his facial reaction to the student's answer to the greater discomfiture of the latter. When I appeared for Physiology and Medicine, I found him a reasonably fair

examiner except that he took a puckish delight in seeing that the candidate at least failed to answer the last of his questions.

After I qualified I went to him for a certificate of physical fitness to apply for a Commission in the Army during the first World War. He looked up and down a lean lank, unprepossessing specimen that was myself in those days and said in his slightly sarcastic manner 'My dear lad, I do not know whether the Army will in any way be benefited by your trying to get into it but I am sure you will be all the better for joining us and so saying he applied the chest piece of the stethoscope on my fully covered torso and was evidently satisfied with what he did not hear and immediately gave me a certificate of physical fitness. It is said that the manner in which a man signs his name is an index of certain traits in his character. Donovan's signature was a piece of artistic carving consisting of large streamline straight letters ending up with a thick dash connecting the first and the last letter.

The speaker could not claim any personal knowledge of Donovan as a Physician or a clinical teacher. When I drifted to the clinical years, Donovan was no longer a Physician of this hospital, but we used to be regaled with anecdotes and stories about his uncanny clinical acumen in spot diagnosis. With his scientific imagination coupled with a mastery of laboratory technique and acute power of observation, he was considered easily the best and only medical scientist cum Clinician of Madras at that period. We students felt that it was a piece of administrative vandalism that an outstanding man of Donovan's calibre should have been transferred to a non-teaching hospital to cool his heels during the rest of his service in India. He was evidently a *persona-non-grata* to the lesser breeds of the service gang and in his transfer and immolation in a non-teaching institution it is justifiable to infer that the philosophy of the second rate was ruling the roost in the councils of the government. It is one of the might-have-beens to

ponder and conjecture what would have happened if Donovan had been permitted to work in the congenial academic atmosphere of a teaching hospital such as the General Hospital. He might have enriched Medicine by further discoveries.

It is not given to every man to combine in himself the qualities which Donovan possessed, a born naturalist cum artist and an intuitive clinician, an impressive teacher, and a painstaking investigator. He came to flower at the very dawn of the present century when the cause of some of the major tropical scourges such as Filariasis, Malaria and Trypanosomiasis were being unfolded to a wondering world by such workers as Manson, Laveran, Ross, Ford and Dutton. It was not by accident that Donovan discovered the parasite of Kalaazar. The instinct for scientific truth was in him and the climate was propitious for the Calcutta born young man hailing from the county of Cork. He must have paced and paced, thought and thought to discover the murdering cause of Kala-azar. It is stated that he examined 1,500 consecutive blood slides and but for his habit of keeping both eyes open in looking through the microscope, he might have developed some serious eye strain. He had to share the glory of discovery of the Kalaazar parasite with another notable medical scientist Leishman conceding the first place to the latter. It is contended that Donovan was the first to demonstrate the organism in a living patient both in the spleen and the peripheral blood. A postmortem demonstration of the organisms is as futile as a post-mortem demonstration of the disease. In either cases the patient is not there to benefit by such a finding.

Two years after the discovery of the Kalaazar parasite Donovan scored another victory in the discovery and demonstration of the causative agent of a distressing, destructive, despised disease afflicting certain sections of the underprivileged in the tropical and subtropical countries of the world. That was in 1905. The disease is a form

of chronic, creeping fleshy ulceration of certain sensitive and secret parts of the body the cause and cure of which was unknown. For more than a quarter of a century the disease was described by a multiplicity of names which are more descriptive and anatomic and all sorts of hypotheses were put forward to explain the occurrence of the disease. South India has the unenviable reputation of being an endemic reservoir for the disease particularly among the districts adjoining the eastern sea-board of the Peninsula.

Donovan the indefatigable investigator that he was by examining the scrapings of the ulcers under the microscope detected certain cell inclusions looking like gigantic bacilli and reported them for the first time as the probable cause of the disease. Donovan's discovery remained unnoticed for nearly four decades and it was left to a brilliant American Scientist to confirm the almost forgotten Donovan's discovery by successfully culturing the organism and establishing its relationship to the disease. A new genus in biological classification has been established in the name of Donovan and the speaker has suggested to the W.H.O. that the disease should be named as 'Donovanosis' getting rid of the existing babel of names by which it is at present known to the confusion of students and Physicians.

Although the disease is a local superficial affection of the skin and mucous membrane we had the good fortune recently to come across a case of Granuloma with systemic manifestations due to the dissemination of the organisms through the blood stream to bones, joints and internal viscera. Such cases of systemic granuloma have only been very infrequently reported in medical literature. It may be stated with a certain amount of pardonable pride in reporting to this audience of the minor achievement in this hospital of demonstrating the organism from the liver of a living patient, probably for the first time in the history of Ulcerating Granuloma.

It is a matter for regret that while Donovan blazed the trail in the precincts of this institu-

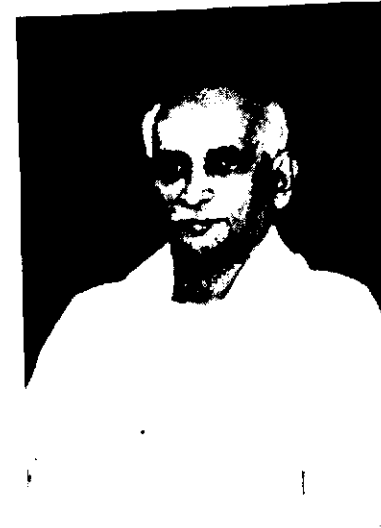
tion, the trial was not taken up here, but only in distant Bengal and the far away United States of America, where the two diseases Kalaazar and Granuloma respectively were subjected to continuous painstaking studies. In spite of the large accumulated knowledge about these diseases there are still gaps in our knowledge and the story of Kalaazar and Granuloma will only reach their denouement when the gaps are filled and the knowledge applied to cure and control these infections.

In to-days function we have shown a historical sense to recall and cherish the brilliant

contribution which Donovan made to the advancement of Tropical Medicine. In the field of Medicine as in any other human activity many are called but only a few are chosen to be creators and discoverers, and Donovan is one of them.

The tablet that has been just unveiled to-day by our beloved and distinguished Vice-Chancellor will I hope kindle a spirit for research among the present and successive generations of students and Physicians who will be walking the corridors and wards of this 200 year old hospital.

Distinguished Old Students



Dr. B. Pattabi Sitaramayya
M.B. & C.M.



Col. C. K. Lakshmanan, I.M.S.
Director - General of Health Services

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Dr. B. T. KRISHNAN, M.B., M.Sc.
First Indian Professor of Physiology



Dr. M. KESAVA PAI, M.D.
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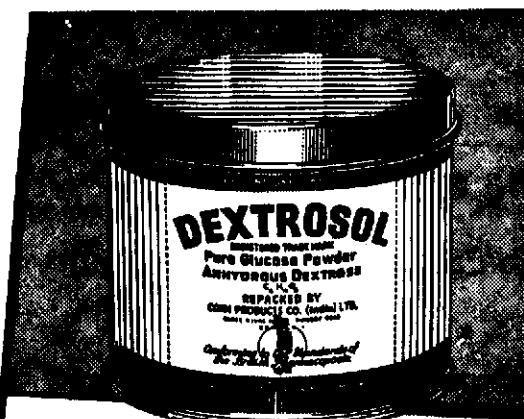


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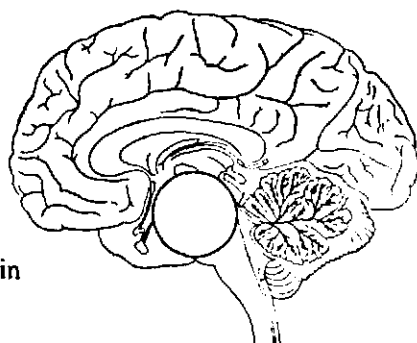
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Some Reminiscences of my Medical Studies

By

DR. B. PATTABI SITARAMAYYA

(Governor of Madhya Pradesh)



Fifty six years ago, on passing my B.A. examination with Advanced Physics as my subject and Sanskrit as my second language, I waited in Madras to take my degree at the annual Convocation in March 1900, and another three months before joining the Madras Medical College for the M.B. & C.M. course. I did not know anything about the course except that the four letters sounded sweet like the word Mesopotamia and I had first heard of it while I was still in the Matriculation class in 1895, from an elder brother of a class-mate of mine - who was then in his B.A. class and who intended to join the M.B. & C.M. course. M.B. meant Bachelor of Medicine and C.M. stood for Master of Surgery (which means surgery). The evolution or shall I call it the devolution of M.B. & C.M. into M.B., B.Ch. or M.B.B.S. is an event of long after, which I shall refer to in its appropriate context.

I may at once state that on joining the Madras Medical College as elsewhere I found I had two advantages—namely, that as a graduate in Physics, I had not to appear for the University examination in, or attend the classes of, Physics and Chemistry. So I was saved the labour as well as the expense by way of College fees and application fee in respect of joining and studying and appearing for examination in these two subjects over again. I had only to study Biology and Anatomy and offer a University examination in the former at the end of the 1st year while I had another year before appearing for the University examination in Anatomy at the end of the 2nd year. I may add that the practice of

'ragging' and 'skying' the new entrants into the College which had been in vogue some years previously and was revived later in my fifth year, by the military medical students of the College, was not in existence when I joined the College in 1900 (July) so that my entrance into the College was uneventful.

Before I entered the premises of the Medical College, fantastic and fearful stories of the anatomy classes and the dissection of the dead bodies of human beings were heard by me much to my consternation and while I entered the College buildings, pausing to scan the meaning of the word 'Theatre' that appeared above the main doors of class-rooms—which were called Anatomy Theatre, Physiology Theatre, Biology Theatre and so on, I stepped into an uninviting hall with coarsely made wooden tables on which lay some dried up and shrivelled things which looked like human beings and at once I realised that it was the Anatomy Theatre. All fear and trepidation disappeared. After all was this the stuff which was described as frightful and fearsome? There was nothing to be afraid of—only they were cadaverous in look as they were in reality and they emitted a kind of odour which later and long after in Medicine, Osler described as musty and semi-cadaverous. We crossed the first hurdle and from the next day we were keenly competing for this part or that part of the body for our dissections. We were presently introduced to the bare skeleton well prepared and polished and not by any means a source of fear or disgust for both were lost in the feeling of admiration for the various joints—ball and socket, hinge and so on. It,

was up to us to buy a well fitted skeleton, but we were advised by senior students to equip ourselves with loose bones so that we might take them in our hands and study the various elevations and depressions, tubercles and tuberosities, ridges and grooves. They said there were in the human body 206 bones and of them the clavicle or collar bone was the most difficult to master, but master I did in a jiffy when that was the only bone to study. On taking up other bones, however, the latent difficulties became patent and puzzling. Every bone was found to be studded with such ridges and grooves. In a trifaceted bone it was difficult to say whether the surfaces were anterior, posterior and superior or anterior posterior and inferior. The nomenclature depends upon the position of the bone. The correct posture of bones had to be therefore studied in situ. Once removed from the body, it became difficult to relate the surfaces of the bone to the muscles taking origin in different parts of it, to the nerves travelling, to the blood vessels flowing on and the ligaments binding the various parts. Therefore the mastery of Anatomy became possible not merely with the bones in front of you but with the bones in their positions.

I was, in the second year dissecting the brain with my companion student. Royal Army Medical officers and members of the Indian Medical Service used to attend the dissection classes occasionally. Captain Symons was one of such visitors. He came to the place where I was standing and all the students in the Theatre gathered round the dead body and the living Captain—quite a stranger. The latter began questioning. Two other students were at the hip of the cadaver and he asked us all one by one the nerve supply of *gluteus medius*. While all the students nearing a dozen mentioned one nerve, inferior gluteal nerve, and I gave the name of a different one, superior gluteal, he agreed with the majority perhaps as a matter of safety and declared me wrong, giving me, however, another chance to correct myself, I declined the chance with thanks. Then

he repeated what he had said and added somewhat caustically, "I hold to mine in spite of what this gentleman says", pointing to me. I remained silent and unrepentant. "Well student", he said, finally 'what do you say now?' "Nothing", I answered. 'I stick to my answer', I added. He wanted to confirm his triumph and confidently sent for Gray's Anatomy which to his utter discomfiture, proved me right and them all wrong. Capt. Symons was appointed later to S3 (third Surgeon) in the General Hospital and that was why he thought of walking up and down the Dissection Hall. I had a class-mate—Dr. Rangachari—whose statue adorns the premises of the General Hospital now—not the gate before which it was first erected but inside it at a place to which it has been shifted. He was the very best in his dissections. He was only an under-graduate and had to study Physics and Chemistry too. Yet he was easily the first in Anatomy—Biology—and practically throughout all the five years. He joined service and became so distinguished a Surgeon that a statue was erected to perpetuate his memory. He was generous to a degree and owned two Rolls Royce cars.

Dr. A. Lakshmipathi joined the College a year after I had joined and Dr. Guruswami Mudaliar, 2 years after me.

In the Medical College the dress of students was a matter of particular importance. A collar and necktie were compulsory if the coat was not a closed coat, but the collar had to be stiff and neat. I bought two pieces of American Pepper's Drill—40 yards each, but of short breadth (only 27 inches). Six yards and odd were necessary for a pair of trousers and a closed coat. I made 12 suits and every week I used to wear six suits changing a suit every day. It was thus that I was one of the neatest and most economically dressed students though not fashionably dressed. There were two kinds of Professors in the College—some like Col. Pope—the Ophthalmic Surgeon wanted plain dresses without open coats, collars and neckties. Others like Col. Elliot who succeeded Col. Pope, for a short while

wanted the most fashionable styles of dress. But he came after my course was over though I took a special course under him. I had not to change these twelve suits during my five years' course and at the end when I found I had outgrown them, I got rid of them by selling them to the hawkers at Re. 1 a suit. I got Rs. 12/- by sale against the Rs. 35/- I had spent. Each piece of 40 yards cost Rs. 8-8-0 so that the two pieces cost Rs. 17-0-0. The tailoring charges at Rs. 1/8/- for each suit came to another Rs. 18/-, so making the total Rs. 17+Rs. 18=Rs. 35/-. I am afraid in the year 1957 it may be difficult to find a parallel to this specimen of economy or for that matter in the past half century. I have anticipated a chapter of my story in order to give completeness to the department of dress. There are several other departments which I shall only take up chronologically.

For General Biology, our Professor was Captain Feyrer, the son of Sir Joseph Feyrer, an eminent member of the I.M.S. and famous as Surgeon to the Viceroy and then to the King. I have not seen a more handsome Englishman than our Captain, tall, well proportioned, with a face possessing attractive lineaments and beaming with intelligence, though his brain did not justify the expectation, roused by the face. He was handling the microscope and while smoking happened to lay aside his cigarette for a minute but the stiff cuff of his shirt was attracted to the burning stump of the cigarette and before he felt the heat, I gave an alarm and put out the incipient fire before it became a conflagration. He felt grateful for being saved from what the incident might have developed into and repeatedly said that Mrs. Feyrer would thank me. "But what about you, Sir", I asked. He took the joke in good part. He had a sense of humour as we shall see presently. Capt. Feyrer pursued us and we pursued him. After Physiology in the second year, he came as the Professor of Materia Medica in our third year and he used to dictate notes from his note book in which he had got typed, word for

word, the particular chapter from the class Text Book. I was listening to him attentively but not writing out to his dictation. He at once pointed to me and asked in a somewhat stern, though not stentorian voice: "Student, why don't you write?" I got up and politely told him in reply: "Sir, I am following what you are dictating word for word in Mitchell Bruce." "No, no," he replied, "what Mitchell Bruce has given, horizontally, I am dictating vertically. Take it down".

And while dictating, he suddenly stopped and ejaculated with a smile on the curves of the lips on his beautiful face—"Pause, Pause, let us pause. Wrong, we are wrong. I shall dictate once again". This young Captain was a source of considerable amusement. We did not take him seriously for he could not strike us in vengeance as he could do if he were an examiner. Not being a senior, he could not be one and therefore he could not do any injury.

We had a three months' out-patient course in Materia Medica, in which we had to dispense medicines, make mixtures, powders, pills, ointments and so on. We had to identify these various drugs and that was not easy unless we were familiar with the appearance of the drugs, with their feel, their weight, e.g., Hydrargyri Subchloridi was a powder of unduly heavy weight as all mercury preparations are. Carbolic acid could be told by its smell and likewise valerianate of zinc. A bottle containing a lotion of perchloride of mercury 1 in 1000 would be a heavy bottle. Tinct. Cardamom Co. could be told by its colour, and smell. Tr. Zingiberis by its taste, Santonin by its shining flakes, phenacetain by its feel, opium and sulphur preparations by their odour.

We, the civil students, were regular in our attendance. There was a venerable old Hospital Assistant (Cf. to L. M. P. of later days) who was the senior officer in charge of the O. P. but he was not respected, much less obeyed by the Military students—the Anglo-Indian group—who used to make fun of the old gentleman in charge—Shri

Ramaswami Nayudu. They used to be irregular in their attendance and whenever they attended, within a few minutes of their arrival and their being locked up in the O. P. dispensary, they used to knock at the main door from outside and when they were asked by the old man how they, who were a moment ago in the room, happened to be outside, they used to reply naively - "By the process of what is called jumping out of the window to enter again by the door". Poor old Ramaswami Nayudu had a sense of humour and where he could not succeed by the sternness of his voice, he managed by his good humour. The Anglo-Indian students were a source of considerable harassment, - pieces of spleen and liver cut from the bodies in the Anatomy Theatre were quietly slipped into the pockets of civilian students. Some of them were very good indeed, well-behaved and quite friendly with us, but others were rude, and brutal. They had fortunately the lady students - almost all being Anglo-Indians, who used to be the butt of Anglo-Indian men students jokes. And they were quits. The three Anglo-Indian students of the M. B. & C. M. class - Tomlison, Pereira and Simpson, were quite well-behaved and if they had any affairs, the class room and the College premises were not the scene of their adventures. There was only one Indian lady student - a Maharashtrian not a girl, but mother of two or three children, who was very modest and unassuming in her manners. Her husband was employed in the Customs Department. She changed over to L. M. & S. and passed out in due course. In those days, an M. B. student if he failed, at a stage, could change over to L. M. & S., or appearing for the M. B. examination could be declared eligible for L. M. & S. as the minimum required for the latter was smaller than for the M. B. & C. M. examination.

In the 3rd year there was no University Examination but we did Materia Medica. When we went to the fourth year, we had to study Pathology, Hygiene, and Medical Jurisprudence. The examination was at the end

of the 4th year. One Captain Tucker was to be the Professor of Pathology, but the bones of both his legs were fractured and he could not come. We had, therefore, the high esteem and the great privilege of dear old Captain Feyrer, our good friend who had burnt the cuff of his shirt as our Professor of Biology, and dictated the pages of Mitchell Bruce, as our Professor of Materia Medica, now advancing with us to a study and dictation of the pages of Green's Pathology. Much the same old story as was witnessed in the second and third years was repeated in the fourth year. Our Professor of Hygiene was Captain Cornwall, I. M. S., who was also the Health Officer of the Madras Corporation. His assistant was Dr. P. S. Chandrasekhara Iyer, M.D., who was a scholar in Bacteriology like his brother Sir P. S. Sivaswami Iyer in Law, Member of the Executive Council, Madras Government, later (1915-1919). Of all the Professors so far, the one person who knew his subject, and could handle his classes with dignity, capacity and seriousness was Capt. Cornwall. He knew his subject - both Theory and Practice.

Medical Jurisprudence had no Professor. Colonel Browning gave a few lectures on the subject. I remember one piece of advice he gave us and that related to Medical Certificates. "You should give actual measurements of tumours or wounds but never say, so and so is of the size of an orange or of the thumb." He quoted a case in which a certain Zamindar was considered impotent because his genitals were not developed and gave the size of the testis as that of a thumb. One man's thumb differs from another's. It may be in one case an inch in circumference or more or less. He also warned us not to blink when giving evidence in the witness box in Courts or put counter-questions to the lawyer. But he added, "you may put any doubt or difficulty to the Judge. If you want to attack the lawyer opposite, state your point to the Judge and it will go on record. No witness can address the lawyer direct, but he must always answer his questions." "If,

however, do you not want to answer, address the Judge as "My Lord" in a High Court or "Your Honour" in a District Court, or "Your Worship" if in a Magistrate's Court. Then you are free, safe and unassailable." I well remembered this piece of advice and utilized it in the Madras High Court on a particular occasion. But this is another story relating to my practice, not to my College days.

I now come to my fifth year. Col. J. A. Robertson was our Professor of Medicine. He was 1st Physician in the General Hospital, Col. Maitland was our Professor of Surgery. He was S. 1 - First Surgeon in the General Hospital. Col. Sturmer took Midwifery as the Superintendent of the Maternity Hospital. Col. Pope took us in Ophthalmology as the Superintendent of Eye Infirmary. "They were all experts - gentlemen to a degree and treated the students as gentlemen. We finished these four subjects in the 4th year but offered the final examination at the end of the fifth year. Robertson's clinical lectures were quite good. So were the lectures of the others. Col. Maitland was tall and well-built, had a look of old age - not justified by his years, was pious and had the look of a Missionary. He was a chronic neuralgic patient. He was slow of foot methodical in his gait as well as in the study of a case and measured in his speech. Indeed he was measured in walking and talking alike; in making the first incision, he never raised the handle of the scalpel, but always placed the blade with the whole sharp edge at right angles to the skin on which the cut had to be made. And as he progressed in his operations, he gently described what he was doing so that every step in his operation was a new lesson in clinics. No case of his went amiss. All operations healed by first intention. He was extremely short-sighted (physically). He had two pairs of glasses and used them alternately for distant and near work, but during operations, at times both together.

The work of S. 1 stood above comparison with that of S. 2 or S. 3. S. 2 was in charge

of Women's ward (operations) and he took us in Anatomy. Col. Kirkpatrick for that was his name, had a staccato speech. He was a tall - stalwart Irishman - a gentleman to the very bone - not very well up in his subject, but studied the lessons beforehand and was as sincere as he was serious in his work. He could not be a very good Surgeon for the simple reason that his thumb was as big as our wrists. Later on he worked for sometime as the head of the Eye Infirmary but did not do much good work there. When he was Anatomy professor, he was absent one day and Col. Browne the Principal, peremptorily sent for him to attend the class at once, regardless of fever and attend he had to.

Col. Sturmer was a tall, well-built, handsome person with tapering fingers that made us feel he was cut out for obstetric work. He performed deliveries without any instruments beyond his fingers, for such was their deftness and as for abdominal operations he could not be excelled on account of his fine, pointed, long tapering fingers. A story was told of his predecessor Col. Branfoot who was an eminent obstetrician and that was that while his wife was carrying and she wanted to go to England for delivery, he pointed to his own brilliant record of operations and overbore her and retained her for delivery in his own Hospital. But when she delivered, she had a spurt of post-partum hæmorrhage which confused him, made him nervous and paralysed his judgment - and she died.

The fifth year in the Medical College used to be a year with no lecture classes. This gave us time from 11 o'clock to attend to our studies for the final examination after attending hospital in the mornings. Col. Sturmer retired during our course of studies and Col. Giffard succeeded him. In fact he had been the first Surgeon in the General Hospital after our Surgery term (course of lectures) had been concluded. We had to work under him. He was quite good in surgical clinics as far as he had studied, but on

Mondays he was intolerable. The Sunday boozing, made him on Monday mornings impatient and irritable and he used to go late to hospital. In those days, it may be remarked, hospital work was from 7 to 9-30 a.m. but on Mondays he used to go to the hospital at 10-30 or 11 a.m. So we used to get away at 10 a.m. We found on Tuesdays that he was not at all minding the absence of students from the wards on Mondays. Col. Giffard was a man of great resourcefulness and originality. He was well up in mechanical work. He could make a good carpenter, smith and turner and fitter but not a surgeon with his thick short fingers and a thumb as big as my wrist. All the same he used to plod on at first and dash away later with all kinds of operations which used to approach butchery sometimes. He had a habit of saying, "This will surely suppurate" and when it did as was found on opening the dressings for the first time, he used to derive satisfaction by pronouncing aloud the words "I said so". If for every operation he gave this thoughtful but purposeless prognostication, there was no point in claiming astrological merit by prediction of failure.

He did not care for case sheets, his diagnosis was of a lightning nature. He did not pick and choose his cases. He operated on every case, whatever its prognosis might be. If the patient survived the operation, it was the the Surgeon's merit. If he succumbed to it, it was the patient's own misfortune. I had a bitter experience of working under this Surgeon. Whenever in the morning work of the wards, he hazarded an opinion calling a hydrocele, a haematocoele, and a femoral hernia, some new growth, I used to put the alternative (often the right one) and ask for differential diagnosis. On one occasion the question was whether the case on hand was one aoesophageal carcinoma or spasm due to achalasia of aoesophagus. He did not come prepared whereas in the fifth year we had to note every silly thing in text books because we had to face an oral examination in selected little riddles. But the worst of it was,

yet to come. In my final M.B. & C.M. year, I was working in the operation theatre not as direct assistant to Giffard, helping in the operation, but as one of the additional contingent holding the patient in a particular posture. In the case concerned the patient was a Salt Sub-Inspector, a Mussalman friend, who was passing quantities of pus per anum. He was in Giffard's wards. Three months has passed and no diagnosis was made. The patient's superiors were pressing for his discharge. Apparently Col. Giffard was in doubt about diagnosis. So on a particular day he had sent for Col. Browning while Giffard was as yet a Major. Col. Giffard would not think much of anybody in his overweening haughtiness of temper and self-consciousness of talent. Yet he had to get a second opinion and he sent for a Col., his superior in rank though not in capacity, as he thought. I (a senior student) was holding the leg of the patient in the bent position at the knee, another (junior) student at the other. By chance an R.A.M.C. man came that day to learn work. The Assistant Surgeon, Dr. Vasudeva Row, was an old man on the eve of retirement. Col. Browning examined the patient and said nothing. Col. Giffard was not satisfied because Col. Browning's silence showed that he did not confirm his (Col. Giffard) own diagnosis. The R.A.M.C. man was then asked to examine. He knew that Giffard's idea was in favour of a carcinoma and he confirmed it. Then Vasudeva Row was asked to examine it. He too confirmed and said 'It looks very much like a cancer.' Then Giffard turned to me and asked, "Student, would you like to examine?". I agreed and I gave over the knee to some other person and was making for the wash-tub to wash my hands. "You needn't wash, the seat of pus is a foul cavity" he said. Then I turned back and made a rectal examination and washed my hands and returned, took over the knee and stood silent. "What do you say?", he asked. I said, "Sir, if it is a case of Carcinoma, should we not expect the surrounding tissues to be indurated?" While Giffard made



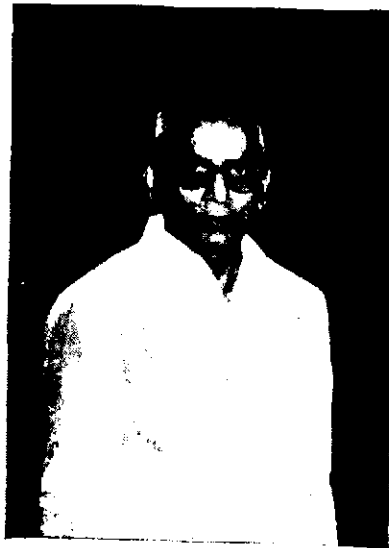
Surgeon General William Robert Cornish
F. R. C. S., C. I. E., Q. H. P.



Surgeon General Michael Cudmore Furnell
M. D., C. I. E.



Major General Sir T. H. Symons, K. B. E., C. S. I., I. M. S.



Sri A. B. Shetty,
Former Health Minister



Dr. T. S. Tirumurti, B. A.,
M. B. & C. M., D. T. M. & H.



Dr. Yellapragada Subba Row, Ph. D.,
Distinguished Scientist

a wry face, Col. Browning having at last found some one to support him in his view which was against Carcinoma, jumped forward and said, "Ah, Giffard, a gentle protest from the student against your idea of its being a cancer". Giffard blurted out saying, "Yes—this student, I know, always thinks by the contraries," I heard my death warrant and thought no more of the case. In the final, clinical examination, I had a case and thought I did well. To my surprise I failed that year 1905. I had to eat the humble pie and went back to his very ward for a clinical course in surgery. Else I had no chance for eternity. Next year I was asked by this very Giffard to examine a person's knee in the University Clinical Test, and say what the matter was with it. That was a case which we knew in the wards as one of hydrocele, operated on and marked for discharge, so in going round the wards before the examination, we never paused at the case for it was marked for discharge. Lo and Behold, this very case was presented to me for examination of the knee. I asked the patient what was wrong and he said there was something hard in the back of the knee when stretched, but when bent it disappeared. I felt I got it. It must be a synovial cyst called cyst of Morant and Baker. "Excellent" he said and in my presence gave 50 out of 50. In operative surgery I was asked to dissect and expose the popliteal artery and I got full marks there too.

Another doctor who was not our teacher but whom we came into contact with was Col. Lee. He was an elderly person—about to retire, knew his medicine well and gave certain good prescriptions which I took down and used with good effect in my practice of ten years. He acted as an Eye Surgeon for a while and did not do much good work. While he was working in the Medical Ward, he had a case of severe pain in the maxillary antrum and the doctor one morning took hold of the patient and bored through the depression in the upper jaw bone above the canine on the side affected. The poor patient was almost dead with pain but no pus came out and Col. Lee dismissed

him, turning to us with a glee. How heartless!

Still another doctor was Col. Eliot who thought a good deal of himself and of his capacity in eye-work. But in every case of cataract he did iridectomy and introduced washing after nipping a bit of the iris and then bandaged the eye. Col. Pope had gone on leave and Col. Eliot was officiating. When Pope came back, he was bursting with laughter at the bandaged eyes of patients and was aghast saying, "The eye is not a testicle, man, to be bandaged." And he set aside the scissors, syringe and can. Speaking of Col. Eliot I must not forget to say that he expected the students to come with a fine collars and neat silk ties and turned collar coats whereas Col. Pope himself wore drill suits with closed neck, and expected students to do so. We had to put in 3 months in the Lecoch's gardens (Lunatic asylum). There our experience was variegated. There was an Anglo-Indian. He had been there for 30 years. Mr. Browne felt that he was Queen Victoria's son and would not sweep his room. He was supplied endless quantities of superior letter paper and there he used to write all sorts of things in block letters. He used to say Terratic, stellatic, solatic and Lunatic. He was otherwise harmless.

Now a word is due about another Surgeon whose earlier days we did not know, but whose later period of work as the third Surgeon I knew very well. Col. Niblock was the third Surgeon and as such taught Biology but by that time we had finished the subject. I, therefore, came into contact with him only in the Surgical Ward, for clinical training. He had a peculiar tone of nasal muttering and could not be easily made out. When he asked for instruments, the student handling them had considerable difficulty and often gave a forceps for a pair of scissors. He would only say "Go to Jericho." That was his expression of displeasure. I mastered his mannerisms and during all the three months of my course in the operation theatre I was posted to give instru-

ments from the tray that was by the Surgeon's side. This gave me good training and I never was asked to go to Jericho. I may add that it was at Col. Niblock's instance that our degree of M. B. & C. M. was changed to M.B.B.S.

Now I must revert to narrate the story of Col. Symons. I have spoken of him as Captain Symons who walked about the Anatomy Dissections Theatre and asked for the nerve supply of glutens medius. This doctor did not come into contact with us as a Professor. He was attached to the third Surgical Ward and we had already finished our Biology - then for a time he looked after both S1 in Col. Maitland's absence, and S3 in his own right in place of Col. Niblock. The surgical work he did in these two wards for 1½ years is worth recalling and I shall revert to it presently. There, however, arose a wild rumour in the city about the fate of surgical operations in the General Hospital in the years 1903 and 1904. Later on he became a good Surgeon and from the Surgeon's place he rose to the position of P. M. O., General Hospital, who was also Principal, Medical College, and there-after he rose to the highest place - Surgeon General - as he was called in Madras, Bombay and Calcutta. Nowadays he is known as Director of Medical Services. During the first World War he went on the Hospital Ship, Madras, as its head and came into violent conflict with Dr. T. M. Nair and others who offered their services on the ship. He returned as the Surgeon-General after the War.

In 1918 or thereabouts he was Surgeon in charge of a Hospital in Bangalore. I was returning from Ootacamund and I was sitting by my side cheek by jowl a certain Englishman whose features were familiar to me. He was reading some issues of the British Medical Journal and after finishing each issue, he was throwing it away, out of the window. By that time I made him out as my old friend Capt. Symons. I then asked him whether by any chance I was sitting by the side of Capt. Symons, and he curtly answered, "Yes - Major Symons". "Oh, you have since grown

to be a Major". Then I reminded him of his visits to the Anatomy Theatre. He felt interested in the conversation as well as the companion talking with him and asked me why I was there. I explained that I had pain in the abdomen and therefore was spending the summer in Ootacamund. "Oh, if so, come up to Bangalore". "I am there. I shall put you on the table and cut you up". I replied saying that I would take a little time, not having written up my Will". There ended the conversation. After I gave up practice in September 1916, I became a whole-time political worker and started an English political weekly named Janmabhumi in December 1919. Some time later perhaps in 1925-26, the Madras Government published two volumes of a Report on Ayurvedic and Unani Medicine. A copy was sent to me as an Editor and in reviewing it, I singled out a passage in which the Ayurvedic physicians were asked to prove Ayurveda to be a science. In the course of my review I asked "Before whom are the Ayurvedic doctors to prove their system of medicine to be a science, is it before Col. Symons whose work in S1 and S2 in the year 1903 and 1904 is too well known to be missed if one refers to the surgical registers of the two wards S1 and S3 and the registers of the Mortuary? This having attracted the notice of Col. Symons, he went with the particular issue of my weekly from Barrister to Barrister and Lawyer to Lawyer in order to file a defamation case against me. They all asked why I added the mortuary. Col. Symons had to explain and he was advised to drop all proceedings in his own interest.

Our nurses were all Anglo-Indians and I must say a word about the students and the nurses. The latter were helpful to those who were friendly with them. My puritanic training in my College course of 4 years made me remain somewhat aloof from these nurses - who naturally liked a little joking, a few lozenges and perhaps a visit to a cinema. None of the Indian students was too friendly with them and I was positively aloof. They did not therefore examine the urine of my patients

nor take their temperature. That was good for me as I had to do my work myself. They always remarked about - why is this student so reticent and reserved?

Before concluding I must refer to an unpleasant event which occurred in 1905. The practice of ragging and skying new entrants was revived by the Anglo Indian, Military Students who would take them by the arm in two batches, one on either side of the student and drag him and drown him in one of the garden masonry troughs filled with water for

the garden. I held the student on one side and said I would not let them do the nasty act of fun in which students were losing watches and money purses. On this one ruffian gave me a clout on the eye. My turban was soaked in blood and I reported the matter to and presented myself and my blood-soaked clothing before the Senior Assistant Surgeon Captain Wyune. The matter was duly reported to the Principal who fined the culprit and passed orders that in case of repetition the students found guilty would be deprived of his stipend and dismissed.



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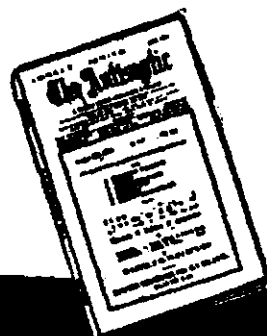
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The Beginnings and Progress of Oto-Rhino-Laryngology in Madras

By

DR. P. V. CHERIAN, M.B., D.L.O., F.R.C.S., F.R.F.P.S.,
(The first Professor of Oto-Rhino-Laryngology in Madras)



The ear, nose and throat department of the General Hospital, Madras, started with very small beginnings about 40 years ago. When I was doing my clinical work in the General Hospital as a medical student, the E.N.T. patients were seen in a small dark room under a stairway in the main General Hospital building. A sub-assistant surgeon, Dr. Parthasarathy, was in charge. This gentleman had no special training in ear, nose and throat diseases. Due to this fact, hardly any in-patient treatment was carried out. Only conditions like discharging ears and sore throats were treated. After some time, this department was shifted to a small building in front of the General Hospital. That site is now covered by the out-patients department. It was a building of two rooms which was originally used as lunch room for the assistant surgeons working in the Hospital. Dr. S. Luther, who had a certain amount of training in the treatment of the diseases of the ear, nose and throat in England ran the department here. Here again there were no operations nor was there any proper equipment. Col. Hirsch, I.M.S., who was on the staff of the General Hospital also did a certain amount of E.N.T. work in this building. Hirsch had his private instruments which were later on sold to the General Hospital. The work turned out in this department was, however, of very poor quality. In the year 1925, while I was working as assistant to the First Surgeon, Lt. Col. E.W.C. Bradfield in the General Hospital, I was selected to go on study leave to England to specialise in diseases of the ear, nose and throat. Accord-

ingly I left about the middle of 1925 when Dr. Benjamin and Santhanakrishna Pillai of the Barnard Institute of Radiology ran the E.N.T. department.

I returned to Madras in 1927 after taking the necessary training in the speciality. The department was now placed under my sole charge and I took over the appointment on the 9th of July 1927. I was given seven beds for in-patients and two operation days. The operations were performed in what was known as the Female Operation Theatre—which was at the south-east corner of the first floor of the General Hospital. This was just one room which was darkened for the purpose. Instruments and fittings were very very old. A special indent was then put in for all the necessary equipment and within a few months' time these arrived from England and I was able to run a very efficient department though the accommodation was very limited.

2. All necessary operations in this speciality up to this time were done by the general surgeons, and they were very few. I could recollect that only about 10 or 15 tonsils were removed in the year and few mastoid operations were done. Very rarely was there a nasal septum operation. Treatment of sinus disease was unknown. There were very few people who could use a throat mirror or even a nasal speculum. Out-patient attendance was about 30 or 35 per day. After the department was opened on the 9th July 1927, daily out-patient attendance rapidly rose and reached the peak figure—200 to 250. There were at first only

two operation days in the week. At my request one more day was allotted to me. On operation days it was usual to have at least 20 to 25 tonsil operations along with a fair number of operations like sub-mucous resection of the septum, mastoids, removal of polypi, etc. Unfortunately, I had no assistants except one house surgeon who was changed every three months. It will therefore be seen that I had to bear the brunt of the work. I used to attend the out-patients department in the morning early and then go to the theatre for operation. Meanwhile, the old out-patient building was demolished and the new structure that we see now was built. What was thought to be a satisfactory out-patient section, was opened on the first floor of this building. This, though it continues to be the E.N.T. department, is found insufficient for the kind of work that is being done now. There is also a theatre here for operations on out-patients. This was working for three days in the week.

3. At a later stage, two Honorary Assistant Surgeons were appointed to the department. They worked for several years before paid staff was sanctioned. Increase in work in the operative and out-patient sections has been phenomenal in this department. The in-patient beds were increased in number on several occasions and now it is fairly satisfactory.

4. It is not an easy thing to do pioneer work for a speciality. Great assistance from the Superintendent and the Government was necessary. This, I am glad to say, I got in abundance. Lt. Col. E.W.C. Bradfield was a tower of strength to me and he helped me in securing all the equipment and staff that I needed so that when I retired in August 1948, the Ear, Nose and Throat Department of the General Hospital was one of the most popular departments. Patients came to this department from all over India and even outside.

5. The Madras General Hospital Ear, Nose and Throat Department has established a very great reputation which I am very happy to see is being maintained and, more than that, is being enhanced.

6. Along with the routine work, teaching of students also was carried out. Students were posted to the out-patient department to work three days in the week, and the surgeon in charge was designated Lecturer in Ear, Nose and Throat diseases. The Lecturership was later on raised to the rank of a Professor. No Post-graduate work was being done in the early days. For the last several years, the University has established a Diploma in diseases of the Ear, Nose and Throat (D.L.O.). This is a popular course and has attracted students from the Madras State and outside. This department has also been recognized by the University for the degree of Master of Surgery with ear, nose and throat diseases as special subject. *It is a matter of great satisfaction, and even pride, that the Ear, Nose and Throat Department of the General Hospital is the only one in India recognized by the Royal College of Surgeons of England for the Training of Students in the Speciality.* University commissions which have inspected this department have always paid glowing tributes.

7. As far as the work that is now being done in this department is concerned, it can very satisfactorily compare with the departments in any hospital in Europe or America. At the present moment, there is a fair number of very highly qualified doctors on the staff of this department who are showing great efficiency not only in running the department but also in teaching under-graduates and post-graduates. A doctor who qualifies for the speciality from this hospital can safely be relied on to carry out all necessary treatment and operations in this speciality. This department has established a tradition for giving every possible opportunity to post graduates to do practical work.

8. I feel great gratification and satisfaction that I had a great hand in the initiation of the department both for professional work and in teaching. The University was good enough to recognise the quality of work carried out by the department. This is amply proved by the early recognition the department got both for

the diploma course and the master of surgery course. As the originator of the department, I have also the satisfaction that it is being run by people who have a very high reputation in the speciality all over India. Every Ear, Nose and Throat Department in the hospitals in the State is manned by trainees from the Government General Hospital, Madras, and I feel confident the popularity of the department will long continue.

Note by the Present Prof. of Oto-Rhino-Laryngology

Further developments in this department which has been so well organised by Dr. P. V. Chierian has been in the direction of more extended surgical work, particularly in the treatment of deafness for which a special *Hard of Hearing Clinic* is now functioning. Cases which hitherto were delegated as incurable or at least had only palliative treatment are now being thoroughly investigated by audiometric and other tests and treatment by operative methods have been instituted. A number of cases have been treated by the Fenestration operation with gratifying results and from September 1956 the operation of Stapes Mobilisation is being tried out in a fair number of cases and the results are being assessed. Though it is too early to place this latter operation in its proper place the results

so far achieved seem to indicate that this procedure which is simpler than Fenestration has a definite place in the treatment of certain kinds of deafness.

Cases of Malignant diseases involving the pharynx and upper oesophagus and the Larynx which hitherto were subjected to palliative irradiation have been treated by more radical approach and the results so far obtained justify the more extended adoption of operations like Laryngectomy and Laryngo-Pharyngo-Oesophagectomy in selected cases. Some indication of the work done in these two fields may be obtained from the following statistics.

Statistics of E.N.T. Department from 1954 to 1956

Total number of cases treated in E.N.T.

Department 1954-1956	...	1,13,513
Laryngeal operations		30
Laryngo-Pharyngo-Oesophagectomy		10

Statistics of H.O.H. Clinic from 1954 to 1956

Total number of cases treated

1954-1956	...	6,583
Fenestration Operation	...	50
Stapes Mobilisation	...	35

There has also been an all round increase in the work done in other fields.

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—SIR WILLIAM OSLER.

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A new and fresh parcel of pulsating life.

Time speds : the child the Man becomes.
Circumstances and environment mould the doings
Of the Man. He struts ; he frets ; he lives.

The field is set : he bats ; he bowls.
His acts, small and great, good and bad,
Bind him to his fellows as he fields.

"What grace, what style' what poise !" shouts an excited fan
He bats : "look, how grand he wields the bat !" Is it a sixer I ?
"Bravo ! a Bradman in the making !", yells some one.

His side to field now ; he stands at the slip.
Muscles tense, eyes screwed, he's a picture of concentration
An easy catch he misses. "What a shame !" someone, boos.

Here's a catch : 'oh how lovely', the sweet one
From the pavilion shouts. There a miss - 'lo,
What a pity !', his comradely team-mate sympathises.

Now he bowls ; Gupte-like he spins to perfection
He claims eight for sixty "He's bound to find a place
In the next test against the Aussies," prophesies an old timer.

To reap fame he plays the game ;
Or else, for the sheer spirit of it :
By the skin of his teeth, three score runs piles up he :

Tired and spent-out stands he before the wicket.
The last ball is bowled ; Is it an l. b. w. ? lo, he's stumped :
"How's that ?", sneers cruel Death.

No help from here, up there, or anywhere ?
But doth the world for him anymore revolve ?
His heart - wouldst it beat within him no more ?

And yet the rhythmic drops from the heavens
Drum the corrugated zinc roof ; the remote temple
Bells, cymbals and drums their clanging continue.

—VIJAY.

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The Development of Pharmacology in the University of Madras

By

J. C. DAVID, M.B.B.S., Ph.D.,

*Principal & Professor of Pharmacology, Christian Medical College, Vellore
Formerly, Professor of Pharmacology, Madras & Stanley Medical Colleges, Madras.
Retired Surgeon General with the Government of Madras.*



Pharmacology, as a subject of study was practically unknown in the Universities of India up to the second decade of this century. Materia Medica, its precursor just required the study of the origin of drugs, their collection, preservation, and use of their preparations in the treatment of disease. No emphasis was laid on the mode of action of the drugs as experimental pharmacology had not been introduced in the laboratories. As a matter of fact the professors of the various subjects were interchangeable and so no research or specialised work could be undertaken in any of the basic subjects—preclinical and non-clinical. With the opening of the Calcutta School of Tropical Medicine the first department of pharmacology for experimental research in indigenous drugs and teaching of post graduate students came into being.

In the early twenties a commission of the General Medical Council from Great Britain visited various Indian Universities and as the result of its advice and in order that recognition by the General Medical Council might not be discontinued the Universities had to take certain steps; and the creation of a department of experimental pharmacology with research facilities was one of the first improvements.

The Government of Madras, on the advice of the Director, School of Tropical Medicine, Calcutta, deputed one of the assistant surgeons for a course in experimental pharmacology for 2 years at this school in September 1925.

In October 1927 this officer (the author) returned from training and opened the new department of Pharmacology. After a few months, the existing chair of Materia Medica was converted into a chair of Therapeutics with the result that the incumbent of the chair of pharmacology was completely divorced from clinical work or clinical teaching and had to do with experimental and research work only.

New apparatus had to be installed and the reference library in pharmacology had to be enlarged. Experimental pharmacology being only experimental physiology, applied for the elucidation of the physiological action of therapeutic agents, an incentive was now given to the expansion of the department of physiology which up to this time concerned itself only with histology and chemical physiology. The creation of the department of Biochemistry relieved the department of physiology with its responsibility of teaching chemical physiology and it could now expand its work in experimental physiology.

In 1926, the Government of Madras decided to train two officers, one a medical man and the other a chemist in research in indigenous drugs. These two officers were also sent to Calcutta for a period of 3 years to work under Col. Chopra, the professor of Pharmacology and officer in charge of research in indigenous drugs at the Calcutta School of Tropical Medicine.

With the return of these two officers the work in the department of Pharmacology was

expanded so that there were two departments, one for research in indigenous drugs under Dr. K. Venkatachalam and Mr. A. N. Ratnagiriswaran and for teaching under Dr. J. C. David.

In the early days of the department, demonstrations of experimental methods in pharmacology were given not only to students but also to members of the medical profession to whom these techniques were novel. The department was meagrely staffed with the professor and just one demonstrator. This continued for 2 years when an additional assistant professor was appointed. Unfortunately during 1930-31 owing to general retrenchment this additional appointment was abolished. In spite of this, several items of research were undertaken on new drugs like Oxytocin and Cardiazol and on the bioassay of galenical drugs, the importance of which was not appreciated at that time; and papers were published in the Indian Medical Gazette Indian, Journal of Medical Research and Quarterly Journal of Pharmacy and Pharmacology (London).

From 1931 onwards, the research section under Dr. K. Venkatachalam was responsible for work on indigenous drugs and poisons of importance in veterinary medicine under a scheme sponsored by the Government of India. A team of pharmacologists, Veterinarians and chemists examined various plants reported to have therapeutic or toxic effects on cattle and their findings were recorded in the annual reports of the departments, the Indian Veterinary Journal and the Indian Journal of Veterinary Science.

The research work in the department done during the first 25 years falls under four heads (1) Research in indigenous drugs of human and veterinary interest, (2) Research on certain actions of known synthetic drugs (3) Research on drugs of importance in tropical medicine, like cinchona, antiamoebic drugs etc., and (4) Biological assay of known drugs as well as those newly introduced and manufactured locally, like Protein Hydrolysate which was much in demand during the last war. More than 40

papers of pharmacological importance have been published by various workers in this department up-to-date.

The extra work during the war years and influx of refugee students gave the much needed increase in the staff. By 1945 there were two assistant professors and two demonstrators including a non-medical one.

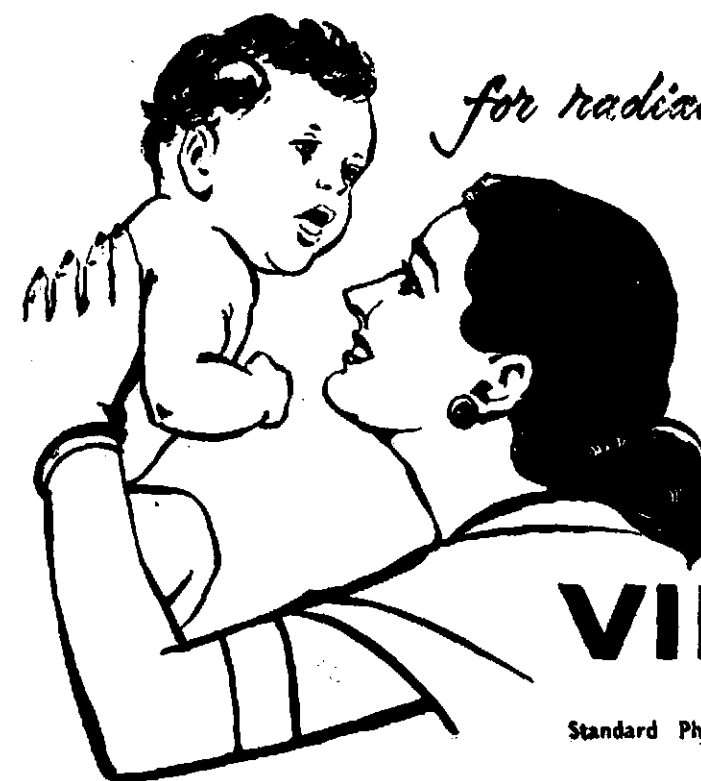
In the post war reconstruction programme the need for trained pharmacists came to be felt and with the institution by the University of a two year course in Pharmacy (B.Sc. Pharm) a lecturer in Pharmaceutics and another in Pharmacognomy were sanctioned. Later this course was extended to one of three years for the B. Pharm degree; and the department of Pharmaceutics and Pharmaceutical Chemistry was separated under another professor. More accommodation was made available by the inclusion of most of the main original building of the medical college, both ground floor and upstairs. The departments of pharmacology and pharmaceutics while having more or less adequate accommodation are housed in a building not originally intended for laboratories and therefore suffer in comparison with the laboratories which have grown around this building for other specialities!

During the past decade a number of members of the staff of the department of pharmacology have been trained for research degrees. Three assistants have taken the M.Sc degree of Madras and one of them is now in the grade of professor and another lecturer in independent charge in another medical college. One was sent on a Rockefeller grant and returned with the Master of Science degree from the States and is now professor in one of the medical colleges in the State and has already made a name for himself in pharmacological research. Several others are still under training.

At present to the teacher of pharmacology is completely divorced from clinical work. This is not an ideal state of affairs. In the early days of the development of pharma-

cology, there was a need for pure research workers and teachers to lift the subject from its low 'empirical' state and place it on a firm footing as an experimental science. At present we are in the days of advancing chemotherapeutic research and the experimental pharmacologist can now play a more useful role as an assessor of the value of the chemotherapeutic agents by the bed side.

The next step which I earnestly hope the University of Madras will take in its centenary year is to create chairs of Pharmacology and experimental Therapeutics in the four affiliated medical colleges and insist on incumbents of such posts having clinical knowledge and qualification as well. Then they will be in a position to direct research not only in the laboratory but at the bed side too.



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DEFEATED PURPOSE

By

N. JAYARAMAN, B. SC., I. B.D.S.



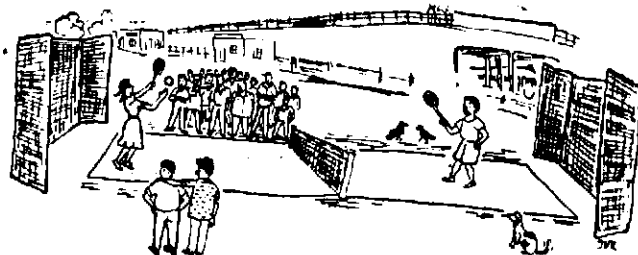
The night was cold, bitter and biting, as only a night in mid-winter could be. Pitch darkness and pregnant silence overlapped each other, forming a strange combination, imparting, as it were, an oppressive melancholy to the whole place. The trees spoke not one word with their innumerable leaves. The air was heavy with mist. He could not see even a yard ahead of him clearly; perhaps he did not try to - but why? He was a misfit, they said, but was he really?

His indifferent blue eyes peered through the unlimited space: still there did linger perhaps an unjustifiable ray of hope, his one and only possession. His life was one great misery, dissipation and waste, - purposeless, with no faith in men, with no faith in God, and, worst of all, no faith in himself.

He, too, had attended college; but that only educated him into a weaker, hopeless, and self-reproachful graduate. Not that he did not realize that in fleeing from himself he was every moment rendering his precious life futile, anchorless, tossed between reverie and self-mockery. Was it really only laughter that he deserved instead of the affection which he - may be in self-pity - so much yearned for? Surely, there were people more miserable than

he, but then were there not others happy for all the world as if they had been born to testify to the pleasure of life? Prayer, he was often told, was the unfailing answer but he had not found it so. Alas! prayer is no magic - he must needs "trouble deaf Heaven with his bootless cries".

Now on this almost primeval night, on the brink of another new day, what had he to hope for except...? Was he to let this one slip useless away? The air was still heavy with mist, the trees with their innumerable leaves were there, but somehow the darkness was not so oppressive, and he could faintly see...and then, of a sudden, as if in answer to his endless questionings, out of the dark that covered him there was born a beam of light. With an almost insane glee of realization, he laughed aloud. What a fool he was! Why, there were friends just for the asking, and why must he think that his feet had lost their contact with the earth? Sufficient unto the day the evil thereof, whichever way you looked at it.. Like a foam-flecked charger bridling proudly against the wind, he threw his head back, squared his shoulders, and, with a light and gay heart, he swaggered towards the city lights.



THOUGHTS ON MEDICAL EDUCATION

By

K. S. SANJIVI



During the last few years several outstanding contributions have been made to the problems of Medical Education. The Goodenough report, the British Medical Association's 'Training of a Doctor', the Publications of the Commonwealth Fund of New York, the Bhore Committee's report in our own country and the Proceedings of the World Conference on Medical Education held in London in 1953 are among the more important of these publications. We in Madras were fortunate also to attend a Conference on Medical Education convened by our distinguished Vice-Chancellor in the University Buildings on the 2nd and 3rd of March 1953 when we had the team of famous foreign medical scientists amidst us.

In this Paper it is proposed to make a brief survey of the present trends in Medical Education from the point of view of the situation existing in India. It is obvious that the plan obtaining in England and America is not necessarily the best for India.

In England or America there is only one system of Medicine accepted by the public and practised by the Registered Medical Practitioners and that is Modern Medicine. It is not Western Medicine or Allopathic Medicine any more. In India, however, we are still told that the bulk of the people believe only in the ancient or indigenous systems of medicine, that the 'common man' has no use for Modern Medicine and official recognition in the form of registration has been given to the practitioners of the other systems of medicine. It is time that we insist on getting the correct answer to these basic questions. It may be considered tactless but not impertinent, I hope,

to inquire which system of medicine is sought by the protagonists of the indigenous systems of medicine in the legislatures when they themselves fall seriously ill.

The first problem for us therefore is to decide on the content of Medical Education in our country. The patient must necessarily get the services of a doctor who has been taught all the best that medical experience throughout the world and throughout the ages can provide. If this assumption is accepted and we as a country believe in the efficacy of the indigenous system of medicine, one should insist on the curriculum including modern medicine in all its aspects and at least the more important portions of the indigenous systems of medicine.

The Madras University has on its Statute Book (page 231 of the University Calendar Vol. III 1953-54) a degree of Bachelor of Indigenous Medicine (B. I. M.). Although it is some years since the Regulations for this degree were approved by the Senate, no institution has applied for affiliation for this degree. One who is really interested in our ancient systems of medicine should certainly like to see the efficient functioning of at least one institution, if not several, offering the B.I.M. course. A patient seeking treatment in such an institution would be making a specific choice of an indigenous system in preference to Modern Medicine and will have the guarantee that he gets the best that that system can offer.

We shall now proceed to the problems of Medical Education in Modern Medicine. Here, the first problem, to my mind, is the minimum period that is required to produce a

'basic doctor' - a doctor who will be a really efficient general practitioner capable of dealing with the problems that arise in every day practice in any part of the country. Such a doctor should know the basic facts in anatomy and physiology and should have an excellent training in General Medicine, Pediatrics, Preventive and Social Medicine and Psychiatry. Professor Janeway gave support to this idea when he recently spoke to the Madras Branch of the Indian Medical Association. Can any one deny that the bulk of medical practice will fall into the important subjects mentioned above? As regards surgery, the following extracts from the Proceedings of the World Conference on Medical Education 1953 are very significant:—

"So far as training in the Operating Theatre was concerned, he did not think there was the slightest need for students who were going into general practice to go into an operating theatre." (M. Iselin)

"Students who wish to become general practitioners in rural districts and small towns must be familiar with certain surgical techniques which might be classified as minor surgery." (Asenjo)

Midwifery must be learnt and practised really well, particularly by the doctor going out to rural areas.

There is a lot of opposition to the production of medical men with *two standards of basic training* corresponding, say, to the old L.M.P. or D.M.S. on the one hand and the M.B.B.S. on the other. We are told that there should be only one standard of medical education which should be the degree course and which should take a minimum of 5½ years (including the period of internship) and should include the study of elaborate surgical techniques and numerous specialities. How many of the medical graduates can really undertake advanced surgery or specialised work on the basis of their undergraduate training only? One intending to specialise must necessarily come back to the college for a post-graduate

diploma or degree in the subject. Does any one regard the M.B.B.S. and the post-graduate degrees and diplomas as two standards of education and object to their existence? Likewise, it should be possible to have a really good diploma course in 3½ years in addition to the existing degree course extending over 5½ years. This may sound very unorthodox but it seems to be the only way by which Modern Medicine can reach the distant rural areas in our country. The following quotation should be of interest in this connection.

"Could not there be built in four years on the foundations of a good general school education a medical course which would serve as an introduction to any branch of Medicine followed for the family doctor by two or three years training for general practice which would vary with the special needs and available resources of the country and cover the diagnosis, prevention and treatment of the diseases commonly encountered there, and for other specialities a post-graduate training depending on their individual requirements? I believe that it could. I would be happy to discuss details with those who may be interested." (Cohen)

Many useful and practical suggestions were made at the 1953 Conference with the object of reducing the period of training and these have been epitomised thus:—

"A plea was made for the integration of the study of physiology and of anatomy. This is a very practical problem. It was felt that if such integration were brought about, it would be good for the student, save time and make for greater emphasis upon both the subjects.

"It was good to learn from the participants in the discussion on both the medical and surgical side that it was their opinion that they must come closer together and that there must be active co-operation one with another." (A. L. Mudaliar)

Another important aspect of Medical Education is the system of examinations. We

still cling to the idea that a student's capacity and training can be tested by a few random questions in a written paper and a few minutes interrogation at the clinical and oral. Far too much value is attached to the performance on a single day while no credit whatever is given to his day-to-day work in the class-room and in the wards throughout the three years of his clinical training. It is no surprise therefore that "the best students sometimes fail and - what is more dangerous - the worst students sometimes pass." (The Lancet, 25th August 1956). The failure rate is still very high and there is no doubt that if credit is given to the day-to-day work, well over 90% of the students should pass. Allen Greg, Vice-President of the Rockefeller Foundation who visited us some time back, was shocked at the high failure rate in Indian universities and said that the only way of remedying this waste of human effort will be to decide the final result on the work throughout the course as much as on the performance at the final examination. When there is such an impetus provided for work all round the year, apart from the better examination results, there will be a much better type of medical men turned out.

It is argued that credit cannot be given for the day-to-day work as the assessment of the work of individual students will be difficult with a teacher-student ratio which is much less than the optimum. This objection may be theoretically correct but is really not valid as even to-day we certainly know which student is regular in his attendance and case-sheet writing and awake and alert during ward rounds and which student is not. However, this objection can, to some extent, be met by increasing the number of tutors with post-graduate degrees. This can be achieved only if a greater number of young graduates could be enabled to sit for these post-graduate examinations. But that is a problem of post-graduate education which it is not proposed to include in this Paper.

As a method of watching the students' attendance in the class-room, frequent tests will be more valuable than the insistence on an 80% attendance. Personally I should do away with the Attendance Register altogether. For these tests a "multiple choice," "fill up the blanks" type of question paper is more suitable to assess how far and how well the student has been following the lectures. The alternative and older method of asking the students to write brief essays on two topics which is all that is possible in an hour, will not cover as wide a field and might give a wrong impression in the case of students who cram prepared answers for a few selected questions. The present trend seems to be in favour of selecting the first few students by the multiple choice paper (where, by the way, the answers are written in the question-paper itself) and then to give only these a two or three-hour exercise on a clinical problem or an essay which would require comprehensive knowledge and powers of analysis and expression. On the results of the latter the students will be awarded distinctions.

Another problem which perhaps is not often discussed is the *weak student*. While, in other courses of study, there are arrangements for private tuitions and coaching classes for the less than average student, there is no such special arrangement for the medical student. The student who is not able to keep pace with the class in his understanding of the varied syllabus of medical studies, should be able to find a private organization which will be equipped and staffed suitably to help him.

No attempt has been made to discuss all the aspects of medical education. That would take up much more space. But I hope enough has been said in this short Paper to convince one that bold and drastic changes are urgently required in our methods if we want to train a much larger number of doctors than we are doing at present, to take the benefits of modern medicine to every remote village.

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KASHMIR - EARTH'S LITTLE HEAVEN

By

S. DEEN MUHAMMED, IV Year, M.B.B.S.



2nd October. Gandhi Jayanthi falls on that day. But to the few of us, who, with painstaking effort made the Kashmir trip a reality, it will be a most memorable day and a day that will remain green in the innermost recesses of our minds; more so, at the thought of the warm send off accorded to us by our numerous friends, members of staff and our beloved Dean.

The journey to Delhi was not very eventful except for the fact that at one stage when the train was jolting along merrily, we had to stop the train to recover a fallen purse belonging to one of our friends. Besides, we spent most of our time chalking out our programme, interrupted by frequent visits to the neighbouring dining-car.

The Kashmir Express which was to take us from Delhi to Pathankot was overcrowded and with great difficulty we found space to squeeze ourselves in. It was at that moment that we realised the significance of the saying "Might is right". We were equal to, if not better than the Punjabi and Kashmiri co-passengers in the oral warfare that occurred between us on one side and them on the other. Our stock of Tamil stood firm ground against the Punjabi and Kashmiri bombardment.

At 8-30 A.M., on October 5th, we reached Pathankot. A great surprise awaited us there. Lt. Col. Kesavalu, an ex-student of our college met us and took us to his saloon for breakfast. We then proceeded by bus to Srinagar. The bus halted at Lakanpur where our entry permits to Kashmir were checked by the Punjab and Kashmir Police Officials. For lunch we halted at Jammu and then we were

again on the road. The changing scenery along the road drew our attention most, in that from bushes, shrubs, coniferous trees, we saw a mountain river gently flowing a couple of thousand feet below, which took away our breath for a moment. Though our driver was driving the bus at a moderate speed it seemed to many of us that he was going at a break-neck speed and one mistake on his part would have cost the lives of all of us. From one corner of the bus someone was singing "Chie Sara, Sara, whatever will be, will be". We reached Bhatote that night and went to bed early.

Next morning after a light breakfast, we were out on the road again. The road wound round many hills which maintained a steep ascent, and the valley below, with its terraced paddy fields presented an appearance of a green velvet carpet. We passed many herds of goats on the way. The woolly and majestic appearance of these mountain goats induced the photographers among us to snap the rest of us along with the goats. so much so that someone coined a perfect caption for the photograph as: "M.M.C. goats among mountain goats". At 11-15 A.M. we reached the Banihal Tunnel. As the tunnel, was being repaired the passengers were asked to get down from the bus and were allowed to pass through the tunnel walking, while the bus took a circuitous route and came to the other end of the tunnel. As we reached the other end of the tunnel, the Kashmir Valley spread before us-a panorama of green richness surrounded on all sides by the mighty snow-capped mountains. An hour's ride from Banihal Tunnel brought us to the enchanting

Kashmir Valley whose colourful people were a pleasant sight to see. Sturdy men in their peculiar conical caps, charming women in their colourful dress (kameez and baggy pyjamas) and their typical head wear were a rare treat for our eyes.

At Srinagar we stayed in house-boats on the River Jhelum. A house boat is eighty feet long, twenty feet broad and consisting of three double bed-rooms, a dining room and an elegant drawing room. The bed rooms, dining room and drawing room are amply furnished with beautiful carpets covering every inch of the floor.

On Sunday morning we set out on a shikara, a small boat having cushioned seats under a colourful canopy to carry about six passengers and manned by a couple of experienced hands. From the shikara we saw lovely Kashmiri women washing clothes on the river bank, and small angel-like children having their morning bath all by themselves. For those of us from the South, a glimpse of the simple, innocent and yet captivating beauty of the Kashmiri maidens was an unforgettable sight. The apple cheeks, rosy lips, chiselled nose, sparkling eyes, gleaming white teeth wreathed in sweet enchanting smiles and the long flowing hair, drying in the splendour of the tender rays of the morning sun seemed to us a standing monument of God's wonderful creations.

And on Sunday after-noon we visited the famous Moghul gardens. Moghul Gardens in all consist of three gardens Shalimar, Nisshat and Chashma Shahi and they owe their name to the fact that they were built by the Moghul Emperors for their queens. The gardens themselves present a beautiful appearance. The narrow pathway, leading the visitor to every hook and corner of the garden, is bordered by green velvet like lawns. Flower-beds and centuries old Chenar trees placed at regular intervals add more charm to the place. Long fountains in the heart of the gardens with their spray mechanism and water falling on the terraces, appears like melted gold under the gentle rays of the setting sun. Nisshat impresses

the visitor much more than the others because it is arranged in nine terraces and each terrace presents the appearance of a miniature garden. Towards the close of the evening, as darkness began to envelope the gardens, the inner voice in us, in parting sorrow cried out "Adieu, the living monument of the Moghuls." Later we visited the Nehru Park on the Dal Lake which did not impress us much.

On 9th October we left Srinagar in a special bus to Pahalgam 51 miles away. On the way we visited the ruins of the Pancha Pandava palace which had sunk down twenty feet into the earth due to an earth-quake. A striking factor of interest was the Tamilian Architecture in the form of stone carvings found on the pillars there. After that we reached Pahalgam which stands at a height of 7000 feet. Pahalgam is a nice little hamlet bordered on all sides by the mountains, studded with pine trees. Pahalgam is the starting point for the ascent to the holy Amarnath caves. That evening Mr. Altaf Hussain, the Revenue Officer of Pahalgam held a tea-party to honour our visit to the town.

On Wednesday our special bus crawled with difficulty as it carried us through the winding ghat roads, hair-pin bends towards Tangmarg. The day itself was gloomy as it was raining and the sky was overcast. Now and then hail-stones pelted the top of the bus. Finally we reached Tangmarg which stands at a height of about 6000 feet. From there we had to go on horse-back to a place called Gulmarg at a height of 8000 feet. On the road to Gulmarg we experienced biting cold which sent a chill down our spines. The horse-ride itself was not without interest for the inexperienced among us were in a sorry plight. At Gulmarg we dismounted in front of the Tourist Hotel and moved in to have our lunch. During lunch we were told that the journey to Khelanmarg was risky and as such, some among us chose to remain in the hotel, while the adventurous ones proceeded towards Khelanmarg with a batch of students from Patna. After some-time it began to snow and for all of us it was a rare sight to see the

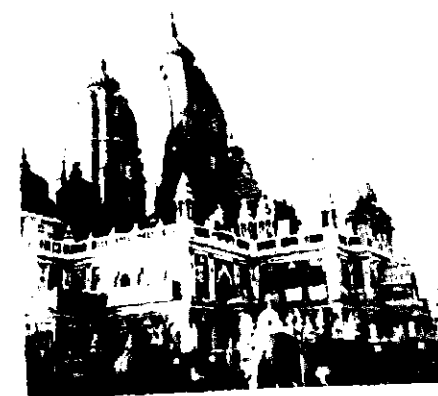
Trip to Kashmir



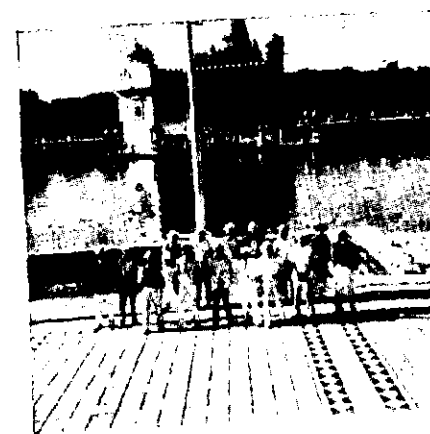
Red Fort — Delhi



Dal Lake — Srinagar



Birla Mandir — Delhi

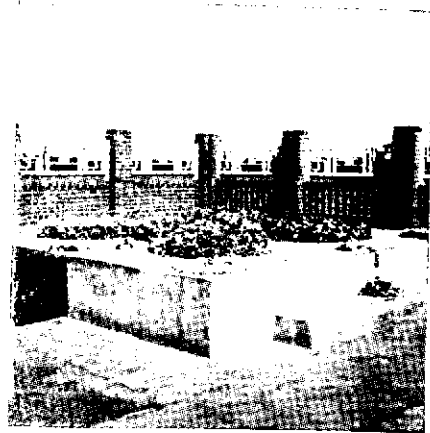


Golden Temple — Amritsar



Gulmarg — Kashmir

Trip to Kashmir



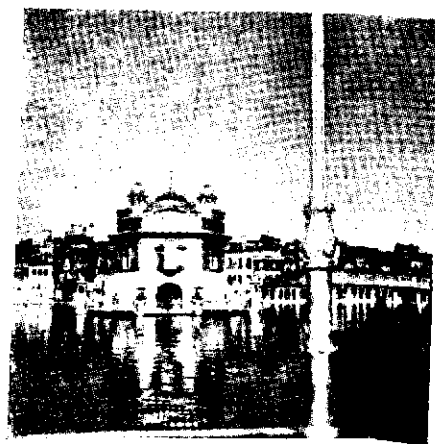
Raj Ghat — New Delhi



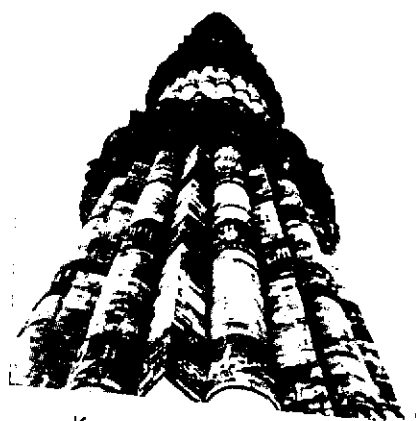
Dal Lake — Srinagar



At Harwan - Water Works — Srinagar



Golden Temple — Amritsar



Kutub Minar — Delhi

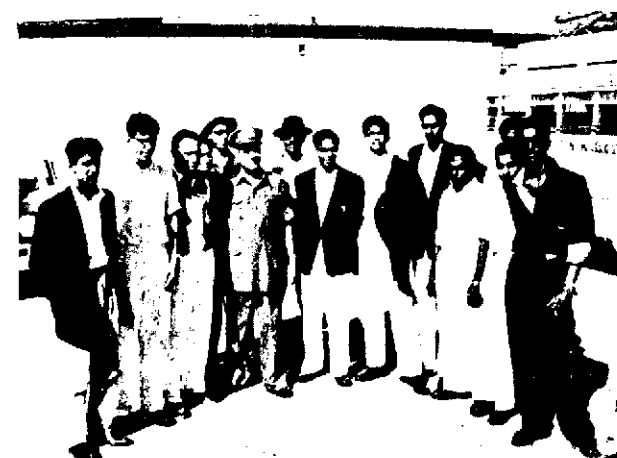
Photos by D. Venkatachellum, 3rd year, M. B. B. S.



Tangmarg



Man Mohan Singh, 2nd Yr. M.B.B.S.
Won a prize in the Inter-University
Debate in Hindi Held Recently
at Delhi



With Lt. Col. Kesavulu



Felix, Soosai, 2nd Yr. M.B. B.S.
University Footballer



Dr. Ramachandra Iyer, M.B. B.S., M.Sc.
Former Professor of Bio-Chemistry
Retired After Distinguished Service



Dr. D. V. S. Reddy, M.B. M.Sc.
Former Professor of Physiology
What Madras has lost Vizag has gained!



Dr. S. A. Kabir, M.B. B.S., 'Bon Voyage'

Mondays he was intolerable. The Sunday boozing, made him on Monday mornings impatient and irritable and he used to go late to hospital. In those days, it may be remarked, hospital work was from 7 to 9-30 a.m. but on Mondays he used to go to the hospital at 10-30 or 11 a.m. So we used to get away at 10 a.m. We found on Tuesdays that he was not at all minding the absence of students from the wards on Mondays. Col. Giffard was a man of great resourcefulness and originality. He was well up in mechanical work. He could make a good carpenter, smith and turner and fitter but not a surgeon with his thick short fingers and a thumb as big as my wrist. All the same he used to plod on at first and dash away later with all kinds of operations which used to approach butchery sometimes. He had a habit of saying—"This will surely suppurate" and when it did as was found on opening the dressings for the first time, he used to derive satisfaction by pronouncing aloud the words "I said so". If for every operation he gave this thoughtful but purposeless prognostication, there was no point in claiming astrological merit by prediction of failure.

He did not care for case sheets, his diagnosis was of a lightning nature. He did not pick and choose his cases. He operated on every case, whatever its prognosis might be. If the patient survived the operation, it was the the Surgeon's merit. If he succumbed to it, it was the patient's own misfortune. I had a bitter experience of working under this Surgeon. Whenever in the morning work of the wards, he hazarded an opinion calling a hydrocele, a haematocoele, and a femoral hernia, some new growth, I used to put the alternative (often the right one) and ask for differential diagnosis. On one occasion the question was whether the case on hand was one aoesophageal carcinoma or spasm due to achalasia of aoesophagus. He did not come prepared whereas in the fifth year we had to note every silly thing in text books because we had to face an oral examination in selected little riddles. But the worst of it was,

yet to come. In my final M.B. & C.M. year, I was working in the operation theatre not as direct assistant to Giffard, helping in the operation, but as one of the additional contingent holding the patient in a particular posture. In the case concerned the patient was a Salt Sub-Inspector, a Mussalman friend, who was passing quantities of pus per anum. He was in Giffard's wards. Three months has passed and no diagnosis was made. The patient's superiors were pressing for his discharge. Apparently Col. Giffard was in doubt about diagnosis. So on a particular day he had sent for Col. Browning while Giffard was as yet a Major. Col. Giffard would not think much of anybody in his overweening haughtiness of temper and self-consciousness of talent. Yet he had to get a second opinion and he sent for a Col., his superior in rank though not in capacity, as he thought. I (a senior student) was holding the leg of the patient in the bent position at the knee, another (junior) student at the other. By chance an R.A.M.C. man came that day to learn work. The Assistant Surgeon, Dr. Vasudeva Row, was an old man on the eve of retirement. Col. Browning examined the patient and said nothing. Col. Giffard was not satisfied because Col. Browning's silence showed that he did not confirm his (Col. Giffard) own diagnosis. The R.A.M.C. man was then asked to examine. He knew that Giffard's idea was in favour of a carcinoma and he confirmed it. Then Vasudeva Row was asked to examine it. He too confirmed and said 'It looks very much like a cancer.' Then Giffard turned to me and asked, "Student, would you like to examine?". I agreed and I gave over the knee to some other person and was making for the wash-tub to wash my hands. "You needn't wash, the seat of pus is a foul cavity" he said. Then I turned back and made a rectal examination and washed my hands and returned, took over the knee and stood silent. "What do you say?", he asked. I said, "Sir, if it is a case of Carcinoma, should we not expect the surrounding tissues to be indurated?" While Giffard made

another Taj Mahal in embryo. It is being built by means of public funds to stand on equal footing with the Taj though not to excel it. A twenty minute's ride by tonga from Dayal Bagh brought us to Taj Mahal which stands on the banks of the Jamuna. We had seen so many pictures and had read and heard so much about the beauty of the Taj, but when we actually saw the Taj before us, we were nonplussed and failed to find words to express our admiration for the beautiful building of marble that stood before us. One could detect the exquisite art of the Indian Craftsmen of yore, when one went inside and saw the splendid etchings etc. engraved on the marble.

At 4 P.M. we left the Taj to see the Agra Fort. It was an impressive Fort and the mosque inside, built of white marble, was worth seeing. As darkness began to clothe the place we left the fort to see the Taj in moonlight. The Taj under the spell of the brilliant and scintillating moon-light presented an exquisite appearance. The monument of marble against a star-lit sky, the gentle movement of the slushing water of the Jamuna, the stillness and peace of the night made us abandon ourselves body and soul and we became part of that perfect setting. It was neither the ravishing beauty of the Taj, nor the grandeur of its architecture but the cause of its very being which one had to admire. How could a man

for just the love of a woman accomplish a feat which ranks as one of the Wonders of the World? That, however, is the very essence of God's gift to Man. The feeling of love in its true and pure form, found expression in the Taj. The Taj is a monument to Love. It stands to inform men after Shah-Jehan's time the supreme bliss that Love is, and the affection the great Moghul Emperor had for his dear Mumtaz.

On the eve of our departure from Delhi we visited the Parliament Building, Secretariat Buildings, A.I.R. Studios, Jumma Masjid (the biggest mosque in the world), the famous Red-Fort, Janther-Manther, (Weather Observatory of bygone days,) Chandini Chowk, Birla Mandir and Connaught Place. That afternoon we were greeted with the news that President Rajendra Prasad was to grant us an interview at 5 P.M. On arrival at Rashtrapathi Bhavan we were taken around the whole place. At 5 P.M. the President received us and enquired about our stay in Kashmir and about our college. He reiterated the necessity to study Hindi as it was one of the Indian languages and more so for the unity of the Nation. Later we had tea at Rashtrapathi Bhavan.

We left Delhi on 17th noon and reached good old Madras at 6-30 P.M., on Friday the 19th October in time for the first Test Match between Australia and India.

*The main thing to ask for is sight—
There is light enough*

—JOHN RUSKIN.

From Morning Till Evening at the N. C. C. Camp

By

C. A. ABRAHAM IV Year, M.B., B.S.



At the end of practically every College term you hear of a sorry group of chaps, packing up a load of troubles into their camp worn kit-bag and leaving for, what you may also have heard of—the N.C.C. camp. It is about this occurrence that I wish to say a few words.

4 a.m. our Company Sergeant Major Mani becomes alive. It takes exactly one minute for his vocal chords to tune in, and brother, tune in it does. At every bed he halts and bawls "Wake up man, Wake up"—that is according to regulations, actually Sergeant Major Mani says far more than that—but that is strictly

meant for adults only. But one morning did not dawn well for our beloved Sergeant Major Mani. That was when I had a brain-wave. I remembered my elder brother's trick when my eldest sister used to wake him up in the mornings. I was awake at five minutes to 4. Exactly at 4 a.m. Sergeant Major Mani resurrected. At 4.1 he started his triumphal morning march. Mine was the fifth bed from his and at



The N.C.C. Camps are generally in God-forsaken corners of the countryside, but let me tell you, dear reader, to be away in such a corner from my marvellous, loveable elder brother, I am prepared to attend a dozen N.C.C. Camps all in a row, farther away from home the better. In other words I am giving you a mild hint that if you too have any such loveable attractions at home hurry up and join the N.C.C.

The first thing you have to do in a camp is to get up in the morning. At the stroke of

4.3 he pulled up at my bed. Generally he takes in an extra quantity of air into his lungs before he starts on bed No. 5. After a full half a minute of his "Good Morning," and without much effect, he stopped to take in another lung full of air. Pretending to just wake up, but talking in my sleep I said all I had wanted to, of our dear Sergeant Major Mani. After a general description of how much we loved him, I went on to say that people thought that the Zoo was the best place for him, but that I personally preferred a museum

for that specimen, for there. Sergeant Major Mani would remain stuffed and could not make a noise.

There are a few things that every human being, even the most primitive aborigine does, when he gets up in the morning. But in the N.C.C. Camp one cuts it down to getting into the uniform and falling in on parade. One remarkable quality that our Sergeant Major Mani had was that before you fully opened your eyes the young man would be ready for parade. But I found out his secret—he went to bed in his uniform! A thing you *must* do in the morning I forgot to tell you, and that is you must have a shave. Even if you fall in on parade with nothing on, you just must have a shave.

Next is the ceremony of handing over the parade by the Company Sergeant Major to the Under Officer. The Under Officer (we love him) is a character diagonally opposite to our Company Sergeant Major, for he is a human being—all except when he is inspecting the Company in the morning. One fateful morning he stopped sternly in front of my dearest friend Moorthi. The Under Officer's lips moved—"Cadet 1287 Moorthi, what is happening to you? The right boot is on your left foot and the left boot on your right?" Now, my best friend Moorthi, though a little short of duty, is a bit long in ingenuity. He answered "Sir, Sir, in the mornings I get an attack of squint eyes.....". To think of what followed brings tears to my eyes, for great was the decline and fall of my dearest friend, Moorthi.

Dear Reader, do not be misled to think that the whole day is a round of Sergeant Major Manis, and loveable Under Officers. Actually, after the morning inspection these characters slowly fade into obscurity for the rest of the day and the instructors then take over. Now, these instructors are the selected emissaries from the Regular Army sent to impart to us a sound knowledge of Military Science. They are the real back bone of the whole show, for without them no training is possible. At least

so long as they keep their noses out of the morning inspection parade we will continue to call them the backbone of the whole show. The Medical Company (that is us) specialises in clearing of casualties and rendering of medical aid to them. A soldier wounded and helpless in the battlefield is our concern. It is our duty to render first aid on the spot and then bring him away to Medical care, constantly assuring him that his end is not yet in sight. The enemy generally fires a gun salute when they see us about, only that their bullets pass just inches above our heads.

It was on such a day, when my cousin John acted as the wounded casualty, that hell broke loose. All went well till after the Thomas Splint was applied. Then came the first aid for shock. Young John was carefully rolled up in a blanket and delicately placed on a stretcher. A peculiar rocking movement could be seen from within the blanket. John was wriggling like a worm. I gave him a stern pinch to warn him that if anything went wrong it would be us who would have to face the music. Suddenly the stretcher on my shoulder felt unusually light and the next I knew was poor John was struggling madly on the ground, yelling as if to wake up his dead grandmother. By this time the operation in the battle field was paralysed, and all gathered round to sympathise with my poor cousin John. The six foot mass of Jem. Raju, the first aid instructor, descended on us and could be heard above the confusion ordering us to undo the first aid for shock. In the blanket was found a seething mass of bugs, all getting a little too chummy with my poor cousin John. Abandoning the casualty, first aid and all, we, the four stretcher bearers quietly retreated into the background, unseen by the expert exponent of military science, or else the said expert would have directed his off the syllabus talk on us—the concerned executors of first aid.

Then breaks the lunch hour, an hour well earned for lunch indeed. But not before Sergeant Major Mani approves with a long blast on his melancholicus whistle when again

it is "Fall in". The difference in this particular "Fall in" is that no inquisitive soul comes snooping round to see if you have had a shave or if your shoes are shining. You then must queue up. But the point about this queue is that there must be some one always standing in front of you, and no one necessarily behind. The crawl towards the counter of issue starts, and suddenly before you know it you have made an encounter with a few mechanised humans called servers, and equally before you sense it, you have passed them with what is known as lunch (food) in your plate. Man is created with a sense of taste and smell which is to be used to his advantage. But the Camp authorities differ in their opinion as regards this. They maintain that the prime concern of a soldier is to say "How do you do" to the enemy getting as close to him as possible, and not to greet the cook with a contented "Well done my boy". There must have been an error, or at least a misunderstanding when God created our Sergeant Major Mani, for if anything pleases his palate it is the camp food. At least it is a public secret that his best (and only) friend in the camp is the cook.

The lunch hour over there is again a "Fall in". But this time it is only for those who are appearing for the Certificate Examinations. Now a word about these Certificate Examinations. These are the hard earned recognitions of our achievements in the NCC career. For the Senior Division (that is us) there is the 'B' Certificate after two years, and the 'C' Certificate after four years of service. (The 'A' Certificate by the way is for the Junior Division in the Schools). These Certificate examinations are no joke dear friend, for they squeeze every ounce out of you before you are reluctantly declared a pass. You must know your theory—I mean the theory taught to you, from A to Z. Rightly the officers say that in the battle field if you do not know what is taught to you, you may not

get hurt, only get killed. All the training we have had in the use of weapons and the battle field techniques are all gone through, and you must satisfy the examiners that you really know all. Dear reader, if by any chance, you come across a person who holds these precious relics you can perfectly be sure that he can put up with almost anything in the world. He is a character you will be proud to know. The other day a friend of mine got married. Said the Father-in-law "I heard that the boy had passed his 'C' Certificate examination, and for sure I know that he is THE MAN for my daughter!"

Finally evening sets in and it is 'Recreation time' till Dinner at 7 p.m. (You may have a bath if you want to during this time). Games are provided, but we generally prefer the Canteen till our cash runs out, and then the "Cadets Room"—graciously making friends, practising the precious principle of mutual co-existence.

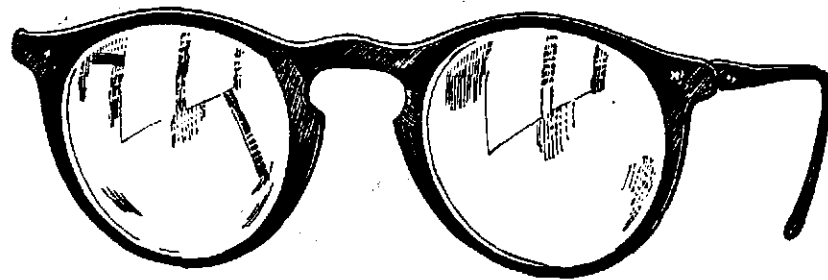
Dinner is, as I said, at 7 p.m. There is nothing peculiar about it to be eaten at 7 p.m. Nevertheless what is taken at 7 p.m. is called Dinner.

After all these happenings we can enjoy one thing human that is not denied to us—sleep. But not quite so soon. We have to wage a private war with mosquitoes, ants and the like species of nocturnal insects, till out of sheer exhaustion we finally fall asleep. The day ends at 4 a.m. the next morning, when once again Sergeant Major Mani announces the birth of another day.

Thus has ended a day in an NCC Camp, and there are 14 such days. Looking back on those fourteen days, and on the nearly dozen such sets of fourteen days I have experienced, I must say I have enjoyed life to the full. For may be I am myself an Under Officer now—or at least I have passed my 'C' Certificate Examination.

[All characters mentioned in this article are purely fictitious]

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Messrs. RADHA BROS.

OPHTHALMIC OPTICIANS

No. 174, BROADWAY — MADRAS

A Short History of the Government Ophthalmic Hospital, Madras

By

DR. T. T. RAMALINGAM, M.S.,
(Superintendent, Ophthalmic Hospital, Madras)



The Government Ophthalmic Hospital was originally established as the Government Eye Infirmary by Surgeon Robert Richardson on behalf of the Board of Directors of the East India Company in 1819 in Royapettah. The following year, the Infirmary was transferred to where the tram-shed in Egmore was situated. In 1884, the present site was chosen and buildings were constructed and occupied in 1886. The Hospital then consisted of three main isolated blocks in addition to an out-patients' Dispensary, European and Indian Kitchens and a residence for the apothecary, and the name of the Infirmary was changed into "Government Ophthalmic Hospital" in 1888. Even then, the hospital seems to have been very popular. The Government Ophthalmic Hospital was singularly fortunate in having had as its Superintendents eminent Ophthalmologists of international reputation in succession for several years. During the Superintendency of Lt.-Col. R. H. Elliot the hospital was greatly enlarged and the operation of sclerocorneal trephining was devised and performed by him for the first time in this hospital, which is a land-mark in the history of treatment for glaucoma. Vast improvements were also made in organization. Plans were laid and apparatus secured for the practice and teaching of Ophthalmology on an extensive and up-to-date scale.

The Hospital by this time had become well known throughout the Ophthalmic world and had attracted distinguished visitors from abroad.

Dr. Temple Smith of Queensland wrote in the Ophthalmoscope of April 1912 as follows :—

"The Visitor, who is interested in Ophthalmoscopy will find enough material here, and interesting material too, to satisfy him. Besides this, he will find instruments of precision to help him to appreciate them, of such modern development and in such number as is doubtful whether he would find collected in any other institution devoted to Ophthalmology. He will also have the good fortune to meet with a mentor with a very keen eye for small fundus changes, who is only too glad to demonstrate them to an appreciative observer."

Lt. Col. Elliot was succeeded after a short interval by Lt. Col. H. Kirkpatrick. The plans laid by Elliot matured and advanced under Kirkpatrick's direction, and just before his retirement in 1920, he opened the Elliot's school, a new block devoted to the teaching of Ophthalmology. The next eighteen years were unique in the history of the institution. During this period, he did some research work on the aetiological aspect of superficial punctate Keratitis or the so called "Madras eye." The museum in Elliot School proclaimed as one of the best in the world by distinguished Ophthalmologists visiting the hospital from far and near redounds to the credit of Lt. Col. Wright. During the same period, the second in command was the well known Dr. K. Koman Nair, who ably assisted Lt. Col. Wright in all his work and was later

appointed as the first Indian Superintendent of this hospital, which he richly deserved. Dr. K. C. Sankara Menon who was connected with this institution for a long time succeeded Dr. Koman Nair. Dr. R. E. S. Muthayya took over from Dr. Sankara Menon in 1946 after an extensive study tour in UNITED KINGDOM and UNITED STATES OF AMERICA and it was during his period the first eye bank in India was opened in this hospital in 1947, and the first corneal grafting from a cadaveric donor was successfully performed in this hospital in January 1948.

The Hospital has attracted Post-Graduates from all over India and from outside the country and for the first time in India, a Diploma course in the Speciality was instituted in 1926. To-day, besides the under-graduates, about 200 every year, from the two Medical Colleges in the City, there are four types of Post-Graduates attending this institution :—

1. Those who attend the practice of the hospital without sitting for any examination;
2. Candidates for the Government Diploma (L.O.)
3. Candidates for the University Diploma (D.O.); and
4. Those aspiring for the M. S. Degree, the highest qualification offered by the University.

Upto-date.

- 320 have obtained the L.O. Diploma.
- 64 have obtained the D.O. Diploma.
- 6 have qualified for the M.S. Degree.

The present bed strength of the hospital is 326.

The Madras Medical College Magazine

The inpatient attendance continues to be above 450.

Previous Superintendents of this Hospital

1. Dr. R. Richardson 1819 1824
2. Dr. Thomas Moore Lane 1824 1844
3. Dr. Thompson 1844 1851
4. Dr. Shaw 1851 1857
5. Dr. Paul, M.D. 1857 1862
6. Dr. George Smith, M.D. 1862 1869
7. Dr. W. N. Chipper Field } 1869 1873
8. Dr. M. C. Furnell }
9. Dr. E. F. Drake Brockman,
F. R. C. S. 1873 1894
10. Lt. Col. T. H. Pope, M. D., F. R. C. S.
I. M. S. May 1894 March 1904
11. Lt. Col. R. H. Elliot, F. R. C. S.,
I. M. S. April 1904 April 1913
12. Lt. Col. W. C. Gray, I. M. S.
May 1913 June 1914
13. Lt. Col. H. Kirkpatrick, I. M. S.
July 1914 March 1920
14. Lt. Col. R. E. Wright, M. D., C. I. E.,
I. M. S., March 1920 Nov. 1938
15. Lt. Col. P. Verdon, I. M. S.,
Nov. 1938 Dec. 1940
16. Diwan Bahadur Dr. K. Koman Nayar,
D. O. M. S., Dec. 1940 Jan. 1945
17. Dr. K. C. Sankara Menon, D. O. M. S.,
Jan. 1945 Jan. 1947
18. Dr. R. E. S. Muthyya, M. S., D. O.,
(Oxon) Jan. 1947 April 1956

Distinguished Old Students & Staff



Dr. M. G. Kini, M. C. M. Ch.,
F. R. C. S., F. A. C. S., F. I. C. S.



Dr. R. V. Rajam, M.B., M. S.
F. R. C. P.



Dr. S. T. Achar, M. D.,
F. R. C. P.



Dr. K. M. Rai, M. B., F. R. C. S.,
D. M. R.

THE STORY OF A BUG

By

PATRICK YESUDIAN, IV Year, M.B.B.S.



Friends, I am sure there will be many prospective car-owners among you. Let me tell you plainly that you derive more fun and pleasure in buying a second-hand car than a brand new one out of the show room, which drives you smoothly to your door. I shall now proceed to narrate to you some of my experiences in purchasing a second-hand car.

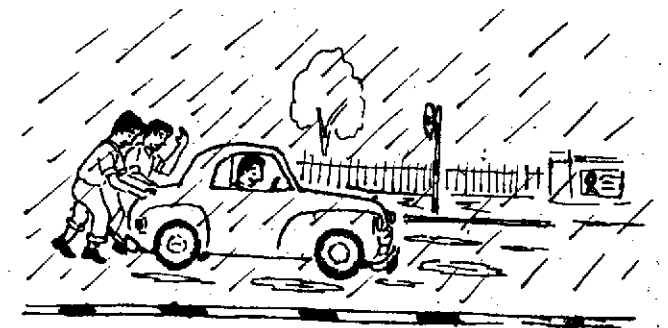
The first step towards this venture was to convince my mother that it was quite impossible to attend the 'O.P.' in time without a vehicle. She, with the economy of a woman, immediately suggested a bicycle. After getting over the shock, I told her that cycling over the Egmore over-bridge twice a day would definitely cause adenitis of my inguinal glands. This put a stop to the bicycle business since she was frightened by the long medical term which I had used. What, with so many motor cycle accidents, it was finally decided that I should get a car.

The permission being granted, my next step was to entrust the matter to a trustworthy 'Broker'. The car of my choice was a

"Bug Fiat" (so called due to its resemblance to a bug) as this was the most economical car from the point of view of maintenance. From the next day onwards a series of 'Bugs' started pestering me from morning till evening. I adopted a method of eliminating most of them by a process somewhat identical to the examination of patients in the clinical wards. Let me allude to the similarities.

The past history, as the clinical students know is very important in assisting the diag-

nosis and assessing the prognosis of a patient. For instance, when a patient comes to the O.P. with severe anginal pain and is very ill and his relatives give a past history of coronary thrombosis, the boss immediately refuses to admit him because he considers the prognosis to be very bad. Similarly one of the cars which came to me for sale had passed through the hands of twenty five owners and had been involved in an accident almost every alternate day (a bit of an exaggeration, of course). This fact which I obtained from the 'C' Certificate foretold a very bad prognosis for the car and I immediately refused to buy it without proceeding further with the examination.



Present History: Having obtained a favourable past history, we next enquire about the present 'illness' of the car because there is invariably some defect which has brought it to the market, but the usual history which is typical for Bug Fiats is that the owner is 'going in' for a bigger car. But take it from me Readers, the only aim of the owner is to dump the car on some unfortunate fellow (as I found out later). In the present history we also get fantastic figures about the petrol consumption.

of the car. The owner will say that the car will run 40 miles for every gallon. But to our surprise we will find that the car can hardly run 20 miles per gallon. Therefore always rule out such figures.

Inspection: Naturally after the history, comes the inspection of the car. The general appearance is to be noted—whether the paint and seats are good. Some orthodox people, I believe, discard cars because the number of the car is unlucky according to them. Inspection of the engine is the most important point. One finds out if the parts are original as the owner claims them to be or if there have been minor changes in some of the chief parts like the carburettor.

Palpation: Confirms inspection findings.

Percussion: Some people percuss the ammeter and the petrol gauge to find out if they are really working. Sometimes due to vibrations the indicators of these contraptions appear to be functioning normally while in reality they are not. These pseudo indications will be revealed by percussion.

Auscultation: Since most of the 'pathological' flutters and murmurs of the engine can be made out with the normal ear, the stethoscope is not of much use in the examination of a car. But I am sure that some you enthusiasts will find a method for auscultating the engine.

Diagnosis: Most of the defects in the car can be made out by the above methods and these go a long way in reducing the price of the car.

Whether the 'findings' are to our satisfaction or not, one thing we never miss is a jolly good ride in the car.

Coming back to the story, after the thorough examination detailed above, I finally bought a second-hand (in fact it was a seventh hand) Bug.

This Bug, I thought would be a quick and economical mode of conveyance. It was not to me, but to my friends at the college. Every evening you could see a group of chaps gathering round my car with cheers and praises for me, of course in anticipation of a 'lift' to the hostel or to their respective homes. I could not refuse them because if I did, on the very next day, I find my car either behind the dining room or inside the ladies hostel. Finally I got tired of giving lifts and decided to teach a lesson to my 'chronic' passengers. One evening when it was raining cats and dogs I found the usual gang waiting for the lift. I took them in and after going a few furlongs I unobtrusively closed the petrol tank. The car ran a few yards, coughed and stopped. The pathetic face which I turned to my friends would have melted even the heart of a hippopotamus. "Sorry boys, no gas" I said. They got out one by one, all the while casting murderous looks at me which were calculated to scorch the hide of a buffalo at a distance of twenty yards. Then they started pushing the car in the pouring rain to the nearest petrol bunk which was a furlong away, while I sat happily inside the car. The next day although I voluntarily offered, to drop a few of my friends at their residence, they politely refused.

I sincerely hope that the tips I have given will be helpful to some of the prospective car-owners of our College.

RATS!

By

M. K. MANI, Final Year, M.B., B.S.



I spent Deepavali this year with my friend Kittu. Kittu lives in a typical small town, and his father, a mirasdar, owns the second largest house in it. As soon as I had settled down, Kittu proudly showed me around the house.

It was a large house. Old fashioned, but very comfortable. I really meant it when I said to Kittu, "What a lovely place to live in!"

"It's the most wonderful house in the world" said Kittu with characteristic modesty.

I didn't want him to get too cocky, so I went on, "But there must be any number of rats and bandicoots in such an old building."

"Not one" said Kittu triumphantly. "We used to have a great many. Couldn't leave anything around. They even ate soap and drank hair oil."

"Good Lord!" I exclaimed.

"You said it! Then we started an all out rat extermination campaign". Kittu lowered his voice to an awe-struck whisper. "We used cyanide. Wiped them out completely."

I shuddered. Unpleasant memories of Toxicology were brought back to my mind. Fortunately just then we were called down to a much more congenial matter, dinner.

I was not present during all the action that took place the following morning. The account that follows is a reconstruction based on the many reports I received about the incident.

Kittu's grandmother entered the kitchen at four o'clock on Deepavali morning, and started

opening the windows. This was a regular procedure for her, and she had done it every day for years. Today, however, was destined to be different.

May be there are cyanide resistant rats, and may be one of them was a resident in Kittu's house. Any way, a rat, following his most primitive instinct, had managed to gain access to the kitchen and had indulged in a real spree. Probably, the amount he ate interfered with the acuity of his perceptions, for he failed to find the exit in time. Hearing Kittu's granny's footsteps, he climbed on to one of the window frames and stood there hoping to pass unnoticed.

He was, I am sure, unaware that granny would open the windows, and what is more, that she always began with that particular one. You can understand, therefore, how startled he must have been when he felt his seat rattle as she undid the bolts; and he jumped to the floor and scampered to the shelter of a number of jars kept in a corner.

The rat, albeit unwittingly, obtained his revenge for the scare he had been given by taking that jump. Kittu's grandmother, who is not by any means fond of a rat at any range, was hardly pleased to find one hurtling through the air and landing a bare foot away from her. She expressed her alarm and disgust in no uncertain terms.

The cook was in the next room. She came toddling in. "What is the matter?" she enquired.

The matter, granny said shortly, was a rat.

"A rat, yes! But what made that weird noise?"

Granny's patience was running short. "The rat jumped at me and I screamed", she said.

"What is the use of screaming?" persisted the cook. "In any house, there are bound to be people and there are bound to be rats. We must co-exist. Screaming isn't going to help any."

I received many different versions of granny's reply to this, all rather unparliamentary. Whatever she said, it had the effect of silencing the cook. She then called the peon to kill the rat.



Now Kittu's grandmother is a GRAND OLD LADY, and anyone who is a grand old lady in capital letters must be very orthodox. The peon is not a Brahmin, and no one who is not a Brahmin dare set foot into Kittu's granny's kitchen—except a rat.

For the rat to be killed, it had therefore to be persuaded to leave the kitchen and meet a violent death outside. With a remarkable lack of sportsmanship the rat made no attempt to leave. Who was to drive it out? Not Kittu's granny, and certainly not the cook, who was such a staunch supporter of peaceful co-existence.

The obvious choice was Narayanan, the cook's help, a Brahmin. Unfortunately, at that early hour of the morning he was rather sleepy, and while the peon lay in wait at one

door, he drove the rat out by the other. The rat made good his escape, leaving the unfortunate Narayanan to face a stream of invectives from the cook, who, in her excitement, had forgotten her policy of co-existence. At last, realising that the lapse was irremediable, she addressed herself sorrow-fully to the now absent rat.

"Unfortunate creature. It was not given to you to die on this auspicious day."

The day wore on, and the rat was forgotten in the joy of the festivities. But he had no

intention of being forgotten. That night he strolled into the kitchen as granny was looking around. This time he didn't stoop to any subterfuge. He walked in by the door which leads from the kitchen to the exterior, and granny spotted him.

The rat made for the jars, and granny went in the opposite direction. Having established a safe distance between them, Granny called the cook.

"Why do you leave the door open at this time of the night when you know there are rats around?"

The cook was a master of repartee; in fact, she was a mistress of repartee. (This may sound a trifle Bohemian to you, but it wouldn't if you had seen her. She lived on palaharam, but by God's grace the palaharam had kept her figure elephantine). She said:

"I had the door open just to make the rat come in. Now he is trapped inside the house and we can kill him."

She proceeded to make arrangements for the killing as calmly as a big game hunter would arrange a beat. Narayanan was assigned the task of beating; he was to ensure the exit of the rat from the kitchen. The rest of the household armed with walking sticks, waited at the door. The cook looked on.

And then came action. Out through the door came the rat, followed closely by Narayanan. Pandemonium prevailed. When the dust cleared the rat lay broken and dead on the floor.

The cook was determined to follow up this victory with another. She said, "I told you long ago not to waste money on new fangled

medicines for rats. They won't get rid of them. But just kill one of them by hitting it and all the other rats will clear out of the house. Ask me if you find another in our house."

Kittu's father said sulkily, "The cyanide was wonderful. No rat could have survived it. This one must have come from outside."

His answer was interrupted by a shout from Kittu, who had gone up to have a bath. "Some rat has been eating chunks out of my soap."

Was it really another rat? Our was it the indomitable spirit of this one, undestroyed by cyanide or trauma, determined to take revenge for the cruelty of man?

I wonder.

When I was a young man I observed that nine out of every ten things that I did were failures. I didn't want to be a failure. So I did ten times more work.

—G. B. SHAW.

You can make more friends in two months by being interested in other people than you can in two years by trying to get other people interested in you.

—DALE CARNIGIE.

The true test of civilisation is not the census, nor the size of the cities, nor the crops, but the kind of man the country turns out.

—HARRY EMERSON FOSDICK.

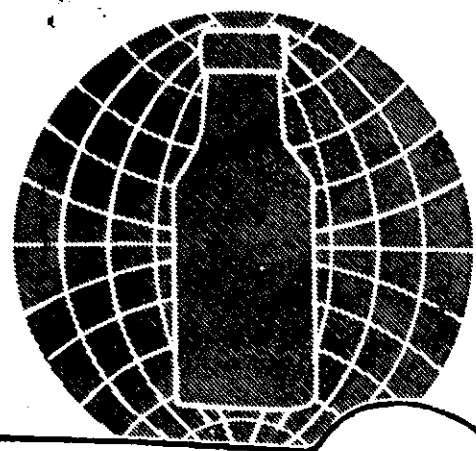
The friend of my adversity I shall always cherish most. I can better trust those who helped to relieve the gloom of my dark hours than those who are so ready to enjoy with me the sunshine of my prosperity.

—ULYSSES S. GRANT.

If you want to know how a stranger gets your measure, how he can tell you who you are, you have only to mind your manners and watch your speech. As your speech is so are you; for it is by the spoken word that we show the degree of our culture or betray the depth of our ignorance.

—FRANK H. VIZATALLY.

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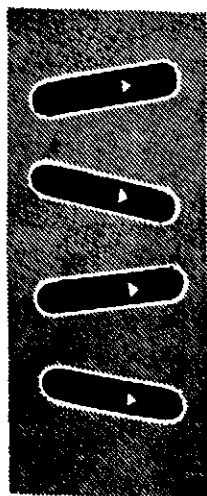
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“ON ERRORS IN DIAGNOSIS”

By

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“The Wise Man’s eyes are in His Head,
but the Fool Walketh in Darkness”

—(Book of Proverbs)

However gifted and careful one may be, to be every time correct in diagnosis is impossible. Any doctor of experience will readily admit this. It is only in consonance with the well known saying that “To err is human”. Perhaps it is even true to say that the very Gods even cannot be always correct. But, with proper care and adherence to certain well established principles, it is possible to reach an irreducible minimum in diagnostic errors. Surely this is a worthy aim and the subject is discussed with this object in view.

Strange as it may seem, the first and most important cause of diagnostic errors is “Not examining the case properly”. This may at first appear to be a fantastic statement, but I feel that anyone who ponders over his cases of mistaken diagnosis will willingly agree with the truth of the statement. I can best illustrate by narrating my own experience in a case. Years ago, a case of ‘hydrocele’ was sent in with a note from a doctor. It was the end of a tiring day. I casually noted that the patient had a big scrotal swelling, and without further ado posted him for operation the next morning. After my chief’s major work for the day was over, I started on this ‘hydrocele’, when, for the first time I realised that the swelling was not scrotal but inguino-scrotal. I began to wonder if I was not dealing with a case of hernia, when all doubts were set at rest by unmistakable evidence of peristalsis under the anaesthetic and so I decided to launch on the

operation for the hernia. As it always happens under such circumstances, and to my utter dismay I just could not reduce the contents into the abdomen. I sent for a senior colleague and he too failed. By now, the patient, an obese one at that, was so long under the anaesthetic that he showed signs of shock. Deciding that discretion was the better part of valour, I closed the incision and sent him back to bed. Next morning my chief cryptically said, “Well, hereafter show me the hydrocele cases also before you post them”. The remark was short but not sweet; but I always felt and still feel, that the ticking off was fully deserved and if anything was very mild, if only for the unpardonable sin of posting a patient for operation before a complete and proper examination. A few days later my chief operated on the patient. There was a pouch just within the internal ring, a sort of continuation of the hernial sac formed by a ledge of peritoneum. Obviously, my previous attempts at reduction had resulted only in the contents getting into this pouch and not into the abdomen proper. The surgeon lifted the contents over the ledge and easily returned them into the abdomen. The patient had a stormy convalescence but ultimately recovered much to my great relief. This incident left in me an indelible impression and I have never after posted any case without a thorough examination. Indeed, I am now so particular about this even in what may be termed trivial conditions, that members of my team some-

times wonder if I am not a disbelieving Jew. I have described this episode in great detail, as it brings out clearly what I believe to be a common cause of diagnostic error viz. "Not examining the case". Under "examination", I include the very important pre-requisite of taking a correct history. Indeed, in many conditions, e.g. in gastric and duodenal ulcers, a well taken history is more helpful in arriving at a correct diagnosis than even several special tests. In many cases, information regarding age, sex, main complaint and its duration will by itself go a long way in helping to arrive at a correct diagnosis. The occupation of the patient, his present and previous places of living, previous residence abroad, if any, are all important factors.

Rushing to Conclusions on Insufficient Evidence :

Perhaps I may best explain this, taking for illustration "Cervical swellings". A hard lump in the side of the neck may be a primary malignant growth. But it may equally well be a mass of secondary malignant glands, secondary to a primary growth in the larynx pharynx, or elsewhere. No examination of a cervical swelling is complete unless the tongue, floor of mouth, jaws, teeth, sinuses, scalp, pharynx, larynx etc. are carefully examined. I have often seen students failing to do this very important examination and so miss an obvious growth in the tongue or floor of mouth. Much more easy it is then, to miss the primary growth if it is a small nodule of epithelioma somewhere in the tonsil, vallecula of the tongue, vocal or ventricular folds of larynx or pyriform fossa. All the above areas must be examined very carefully by inspection and palpation for primary growth and also by laryngoscopy, oesphagoscopy etc. where indicated.

Failure to do the routine examinations :

Many mistakes arise, because such obviously important examinations, as of motion, urine, etc. have just not been done. Times without number, cases have been sent in as piles where the history itself was obviously suggestive of

dysentery and yet the motion had not been examined even once. Amoebic dysentery can be very mild. Indeed, medical students with dysentery have come to me saying they have piles. Their discomfort had been very little. All they had was mild abdominal discomfort and some blood in motion. Blood due to piles is fresh, but in dysentery it is altered. Outside the body, the amoebae quickly die and unless a fresh motion is examined, findings may be negative. If fresh motion is not available, what is sticking to the gloved finger on rectal examination, or the end of a lubricated catheter passed up the rectum must be examined. I stress this, because I have seen reports repeatedly negative for amoebae, and yet when fresh motion was obtained as above and examined, several actively motile amoebae were found. A negative report on motion which is not fresh is worse than useless. Indeed, active amoebae can be seen under the microscope, which fail to be obvious when the same slide is re-examined a few minutes later. The amoebae cease to be motile and it is not always that the usual methods like adding warm saline, or gently heating the slide, succeed in reactivating them.

To take another example, it is not known as widely as it ought to be, that the only way in which diabetes may manifest itself first is by fissures of the preputial orifice, with or without a mild infection of the glans and preputial sac. There may be a purulent subpreputial discharge. The sugar laden urine causes irritation and the above mentioned troubles, especially if there is a degree of phimosis also. A medical student was greatly perturbed that his old venerable father had obviously been misbehaving as he was having urethral discharge. The student requested me to examine the old gentleman and do the needful. I at once asked the student if he had examined the urine for sugar. He had not. The urine contained sugar and the patient had also a phimotic prepuce. After preliminary irrigation of the preputial sac for a few days, a circumcision and treatment for diabetes quickly cleared up the condition. Indeed, diabetes as a cause for

such conditions as vague shoulder pains, sciatica, etc. has more than once been missed, by failure to do this very important routine.

Early rectal carcinomas and indeed even advanced ones have been altogether missed, simply because the very important and essential digital examination of the rectum had been omitted. I have seen at least two cases where the patients had been actually operated for "internal piles" and not having relief reported to hospital soon after. Digital examination showed a growth so low down that one wondered how on earth it was possible to operate on the internal piles missing the growth which was practically abutting on the operation field. I may here add that in a suspected case of carcinoma of the rectum, if amoebae are found, it does not necessarily mean that the ulceration is dysenteric in origin, because dysentery may be superimposed on other conditions. In suspected cases, a biopsy report must be obtained.

The following case histories are very revealing.

Case Report No. 1

Years ago, an Anglo Indian aged 30 came to the out patient department with the following history. He was having attacks of 'Dysentery' off and on for 3 years. The trouble started while he was in Rangoon. He had consulted several doctors there and later in Calcutta and other places. He had received several injections reaching the fantastic figure of about 300 (including several emetine injections) but with no benefit. Yet in the course of the 3 years not one of the doctors had done a rectal examination. When this was done, the rectum was found almost completely blocked by non-malignant ulceration. It was a case of "infective granuloma of the rectum".

Case Report No. 2

Again, I was urgently summoned to see a case of acute intestinal obstruction. Digital examination of the rectum showed it to be completely blocked by stony hard scybalous masses. It was a case of faecal impaction.

Under the anaesthetic, the faecal matter had to be dislodged with a spoon before an enema could be run in. This was followed by a good evacuation of flatus and faeces and the acute intestinal obstruction disappeared.

Another example is in missing a distended bladder. Yet, it is one of the easiest of things to decide by passing a catheter, or by noticing the changes after the patient passes urine, as to whether a hypogastric tumour is a distended bladder or in any way related to the bladder. Enough has been said by now, as to how omission of the essential routine examinations will result in disasters. Any member of the teaching staff would have found case sheets lacking in very essential information as for e.g. in cystitis, no report would be found of urine, (naked-eye or microscopic examination), in anaemia no report as to blood picture.

Accepting a diagnosis in the absence of an important fundamental feature :—

For e.g. before a diagnosis of dislocation of shoulder is accepted two important things must be satisfied.

(i) the head of the humerus must be absent from the glenoid fossa.

(ii) and it must be found elsewhere.

Yet, it is not uncommon to find students diagnosing cases of deltoideoparalysis or 'Caries sicca' as one of dislocation of the shoulder. If the above two conditions to be satisfied are remembered, such mistakes will never arise. In a destructive disease the head of the humerus may have disappeared, but in such a case only one of the above conditions is satisfied, viz. the absence of the head in its usual place, but not the second, viz. finding the head in another place.

Similarly, a tumour in one half of the abdomen may be movable, and palpable bimanually, and more or less kidney shaped. Even so, if it does not fill the loin, the chances of its being a kidney tumour are remote. Some time ago I had a case of abdominal tumour of a similar nature, but the swelling

was bulging forward rather than towards the loin. My initial diagnosis of kidney tumour was criticised by my assistant on this score of the tumour not bulging towards the loin. I had to accept his contention and re-examine the case, when a globose tumour was felt, its top dipping beneath and adherent to the under surface of the liver. The free edge of an enlarged liver was well felt and was hard and nodular. Marking the outline of the tumour made matters very evident. In size, shape and situation it resembled a markedly enlarged gall bladder. Laparotomy showed the case to be a distended gall-bladder, due to a carcinomatous growth at its neck. There were small secondary nodules in the liver. Thus, unless the main fundamental features of a particular condition are satisfied, one must hesitate before labelling it as such. Minor variations may occur for easily explicable reasons, but the fundamental features should be there. Surely, it is wrong to diagnose a case as malaria in the absence of the malarial parasites in properly taken blood smears. Too much has been made of the so called therapeutic tests. Indeed, they have often been misused. Recently I saw a case of advanced liver abscess who had been literally drenched with quinine orally as well as parenterally. If at all the case is one of malaria, the first few doses of quinine properly administered must surely show some good effect.

Temptation to make diagnosis of rare conditions must be avoided when a simpler diagnosis will equally well fit in:

Common conditions are always common. This needs no explanation. Yet, you will find an occasional individual with a peculiar genius for persistently diagnosing rare conditions. For example, to put it in a rather exaggerated way, a fluctuant translucent scrotal swelling is far more likely to be a hydrocele than a hydatid cyst. In nine cases out of ten, a painless lump in the breast in a middle aged women is likely to be a carcinoma. So, almost the first thing and perhaps the only thing one has to think of in

such cases, is carcinoma of the breast. 'Fat necrosis' of the breast is a very rare condition and may simulate carcinoma. Even when a condition looks like fat necrosis, it is almost impossible to diagnose it as such without special methods of diagnosis. I would far rather treat a doubtful case as carcinoma, than take it for a benign condition and wait and watch. Even if the lump is more like a benign one, in the middle aged and elderly patient I would prefer to remove the lump with some healthy breast-tissue around and submit it to biopsy rather than wait and watch. If one waits, and later the condition turns out to be a carcinoma, the opportunity when an operation would have carried with it a very great chance of cure would have been irretrievably lost. A word here about taking biopsies. Wherever possible, for e.g. where a dental ulcer of the tongue is suspected to be turning malignant, the entire ulcer with a portion of the presumably healthy tissue around must be excised for biopsy. If the ulcer is very large, portions from several suspected spots must be taken. If the examination is limited to only one area, the area which shows transition to malignancy may be missed.

From my remarks about diagnosing rare conditions, I do not want to be misunderstood as suggesting that rare conditions should not be diagnosed at all. Rare cases have certain special features. In their absence or doubtful presence, especially if a more common condition will fit in with the findings, this latter is more likely to be correct.

Case Report No. 3

A man of 50 came in with loss of appetite and a hard nodular swelling in the liver. The reasonable diagnosis from the findings of the case was "Carcinoma of the stomach" with secondary deposits in the liver. Yet, a very clever surgeon of great experience and repute some-how chose to diagnose the mass as 'Sequestered cartilage in the rectus muscle.' He said, it was very likely an embryonic rest from the near by xyphisternum. Even when pointed out that the mass was moving

up and down with respiration, which a thing in the rectus muscle will not do, the Surgeon persisted in his diagnosis. At operation, no sequestered cartilage was found, there was a carcinoma of the stomach and there were secondary deposits in the liver. The rare diagnosis was foredoomed to failure, because it did not explain why the patient had loss of appetite and it did not explain why the mass moved up and down with respiration.

'Mistaking the wood for the tree':

The cause of a finding must be thought out in all its aspects. Thus, supposing a patient is found to be bleeding per rectum and examination shows piles, it does not necessarily mean always, that the patient is suffering from piles only. For, the piles may be secondary to congestion caused by a stricture or growth above, or it may be secondary to cirrhosis of the liver or be a safety valve for a patient suffering from high blood pressure. Therefore, unless all these aspects are considered and all examinations carried out, treating the patient for piles, may not only fail to cure the condition, but may even be actually harmful.

Giving more than due importance to certain special finding as of X-rays W. R. reports etc:

Special methods of examinations are of course very helpful, but these are only auxiliary aids and can never replace the very important clinical examination. I know of cases where the urinary bladder had been opened for vesical calculus, mainly relying on X-ray shadows in the region behind the symphysis-pubis, and when the bladder was opened no stone was found. The shadow in such cases was cast by the base of a turgid penis as sometimes happens.

Case Report No. 4

A man of 60 had symptoms of chronic intestinal obstruction. Signs, symptoms and

skiagrams taken after a barium enema all suggested a growth. There was an enlarged spleen but this naturally could not account for the symptoms. Yet, on laparotomy no growth was found. The filling defect was solely and very unusually due to the enlarged spleen. No cause for the patient's symptoms could be found either, even after a very careful exploration of the entire abdomen. Instances where X-rays have misled will easily come to the mind of any doctor.

Case Report No. 5

A patient who had sustained a gunshot wound in World War No. 1 went about from doctor to doctor with his skiagrams showing a bullet in the chest. Several operations for extracting the bullet, done by different surgeons at different hospitals had been unsuccessful. Ultimately, he reported to a surgeon who refused to see the X-rays before a careful general and local examination of the patient were made. Thus, while he was palpating the patient, to his great astonishment and delight the bullet was felt subcutaneously in the back. He then and there extracted it under local

*Nothing is impossible.
We merely don't know
yet how to do it.*

—Thomas A. Edison

anaesthesia and handed it over to the patient. What had happened was, the previous operators had depended on the skiagrams which gave an apparent appearance of the bullet being close to the vertebrae. Neglect to palpate had resulted in several unnecessary serious operations. Again, the irregular shadows in the fundus of a stomach, caused by swallowed lipiodol have been mistaken for bronchiectasis. Instances like this can be multiplied.

Similarly, the fact that the blood Wassermann report is strongly positive, does not mean every ailment the patient has is due to syphilis. Unless there is a suggestive history or supporting clinical evidence, mere Wassermann report alone must not lead one to diagnose a condition as being syphilitic. The clinicians of old

were remarkably accurate in their diagnosis. Many of the special investigations now known were not at their disposal. But their wonderful clinical acumen compensated for this. It is now believed, not altogether unreasonably, that this important clinical acumen is becoming less evident, and that the tendency to depend on the various auxiliary methods of investigation is becoming more common. If you ask a student, as to how he would assess if a patient's kidneys are functioning properly, the chances are that he will at once talk about blood urea or urea clearance test and the like. More often than not, he may completely omit to mention about measuring the quantity of urine passed, or looking to the condition of the tongue or examining the urine. It has been well said that the various auxiliary methods are very useful servants but bad masters. Of course special methods may help where clinical examination may fail. Thus, in the very early stages of pulmonary tuberculosis even the most careful examination by the cleverest of physicians may reveal no clinical signs whatever. Yet, skiagrams of the lung may show unmistakable evidences of the infection. Indeed, it has been seriously suggested that the only way of stamping out this scourge is to spot it long before clinical signs and symptoms arise, by mass radiography i.e. skiagraphy of the lungs as a routine once a year, of the entire population. In spite of this, the general statement that clinical examination should precede all other methods still remains true.

Looking for Signs and Symptoms which are really late signs:

Such descriptions as headache, spontaneous vomiting and failing vision as being characteristic of a tumour of the brain or of coffee-ground vomits, achylia and cachexia as characteristic of carcinoma of the stomach, are best forgotten. These are signs of very advanced stages of the conditions, when chances of cure are nil, even as faeculent vomiting and cold and clammy sweats are, if looked for as evidences of intestinal obstruction. Faeculent vomiting, dehydration etc. are more

evidences of impending death than of intestinal obstruction. I often think, that a text-book description will be all the better for it, if mention of these late signs are completely omitted and stress is laid on the signs and symptoms of the early stages. Text-books of course do point out that one should not wait for these late evidences, but somehow the graphic pictures of these late stages stick to the student's mind more permanently than the necessarily vague description of the early stages. All malignant growths and many other conditions too, should be diagnosed long before a complete and classical picture develops, if a cure of these conditions is at all to be expected. Thus, any middle aged man beginning to suffer suddenly from loss of appetite without any obvious and easily explicable cause, should be assumed to have carcinoma of the stomach, unless and until it is negated by further special examinations. Indeed, if barium meal skiagrams and test-meal examinations leave one in doubt, a laparotomy should be done to confirm or refute the diagnosis. A laparotomy under such conditions is not only justifiable, but one should go further and say that it is imperative that the surgeon looks in and sees, rather than waits and watches.

This may be a convenient place to point out some of the mistakes, that had been made with reference to carcinoma of the oesophagus. I know of a few patients who reported to their doctors for dysphagia and the radiologists to whom they referred the cases had assured the patients and the doctors on the basis of barium swallow and screening only that there was no evidence of any abnormality. Yet, when a barium swallow picture was taken, unmistakable evidence of carcinoma of oesophagus was present. Indeed, even if the barium swallow skiagram is apparently normal, it is imperative that an oesophagoscopy examination is done in all these cases before a final opinion is pronounced. Only by such precautions can a proper diagnosis be made at a stage when surgery can benefit the patient.

Missing important but apparently Trivial Factors:

A small but a bright pencil torch can not only literally but also figuratively throw light on many cases. Transillumination to distinguish between a haematocele and hydrocele is well known. A fluctuant scrotal swelling may not transilluminate but still may not be a haematocele. It may be a chylocele. Some swellings of the breast may resemble a solid tumour, but may be clearly proved to be cysts if they trans-illuminate. One must hasten however to add, that this does not preclude the possibility of an underlying malignant condition. I have seen more than once, cases where haematuria was the one and the only manifestation of filariasis. If the urine is centrifuged and examined under the microscope in such cases, micro-filaria are often seen. If such a possibility is not remembered, the cause of the condition may be altogether missed. I know of at least one case, where a totally unnecessary operation had been done for haematuria due to the above cause.

Again, an aspirating needle and syringe can go a long way in preventing some mistakes.

Case Report No. 6

A middle aged man was sent to me for opinion, with a provisional diagnosis of malignant growth of the upper part of the left side of the neck (lymphosarcoma?). To me the condition appeared to be very likely of inflammatory origin. I therefore introduced a stout needle and aspirated, when a few drops of pus were drawn from the depths of the swelling. There were several features in this case which must have made one think of inflammatory mass in preference to a malignant growth. They were: (1) the patient was sure that the condition was only of about 25 days duration and that the area was perfectly normal prior to this. The swelling was very big and even the most malignant of growths could not have reached the size in a few days. (2) The overlying skin was pitting on pressure and a small area on the top of the swelling

M-9

was comparatively soft, while the area around was very indurated. (3) There was definite history, that a few days prior to the start of the trouble, the patient had a septic throat with fever and the left tonsillar area was particularly painful. (4) Blood picture showed intense polymorpho-nuclear leucocytosis, both relative and absolute. Under such conditions, one should put in a needle and see. It carries with it practically no risk whatever. The patient was operated upon, and pus let out. The whole mass disappeared in a few days. I can recall at least two more cases where the patients were thought to have sarcoma of the lower part of the thigh and were found to be suffering from a deep seated abscess in one case and the other from chronic osteomyelitis. In yet another case a child was sent in, again as a very malignant type of sarcoma of the femur and was found to have a big subperiosteal haematoma due to scurvy, the condition admittedly rare now-a-days.

Expecting Classical Text-book signs and symptoms in every case may sometimes mislead:

Thus, tuberculous gland need not always give rise to a matted feel on palpation. If the inflammatory fibrosis has not extended beyond the capsule of a lymph gland, matting may not be present. A stomach may be the seat of carcinoma and yet there may be no hypochlorhydria or achylia. Indeed, the test-meal may show even high acidity and I can recall to my mind at least two such cases. The pleural cavity may be full of fluid and yet breath sounds may be heard on auscultation. This happens if a bronchus surrounded by a consolidated piece of lung tissue lies close under the effusion near the chest wall. Again, if one expects in every case of acute appendicitis a clear cut history of onset of pain around the umbilicus later settling down to right iliac fossa, sooner or later one will miss cases of appendicitis. It has been well said somewhere that the man who expects a classical text book signs of appendicitis every time, will miss many an acute appendicitis. I can well recall the case of a lady who was positive that her pain

started in the right iliac fossa only and not around the umbilicus. As various investigation were inconclusive I suggested a cystoscopic examination and ascending pyelogram. She just did not like this, excused herself and got her appendix removed in some other hospital. All her symptoms were relieved. This illustrates that one should not always rigidly stick to text-book signs and symptoms. Yet another example worth mentioning is in relation to carcinoma of oesophagus. A clear cut history of relentlessly progressive dysphagia, first for solids and later for fluids, will be forthcoming in every case. Dysphagia may come on suddenly as a bolt from the blue not only for solids but even for fluids. It may disappear next day and again come on later. Indeed, a case may resemble cardiospasm in many respects and yet oesophagoscopy may show the condition to be one of carcinoma. These aspects cannot be fully discussed here.

But suffice it to say that owing to several variable factors, disease often presents itself in all sorts of diverse ways, quite distinct from classical text-book enunciations. Again, mere young age alone must never preclude a diagnosis of carcinoma if other evidences point to it. That a female patient is very young or very old or that she is not married must never negative a diagnosis of pregnancy if there are evidences pointing to it.

Examining a case with a preconceived idea:

If a patient is examined with a preconceived diagnosis that he is very likely suffering from a particular disease it is possible to make "impossible" mistakes. The temptation to fit in the findings to a preconceived diagnosis must be totally and rigorously resisted. An extreme example is what sometimes happens to a student in the examination hall. No student can seriously deny that belief in "Rumours" has caused several failures. Once, it leaked out that there was a case of ascites in the examination hall. The shrewd examiner knew this and so he replaced the case by

another patient who had an equally big abdomen, due to a very large leukaemic spleen. The next unfortunate student to enter, promptly diagnosed the case as ascites. Even when the examiner informed him that the ascites case had been replaced by another, the student persisted in the diagnosis of ascites. Of course this is not really an example of a preconceived diagnosis in the true sense, but it illustrates what can happen if one examines a case with a prejudiced mind as it were.

"Negligence" must not be cloaked under "mistaken diagnosis":

In large teaching institutions, a routine hernia operation is nobody's job but that of the last joined house-surgeon. The spectacle of the house-surgeon standing with his scalpel on hand, not knowing which side to incise and the anaesthetist churning the patient's throat in an endeavour to make him cough and show up the involved side may be very rare, but it is neither exaggerated nor unknown. For some unknown reason which science has not yet explained, the anaesthetised patient refuses to cough under such circumstances and give away the secret, even though it may be in his own interest. I often tell my house-surgeon that if any one of them come up for their "chance", not knowing which side is involved, his "chance" must be taken away. This is to impress on them the necessity of examining the patient beforehand and I am glad to say they have taken it in the right spirit. Instances where the healthy hip joint has been opened up for arthrodesis or the healthy limb amputated, are extreme examples but are not unknown. The healthy limb, also draped in sterile towels lest the bare foot may carry infection to the area to be operated on, has resulted in such serious mistakes. These are really not mistakes in diagnosis but examples of gross negligence. These mistakes may be very very rare, but are of such serious consequences resulting from neglect of elementary precautions that they seem worthy of being pointed out.

The use of antibiotics and chemotherapeutic drugs:

Has been the cause not only of errors in diagnosis but also of delay in instituting correct treatment. Thus, an empyema complicating pneumonia or broncho-pneumonia may be completely missed as the pyrexia quickly subsides and the patient looks comfortable. In some cases aspiration is persisted in, while the correct treatment would have been drainage. When the antibiotics are stopped the lurking infection held in check till now, will flare up necessitating operation. By now the fibrinous deposits on the pleura would have become organised and thick. While in the earlier stages a close drainage might have sufficed, now major operations like decortication or thoracoplasty may become necessary.

Spot Diagnosis:

This is on an altogether different footing. When a spot diagnosis is expected, the assumption is that there are some obvious typical feature or features in the case, whereby, it is possible to diagnose the condition with reasonable surety. Experience will help in quickly piecing together various evidences at a glance as it were, and arriving at a conclusion. A person gifted with a "Sherlock-Holmes touch" may succeed more frequently than others, but it is important to know when your Sherlock-Holmes touch has miserably failed you. Then, you must be prepared to revise your diagnosis and admit your mistake without much ado. Once, at an outpatient clinic, seeing a boy walk up to the clinic in a constrained manner, the professor made a spot diagnosis of "talipes-equinovarus." When the boy came up and complained of something quite unrelated (as of a fever or a headache), the professor asked him as to why then was he walking in a constrained manner. Out came the reply that a bit of stone had just slipped into his shoe and that he had not yet removed it.

*The best part of beauty
is that which no
picture can express.*

—Francis Bacon

Everybody including the professor had a good laugh. Thus, the important thing is to be able to laugh over your own mistakes and correct them before the patient comes to any harm.

Conclusion:

Whenever possible, diagnosis must be made on definitely positive findings. Thus, before labelling a case as gonorrhoeal urethritis, the urethral smear must show gonococci, or before diagnosing typhoid osteomyelitis typhoid bacilli must be isolated from the pus. This may be a counsel of perfection and it may not be wise to always insist on this. Thus, pulmonary tuberculosis may have to be diagnosed and treated long before tubercle bacilli are found in the sputum. Even so, the principle that diagnosis must depend on positive findings is essentially correct.

Importance of Knowing the "normal":

It is very essential to know what the 'normal' is, before one can detect the abnormal. This appears self-evident. Yet many case sheets will contain statements that the "Heart and lungs are normal" or "The liver is normal" and yet when the student is asked to mark out the boundary of the normal heart or the liver or to describe the normal breath sounds, he is at a loss. There is a very beautiful story in Hindu mythology that Rishyasringar as a boy was brought up in an isolated island where his father was his sole companion. When he suddenly saw, for the first time a beautiful damsel, he was at a loss to understand what he was looking at, because unusual emotions which he had not hitherto experienced were surging in him. Not having seen a maiden he was under the impression that he was seeing something abnormal!

It would have become by now quite obvious, that many diagnostic mistakes are avoidable, if only one sticks to proper methods and principles. An old saying has it that "The wise man's eyes are in his head, but the fool walketh in darkness". This is a particularly

apt statement to stress the importance of the art of "Inspection". Even as a man is walking in, his gait, colour, presence of anaemia or jaundice, whether the patient is breathless, whether his voice is normal or hoarse, whether the trachea is pushed over to a side, whether he is short of hearing or vision, whether there is clubbing of the fingers, puffiness of the face or oedema of the feet, cyanosis or enlarged veins anywhere etc. etc. must be noted. Such "Sherlock-Holmes" touch or "clinical sense" or whatever you call it, may be a gift to some but with patience and perseverance the art can be acquired. Once, I was urgently summoned to see an unconscious patient presumed to have had a head injury. He was deeply unconscious. Somehow, even as I had a glance at the patient, I thought I was dealing with a case of status epilepticus. An urgent radiogram of the skull had already been asked for, and I must confess that I had not the courage to cancel this. By a peculiar coincidence, when the technician arrived he remarked, "Why a skiagram for this? This patient is my neighbour, a confirmed epileptic". The skiagram was normal. The patient recovered consciousness a few hours later.

In coming to a conclusion regarding diagnosis, one must try and appraise the degree of importance of the various factors brought to light, and learn to pick the important and sift out the unimportant. In doubtful cases, an over-all picture of all factors must be taken into consideration giving due weight to such important factors as pulse, respiration, temperature etc. For e.g. if breathing is not hurried a diagnosis of pneumonia must be wrong. If breathing is hurried in a patient a day or two after an operation, and the heart is pulled over to the side which shows the lung signs, the condition is almost surely one of massive collapse of the lung. If, on the other hand, the heart is pushed over to the opposite side, there is either an effusion or a pneumothorax on the affected side. Once, a motor driver of obese build was thrown over from his lorry and badly bruised. The surgeon thought that there was an intra-abdominal catastrophe and

wanted to operate on the case at once as an emergency. However, by the time he saw the patient it was about 8 hours after the accident, and the patient's pulse rate was all the time keeping round about hundred. On this score alone that the pulse rate was not rising, his assistant suggested that probably there was no intra-abdominal lesion and that his tenderness and rigidity were due to the bruising; and that being obese, flatulence caused easy and rapid distension of abdomen. The surgeon agreed with the explanation. A flatus tube was left in place. By the evening, he passed lot of flatus and faeces. The distension subsided and he rapidly rallied round. Next morning, the surgeon assembled the whole class, explained the details of the case and summed up by saying that the credit of saving the patient's life went entirely to his assistant. The magnanimous surgeon was the late Major Ebdon. It was very important in this case to decide correctly, for the patient was in no way a fit subject for any operation. To open his abdomen unnecessarily might have turned the scales against him. On the other hand, had there been an intra-abdominal catastrophe and one had waited, he would surely have died.

In cases of deaths every effort must be made to obtain a postmortem examination. One post-mortem examination may teach more than many a book. Syphilis is said to be a great imitator of diseases, but I would say that in our country malaria and amoebic abscess of the liver are no poor seconds in this respect. A wealthy patient whose main complaint was general debility, went from doctor to doctor, not only in India but also in U.K. and the continent without his disease being diagnosed by anybody. In sheer disgust, he stipulated in his will, that after his death a post-mortem examination should be done on his body. When this was done, a huge liver abscess very well walled-off by thick fibrous tissue was found. This had never been suspected during his life. Malaria and liver abscess, in addition to killing many a patient, have humbled many a proud physician.



ADVANTAGES



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③ ... AS A PILLOW IN THE CLASS ROOM



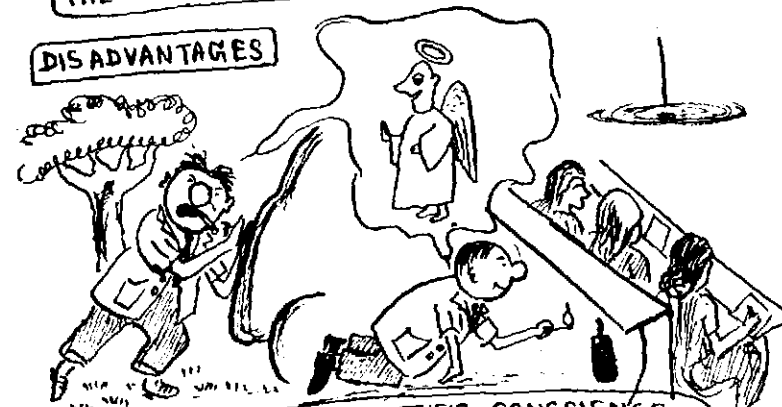
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Just biding my time
That's all I do,

Just living until
Each day is thro'

Just begging the hours
To run away

Just hiding my heart
From day to day

Just biding my time
Till night comes on !

Just hugging a dream
From dark to dawn

Just living to see
In your lovely eyes

The key to my vanished
Paradise !

In Memoriam



J. Dhairyam, M. D.

Dr. P. S. Chandrasekhar — Life Sketch*

In Memoriam



Dr. P. S. Chandrasekhar, B.A., M.D.,
Professor of Hygiene 1917—1921



Dr. P. S. Chandrasekhar, was a very distinguished Professor of the Madras Medical College. He was born in 1869 and was 87 years of age when he passed away on 26-9-'56. He was the oldest medical man living in Southern India.

I was his student in 1906 when he was Assistant Professor of Hygiene and Bacteriology. He was not only a Specialist in his subjects but also a consultant, his advice being eagerly sought by successive Directors of Public Health in all matters concerning sanitation and Preventive Medicine. The Directors of Public Health were the Professors of Hygiene and Bacteriology in those days, and as they were frequently changed, Dr. Chandrasekhar was *de-facto* Professor and his lectures were listened to with rapt attention.

Though "King Institute, Guindy" were expected to do all laboratory examinations, specimens from General Hospital were invariably sent to Dr. Chandrasekhar, as his results were considered very reliable. He maintained stock cultures of all organisms, and many a time "King Institute" had to request him to send one or other of them.

He had a complete library of the latest books on Hygiene & Bacteriology, which he used to get by direct mail from over-seas, as soon as new books were published. He was a voracious reader and he had read all books in his subject. He passed on his library of over 3000 volumes to his Asst. Professor Dr. C. Ramamurthi when he became Director of Tuberculosis Institute. Dr. Ramamurthi subsequently became Professor of Hygiene & Bacteriology in Andhra Medical College and is now in retirement at Virinchipuram near Vellore and is still the proud possessor of these books.

When Dr. Chandrasekar was in the Hygiene Department, he was doing research in Tuberculosis on his own. He conducted a survey of T.B. in General Hospital and instituted scientific treatment. T.B. cases which were until then doomed to death, had the benefit of his care and new treatment and some of them, I am glad to say are still alive.

When Government wanted to start a T.B. Hospital, Dr. Chandrasekar was the only one who was proficient and he was appointed the First Director of Tuberculosis. He started the Hospital in "Temple Gardens, Royapettah," and successfully overcame initial difficulties incidental to all new ventures - when he had systemised the hospital and brought it into good working condition, he undertook an expensive foreign tour at his own expense of all T.B. Hospitals and Sanatoria in the United Kingdom and Continent. On his return to India, he brought the Madras T.B. Hospital to a still higher eminence.

Subsequent to his retirement in 1924, he was invited by the Mysore Government to investigate into the incidence of T.B. in their State and asked him to recommend suitable measures which he did with great success.

In recognition of his valuable work, he was awarded the Kaiser-i-Hind Gold medal and I think he was the only Medical Officer to be given this distinction in our State.

For many years, he declined to be drawn into "Private Practice," but, it was forced on him by T.B. patients, who flocked to him from all over the Presidency as they thought he was the only one who could cure them.

* Speech delivered by Dr. P. Krishnaswami, M.B. & C.M., M.R.C. P., at a meeting convened on 27-9-56 to condole the death of Dr. P. S. Chandrasekar.

His library on T.B. was complete and up-to-date. Study of books and journals was his hobby and he took an intense interest in them. He sent for all the latest publications in his subject, and kept himself posted with recent advances on new subjects such as Vitamins, Sulpha drugs, Anti-biotics and Anti-Histamines. Till the end of his life, he was a subscriber to the British Medical Journal and other journals. A peculiar habit of his was to underline important portions. One can always recognise Dr. Chandrasekar's books by this heavy under-scoring.

Besides professional subjects, he dived deep into the study of Sanskrit. For the last many years, he employed a Sanskrit Pandit, with whose help, he studied many Sanskrit books. He wanted to know if there was anything in Ayurveda and he was the first allopathic doctor to study the Sanskrit texts in original. The only hobby he had in his earlier years was "music." He was the Honorary Secretary of the "Parthasarathy Swami Sabha, Triplicane," and he took great pains to secure "Sangeetha Vidwans" for the performances much to the delectation of the public.

Dr. Chandrasekar was a handsome person, well dressed, with striking personality and force of character which showed many remarkable traits.

The word "forgot" was not in his dictionary and he never at any time said "I forgot". He had always a blank post-card in his pocket in which he noted all he had to do, and as each was done, he scored it off.

He never procrastinated, putting off till tomorrow what he could do to-day. 'To-day' was the only day for him after the model of the renowned Physician Sir William Osler.

He always planned his work and laid plans within plans, which he carried out thoroughly and methodically. He very rarely lost his temper. He was always courteous and dignified and when he issued commands, even his recalcitrant servants felt compelled to carry them out.

He was a silent and unostentatious worker and never courted publicity. He made full and profitable use of his time. Latterly, during his conversations with me, he expressed his regret about the falling trends in medicine. He thought the authors of new books and articles in journals did not show the same erudition of scholarship as in olden days; that clinical medicine is being supplanted by laboratory Medicine; that prescribing and dispensing as an art have given place to patent medicines; and that professional standards are tending to fall.

I mention these not in the nature of criticisms from him, but as opinions of a great medical sage in Madras, so that we may all endeavour to take constructive steps to remedy them.

Dr. Chandrasekar retired 32 years ago; and six generations of students have passed out of this college since. He has not been in public life during the last many years and most of you do not know him. Yet, that you have gathered here in large number shows the veneration you have for men of learning and the high idealism which you wish to follow. His life is both an example and inspiration, and though we may not reach to his heights, we can all make efforts to climb higher and higher, as the man who aims at the sky shoots higher than the one who aims at the tree.

May his soul rest in peace!

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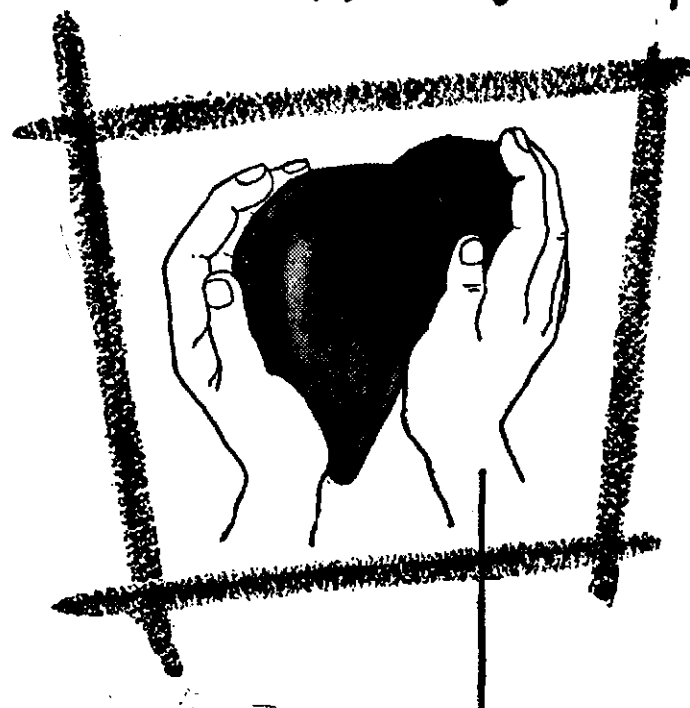
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"THE FUTURE OF MODERN MEDICINE IN INDIA"

By

DR. P. KUTUMBIAH, B.A., M.D., M.R.C.P., (LOND.)



Modern medicine has been flourishing in India for over two centuries and it cannot be asserted that it has accomplished in India what it is capable of accomplishing and has accomplished in other civilized countries of the world. The medical sciences are today giving the world the healthiest period it had ever known. With the help of the discoveries of the modern medical sciences plague, leprosy, small-pox, intermittent and remittent fevers, dysenteries and cholera have been banished from all civilized countries. In India these diseases still ravage and take a heavy toll of human life. It is evident that this state of affairs cannot be attributed to modern medical science but to the imperfection and inadequacy of the existing medical service in India to fully utilise the discoveries of modern medical science in the fields of prevention of diseases. The problem that confronts those who are in charge of the National Health is that medical service should eventually provide everything that modern medical science can offer towards the preservation of health and the cure of diseases and that it should make available their benefits to the entire population. It is admitted that medical science in India is not at present optimally organised and supervised and distributed but also that the development of plans for its improvement should be preceded by the inclusive study of the many complex factors involved and should not be directed towards the support of any preconceived scheme which has not been based upon such theory.

The Government of India have been conscious of the urgent necessity for the improvement of the existing medical service so that

its benefits may be made available to the entire population of India. With this object in view they appointed "The Health Survey and Development Committee" to make an inclusive survey of the many complex factors involved and advise them as to the steps to be taken to achieve this end. After a comprehensive survey of the many complex factors involved the Committee has drawn up a Health Programme for the somewhat distant future and the other a short term scheme covering two five-year periods. The attainment of this objective, which may take about forty years, is to be achieved through successive stages of intensive effort directed towards the production of the necessary trained personnel and the creation and development of the organisations and institutions which will form essential parts of the community's health service. The future of modern medicine in India will depend entirely how far the Government is able to implement their recommendations in the orderly manner suggested and the co-operation which the Government receives from the public of this country. Without the mutual co-operation of the Government and the people it is futile to hope that anything substantial can be accomplished.

The main problem which underlies the success of the recommendations of the Health Survey and Development Committee is the supply of medical men in the required numbers and of the right quality. The utter inadequacy of the available number of medical men for the task to be accomplished is vividly realised. But in the attempt to produce medical men rapidly to meet the demand there is a danger of sacrificing quality to quantity.

The quality of the medical men turned out of our medical colleges will depend on the nature of the medical education imparted to the students in these institutions. This raises the question of the present status of our medical education. Modern medical science is the product of a long evolution. Starting as an art modern medicine has slowly emerged as a science in the course of a few centuries. As Clifford Allbutt remarks "The beginning of the 20th century saw the emergence of medicine from an art of observation and empiricism to an applied science founded upon research; from a craft of tradition and sagacity to an applied science of analysis and law; from a descriptive code of surface phenomena to the discovery of deeper affinities; from a set of rules and axioms of quality to measurements of quantity." Medicine is not a mere applied science but a science in its own right. It is an independent form of scientific activity. It is capable of being pursued and developed as such and is on equal terms with the other sciences. The scientific element in medicine is not merely applied physiology and applied pathology. While taking full advantage of any appropriate discoveries in the ancillary sciences of physiology and pathology it need no more wait on the advance of these sciences but is bound to undertake physiological and pathological researches of its own when they become relevant to its purpose. Medicine at the beginning of the 20th century has become largely an experimental science. In recent times it has become a fashion to deprecate the art of medicine at the expense of the scientific aspect of medicine. This attitude is not justified. The art of medicine will long remain the chief implement of the practical doctor. It still forms the back bone of medical practice and is indispensable to mankind. The art and the science of medicine represent the two great activities of medicine. The art of medicine ministers the immediate needs of sick individuals and may be called curative medicine. The science of medicine is concerned with the advance of medical knowledge and may be called progressive medicine. The modern medical student must be trained in both these

aspects of medical science—the curative and progressive.

Our medical colleges are at present so constituted that the greatest emphasis is laid on curative medicine. Our graduates are trained to diagnose diseases and effectively treat these cases according to the best traditions of modern medicine. The progressive side of medicine is very much neglected and very meagerly provided for with the result we are not building up a reserve of well trained and qualified men who will whole-heartedly devote all their time to progressive medicine. Progressive medicine requires the organisation in the colleges of well equipped laboratories where all available facilities for research is provided and men who have chosen research as their career are in charge of these laboratories. A survey of our medical colleges reveals the weakness of our training of medical graduates in the science of medicine. The fundamental subjects like anatomy, physiology, biochemistry and pathology are very much neglected. There is not at present available enough Professors of knowledge and accomplishment to fill these important chairs in our colleges and hence they are filled with any available candidate with the minimum of qualifications. In the last one decade every possible opportunity has been utilised to train men in medicine and its allied branches and surgery and its allied branches. There has been no attempt to choose young men of brilliance and promise and attract them to the vital subjects of anatomy and physiology and biochemistry and pathology. Particularly it is deplorable to see the lack of eminent physiologists in our medical colleges. Unless the Government embark on a far sighted scheme of attracting young men of promise to these departments the future of modern medicine will be very gloomy indeed in India.

"The final and practical use of all medical science is to maintain health and to combat disease in mankind. It is in the very nature of things that the study of disease, to be effective, must begin as it must end, with disease

itself, and that all knowledge applicable to human disease must owe its inspiration directly or indirectly, to intimate contact with disease as this exists in living man. If the vitality of medicine is to be increased, it must be clearly recognised that there is a fertile science that deals primarily with patients, and this must be encouraged to a more vigorous growth. This science may be termed experimental medicine or clinical science. This science seeks, by observation and otherwise, to define diseases as these occur in man; it attempts to understand these diseases and their many manifestations, and here especially makes frequent use of the experimental method. It makes definite experiments upon disease or watches the effects of experiment conducted by injuries, however, these arise; it culls, or actually creates, and uses physiological and pathological knowledge immediately related and applicable to the diseases studied.

The work of clinical science cannot be delegated to laboratories. It must be inspired and sustained by direct contact with disease. It must be carried through in a very large measure by observations on sick people." (reference) For this purpose it is essential that

in every medical college a research Professorship should be established in clinical medicine and all facilities for research work in this experimental medicine should be provided. I must refer in this connection the pioneering work done by the Indian Council of Medical Research. It has a very important section connected with clinical research. In the past few years the Council has tried its best to stimulate research in clinical science and by awarding research scholarships has sought to promote experimental medicine in medical colleges. But this is not enough. The various medical colleges must rise to the occasion and provide for these research scholars suitable places where their research could be conducted. This would mean a re-organisation of our departments of physiology, biochemistry and pathology in our colleges. There is a wrong impression that

research has no relation to the practice of medicine and it concerns only people working in the laboratories. While it is true that the practising physician or surgeon cannot be expected to be in touch with the work of research carried out in the laboratories, it is imperative that they should in their practice utilise the knowledge gained by the research scholars (in their laboratories). As Clifford Allbutt remarks "Research is the salt of the most practical training. It cannot begin too soon. It is the light of the wisdom of man, the mind of the boy; of the heart of the child. Education has so long lingered on Hellenistic and Scholastic ways, on the systems of abstract notions unweaved by verification, that the hard-shell practical man is still occupied by the notions of antiquated theory, and the phrases of a dead or moribund nosology. The majority of medical men have to work upon the store of scientific ideas and facts with which they set

out in practice; onwards they may gain in adaptiveness and technical facility; but can dig little deeper into the strata of knowledge; but for the modern academic spirit this would spell, as in history it has spelled, stagnation. Therefore it is of the greater importance that

every student should start on his career well equipped with scientific principles. If, thus equipped, he be not at first so handy a doctor as his seniors, yet with his larger mental grip he will soon pick up common devices and apply them with more freedom and economy." (Allbutt).

Once the main problem of the production of well qualified well trained and well equipped medical men is taken in hand, the next problem that has to be tackled would be the organisation of the medical service in this country to provide the most effective medical service for the rural areas of India. The great importance of this problem is realised by all medical men and the Government of the country. The Prime Minister has emphasised this problem on many occasions. "The health

*A candle loses nothing
by lighting another
candle.*

—Anon

of the villages requires special attention. The country derived its vitality from the villages. It is not enough for large imposing hospitals and other buildings to be put up in the towns; the benefits of health must be extended to the whole countryside." As noted above, the Health Survey and Development Committee have taken the countryside as the focal point of their main recommendations because they realised the basic problem before the country was the provision of adequate health protection to the people living in the rural areas.

How to provide the most effective medical service for rural India poses not one but many problems - problems centering about the essential characteristics of the rural areas and their relation to the medical service deficiencies. "In varying combination and degree, poverty, isolation and ignorance account for the lack of medical services in many rural areas, for the poor quality of much of the medical services now available, for the scarcity of good hospitals, for the persistence of diseases which modern medicine can prevent or cure, and for the relatively high maternal and infant death rates. Paradoxically enough, advances in medical science itself also account in large measure for certain of the deficiencies in rural medicine. Far-reaching changes in techniques of diagnosis and therapy during the past quarter-century have caused well trained doctors to concentrate in cities because of their demand for access to good hospital facilities, easy reference to specialists, and ample opportunity to gain in knowledge and experience by association with other members of their profession. Isolation, perhaps as much as poverty, has delayed educational progress in rural areas. Inferior education, in turn, is responsible for ignorance, in this country even illiteracy, and ignorance has been at the root of some of farmers' troubles. There are farmers whose attitude toward personal hygiene and medical services are those which were common among the mass of the population fifty or even a hundred years ago. Many follow a heavy and unhealthy diet, and are not apt to enquire into the source of the water they drink.

Becoming ill they are likely to dose themselves and waste their money on patent medicine. Last but not least, there is still current in rural communities the older notion that the hospital is a place to be avoided, and partly as a result, even the few hospital beds available are frequently unoccupied." This admirable summary of the characteristics of rural America, applies in toto and even with greater force to rural India.

In the light of the difficulties involved in any attempt to extend and improve medical care in the most needy areas of rural India many steps must be taken. This task will require many years for its achievement and it can be accomplished only step by step and in a cumulative and accelerating fashion. There is no room here for any shortcuts or any improvisations. The immediate objective must be the five year programme recommended by the Health Survey and Development Committee and a start must be made with the creation of the primary health centres suggested in that report and make it attractive and workable. If the Government feel that they are unable to start this scheme due to financial stringency then an attempt must be made to start it in a modest way. A good public health service is the first essential today in many areas of rural India where poverty, isolation, and ignorance prevail. There is already in some States a well organised public health department staffed with qualified and experienced personnel. This department must undertake the pioneer work in teaching the populace the elements of personal hygiene, nutrition, and preventive health measures. Progress will be slow at first for the public health personnel will have to check water supplies and sewage disposal, immunize children against contagious disease, provide pre-natal care, as well as, instruction in infant care for mothers and carry on a vigorous anti-venereal disease campaign and other related functions. That an energetic and well conceived public health programme can drastically reduce infant, child and maternal mortality, as well as, the incidence of communicable

disease has been demonstrated many times over. There are already District Health Officers who are carrying on this work on a modest scale in each district. The personnel of the staff of District Health Officers must be appropriately increased and supplemented by such elements as are not present in the present set up. The present quota of sanitary inspectors must be greatly increased and their training extended and intensified so as to include the above mentioned public health subjects. By doubling or trebling the present recruitment of sanitary inspectors and giving them the above suggested instruction a great move forward will be made. An intensive training for a period of 12 months ought to suffice for this purpose. Nurses, and midwives for maternity and child welfare work must also be added to the staff. Squads of well trained and well equipped workers to carry on the work of D. D. T. spraying and to attend to anti-malarial work must also be created, if they are not already in existence, and attached to the staff of the District Health Officer.

The next important item is the securing of physicians to work in the rural areas. Hospitals and health centres are neither built or staffed in a day. The Achilles heel of medical service is the concentration of qualified medical men in towns. "The practice of medicine is both a science and an art and rare indeed is the doctor who can maintain the high standards he acquired in medical college and teaching hospital under the physical, economic, and educational limitations of the isolated rural community." On account of this tendency for doctors to congregate in towns there has been a steady decline of country doctors, a phenomenon not peculiar to India by any means, as it has been also observed in America and England. The reason for this is that good doctors are not satisfied merely to earn a livelihood. They seek to practice medicine according to the high standards they have learnt in their colleges and for this they require facilities for diagnosis and therapy that are now to be found for the most part in urban areas. The first step in the dispersal of qualified doctors

from towns to rural areas is the creation of hospitals in selected places which will afford young doctors good hospital facilities, easy access to specialists, and ample opportunity to gain in knowledge and experience by association with other members of their profession. As a first step in the dispersal of young qualified doctors of the existing District head-quarter hospitals must be enlarged and equipped so as to accommodate 200 beds - 60 beds for surgery, 60 beds for medicine, 30 for obstetrics and gynaecology and 50 beds for the specialities - ophthalmology, ear nose and throat, venereology etc. The surgical beds will include a few beds for orthopaedics and the medical beds a few for pediatrics. It is very essential to post to these hospitals qualified medical men with ample experience in their specialities to be in charge of their specialities. These hospitals must be provided with X-ray units-diagnostic and therapeutic well equipped pathology and bacteriology laboratories for serological diagnosis, and when available a dental department. Most important that these hospitals should run very efficient out-patient departments. The pathology and bacteriology laboratories can be run very efficiently by trained technicians under the direction of specialists. The basic idea is to start as many as possible complete hospital units which will attract young qualified doctors to pursue their post graduate education and gather experience in medicine, surgery, and obstetrics. As the supply of qualified doctors become available these hospitals may be expanded to accommodate 300 beds. The existing practice of posting the District Medical Officer on the basis of seniority must be abandoned forthwith. The D. M. O. may be utilised for organisation work. Better still, non-medical men with executive experience should be placed in the administrative charge of these hospitals so that the specialists may be free to devote their energies to their professional work. The next expansion when medical personnel become available is to improve Taluk hospitals to accommodate 100 beds. Till these are started the District Headquarter hospitals must be made the centres of village medical work.

For this purpose the starting of mobile clinics are suggested. They can bring medical help to a radius of 30 miles centering from the hospital. One well equipped ambulance is enough to start with. A separate personnel must be maintained for this purpose. Two qualified doctors, one or two nurses, one midwife one compounder and one or two dressers will be needed on this unit. Such mobile units are doing yeomen service round about Vellore villages. To begin with, the public health personnel will be resident or easily available to these villages. Mobile clinics can bring enormous benefit to people in particularly isolated areas. Operated either by the district hospitals or as an adjunct of the public health service, they would be especially useful for maternal and infant care and immunisation programmes and in providing periodic dental care. A service of this sort can also be of value in educating the rural population on the fundamentals of hygiene and nutrition. Equipped with a small screen and a mechanism for sound reproduction the "clinic on wheels" could bring to rural areas, otherwise cut off from educational contacts, talks and demonstration produced for mass distribution by state and federal health agencies or by the staff of regional hospitals. This has been the experience of Rural America. This has also been the experience of Vellore hospital. Dentists are not available at present but in all other respects this example from America can be copied with immense benefit to rural India.

A third and a most important problem on which the future of modern medicine in India will depend is the attitude of the Government and the people towards the claims of indigenous systems of medicine in India. For some years past an agitation has been set on foot to rehabilitate the indigenous systems of medicine in India and to supplant modern medicine by them as the medicine on which the future national health schemes should be based. The Health Survey and Development Committee in their recommendations made the following remarks. "With regard to the indigenous systems of medicine, the Committee affirmed

quite definitely, that there are certain aspects of health protection which in its opinion can be secured wholly, or at any rate largely, only through the scientific system of medicine. Public Health or preventive medicine, which must play an essential part in the future of medical organisation, is not within the purview of the indigenous system of medical treatment as they obtain at present. The indigenous systems of medical treatment do not at present deal with such vital aspects of medicine as obstetrics, gynaecology, advanced surgery and some of the specialities. Further no system of medical treatment which is static in conception and practice and does not keep pace with the discoveries and researches of the scientific workers the world over can hope to give the best available ministrations to those who seek its aid." I entirely agree with the conclusion of the Health Survey and Development Committee that no justification is needed in confining its proposal to the country-wide extension of a system of medicine which must be regarded neither Eastern nor Western but as a corpus of scientific knowledge and practice belonging to the whole world and to which every country has made its contribution. I should like to quote the remarks of a very learned scholar Chandra Chakrabarty on Indian medicine in his book "The Ancient Hindu Medicine." "I suffer from no national hypnotism or megalomania...It is very likely that some of my interpretations may not find ready acceptance in many orthodox quarters. But sooner it is realised, it will be better for the communal health that the ancient medical works cannot serve us today any other useful purpose than to supply rich materials for the cultural history of the race. Its prolific vocabulary might be also profitably utilised to create a national school of medicine, for continuity of historic consciousness, activates and acts as a stimulus for progress. Our very great achievements in the past, which we have every reason to be proud of instead of inspiring us with the greatest efforts to lead in arts and sciences, should not mortgage our future to the dead past. For a race that does not take the utmost care and the

most advanced methods for the prevention of disease and the preservation of health, cannot effectively compete in the struggle for existence, with more forward races and succeed in the survival of the fittest. Health is the foundation of all wealth and progress. We cannot afford to cling to an empty shell, carry the dead weight of the past on our back sacrificing our future, unless we want to be counted with the extinct races."

A study of the evolution of the modern science of medicine reveals many of the fallacies which underlie the present agitation for the revival of the indigenous systems of medicine.

1. A science of medicine based on 'philosophic' and not on "scientific" hypotheses fails to evolve. The medical theories of the ancient Hindus were based on a *priori* philosophical concepts, like the *panchabhuta* theory, and the *tridosha* theory, which have never been replaced by an accurate knowledge of the function and the structure of the human body. In the days of the first attempts at medical organisation they were legitimate because positive discoveries were few and unimportant. The evolution of the modern science of medicine commenced only after its abandonment of the *a priori* philosophical concepts of Greek medicine for accurate knowledge supplied by the science of anatomy and physiology.

2. The decay of a medical science is essentially an internal phenomenon. It is sometimes alleged that the invasions of the Mohammadans and the later of British are factors in the decay of the ancient Hindu Medicine. The first may account for the gains made by the ancient Hindu Medicine being lost but it cannot account for the decay of Hindu Medical science. That science was in fact in headlong decay before the sixth century A.D. i.e. before the advent of the Mohammadans. Hindu medical science was not

killed, it died. It had reached the limit of possible expansion within the mould in which it was cast. The same fate overtook Greek medicine in the middle ages but the European Renaissance liberated it from the unyielding mould it was cast in and made it flow into the more congenial and elastic mould of scientific medicine. In India historically no such renaissance occurred and Hindu medicine was left in its original mould to perish. Modern medicine is the evolutionary product of ancient Greek medicine. All talk of revival of and research in ancient Hindu medicine is a waste of time as this experiment has been conducted in history on Greek medicine, an ancient medicine very closely allied to Hindu medicine, and this has resulted in the emergence of modern rational medicine. It is wisdom to take the modern rational medicine and to enrich it with our own distinctive contributions rather than repeat the same historical experiment and arrive at an identical result few centuries after.

Habit is a cable; we weave a thread of it every day, and at last we cannot break it.

—H. Mann

3. Science can exist and advance only so long as scientific spirit survives. The survival of scientific spirit is dependent on advancing civilisation. The same is true of the science of medicine. Rational medicine is a development of civilisation which better than any other, measures man's intellectual advancement. In the middle ages European civilisation slumped very badly and medicine ceased to be a science and became a matter of salves, poultices, talismans, and spells. The high water mark of ancient Hindu medicine was in the reign of Emperor Asoka. Practically no important addition was made to the corpus of Hindu medical knowledge after that date. In the fifth century A.D. a great renaissance occurred in the reign of Vikramaditya and after that date Hindu civilisation began to deteriorate and with it Hindu Medical Science also. The great advance made in the European civilisation is entirely due to the fact that the European nations made science the basis of

their civilisation and fostered scientific spirit in their peoples. India is still hesitating to take this momentous step and until it is done and the outlook of the present generation is made scientific and scientific spirit is actively fostered in her people no real advance in the science of medicine can occur in India.

There is a sober appreciation among the advocates of the indigenous medicine of the obvious inadequacy of the ancient surgery. The art of surgery is not of any use to patients without anaesthesia, haemostasis and asepsis. The science of surgery is only possible with an accurate knowledge of human anatomy and physiology. Without the phenomenal advances made in the sciences of anatomy and physiology in the recent years such highly specialised branches of surgery - the abdominal, thoracic and neurosurgeries - could never have come into existence. It is true that the ancient Hindus possessed considerable skill in surgery but to argue that their surgery could be revived under the present conditions and would serve any useful purpose is to be totally ignorant of the demands of modern surgery.

A great deal of capital has been made about the alleged excellence of the ancient Hindu therapeutics. But there too a study of the evolution of the modern science of therapeutics will help to dispel many of the misconceptions and exaggerated ideas entertained by the advocates of ancient Hindu medicine on this subject. The methods used in the treatment of diseases comprise three basic measures - faith healing, hygienic therapy, and drug cures. What has a bearing on our discussion is drug therapy? The ancient pharmacopea was composed entirely of remedies of plant origin, the so called galenicals, after the great Galen. Many considerations weighed in the choice of drugs. The most important one was their recommendation by some one who had used them or heard of their use. Another recommendation was their appeal to the imagination for the healing virtues they were believed to possess. Paracelsus initiated a new approach to the study of therapeutics by introducing

certain metals (non-galenicals) into the pharmacopea. He used and popularised inorganic substances such as mercury, lead, iron, arsenic, antimony, copper sulphate, and potassium sulphate as remedies. It is true that some of these had been used long before his time, but had not been generally accepted as useful agents for the treatment of diseases. He is thus the founder of chemotherapy, for he maintained that there was a specific for every disease and that chemistry was the agency for obtaining these specifics. In the twentieth century his belief was revived in scientific form by Ehrlich. The development of the science of bacteriology, particularly through the pioneer investigations of Pasteur, Koch, and their immediate followers between the years 1855 and 1900. Chemotherapy is still an infant science but already it has revolutionised the treatment of infectious diseases. The future of modern therapeutics lies in orderly development of this science.

The pharmacopeia of the ancient Hindus is loaded with a mass of useless remedies that had been collected over many centuries, along with some of proved value. Ancient Hindu medical practice was established by Atreya in the sixth century B.C., did not include an extensive use of drugs. It relied mainly on hygienic therapy and dietetics. Later on a more extensive use of drugs was grafted on the old system. At first the drugs were mainly of vegetable origin but few minerals like mercury were later incorporated. The ancient Hindu medical men lacked an effective method of determining the curative value of drugs. They had to search here and there, blindly trying one preparation after another hoping always that this decoction or that infusion would possess healing power. In early times the difficulties in evaluating the virtues of one or other remedy was enormous, since differentiation of the specific nature of the various infectious diseases had not been made. The method of blind testing was the only one available. The method of 'control' observations and of scientific testing of drugs did not come into use in India until the beginning of the twentieth

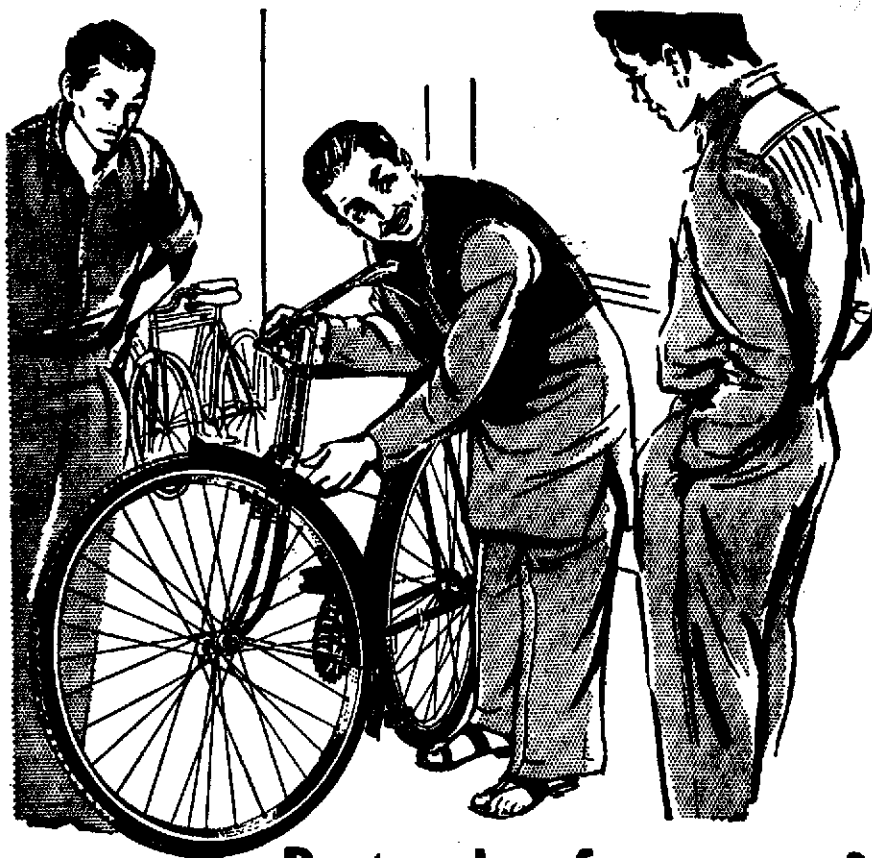
century. When these methods were finally applied, the mass of useless remedies that had been collected over many centuries was slowly discarded and those that were of real value were discovered and these have been incorporated into the modern pharmacopeia, which contains many specifics which the modern medical science did not discover. Modern rational medicine does not rely very much on galenicals. It relies mainly on hygienic therapy but is assisted by a moderate use of some well tested and tried drugs. The plea to revive the indigenous systems of medicine for the sake of a few specific remedies is a very short sighted one, as these can be incorporated into the modern pharmacopeia after being scientifically tested. With the growth of the modern science of chemotherapy and the discovery of antibiotics like penicillin, streptomycin, chloromycetin and aureomycin, etc. ancient pharmacopeias have lost much of their importance and charm. Therapeutics divorced from a true science of medicine tends to be purely empirical and in the long run proves sterile.

"Science has made the modern world what it is today. Science has entered into every area of our private and public, national and international life. It has enriched us beyond measure, but in that very process it has complicated life-complicated it to the point when it is uncertain whether we can cope with all that has been thrust into our hands". One of the root problems of our times is the problem of the proper use of science. All the nations of the world are feverishly planning to utilise the rich dower with which science has endowed them for the reconstruction of the postwar world particularly national health.

Everywhere in the civilised world the affiliation of science with politics is noticeable. In India one sees the unfortunate affiliation of politics with science which is proving a serious hinderance to progress. This is particularly the case with the medical science. The ancient Hindu medicine has not been killed, as it is loudly but ignorantly proclaimed by the advocates of the indigenous systems of medicine. It died a natural death. Instead of giving it a decent burial politicians are wasting the nations' time and money in a frantic attempt to revive it and thus put the clock of progress back a few centuries. "The medical sciences are today giving the world the healthiest period it has ever known but they are not yet mature. What has already been accomplished in scientific medicine is small in comparison with the future possibilities of preventing diseases, and alleviating suffering and prolonging human life. But there is no assurance that these possibilities will ever be realised. In this matter man literally controls his own destiny. The danger to the scientific spirit, to the advance of medicine and to the integrity of civilisation does not come from the mass of unthinking people. This danger comes from the intelligent people in whom the primitive instinct escapes from repression and rises to prevent thought." It is the duty of those who control the destiny of the nation not to be stampeded by this ill-conceived agitation but with vision and courage to go forward and implement the national health programme which after prodigious labour and deliberation the Bore Committee has prepared for use of the nation.

*Character is made by what you stand for,
reputation by what you fall for.....*

—ALEXANDER WOOLCOTT.



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Drugged Audience

SALOFKACHEE

By

CHANDRASEKHAR, IV Year, M.B.B.S.

(Reference has been made, of course, to Human Beings)

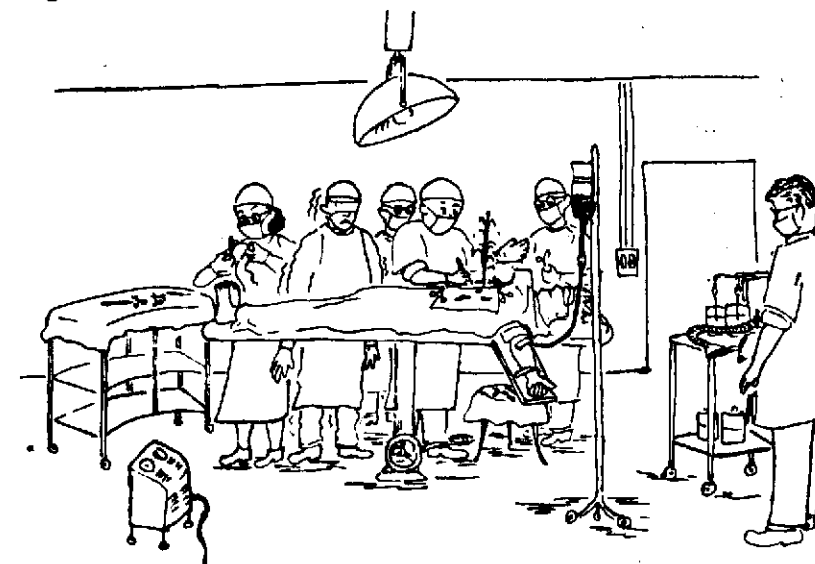


Sounds rather strange, doesn't it? Well, don't let your imagination run riot, for it is merely a Spanish word for the Scalpel. After all, what is in a name? 'A rose by any other name would smell as sweet'. Even so, a scalpel, however you may call it, would ever be "THE HEALING KNIFE". Of course, it depends on the "HEALER" whether he saves or..... slips. But, he too is human, and so is not infallible.

Slipping into the surgery, one fine morning, I found the surgeon doing a Sympathectomy-

sity, was entering the theatre for the first time in my life. However, checking myself in time, I rather took advantage of this encouraging welcome and made bold advances till I almost rubbed shoulders with the surgeon.

From this vantage-point I saw him dissecting in the right supra-clavicular region. With a little more effort, I could easily make out the apical pleura bulging in and out of the area of operation, thus coming right in the way of the scalpel. It exasperated the surgeon who was trying to get behind it to reach the sympathe-



that was what the list stated. As soon as I stepped in, the Anaesthetist, beaming a broad smile, said, "Good morning, Doc." Now, to tell you the truth, it fairly startled me to be greeted in such flattering terms, for, I, a fresher then, and stimulated more by an adventurous impulse than by scientific curio-

tic chain which lay deep down. It tingled my spine to see the risk he was taking, for you might well guess the grave consequences of a slight nick of the pleura. I was wishing, with all my heart that such a thing would never occur, when, suddenly, there emanated a loud hiss from the site of the operation. It could

not have frightened me more, had I seen a snake emerge from it.

Well, I did not have to look to know what had happened. It was obvious that the scalpel had slipped creating an opening in that thin membrane through which, the atmospheric air, at great pressure, was forcing its entry into the vacuous pleural cavity. Hence the hissing grew louder and louder as more and more of air found its way into the space, collapsing the lung in the process. As a result, the patient's breathing became laboured. She, it was a woman, became cyanosed which was all the more apparent as she was fair-skinned. While the blood in her veins turned blue, in mine it was freezing for I could not bear to see her struggling for her life which seemed to be suspended in the balance.

Imagine the shock I suffered, when at this critical juncture, the Anaesthetist beckoned to me with an (intra-venous) syringe in his hand, asking *Me* to give the shot. I nearly fainted and might have needed that drug myself to bring me around. But, mustering up what little courage there was left in me, I SHOOK my head. Not only did he instantaneously understand it, he realized his blunder as well. Oh! at what a moment!

The surgeon, meanwhile, was waging a fierce battle with the antagonistic forces which tried to defy all his attempts to repair the

damage he had done. Finally, to the great relief of all, he succeeded in sealing the slit and the hissing stopped immediately. Having thus surmounted the dangerous difficulty, the surgeon continued with the operation, the purpose of which was to sever the sympathetic cord. When, in the end, he found it, he went into such a rhapsody that he cried out to us to go and see it. We all, including the Anaesthetist of whom I was deadly afraid now, at once made a bee-line to get a glimpse of that nerve which had so unnerved us a while ago. Equally great, if not greater, was our joy at the surgeon's triumph, for, as sympathetic spectators to this sympathectomy did we not also share the most miserable moments of it.

Yes, it was a glorious victory for the surgeon in his ceaseless war against the ravages of disease. While for me, a novice, it was a thrilling experience. Musing thus, I had moved to the door, when I heard the Anaesthetist calling me, with a sarcastic note in his voice, "MISTER,....."

I do not know what more he uttered, for I had bolted by then. It was, certainly not my fault that he should have mistaken me for a house-surgeon, just because it happened to be holidays for the students.

No wonder, I received such a warm welcome.

The world is a looking glass, and gives back to each man the reflection of his own face. Frown at it and it will look sourly at you. Laugh at it and with it and it is a jolly good companion.

—THACKERSAY

THE FLY TRAP OF VENUS

By

VASANTH PANDIT, V Year

(The 'Fly trap of Venus' is a certain Insectivorous plant which by its gaudy colour and scent attracts unwary insects to its jaw-shaped leaves. The leaves trap the insect and then secrete digestive juices, proceed to kill and assimilate the insect.)



The hill-resort of S is famed for its invigorating climate and for its many beauty-spots. Dotting the verdant countryside are any number of water-falls and other picnic spots, but the one which I shall never forget, is a water-fall known as the 'SPREAD EAGLE FALLS'. The name itself is so picturesque and brings back many memories of bygone days, the days of happy childhood, and of that innocent and carefree time. It brings memories of happy picnic parties and fishing trips. Yes, but along with this it brings back a certain terrifying memory—a spine chilling nightmare which eclipses all others in its intensity.

The falls are situated in a lonely wooded valley. The only people who go there are picnickers and an occasional wood-cutter. A tiny mountain stream meanders through this Happy Valley. At one point on the stream there is a drop of some thirty feet, and this is the famed beauty spot known as Spread Eagle Falls. The stream here is divided by a large mass of rock and the falls are therefore in the shape of a 'Y'. The two spreading arms can be imagined to be the spreading wings of an eagle. The valley resounds with the sound of the cascading water. But immediately below it is a deep, dark quiescent pool walled by vertical granite. It is a spot, once seen, never to be forgotten.

At long last the Christmas holidays had actually begun. We had thrown our school

books away and our thoughts were now far away from the dusty class rooms. The two of us, Ramadass and I had decided to spend the day at the falls and so we set off early in the morning. When we reached the valley the sun had just risen above the rim and was piercing the early morning mist with slanting shafts of light. The grass under foot had been turned to a crisp brown by the nimble fingers of Jack Frost and glistened with dew in the early morning light. In the shade remnants of frost lay like a silver shroud upon the sleeping earth. The rays of light cut through the rising mist from in between the trunks of the tall pines whispering to each other the previous night's gossip. Perhaps, one spoke of the night owl which had finished a nest of sleeping field mice or of the wicked jackal which had kept up an allnight chorus with his friends on the other side of the valley. But the predominant sound was from the roaring of the falls, heard throughout the length and breadth of the valley, constant, but never jarring.

We climbed down to the bed of the stream laughing and joking and taking in deep breaths of the fresh morning air. In these idyllic surroundings all our cares were forgotten and hours passed away like minutes. We waded into the ice cold water and tried to catch the swiftly darting fish, shining like gleams of silver in the sun.

I don't know whose idea it was to jump from stone to stone along the crest of the falls and reach the large boulder of rock in the middle of

stream. The stones were treacherously smooth and covered with dirty green slime. It took us only a few seconds to reach the 'Island' and it seemed a very daring feat to us at the time. To stand on a small bit of rock, surrounded by the rushing water churned to milky whiteness was very thrilling but made us forget the danger. A few initials were carved on this rock and it was natural to add ours to this list of Honour. I picked up a sharp piece of stone

I could only shout 'Help! Help!' and the valley took up my futile cry and echoed it back to me mockingly. I climbed down to the edge of the pool but there was no sign of my friend.

It took me fifteen minutes to run to the nearest human habitation - the local AIR station. I told them the news in panting words and my condition told them the urgency for



and set to work with my back to Ramu. When I finished, 'How's that?' I asked. But only the roaring cataract answered me. I looked below and saw a hand groping in the waters of the pool far below me, and then it disappeared for ever. My heart seemed to stop from fear and for an instant my head swam and my sight become blurred. Here I was, the only person to witness this incident, but helpless to save my friend, for I could not swim a stroke. I knew that the pool was very very deep and its waters running very rapidly.

action more than words could express. In a matter of seconds the best divers in the town were alerted and they came with ropes and other equipment. They probed the secrets of the pool but it guarded its victim jealously. It took them four hectic days to find the body under an over hanging rock. It was some weeks before I recovered from the shock.

Yes, the Spread Eagle Falls is noted for its captivating and enchanting beauty, but its allure is lost to me.

ON HYPOSPADIAS

"DHARANI"



Crooked, thwarted and woe-begone!
Whither the fearless spout, stream full of
freedom,
Gushing expression of Nature's perfection?
Instead, dribbling with an incoherent babble,
Bent with shame, dumb so young,
Brooding, misshapen cyclop!
Clutching the cowl of prepuce
Waiting like a miserable traveller
On the hot stretch of Time!

Parry's

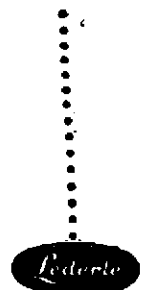
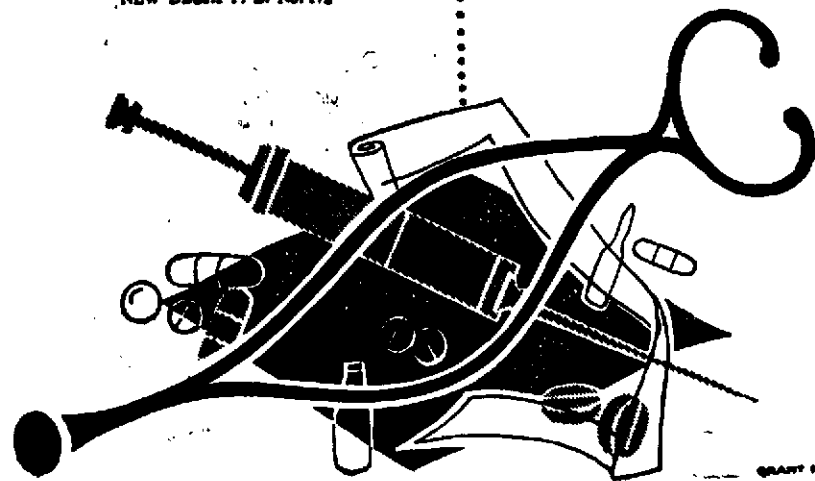
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Lint

The Drum Murder Case - Certain Medicolegal Aspects

By

DR. K. C. JACOB, B.A., M.D.,

(Professor of Forensic Medicine, Madras Medical College and Police Surgeon, Madras)



It is well known that a good proportion of the reading public have a great fascination for murder stories and detective novels and when a sensational murder case is reported in the newspapers, it is followed, studied and discussed from day to day by the general public. Besides this, such cases evoke great interest in the medical, legal and police circles which are connected with their investigation, examination and trial. The publication by medical journals of relevant aspects of these cases will greatly benefit junior state medical officers who, at any time, may be called upon to examine dead bodies and connected materials and also to give their opinion in the Court of law - a duty which is looked upon with a good deal of nervousness and trepidation by many a young doctor. Books like the one on the medicolegal aspects of the Ruxton Case have been of great use and interest even to the specialists in the forensic field. Certain features of the following case, which happened very near us in points of place and time, may be of interest to the medical students and junior medical officers.

Summary of the Case :

On 21-10-1954, the Madras Newspapers flashed the news that a railway gateman at the Tondiarpet station had noticed two people escaping in a moving train at about 10 P.M., the previous night, after having rolled down something heavy from a compartment on to the off-side platform (on the Western side) and that a police constable on duty and others, attracted by the hue and cry, found on the platform a heavy zinc drum, with hasp broken and lid open, from which the head of a female

corpse was protruding. Telephone message was at once sent to the Sub-Inspector, Royapuram Railway Station and written messages to the Police and other concerned Railway authorities. The Circle Inspector of the Railway Police, held an inquest over the dead body at 8 A.M. on 21-10-54 and sent the body for Post Mortem examination to this Department. After the autopsy conducted in my presence by Dr. Narayanaswamy, tissues from the wounds on the scalp and the chest were sent, under my instructions, for Pathological examination and the bones to the Chemical Examiner, for determining the age. The Police also were asked to take finger print impressions before disposing of the body. Meanwhile, the preliminary investigation revealed that the drum containing the dead body was despatched from some station in the Andhra State and hence the Circle Inspector of Police, Crime Branch, C. I. D., Kurnool (P. W. 66 - Investigating Officer) and the Deputy Superintendent of Police, Railways, Vijayawada (P. W. 54) were informed that the case was within the jurisdiction of the Andhra State Police. The former took up the investigation and in response to flashed messages all over, he received one report from Masulipatam that one Divi Subbamma was missing since the morning of 19-10-54 according to a written complaint made by her two nephews. Vigorous enquiries were set afoot which proved fruitful in getting the photos of the dead body identified by three of the deceased's close relatives and later, on 30-10-54, the dead body kept in the Cold Storage, Government General Hospital Mortuary, Madras, was actually identified by three relatives as

that of the missing Divi Subbamma. After a few days of hectic investigations, the investigating Officer was convinced that three people were responsible for the crime, namely, one Poornachandra Rao (the first accused), Panduranga Rao (the second accused) and Venkayama (the third accused). The third accused was considered a friend of Divi Subbamma, the second accused was grand son of the third accused and the first accused was a class-mate and close friend of the second accused and all the three were living in the same locality as Divi Subbamma. Accused No. 1 was arrested in the early hours of 26-10-54 at Masulipatnam when he was trying to catch a bus for Ellore and from information extracted from him, three material objects connected with the case (M. Os. 3, 4 and 5, triple lined gold bangle, double lined gold bangle and gold ring) were discovered. At Ullipalam, on 26-10-54, while conducting a search in the house of a brother of accused 3 the second accused was arrested and again on 28-10-54, accused 3 was arrested at the same place and two material objects, gold Kanta and gold chain (M. Os. 1 and 2) were recovered from information obtained from her. After completing the investigation, the charge sheet was laid on 9-11-54 by the investigating officer.

In the Court of Sessions, Krishna Division, Masulipatnam held in August 1955, the three accused were charged, first that they on or about the 19th day of October, 1954 at Masulipatnam conspired and agreed to cause the murder of the deceased Divi Subbamma and also to commit robbery of her jewels, secondly that in furtherance of their common intention, committed the murder of the above person, thirdly, that they committed robbery and fourthly that they in the course of the said transaction caused the disappearance of evidence of murder and robbery. The accused pleaded not guilty and claimed to be tried.

The case for the prosecution may be briefly outlined here. The deceased Divi Subbamma, aged about 65 years was living alone, being a widow, in a portion of a house in the Masulipatnam town and used to wear on her person

gold necklace and other jewellery. Accused 1 and 2 decoyed the old woman into another house on the morning of 19-10-54 and there murdered her and removed the jewellery from her person. The first two accused got Rs. 69-4-0 by selling the gold after melting some jewels. With this money, a trunk and lock were purchased and finding that this did not hold the corpse, they purchased a drum and coming back to the house, all the accused placed the corpse in it, closed it and locked it. With the drum, the first two accused went to the Masulipatnam Railway Station and finding that a train had already left for Bezwada, they at some time after 6 P.M., took the drum to the Bezwada-bound bus stand, loaded the drum on the bus and boarded the bus, accused 1 alone travelling up to Bezwada as accused 2 got down in some part of the Masulipatnam town itself. He (accused 1) reached Bezwada at 9-40 P.M. and bought a ticket from Bezwada to Tenali to go by the Passenger train No. 430, which left at 4-35 A.M. on 20-10-54. The drum was placed in the train having obtained a luggage receipt for the same. He got down at Tenali leaving the drum behind. The Guard came to know about the drum left behind, from somebody at Venkatachallum station and he verified the same at Sullurpetta and Tiruvattiur stations. At the terminus, he found the drum missing from the compartment and thought that it was probably removed by the owner. After Tiruvattiur, the train had stopped at the Tondiarpet station at about 9-58 P.M. A gateman saw two persons rolling a drum on the off side platform on the western side and quickly getting into the moving train and going away. These people were not traced; their motive was probably theft.

The further stages have been already described above.

The prosecution examined as many as 67 witnesses to bring home the guilt to the accused. There were no eye witnesses to the occurrence and the entire case rests on the circumstances furnished by the prosecution in addition to the statements made by the accused.

In the end, the learned judge convicted (in his judgment pronounced on 22nd August 1953) accused 1 and accused 2 under the first charge and sentenced each of them to transportation for life. Under the second charge, he convicted accused 1 and 2 and sentenced each to be hanged by the neck till they be dead subject to confirmation by the High Court. Under the 3rd charge, all the accused were convicted and under the 4th charge, accused 1 and accused 3 convicted. The learned judge paid a tribute to the efficient and intelligent handling of the case by P.W. 54 and P.W. 66.

Medicolegal Aspects :

The Medical Officers connected with this had to tackle the following questions. 1. The time of death; 2. The wounds - antemortem or postmortem and how caused; 3. The cause of death; 4. The identification of the dead body.

1. The Time of Death :

The body was brought to the Cold storage at 4-30 P.M. on 21-10-54. At the time of the

the skin in places, loosening and falling off of hair from the scalp, loosening and falling off of some nails, fairly advanced putrefactive changes in the heart, lungs, stomach, liver, spleen, kidneys, liquefaction of the brain etc. enabled a rough estimate that death would appear to have taken place about 48 hours prior to depositing the body in the mortuary. This takes the time of death back to the evening of 19-10-54. Considering the climatic conditions prevailing at the time, the fact that the body was kept inside a drum for several hours, certain circumstances of death, the age and physical condition of the victim at the time of death, it was possible to give the opinion that death could have taken place in the morning of 19-10-54, consistent with the prosecution version.

2. The Wounds-Antemortem or Post Mortem :

The main wounds noticed in the autopsy room were two lacerated wounds on the top of the head, two abrasions in the extremities, fracture of 3rd to 8th ribs on the left side in front



No. 1—Photo of the dead body of Divi Subbamma showing the fairly advanced degree of putrefaction.

autopsy on 22-10-54, the appearances were those of fairly advanced putrefaction. The rigor mortis had completely passed off and the widespread discoloration of the skin, marbling of the veins, softening of the eye balls, distension of the abdomen, bloating of the face, protrusion of the tongue (Photo 1) distension with gas of the vulva, breasts etc., peeling of

and fracture of 2nd to 5th ribs on the right side, with bruising near the sites of fracture, and dislocation of the cervical vertebra between the 4th and 5th. All these wounds except the last one appeared to have been inflicted before death. But as the appearances were altered by the putrefactive changes and as there was the history of having put the body inside a drum, it was

anticipated that the defence would contest the point. Hence, tissues were taken from the margins of the wounds in the scalp and from near the sites of the fracture of the ribs for expert pathological opinion. It has to be conceded that mechanical injuries could have been produced on the scalp and the chest wall in the process of first putting the body into a trunk and then forcibly thrusting the body into the drum allowing compression of the chest wall and pressure on the head by the lid of the drum. But, in addition to the naked eye appearances favouring ante-mortem injuries, there was the pathologist's expert opinion that there were unmistakable microscopic appearances of ante-mortem wounds. Dr. Viswanathan based his opinion mainly on the presence of early inflammatory changes like dilatation of blood vessels etc, in the microscopic picture of the wounded tissue and these being signs of vitality, he gave his definite opinion that the injuries in the scalp and chest were ante-mortem and not caused after death.

It is possible that the head injuries were caused by hitting on her head with the rice pounder produced in the court and the resulting unconsciousness might have made it impossible to cry loud for some time to attract the attention of the neighbours. Pressing on the sides of the chest with the knee, as mentioned in the confession of accused could have produced the fractures of the ribs and the bruising. As there was no evidence of bruising at the site of the dislocation of the cervical vertebra, it could have been produced even after death in the violent handling of the body after death.

3. The Cause of Death:

The injury to the head and the fracture of the ribs on both sides of the chest could have produced death from shock and were sufficient in the ordinary course of nature to cause death. On account of the putrefactive changes affecting the brain it was not possible to see any special damage to the brain like haemorrhage, contusion, or laceration. External bleeding from the injuries to the scalp is not likely to

have been severe and there was no external bleeding from the thoracic injuries. Even though the deceased was an old woman, it is likely that the death was not instantaneous and some time might have elapsed between the receipt of the wounds and her death. If the confession of one of the accused is to be believed, there must have been an element of homicidal asphyxia super-added to the shock. It is needless to say that distinctive autopsy appearances are not to be expected in such a case, especially when the body was in a state of advanced putrefaction.

4. The Identification of the Dead Body:

The peculiar circumstances in which the dead body was first discovered necessitated a careful scrutiny for purposes of identification. Photographs were taken and general appearances of the body with the clothing on her person were observed. When the body was received in this department for autopsy, a careful examination was made for any distinctive marks or features helpful for identification. It was observed that there was not even a single tooth in either jaw and that the local appearances of the gums were against any recent loss of the teeth. Two tattoo marks, one in the centre of the forehead and another on the chin, and three small moles were observed on her person. A piece of saree round her waist was noticed and the Police were specially asked to arrange for its preservation. Special instruction was given for taking finger print impressions. The presence of grey hair in the scalp and in the pubis, the appearance of the gums and the absence of marked distension of the breasts in spite of the advanced putrefaction (Photo No. 1) suggested an advanced age. For correct estimation of the age, the Police were specially asked to preserve the bones to be sent officially to me through the Chemical Examiner (according to the usual procedure in this State).

The various findings which established the identity of the deceased were the following:

(a) Photographs of the deceased were identified as those of Divi Subbamma. When the

investigating officer received the information first that a corpse of a female was found in a drum on the Tondiarpet platform, he flashed messages all over and only one report was received by him, that is, from Masulipatnam, that one Divi Subbamma was missing and that the Inugudur Police had registered the case. When he contacted P.Ws. 1, 2, 4 and 5, they identified the photographs as those of the deceased Divi Subbamma.

(b) The dead body was actually identified by P.Ws. 1, 2 and 3 when they were shown the corpse kept in the Mortuary of the General Hospital. In fact, they gave the marks of identification of the deceased before they were actually shown the body. The defending side argued that identification from the photos or from the decomposed body could not have been possible and supported their arguments by pointing out that in the original complaint given by them regarding the missing relation, no definite marks of identification were given. The learned Judge was of the opinion that the first report given to the Police does not always contain every bit of information relating to all

conducted the Post Mortem stated that it would be possible for close relatives to identify the corpse under the existing conditions and in view of the fact that P.Ws. 1 to 3 were close relatives and had lived with her for 30 years, the learned Judge came to the conclusion that "he had no doubt whatsoever that the body recovered from the drum is that of no other person than the missing woman Divi Subbamma". Personally, I am not quite sure that the relative could have identified the photographs as those of the deceased Subbamma beyond all doubt.

(c) The determination of the age of the body recovered from the drum was another piece of evidence. Though the Police officer made a wrong estimate regarding the age in his requisition for autopsy to the Medical Officer, it should not be considered as a material discrepancy since the actual age was expected to be estimated correctly later after the autopsy. The bones were examined by me (having received them from the Chemical Examiner) and a definite opinion was given that she must have been about 60 years of age.



No. 2—Photo of the lower jaw recovered from the body. Note the absence of teeth and the absorption of the alveolar margin, the position of the mental foraminae and the general shape.



No. 3—Photo of the sternum recovered from the body. Note the bony union of the manubrium with the body and the xiphisternum with the body of the sternum.

marks of identification and that in view of the fact that some description of the person relating to her colour, height, grey hair, jewellery, etc. was given at the first instance and in view of the fact that the doctor who

The extent of fusion of the skull, the alveolar margins of the maxillae and the mandibles, the general shape of the mandible (Photo 2) the fusion of the manubrium with the body of the sternum and xiphisternum (Photo 3) and

the general consistent appearances in the pelvis and long bones helped in arriving at this opinion about her age from her skeleton. It was conceded that a margin of error of about 10 years may have to be allowed wherever age is estimated solely from the skeleton of people beyond the age 25 years.

(d) The green bordered white saree found on the person of the deceased was carefully preserved and subjected to further scrutiny. The dhoby mark on it was an important and useful clue.

It is unfortunate that dactylography was not of practical use in this case due mostly to the inadequate training of the investigating police officers. At first, when the concerned Police were asked to take the finger print impressions of the deceased, the reply was that it was unnecessary as the deceased was a female. Hence, a written request was officially made to them to arrange for it whether it proves useful or not and my information is that when they finally did take the impressions, it was done unsatisfactorily and that the impressions were not clear enough to compare with her finger impressions when alive. There were legal documents where her finger impressions had

been affixed and the most scientific method of establishing the identity beyond doubt was thus spoiled by careless or inefficient handling of the matter. However, the findings mentioned above, especially the absence of any tooth, the estimation of the age from the bones and the dhoby mark on the saree on her body, were almost unchallengeable points in convincing the Judge that the body recovered from the Drum was the body of the missing Divi Subbamma.

Summary :

1. A short account of the 'Drum Murder Case' is given.
2. Important medicolegal questions arising from the same are briefly discussed.
3. Defective investigation could happen with inadequately trained police staff and medical officers ought to be permitted to advise them and to direct them with reference to scientific lines of procedure.

Acknowledgment :

I am indebted to the Learned Sessions Judge from whose Judgment, I have freely drawn in framing the summary of the case.

If we could read the secret history of our enemies, we would find in each man's life, a sorrow and suffering enough to disarm all hostility.

—LONGFELLOW.

Occasionally I hear a mean thing which has been told behind my back. And as a rule, there is something to it.

—E. W. HOWE.

No horse gets anywhere until he is harnessed. No steam or gas drives anything until it is confined. No Niagara is ever turned into light and power until it is tunelled. No life grows great until it is focussed dedicated, disciplined.

—HARRY EMERSON FOSDICK.



"Bhylla" by Amateurs



Feeding of the Sacred Birds



Keep Smiling



Cute foursome!



Shy Trio?



Don't be Camera-Conscious!



Water-fall at Kallas Konai

THE NEW HOUSE SURGEON

By

M. M. SREENIVAS, IV Year, M.B.B.S.



The day - August 1st. The time - 10 a. m. The Ward - Hebers Ward and the hero - a doctor just graduated.

What a wonderful morning it was! The sun was shining bright outside. A cool breeze from the sea brought in the exhilarating aroma of the Champak flowers from the Champak trees bordering the southern limit of the hospital. The hospital was bustling with activity. Doctors, House-Surgeons and students came purring in. Visitors crowded the corridors.

On such a wonderful morning our hero whose name is Dhandapani was sitting at the table at the far end of the ward. With his face cupped in his palms, his elbows resting on the table his eyes were staring somewhere ahead of him. His face registered a very unpleasant look. A dejected, tired or angry look one may call it, but all the same the patients who were looking at him thought it was a very unpleasant look. The Staff, sisters and patients noticed him but he was unconscious of them all. He was thinking..

He thought of his days at the Vizag Medical College where as a student he was very popular with all. He had applied for House-Surgeonship after he had passed, in the General Hospital, Madras. To his surprise he got it and he was happy. But just now he was far from happy. He had begun his first day of house surgeoncy with calamities and had become the laughing stalk of the nurses. Here most of the methods were new to him. He knew practically none here. He had not met his boss or assistant yet. He had arrived only the previous night and could not meet any of

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his Colleagues. He wished that he had continued at Vizag itself.

That morning he had made a mistake in writing a requisition to the Bio-Chemistry department. He had made a mess of it. While filling a requisition for an X-ray he had made a bigger mess of it. The nurses had pointed out the mistakes to him. The staff corrected him at every step. The staff and sisters all laughed at him. He did not like that, not our hero Dhandapani. To be laughed at by a lady and a nurse at that; It was unthinkable!

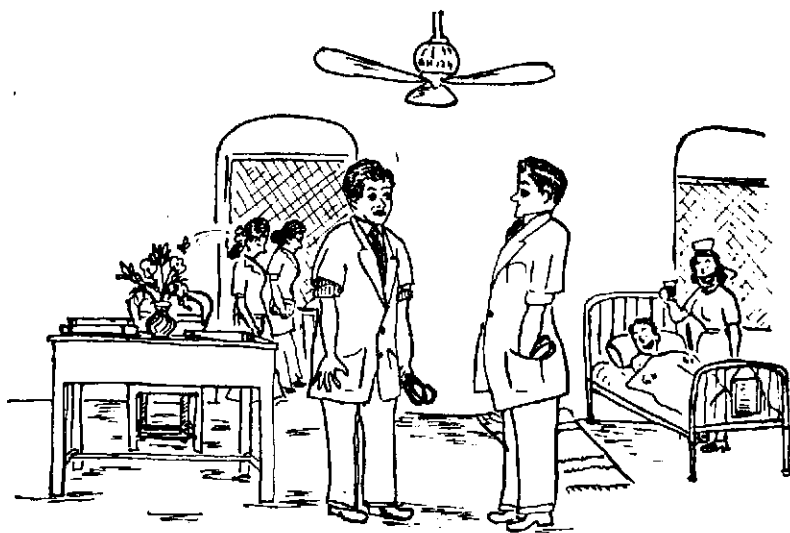
Later, trying to get back his lost prestige he became more vigorous and self-conscious as he went round the beds to examine the case sheets and make remarks, but sad to say he fumbled at every step. He was becoming the laughing stalk of the nurses in the ward. Laughter is very infectious you know and our hero, sad to say, thought he noticed a few patients giggling. That was the last straw.

Exasperated he went back to the table and decided to wait for his colleagues. His eyes began to move. A few patients were looking at him. He thought their eyes were pleading and a silent prayer was being sent to him to go and see to their needs and to comfort them. But he resisted the impulse to go anywhere near them.

He saw some house-surgeons coming towards the ward. He felt relieved. His colleagues were coming, he thought. His relief was short-lived. They passed the ward and went their way. He was surprised to see that most of them carried books. Was he expected to have some book with him? He had noticed

that some had 'Clinical Methods' and some 'Das' with them. Another mistake. He should have brought a Das with him.

His wished he had brought his 'Das'. What if the Assistant or Boss asked him about the books. Perhaps they would excuse him. Why did house surgeons carry books like that? Perhaps in this hospital they were expected to. It was a good idea anyway. He needed a brush up. His surgical knowledge was not something one could be proud of. He wondered whether the patient in number 3 was having an epithelioma. He was not sure. It could be a sarcoma. Oh! for a Das now.



His train of thoughts snapped when he saw a house surgeon enter his ward. Should he get up? Yes he must. But why? He must be someone like him. A colleague of his. To be on the safe side he would rather get up. He got up.

'Good morning' said Dhandapani to the new-comer.

'Good morning' replied the new-comer. He looked at our hero for a moment. Then asked 'Are you the new house-surgeon?'

'Yes', Dhandapani replied and added, 'This is my first day'. Our hero felt very uncomfortable. There was some thing funny

here. He did not like the look of the new-comer. He was about to sit but thought the better of it.

'You are from.....'

'I am from Vizag Medical College', Dhandapani said hastily. He then added, 'I am new to this place. I know practically no one around here'. He tried to smile, but somehow he could not.

'What are you doing here?' the new-comer asked. This time his tone was harsh.

'What am I doing here?' Dhandapani was surprised. Yes what was he doing? Why the

hell? He looked up and then he said 'II don't understand.....' He faltered. He was becoming very nervous. He wondered whether he had blundered into another mistake. What was happening to him this morning?

'Address me as Sir, man' the new-comer shouted. 'Don't you know that you are talking to the Assistant?'. What manners did they teach you at Vizag? Come, get away from the table, will you? It's past ten now and look what he is doing. Go man, go and work and look sharp while you are under me. I won't tolerate lazy fellows around here'.

Dhandapani moved swiftly away from the chair. Beads of sweat were visible on his forehead.

back. He hoped the earth would swallow him up. What a first impression! And three months under him! The Gods were definitely against him. There was no doubt of it, he thought.

'What day is to-day?' the newcomer who had seated himself asked.

'Wednesday, Sir; Dhandapani, replied, with a sorrowful look on his face.

'Don't you know that it is operation day to-day?'

'No Sir..... I.....mean Yes Sir'

'What did you say?'

'I did not know it was operation day to-day Sir.'

'Just how can you know. You are so indifferent. Before you came to this ward you should have known everything. You must be interested in your work, my dear man. Passing M. B. B. S. is not enough for a good doctor. With a little luck even I can pass..... I mean anyone can pass. Now go...Get the permission of the staff and hurry up to the theatre. Now run away'. With that the new comer left the ward.

Dhandapani did not run. He could not. His legs simply failed to respond. He looked at the retreating figure of the assistant. A little later when he came back to his senses he looked around hurriedly for the staff nurse. He must ask her permission before he went to the Theatre. Why ask her permission, he did not know. Perhaps that is how it was done in this hospital. As much as he was averse of going and confronting the mocking nurse, he felt he had to undergo even that for fear he might be making another mistake. Oh! there was the staff.

'Staff, I am going to the theatre' said Dhandapani trying to be as stiff as possible.

'Who is stopping you' retorted the staff.

'But to-day is operation day and I have been asked to go to the theatre,' he explained, this time trying to be conciliating.

'What Doctor! What is wrong with you. It is not operation day for your unit to-day'.

'But...but the assistant...told me just now.'

'What! Has he come?', the staff asked, surprised.....

'He has come and gone. He was talking to me'.

'You mean the one who was talking to you just now.'

'Yes'

'And who told you he was the assistant?'

'Why, he told me'.

'What else did he tell?', the staff asked and once again Dhandapani saw her eyes dancing with merriment.

He said nothing...'Who was he?'

'He is a grand joker. He is a student. A third year student'.

'You mean he was not the assistant? You mean...'

'Now look here, Doctor. I know who is who. I don't know what else he told you, but this I know. He is not the Assistant and you are...you are...' she did not finish the sentence, but walked away.

Dhandapani walked after her and asked 'But staff he was wearing a House-Surgeon's uniform'.

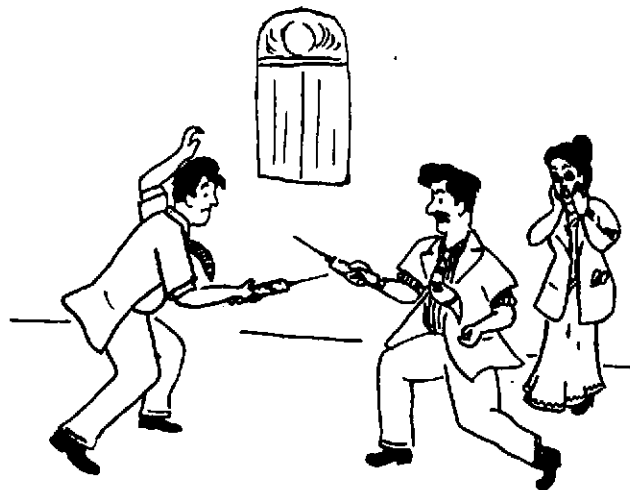
The staff turned around. She looked at our hero a full minute. Then she said 'Doctor, from to-day onwards all clinical students are supposed to come in that uniform plus a badge. He is a student, I tell you, and I know him very well and what a practical joker he is!'. She began to laugh. After a while she continued, 'You can recognise your assistant anywhere in this hospital. He is completely bald. Do you hear me. Completely bald'. She turned and still shaking with laughter, went her way.

Dhandapani looked aghast. To be ragged by a mere student! Why he had called him

Sir and had cringed to him. Our hero felt very sad. He wondered whom he had seen the first thing in the morning. The whole morning was full of calamities. He felt tired. He went back to the table, slumped on the chair and rested his drooping head in the cradle of his arms. He looked down the creases of his pants and brilliant shine of his boots.

'Good-morning. Sleepy so early in the morning?' some one said.

Dhandapani raised his head and saw a tall man standing beside him. He had a stethoscope round his neck and ..and ..Dhandapani jumped up from his seat. Another blunder. And he had asked whether he was sleeping. Oh! What would he think of him now...and ...the tall man was completely bald.



ARTHANAREESWARA

By

DR. SIVARAMAKRISHNA RAO

[This is the true story of a singer who lost his voice as a result of a cerebral stroke. Arthanareeswara is form of Siva wherein he is represented as half male and half female.]

*Sivah Saktia yukto yadi bagavati saktah prabhavitum
na ched evam devo no khalu kusalah spanditum api.....*

—SANKARACHARYA.

*United with His Shakti does Shiva create,
Bereft of Her, the Deva cannot even stir.....*



PROLOGUE

The outdoor theatre was crowded. Waiting humanity buzzed at different frequencies of interest. In the front row, among the elite of the little town, the Chairman of the Municipal Council was asking:

"Have you never seen our star actor before?"

"No," said the Collector for the district. "But I have heard of him. Does he sing well?"

"What do you mean, sing well? He is magnificent. Whenever we stage a play here, he plays the chief role. And his voice—wait till you hear him—"

Canto the First—The Rapture of Siva

I stood in the wings, perspiring. In the darkness outside, the twinkle of a million stars in the sky. Over the stage, bright lights that hurt the eyes and softened makeup. The heat and the suffocation, the actors and the make-believe. My cue has come, and I walk to the stage and I sing.

I am Madan Mohan, the singer. I heard the words. All my life I have heard these words in the audience. But who am I without my music, my divine beloved?

When I touch the chords of feeling inside, She stirs deep inside, and dances over my soul thus—now gently, now languidly, now sweet-stirring, now with gathering passion and fury now like waves breaking against rocks, now like fury-laden winds uprooting forest trees, now like thundering clouds riving the skies on lightning-sparking anvils, now like rumbling volcanoes erupting roar-laden fire over dew-kiss'd valleys.

For a moment stay thus, my Beloved, and then drop oh gently, oh softly, oh tenderly again, into love-gentled sweetness!

Thou goddess eternal, Thou music, come from depths and feelings of intuition, from reeds of love and tenderness and fury and violence, from strings harped by need and desire and frustration, from timbering columns of power and glory and ambition, from strangled pipes of hate and greed and envy and lust, from thundering drums of suffering and pain and punishment, from all this symphony of mankind's deepest instincts, come!

Thou and I. . . who art Thou, Thou who are sweeter to me than myself? Thou existeth in me. But without Thee, who am I? Arthana-reeswara. . . more than that. Thou with the deer-eyes and tresses like rain-laden clouds, Thou with the limbs of moon-beams, Thou with the rose-bud hued bosom, Thou art within me and Thou art me. Thee I worship, and truly I live only for Thee, for Music.

Worship and love. . . who is the loved and who the beloved? I cannot tell, for

Thou art my body, my soul, my life, my all. When I call to Thee my love is a flood of joy that is almost agony.

Each piling note of music that rises into a cumulus of feeling is a torrent of joy that drenches and deluges me in the pain, the sweetness, the wonder and the supremeness of communion.

Agony mounts at the touch of my Beloved, agony mounts at the dividing line of pain and join into a crescendo, into a titanic quality that is heart-breaking, melting all feeling, all body into a lava that pours across and over jagged emotions, and this torture, this joy becomes unendurable, and now time stops, but feeling rends on its pain, and when time stops this agony becomes ecstasy.

In ecstasy I am plunged, and everything stops, and only music, Eternal Music is ageless in its utter oneness with me. The stars and the moon, the laughing wind, the falling dew, all stop forever, for the world is no more. This is ecstasy. The being-state that is non-being. The bliss that is pain, the moment that is deathless. Life and death, Existence and Dissolution, exist in a one-ness, primeval.

How long is ecstasy and how long is time? A moment, an hour, a year, a century, a yuga, a Creation? All or one.

In a moment that stayed and became much more than a moment, I linger in ecstasy, and in a dream I remember all the love-touched moments that my music gave me. Memories crowded and come in a rush.

How long is ecstasy and how long is time? Forever and forever.

Interlude

But forever now ends. A blood-vessel has burst in my brain. Everything dissolves into a blackness punctuated by meteoric flashes. Lightning explodes in my skull and sparks fly like goblins carrying lamps in hell. A dull thud. Time travels past in bloodied streams that eddy at the landmarks sticking out like

stones in the current. At the eddies I waver, and gropingly reach for the banks.

Outside, there was a commotion in the audience. The Collector stood up deeply shaken. One moment he was listening to music the like of which he had never heard in his life before, music that was matchless in its power, its passion and its glory. The next moment he saw the singer crumple on the stage, unconscious. The Chairman shouted in vain for order. The D.M.O. pushed his way to the stage, and with two bearers the unfortunate player was conveyed to the district hospital.

The D.M.O. found that the boy had high blood pressure. He sat down and waited.

The hospital beds, the odours, the silence. The actor woke up. The starched uniforms. Light focussed into eye-balls. Tendons that were tapped, pins that pricked all over, seeking. The arousal of consciousness.

"Can you speak now, Madan?"

The actor heard him. He wanted to say yes. His mouth twisted. Into the silence of the room he leered, and there came no words.

Canto the Second - The sorrow of Siva

Into a darkness I have flung my Beloved and now she is gone. A part of me is dead and gone, and what is left is the husk, useless. No more can I create thee, my Beloved, my music.

The night is cold and lonely. Life is an emptiness of space wherein the past is a mocking echo. In the echoes I am trapped and I am alone.

In a raging delirium of madness I rip the shell that binds me and the echoes escape. In their wakes I am set free and in the fast-mooning night I have found Thee, my Beloved, and how sweet are Thy arms.

Then into truth I awake and the dream is dead. Not all my agony can make Thee come back.

Days and nights flit past. Clouds hurry past, miserly and fearful of spilling one drop of

nectar and I am parched with waiting, hoping.

Hope struggling against truth, hope strong with the desire of the soul. Where art Thou, my Beloved, my music?

No answer. The temple of my soul is dark and the lamps in my heart are unlit. Incense waits and camphor is crumbling. But the deity is not there. She has fled. The bells are silent, and bats have made a home in the alcoves. Spiders have spun cobwebs across the entrance.

Moss has mildewed the stony approaches and lichen have grown in the crevices of the rock walls. The boulders of the temple are decaying.

Cymbals wait in the mandapam. Violins bloat their bodies, varnish peels slowly, and the wood rots. Veenas soften, their strings tarnish, the keys are no longer true, and the bridges are rusted. Flutes lie on the floor, sad and silent and strangled. Mridangams wait, mute, while rats gnaw their leather thongs and make nests inside them. All is silent, dead.

How long is time? When will Thou return to me, beloved? Perhaps at the end of time. I cannot tell.

If time ends, what lies beyond the pleated margin of its fabric?

Death, perhaps, Life and eternalness, perhaps? Or Creation afresh, one more chance in the roulette of life, one more turn with the willow in this game?

Or a stark chaos in an abyss of damnation? Is this the end?

I cannot tell. Misery grows into an evil thing in me, branching and budding into my cells, destroying them. In a desperation I want to die.

The beach stretches before me, and the sea is a dark-bodied creature, beckoning me. Oh for the cool sweetness of death, for the sweet comfort of it. But I cannot die. I must seek my Beloved.

Tell me, sea. Tell me what to do. Tell me,
sand. Tell me, earth. Oh tell me, clouds.
Tell me what to do?

But the sea is silent. The sand is silent.
The earth is silent. The clouds are silent.
Helpless and alone, I sob on the beach.

All life is a desolate beach and I am alone.
Along the vistas of time, along the thread of
existence, I must journey alone, for my music
is lost to me. The world is lovely and the
evening is a mood of nature's sweetness.

But what sweetness is there in nature when
the music in my soul is dead?

No. I will not die. I will seek my Beloved,
but not as music. Music has fled but my
Beloved is Eternal. She is deathless, and I
will seek Her and find Her somewhere. In
the sixty-four arts she has hidden Herself in

Her shyness, but I will seek Her there and win
Her back.

Epilogue

*Madan Mohan walked along the main road of the
little town. For how long, he wondered, was he to
live without employment?*

*The doctor had debarred him from hard labour,
and he was nearly illiterate. For months he waited
for the clerk's job in the Municipality. One day he
will get it, he knew. In the meantime he would learn
and brush up his knowledge.*

*Till then I must live on charity, for I can neither
speak nor sing. Faces of pity are turned to me from
the houses and rice pours forth in a bounty of pity.
But to pity I was dead long ago, just as one is dead
to pain in course of time.*

*In the little temple to which he was going now,
the priest was chanting at the end of the prayer:
"Sarvesam Mangalam Bhavantu .."*

Development of Bacteriology Under the Madras University

By

DR. M. K. K. MENON

(Assistant Director, King Institute, Guindy)



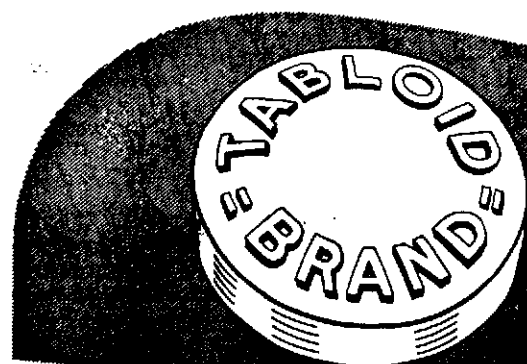
The last several decades of the 19th century as well the 20th century so far had seen rapid strides in our knowledge of Bacteriology and infective agents, in general. Therefore any attempt to describe the work and advances in this field under the University could only be a general description of these advances made in other countries. Teaching of Bacteriology to under-graduates of the University is mostly confined to the Medical Colleges and research and Public Health Institutes here as the King Institute of Preventive Medicine. During the earlier years the teaching of Bacteriology in the Medical Colleges had not been assigned any important place. No separate professor or lecturer in the subject existed. The teaching of this subject was entrusted to the Professor of Hygiene. Later, as the subject began to assume greater and greater importance new laboratories were put up for Media preparation, culture and diagnostic work and for animal experimentation and with this change of outlook a separate Professorship was also created to teach the subject to under-graduate students in the Medical Colleges. Post-graduate degrees were later introduced such as M.O., Ph.D., M. Sc. etc. in Bacteriology. In the Department of Bacteriology, Madras Medical College, all the Bacteriological and diagnostic work pertaining to the General Hospital is conducted. The Upgraded Serological Laboratory of the Institute of Venereology of this Hospital undertakes the performance of the Serological tests on samples of blood sent from this Hospital.

centre of Bacteriological work in South India. This Institute comprises several activities within its orbit and serves as a diagnostic and Bacteriological Laboratory for all the Hospitals of the State. As will be seen from the yearly reports of the Institute important research work on various Tropical diseases and on several problems on Immunology have been conducted in this Institute. The routine work in all the sections of the Institute, has continued to increase in volume and a stage has been reached when it has become necessary to proceed expeditiously with plans for de-centralisation and the establishment of regional laboratories to deal with routine clinical diagnostic work. This will also enable the officers of the Institute to devote their time on Research work. In the Vaccine Lymph section of this Institute Glycerinated Lymph is manufactured and issued to the Public Health Department and to various other agencies. Standardisation and manufacture of Therapeutic Sera like Tetanus Antitoxin, Gas Gangrene Anti toxin etc., are conducted in the Department of Antitoxins and the various Hospitals of this State are supplied with Serum indents made by them. All batches of Serum supplied from this Institute are subjected to rigorous tests required under the Drug Rules as regards potency, safety, sterility etc., before they are released from the Institute. This department possesses at the present moment 62 Horses for manufacture of Sera. In the Diagnostic Department Microscopical, Cultural, Agglutination, and other tests are conducted as also the accepted Seriological tests for Venereal diseases. Anti-Cholera vaccine in large quan-

The King Institute of Preventive Medicine, Guindy forms, however, the most important
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tity is manufactured and distributed to the Public Health Department whenever there is an incidence of Cholera in the State or outside. T.A.B, Vaccine and Therapeutic Vaccines are also manufactured and issued outside. Sterile solutions such as Quinine, Calcium Gluconate, Glucose etc., are also manufactured and sent out for the use of the Hospitals. The Blood Bank of this Institute constitutes a Central Transfusion Service for the whole State. Functioning mainly as a Plasma processing centre and a Centre for training of Medical Officers and Technicians in Blood Transfusion and resuscitation work the Institute Bank has also to explore and accept blood donations to supplement the requirements of the City and Muffassil banks. Grouping Sera are freely distributed to several transfusion units and physicians in this State. In the Department of Biologicals Control all the biologicals manufactured in the Institute are further tested to ensure that they conform to the requisite standards before they are issued outside. The work of the section of Water Analysis and Algae Control deals with Water Bacteriology and Chemical Analysis of samples of drinking water, milk and milk products as also the testing of disinfectants etc., are carried out here. The Department of the Government Analysts deals mainly with the examination of Foods & Drugs implementing the provisions of the Madras Prevention of Adulteration (Foods) Act and the Drugs Act.

Besides the routine work done on these sections important Research work is also undertaken and these are either contained in the reports of the Institute or published in various Medical Journals.

It will be seen from the aforesaid that the King Institute, has kept pace with the developments in this fascinating subject of Bacteriology and also serves as an important organisation for the maintenance and upkeep of public Health. The knowledge of Bacteriology and immunology imparted to our Medical students under the auspices of the University Medical Colleges has indeed helped among many other things to change our old concep-

tion of diseases as a visitation from Heaven or Hell to the present day proof of the transmissible Bacteria; to show in fact, that, since the aetiology and modes of spread of most diseases were known, the means for their control should be available. Adequate stimulus has been provided by the University for the creation of Central Laboratories which are well equipped for a first class laboratory service which will be competent to deal with all Bacteriological and epidemiological problems as well as the Serology of infectious diseases.

Looking several decades back of the existence of this University one is struck by the development of immunology and by the widening interest in Bacteriology as a Science. About 1900 onwards Bacteriology and Immunology were in fact, the first of the laboratory sciences to make any significant intrusion into bedside medicine. In 1901 Bordet and Gengou had established the principles of complement fixation which Wassermann and Neisser extended in 1906 as a specific test for syphilis. In 1904 Almroth Wright and Stewart Douglas announced their work concerning the presence of opsonins in Immune Serum. Later, they introduced to medical practice the conception that Autogenous Vaccines would be solution to many problems of disease arising from subacute and chronic bacterial infections. In 1908 Eelaschick introduced the dermal test for susceptibility to Diphtheria. Then came in the various tuberculin sensitivity tests such as Von Pirquet (1907) Mantoux (1910). In 1924 the Dicks (George Dick and Gladys Dick) announced their test for determination of susceptibility for scarlet fever. Further developments were seen in the work of Rebecca Lancefield in differentiating Haemolytic Streptococcus by Serological methods; the publications of Felix & Pitt on the antigens of Bact. Typhosum and the development of Phage-typing etc. by Craigie & others. The development and perfection of various Diphtheria Prophylactics (Such as T. A. F; A. P. T; P. T. A. P.) etc., and the demonstration of the value of Tetanus Toxoid in the prevention of Tetanus are further im-

portant milestones in the development of immunological methods. The introduction of living virus vaccines represents another important development in the Prophylaxis of diseases like Small Pox and Yellow Fever and Poliomyelitis.

Another important landmark in the development of Bacteriology in relation to diseases is the application of Chemotherapeutic drugs like Sulphanilamides to bacterial infections. Closely on the wake of this development

Antibiotics with powerful therapeutic effects have appeared in the field. In the past few years many antibiotics have been isolated though a few only have been found to be therapeutically useful. However, armed with Sulphanilamide, Penicillin, Streptomycin etc. the medical practitioner can to-day tackle most bacterial infections with reasonable hope of success. But, a new danger seems to be the development of drug resistant bacteria and a satisfactory solution of this problem is still awaited.

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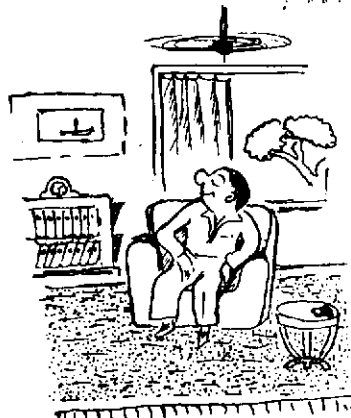
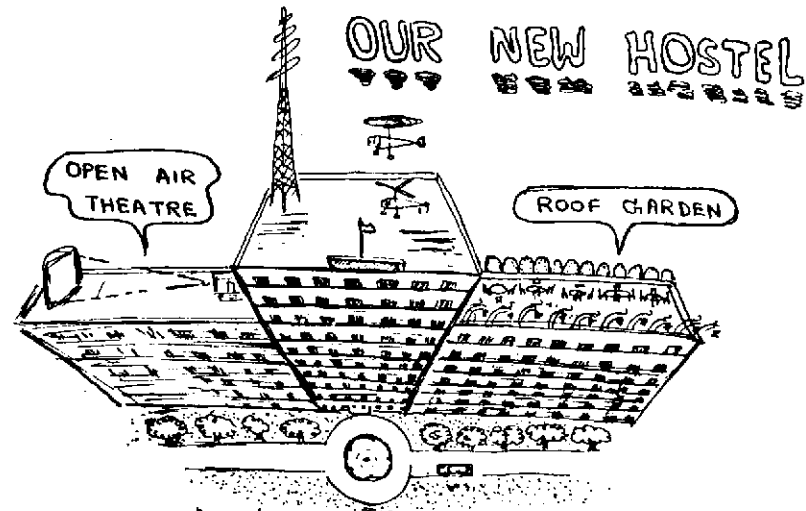
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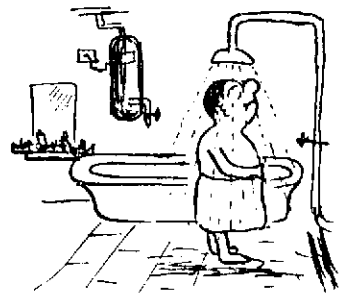
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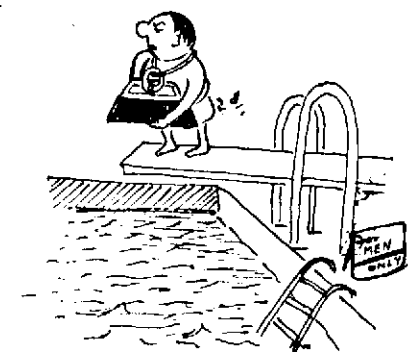
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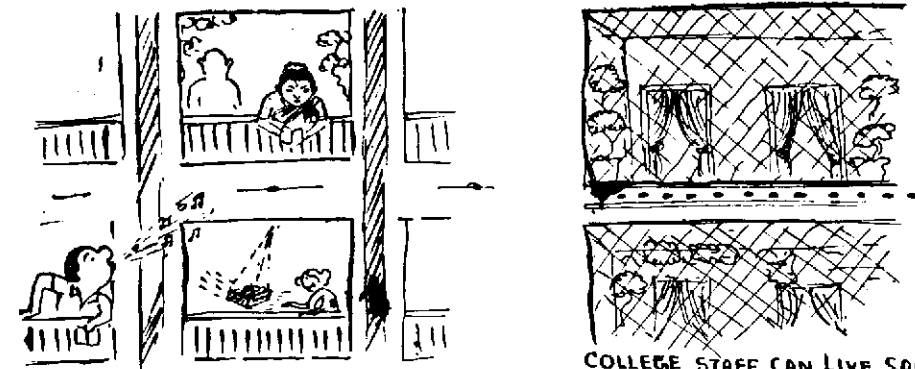


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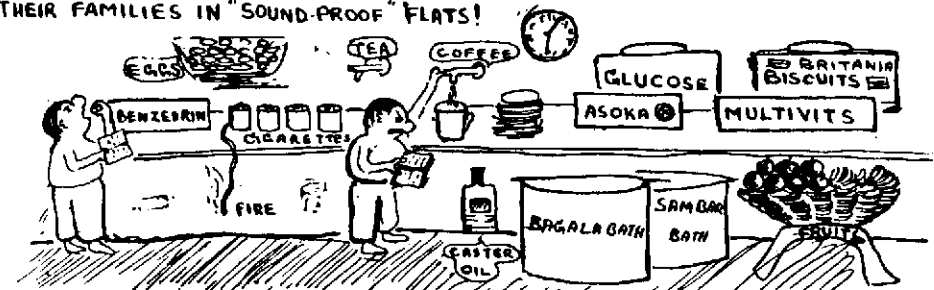
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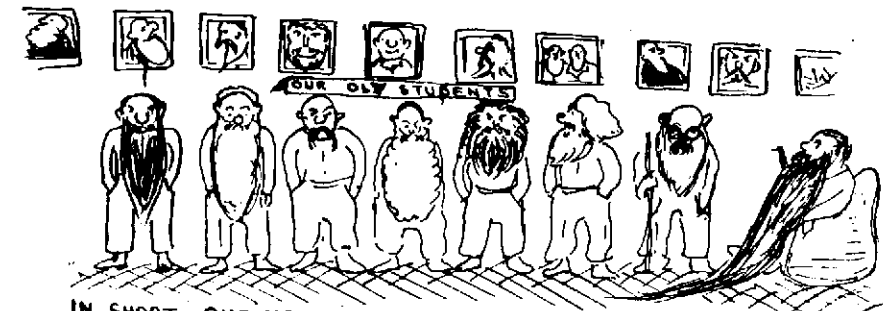


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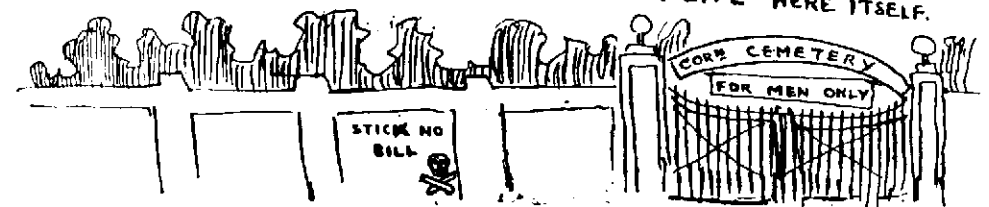
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OUR OFT TRUMPETED LOVES

By

DR. M. M. COOPER, M.B.B.S.,
(Asst. Professor of Anatomy)



Nalini, young and beautiful, fresh to the joys of the world, fell madly in love. Kishore came into her life like a bolt from the blue, a God from the heavens. To her eyes, he embodied every humanly virtue, every quality worthy of a man. He stood before her, towering in strength, moral as well as spiritual. His genial smile and ready wit swept her off her feet. She was obsessed with only one idea.....to make Kishore her own.

The feeble gust of wind soon turned into a sweeping storm. The stream of unfettered emotion swept up a huge cloud of dust before her eyes blinding her to all reality. The fierce lightning of resentment at any opposition, did not fail to add its own ominous thunder to the scene. The greater the opposition the more she thrilled in the pursuit of her lover. She was madly in love.

Brushing aside all admonishment, breaking aside all family ties, carried away by the whirlwind of her convictions, Nalini eloped and was married. Her cup of ecstasy was full to the brim. She emerged into a new world, now as Mrs. Kishore.

The fury of the storm abated. The dust of blinding particles of inexperience and folly settled at last. The horizons of far vision cleared as the murky clouds gradually moved away and melted into nothingness. The first bright rays of the sun brought wordly reality to the hitherto dimly lit corners of blind enchantment, and as the heat of the day numbed, the distant white snows of happiness, were melted mercilessly into torrents of tears

and repentance, laying bare the hard grey peaks of mountains of massive stone. The dull and dreary drone of daily drudgery set up a gulf between her and Kishore. Their lives lacked understanding and regard. The gulf yawned broader every hour, every day. Mrs. Kishore nearly lost her reason in trying to explain to herself.....why.....why?

Pondering in her loneliness Mrs. Kishore looked back on Nalini. There she was before her eyes, young and beautiful, happy under the vigilance and protection of sane parents, blissfully ignorant of the dangers around her. How she wished to be in her place once again.

Hardly an year has passed. Mrs. Kishore is back with her parentsfreed from the bonds of hasty matrimony. She works to live and lives to learn. She hasn't succeeded in understanding clearly what that overpowering emotion called Love was? Was it real love? If so why did it dwindle and die?

The world today is held in the grip of mass hypnotism by a high powered system of profanely illustrated literature and advertisement. The loud and blaring tones of these mind twisting agencies which operate purely for running a profitable business, have dimmed the minds of some of our clear thinking youth. To the millions of our Youth the lie of 'Love' is fed through cheap, gaudily illustrated booklets, where unrealities are twisted into realities, in which the young reader unwillingly participates. Be it in the sphere of dress or hobby, or occupation, or behaviour towards the opposite sex, this high powered hypnotism does not

fill to deviate many from the straight path of commonsense and reason.

The Oft Trumpeted Love is nothing but a passing wave of emotion stirred up by the meeting of the opposite sex, to which the novelty of the experience, and the secrecy of the event, adds a touch of excitement and flurry.

Real Love (Bhava) takes two forms. One the love for all living matter and the other the quiet sacrificing love of the parent for the offspring. In our relation with the opposite sex, there is a real need for the adoption of a sane attitude, either as friends, or in the light of reality and facts, as would be partners in life, with real respect and regard for one another.

Pharmacology and Pharmaco - Therapeutics

by

J. C. DAVID, M.B.B.S. (Mad.) Ph.D. (Ed.)

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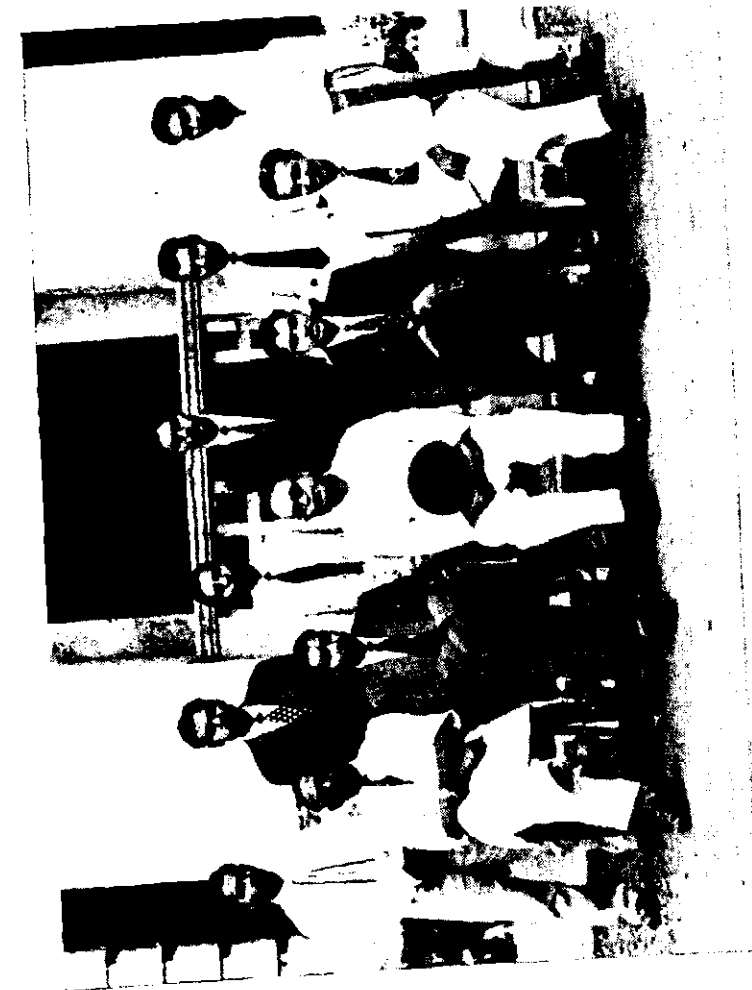
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Members of the Dental wing who worked at Pakkam

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The Beginning but not the end of Modern Dentistry in Madras State

By

CAPT. M. G. RAO,

(L. D. Sc. [Cal.], P. G. P. Prosthodontia [University of Calif.], F.A.I.D. [U.S.A.]
Professor of Dental Surgery, Madras Medical College)



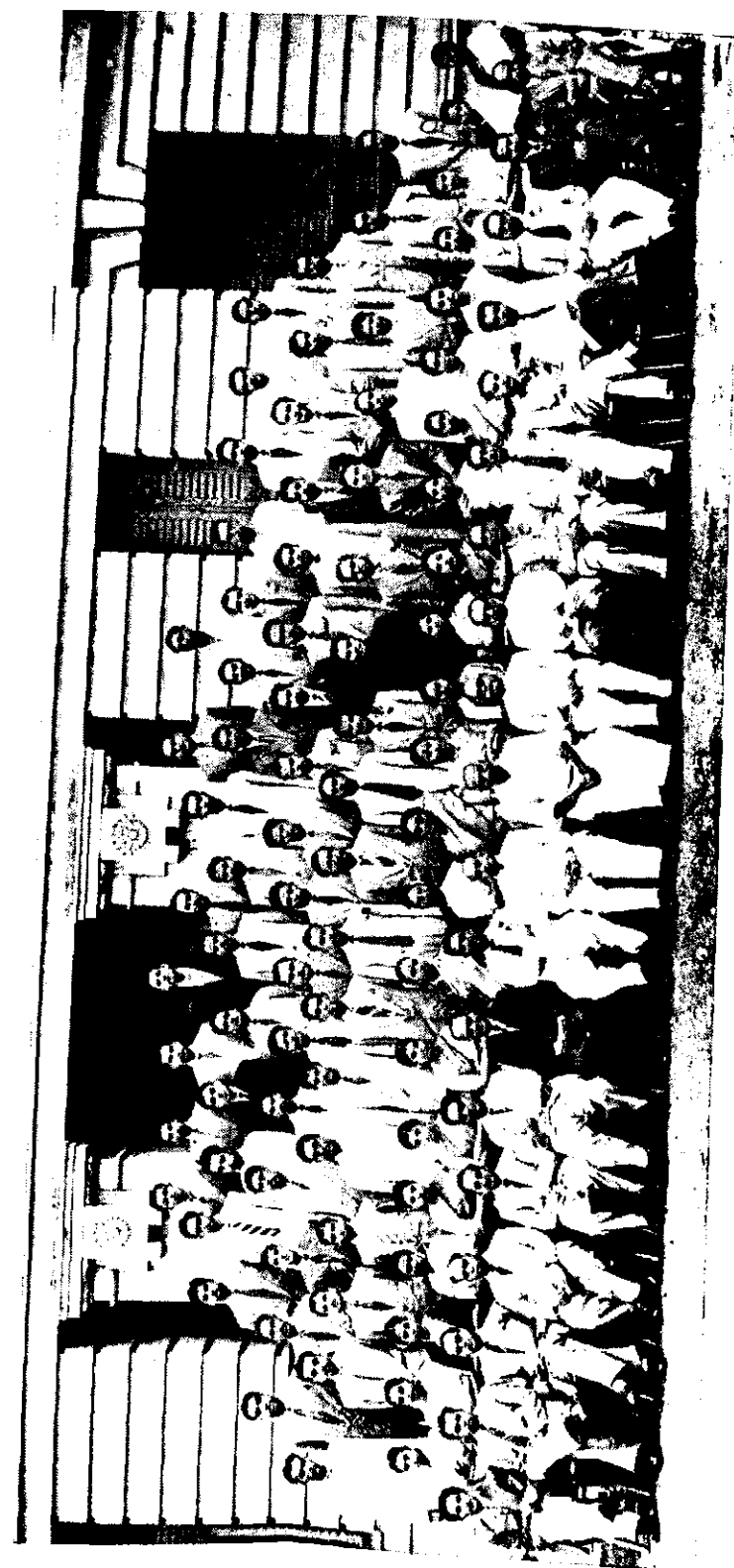
It was not until the Second World War when Dentists with academic qualifications formed the commissioned ranks of the Indian Army Dental Corps, that the first ray of hope appeared for Dentistry to become a full service equivalent to any other speciality of medicine. And at the close of the war, programme of health services which included Dentistry as an integral part thereof was sought to be drafted by the Govt. of India. Thus, a new era was ushered by the work of the Health Survey Development Committee of 1946. As a result of that report, the Union Government have come to recognise its inescapable responsibility for the development of scientific dentistry in India and from the numerous theoretical and practical considerations that entered into the report, the first stage in the evolution of the new policy was

reached with the passing of Legislation providing educational qualifications for entrance to the profession of dentistry as from 1948. The act became operative in Madras State from 1951 and the total number of dentists, registered in Madras State in the first register were 19, with academic qualifications and 374, without academic background. In 1953 the numbers were 20 and 342 respectively. Today qualified men in Madras State are 31 and the unqualified are 291. (In certain states, like Kerala, Karnataka and the previous Hyderabad State, this act is not still operated.) The present ratio of dentists to the population in Madras State is 1 dentist to 1,02,484 people.

The table below, giving the proportion between dentists and the population in the other countries, makes interesting reading :—

U. S. A.	1	dentist to	1500 of population
New Zealand	1	"	1783
Norway	1	"	2000
Australia	1	"	2114
Japan	1	"	2765
Britain	1	"	3271
Phillipines	1	"	3333
Singapore	1	"	4072
France	1	"	4114
Sarawak	1	"	4230
Germany	1	"	4840
Federation of Malaya	1	"	7944
Vietnam	1	"	26316
Egypt	1	"	32065
Thailand	1	"	33000
India	1	"	95493
(Madras State)	1	"	102484

GRADUATES OF THE YEAR
1956 — 1957



From the above, it is evident that public interests demand a far more adequate number of properly qualified dentists. As the large number of unqualified dentists are likely to be without any theoretical background of training in dentistry, the Government have sanctioned a scheme for a regular course of six months duration to such of these who desire to gain some scientific knowledge in dentistry. None has so far entered this course.

But even this small number of qualified and unqualified men registered in Madras State will be reduced seriously owing to causes like old age, ailments, retirement and death. Since all new registrations in the Dental Register will have to be qualified men, the State Government have at last opened the new Dental Wing in the Madras Medical College with fully expanded facilities for treating out-patients in the Dental block of the Out-Patients Department of the Government General Hospital. The first proposals were made as early as 1944 when plans to open a Dental School were considered and for want of a properly qualified Professor of Dental Surgery, the scheme could not be given effect to. Another attempt was made in 1949 with the plans submitted by the then Professor of Dental Surgery, but the Government could not spell headway. In 1950, the writer designed a detailed scheme to serve the dual purpose of imparting a course of instruction to the students in the B.D.S. course and of rendering better and useful dental service, particularly to the poorer sections of the population. The plan of instruction is so arranged that the students undergoing the B.D.S. course will have sound knowledge of all basic sciences needed by the dental Surgeon for the efficient discharge of their duties. The institution thus developed in 1953 has now 68 students on its rolls and the first batch of qualified dental surgeons from this institution will come out in April 1957. Thereafter, further batches of qualified men and women will be available for employment every year in December and April.

Proposals are now under consideration to increase the seats from the existing 20 in number to 30. This move is, of course, doubtless, praiseworthy, but in the light of our requirements, is it not advisable to step up the entry even further if we are to reach the ratio of 1 dentist to 5,000 of the population as recommended by the Bhoré Committee? Although, it will take several years, it merits all consideration without any reservations when we see the wholly inadequate number of qualified dental personnel to deal with the needs of our State.

In considering the recruitment of students, we have naturally to consider the purpose for which the selection is made. The qualities we have to look in our students are - intellectual honesty, qualities of leadership, sense of responsibility, initiative and the digital dexterity to the technological and biological approach to our scientific service. I would also like to point out that Dentistry differs from Medicine fundamentally. The dental student takes his qualification after he has spent time practising dentistry on his patient during his course. In Medicine, this contact with the patient does not occur until after qualifying for the degree. The medical student in no way undertakes a responsibility for the case he examines while the dental student undertakes a limited responsibility in treating the patient with his experience and capability. It is, therefore, obvious that the need for high ethical and social responsibility occurs early in the life of a dental student. To secure these ideals in our dental students for efficient objective training is very important and the difficulty in getting the right type of people is all the greater. The entry to the dental course depends on the popularity of dental surgery as a career among men and women whose parents not unnaturally look for a return in financial gains. The needed large entry to the profession of dentistry will have to be achieved in competition to other professions such as Engineering, Medicine etc. This can only be done by instituting educational and subsistence grants and by ensuring the dental surgeon a just financial reward at the end of his training.

GLIMPSES INTO THE PAST

By

ALICE



It surprises most of my non-medical friends to know that I have spent not less than a decade and a half in this medical college, without getting those four simple letters M.B.B.S., next to my name. It however, does not surprise my colleagues, who believe in the fact that failing is a rule and passing a chance in the medical college.

It was the August of 1940, that found me a new-comer to the dreadful Red Fort, with the satisfaction of having achieved something remarkable in my life and with a very high sense of responsibility. Studies became an all-time obsession. I secured 75% marks in my first, class-examination...the highest I ever secured in my medical career, for very soon I was advised by my seniors that medical exams were a chance and luck was the only thing that was needed. Though at first my sense of responsibility would not let me go astray, I soon joined their ranks and began to spend the evenings at the Clarence hotel (the leading hotel at that time) and at the Cinemas. In fact I became so sociable, that I found no time to study.

My examinations soon approached. I did badly in the theory, but being a staunch believer in luck, went for the orals also. Anatomy was the first. The bell rang, and I moved in to the room, with my heart in my mouth.

The examiners looked at me seriously through their glasses and over their frames as well. All of a sudden, one of them flung a bone at me. I caught it reflexly, probably in self-defense, when he said, 'Yes, what is it?'

'A bone, Sir,' I replied.

'Ha! Ha! Ha!'. He looked at the other examiner and said, 'The boy seems to be intelligent'. He knows it is a bone. Come on Man, what bone is it?

'It is the collar bone, Sir'.

'Collar bone, you fool, what is its anatomical name?'

'Clavicle, Sir'.

'Oh! At last you have got it; what side does it belong to?'

'It is in the front of the chest, Sir'.

'Is it left or right?' I had no answer to this question. So I kept quiet. He glared at me for some time and then gave me a humerus. This was a lucky break for me as I had studied it thoroughly. As I took it in my hand I said, 'It is the left humerus, Sir'. The examiner seemed surprised. 'You seemed to have studied this bone!' he said, 'Leave it there and take up the next bone.'

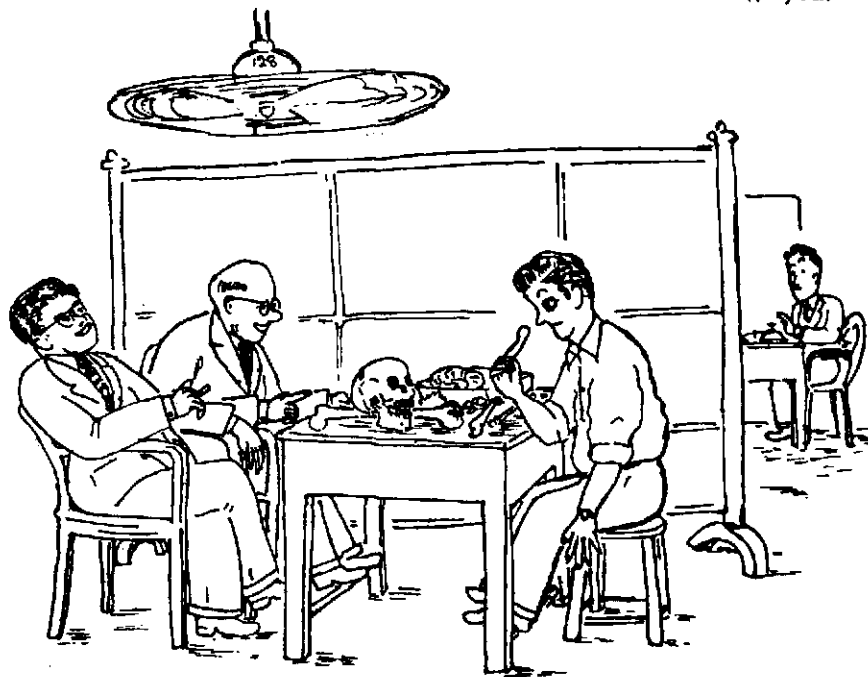
The next to the best of my knowledge was a piece of some bone, for it had no sides and no regular shape. "Where does this bone occur in body?" "Anywhere Sir....." "Anywhere?" "Yes Sir, it is only a piece of a bone Sir, you could have got it from any where." "Ha! ha! The boy is trapped! He looked at the other examiner and with a wink in his eyes said, "He does not seem to have studied the nasal bones" he said. Then with a great confidence he asked me, once again, "what is it?" "It is the nasal bone, Sir", I answered equally confidently. He was shocked and looked around to see if any person in the vicinity was prompting and said, "who told you that?". You only mentioned Sir, that I had not studied the

nasal bone.....so....." He was disappointed and went on asking me a lot of questions about the side, attachments, and even the development of that bone, till he succeeded in making me silent once again. The other examiner took over and we walked to the soft parts. Pointing to Brain sections he asked "what tissue is that?" It's the Brain tissue sir", I answered. "That's what you are lacking, my boy," he said and we moved on. He next showed me the heart and looked at me, expecting me to identify it. When I answered it was the heart, he wanted the correct (Anatomical) name. I did not know what to say and somehow I slipped, "Love Sir". "My God!" he exclaimed and asked me to get out.

Physiology was no better and I became an additional coming into contact with "Chronics" who had spent years in the department, had

came to inform me that I had passed my Anatomy. I could not believe him at first, and was very anxious to know the reason for this deviation from the normal. I was sure I had done nothing extra-ordinary to get me this surprising result. When I traced the cause, I came to know that my professor who happened to be an examiner, had become the proud father of a bonny son, the day I went for my orals, all the rest of his children being girls! In that happiness he had determined to pass the first candidate.

The death of the Physiology Professor was responsible for my success in that subject. The new Professor carried no opinions with him and I made it a point not to show him my face till the exam time. When he saw me in the orals he exclaimed. "My college; it is the first time I am seeing you." The other



faced very many examinations unsuccessfully, and who were proud of their seniority in the red fort. I learnt to express my failure as "could not satisfy the examiner". I moved with them, followed their footsteps and went on appearing for the examinations indifferently and facing my results boldly, till one fine morning, I was surprised. My friend Gopi-

examiner whispered, "Probably a quiet going chap." This calmed my professor and he asked, "What is the classical sign of Parkinsonism?" I did not know, but was perplexed to hear the other examiner whisper again, "The boy is showing it, but he is too shy to open his mouth". My Professor's eye immediately turned to my hand in which I was rolling a button between

my fingers. I dropped down the button and said, "I am sorry Sir," but he smiled, "You are right, why don't you say that is the pill rolling movement." I was reminded of my faith in luck and felt that it was in my favour this time and went on answering the volley of questions my examiners asked me (most of the time tossing a coin to say yes or no). Towards the end I realised that I had satisfied my examiners and a month later the results confirmed my suspicion.

This was no encouragement to me. I knew I had passed by luck alone, so in my third year I made an honest attempt. I knew my Pharmacology so well, that many a time my classmates called me 'Mobile B.P.' My theory was excellent and with utmost confidence I went for the oral. "What is BEPANTHEN?" "I have not read it in my book, Sir." Is it a proprietary preparation?" "Do you think that you are so thorough with the book? Even I don't know so many things," he said in an angry mood. We then discussed politics and debated on the economic status of India. He seemed to disagree with me in toto and finally drove me out saying "Better luck next time." As I came out my friends congratulated me, for they thought the long examination was only to decide about giving me the first rank. I was doubtful of my fate, and the 5th of the next month was the day when every body stood still and were dumbfounded to see my name missing from the list of the successful candidates.

This was a shock to me, which made me so weak, so disheartened that I never wasted my energy any more in learning that subject.

In my pathology examination when I was attempting for the 4th time my examiner asked me to tell him what was focussed under the microscope. I said it was a monocyte. He looked surprised at my answer and said "Make sure my boy, before it is too late." I looked in again and confirmed it was nothing but a monocyte. He said, "You are losing your chance. Try once again." I looked again

and confirmed I was right. It is nothing but a monocyte "Sir". I raised my voice with new courage. His hand went on my shoulder, his eye twinkled and with a smile on his lips said, "Very good my boy, what is your number? I gave him my number and he said "You can go, no more questions for you". When the results came I found that I had not only passed, but had also topped the list.

My life had become so unstable that it took me a full year to get over this joy and I started my Ophthalmology only after I had failed in the first attempt. The second attempt was not bad, but of course, my standards and the standards set up by the examiners, were still far apart.

The third time when I went he asked me, "What did I ask you last time?" I had never understood his questions, so I scratched my head. Then he remembered. "Oh, yes, I have been asking you Interstitial Keratitis for the past so many attempts and you have never given me an answer. I am sure you must have read it this time" To my bad luck I had to say "No" when he felt sad and said, "Better read it next time. I will give a pass if you tell it next time."

I was thorough with it the following attempt. I read it so well that I forgot the rest of the diseases and to my greatest disappointment the examiner was indisposed just one day before the exam. So naturally history repeated itself.

Looking back on the past sixteen years, I must say I have been one of those lucky few to see three generations of students pass through this college, and to witness the wide variety of changes that have taken place in the various departments of this great institution. Many of my class mates are on the teaching staff, and I am looking forward to that glorious day, when some of them become my examiners. Then perhaps, through mutual understanding, I may succeed in acquiring those Four simple, but much coveted letters, M.B.B.S., next to my name.

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By

BALKISHEN, II, M.B.B.S.



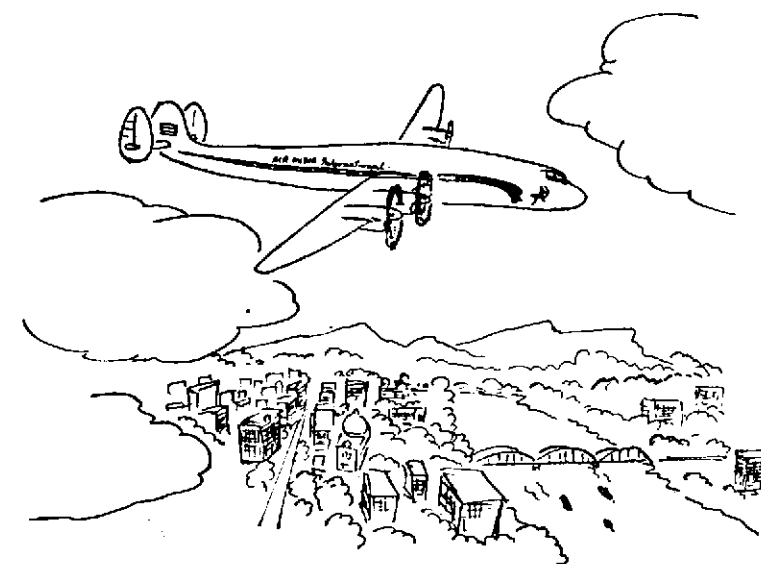
It was the eve of my departure; the clouds gathered overhead, the sun was dull as if overcome by grief at the coming separation; everything was still - no stir in the air, no movement of the trees-only the occasional dolorous pitch of the wood-dove. I was thinking of that long flight over the sea, in conditions and circumstances unfavourable for flying as shown by the recent air tragedies and of those far away places over the sea, yes! those far away places that I wanted to see.

in abundance, and everyone wished there was a farewell party to attend each day. This state of affairs continued far into the wee hours of the morning but like many other features of this life the end was inevitable - it came bit too soon for all of us. Everyone endeavoured to impress upon me their several instructions, the most ardent of which was 'Don't forget to drop me a line'.

That was over, and once again stillness and gloom reigned supreme. My mother and I sat

up the remaining hours before Sunrise and these seemed drawn out into long years. No word was spoken, each being occupied with one's own thoughts and occasionally sipping Cocoa. The sun arose with a great welcome; the clouds rolled away, soft winds came forth to kiss the sun-clad vales, while amidst the surrounding trees the birds rendered a gentle sweet refrain.

Soon the feverish pitch of anxiety overcame each one in turn; everything



This would be my last night in Barbados. The final words of farewell were being said amidst much celebration and festivity. Everyone was happy; faces gleamed and were all smiles; the cares and worries of the transient scene of life were temporarily banished by the customary pint (of beer) or the favourite glass (of rum). Joy was unconfined and the consumption of beverages and other delicacies was

was checked and rechecked. Questions were asked with the zeal and ardour of a detective examining a suspect. Noses were powdered, hair given the last touch, and each one went hither and thither to see if anything had been forgotten. Everything was found to be alright. We solemnly filed into the car. The engine started and the car lunged forward and we were soon on our way. Friends waved good-

bye and I waved back to them. The car sped along winding roads, past fields of cane.

At last we arrived at the air port. There we sat waiting and watching the planes and passengers come and go and above all anxiously looking for the arrival of the T. C. A. plane. It came, but no one seemed delighted at its arrival. In the mean-time more friends were arriving to see me off. They all seemed to want to detain me but I was just listening for the call. Then all of a sudden from the loud speaker was heard "Flight 601 leaving for Bermuda, Montreal, and Canada in about ten minutes, will passengers kindly check with the T. C. A. counter".

Muscles became tense, the heart beat increased and cheeks became flushed. Tears came to the eyes and sighs started but were suppressed with some difficulty. People stood with fastened lips and blank expressions on the faces. I began to speak but the voice failed so I just shook hands. I turned to my mother, she looked at me and turned away—I could understand and for a moment I did not want to leave. I overcame that and quickly hastened away. I kept my face fixed in front of me as I was too timid to glance back. As I wended my way to the plane I was greeted by the cameramen but I dare suppose that the expression on my face broke his camera! As I went into the plane I heard the visitors shouting indistinctly. I stopped, glanced back and saw them vigorously waving—I waved back and next was out of their sight.

I took my seat in the plane and made futile attempts to read the newspaper but just could not bring my mind to that. The engines started, and propeller kicked off. The plane taxied on the field...next there were two successive bumps and then the plane was in the air, moving over the south eastern coast of the island.

The atmosphere was clear and bright. I could see the green fields far below me bathed in light and the narrow roads sinuously

winding their way among them. As I gazed on this scene I understood why the island was also called 'The Garden of the West Indies'.

I looked at my watch—it was 10.15 a.m. the next stop would be at 2.00 p.m. at Bermuda. The plane flew on, Barbados was left behind; the next island seen was Guadeloupe. At Barbuda the most northerly island the plane took a turn and proceeded westward. The weather became very cloudy, the clouds stretched far and wide as far as the eye could see; this billowy expanse of clouds was reminiscent of mountainous country. I soon tired of gazing at this expanse of cloud, and turned my attention to my immediate surroundings within the plane.

A lady was seated besides me, carrying a bonny baby. A conversation started between us, and my services as a nurse were warmly welcomed. The baby was a jolly fellow and his gamboling added life and sentiment to the cabin; the air hostess turned out to be a delightful creature and the conversation (in French) proved very entertaining. The plane started to descend and beyond the edge of a nearby cloud there could be seen thousands of greenish spots closely packed on the surface of the deep blue sea. These were the Bermuda islands, and in about 45 minutes we would be making a landing.

The islands are small and mostly connected by bridges on account of their close proximity. The land is low and dark colored, the vegetation is dense and deep green while amidst this vegetation are found the Bermudian homes—neat, squarish, double apartment houses of a white, pink or light-green color. The roads are wide and the traffic is moderate; the people are coloured and white. The place is considered a paradise by American tourists.

After a short stay the flight continued towards Canada at a height of 21,000 ft. and at a speed of 275 miles per hour. The weather, was a bit cloudy and the sea below could be faintly made out. The journey was uneventful. However, as we approached North America we beheld quite a specta-

cle. The surrounding atmosphere was dark though not cloudy (for the sun had already set) and below were the North American cities bathed in artificial light of various tints and spread over a wide area. Each city seemed as if composed of myriads of lighted candles emitting their elfin light of various colors—green, white, red, blue, orange, yellow etc, against a dark background. As the plane descended, the scene became more beautiful. Once again we fastened seat belts and awaited those two successive bumps which would inform us that the plane had touched down. Everything went smoothly; we filled in the immigration cards and awaited the word to descend. At last it came in the cool sweet musical tones from the lips of a gorgeous female "You have just alighted at Dorval Airport, Montreal. Time is now 8.45 p.m. Canadian Summer Time. Kindly make sure you have all your belongings and that your immigration card is quite correct. Please follow me". Boy! What an invitation and it needed no repetition. Hastily we descended and proceeded across the field to the waiting room of the terminal building. There I, sure had a pleasant surprise—the lady companion in the plane turned out to be the wife of one of our good old school friends and he was waiting for her the meeting called for a celebration.

I put up at Dorval Inn, (hit the straws at 11.00 p.m.) slept soundly that night and awoke at 10.00 the next morning. I performed the usual morning ablutions, dressed, visited a cafeteria for breakfast and then went to see the sights. I enjoyed every bit of it, the noise of the planes coming and going every half-hour, the dense traffic, the beautiful buildings, commercial posters and signs, the C.P.R. trains longer than the eye could see, the feed the music, television, and above all the people, their hospitality and benevolence. Two days passed as a heavenly dream.

I departed by air at 8.00 p.m. (the sun had not yet set) for Ireland and England. At about 6.00 a.m. we were awakened to witness the distant sunrise—quite a rare phenomenon which

escapes description by words. The temperature within the plane fluctuated on account of the low temperature outside, otherwise everything was serene. At 10.00 a.m. the plane touched down at Shannon, Ireland.

The one hour stay was spent in writing letters, postcards and getting a glimpse of the surroundings of the airfield. Not far away could be seen the turbulent Shannon river moving onwards to the sea, while along its banks and stretching far and wide were potato fields covered with young plants whose foliage was of a yellowish-green color.

After one hour duration the flight was continued onwards to London, where we arrived at 1.30 p.m. Here the weather was unkind, being chilly, rainy and gloomy. After passing through the immigration and Customs Offices we took bus to the B.O.A.C. terminal building within the city. By the time we reached there the weather had changed for the worse; it had become definitely cold and a bit foggy, the rain had increased. All around people were busily donning gloves and overcoats. I checked with Air India Office then took taxi to Alfred Road where I stayed with my uncle and cousin.

Three days were spent at this place, surrounded by sombre people and to inclement weather. The days all seemed like one continuous night during which the weather remained foggy and rainy. The sun was seen only once and then it was pale like the moon. I took time off to visit some of the historic places of London. However these never interested me much London is evidently a beautiful city of fine architecture and first-class planning but the enjoyment of its beauty is often marred by the 'English Weather'.

The day for my departure came and it was greatly welcomed. At 10.00 a.m. I left London by Air India International for Switzerland, Rome, Cairo and Bombay. I was seen off by my uncle and cousin and a few other West Indian folk. Life aboard followed the usual previous pattern. After 4 hours flight, Zurich, Switzerland was reached.

All my praise, love and interest go to this wonderful alpine country with its snow-capped mountains whose slopes are covered by coniferous trees, the alpine sheep amidst the green pastures or the sides of meandering rivulets whose waters are forever rippling. On the airfield stands the most beautiful terminal building I have ever seen, a building truly beyond description. The pleasure of this visit was crowned by the hospitality of the people. Alas! it ended all too soon.

From Zurich we proceeded to Rome arriving there after 2½ hours flight. Rome, the Eternal City, follows the usual pattern of Western cities differing may be in the number of its lovely squares, churches, statues and other works of art which adorn it and most of all its pigeons. The weather was bright and sunny. The next stop was Cairo. Bombay, our final stop, was reached at 1.30 p.m. the following day.

For the first time during my flight I was perfumed, but with D.D.T. as a health precaution. After this ceremony I was allowed to descend down from the plane of was then suddenly escorted by a Doctor whose first remark was 'come with me'. He seemed upset and wanted to know if I had brought

along any malarial parasites with me—may be in my pockets or in my baggage. After convincing him that it was not the practice at home to keep company with such little villains, he decided to let me go, but not before I had shown him and his associates the Island Barbados on the map. I took my luggage and started to leave but I was once again disturbed—this time of was that Indian was in search of me. I was somewhat puzzled so I started to recount what sins I had committed or omitted and if any any Indian was thus involved. While in this ponderous state the individual came up and introduced himself as Mr. Mehta—the person whom I was to contact on reaching Bombay. That was a great relief. Mr. Mehta took charge of all proceedings from there so I was saved any likely embarrassment. We had lunch together, took the bus to the city and visited his office. From there he took me over to the Telang Memorial Hostel and took leave.

Now I was in Bombay, but I was not anxious to go around this city probably because I was tired and then there would always be plenty of time to do that, considering that I would be in India for six years—so I rested.



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A patient came to the doctor, one day and sheepishly reported to him that the finger had improved, not, however, from any use of epsom salts which he had advocated but rather from a poultice of bread, soap, and water.

'You ignored my advice then,' reared up the M. D.

'Wasn't my fault, Doc. My sister-in-law was visiting us and she insisted the poultice would do the trick.'

'Poultice, eh? That's queer. My mother-in-law, who lives with us, insists epsom salts is indicated in such cases.'

'Doctor,' said the patient, 'my son has scarlet fever and he admits he kissed our pretty young cook.'

'Be calm,' advised the doctor, 'you know how boys will be boys.'

'But you don't understand, Doctor. To be frank with you, I've kissed that girl myself.'

'Well now, that is complicated, is 'nt it', agreed the doctor.

'Worse than that. I kissed my wife both that morning and that night'.

The doctor was now excited. 'Dammit,' he admitted, 'now I'll get it too'.

All the world's a stage

And all the physicians merely ushers

Ushering us in and ushering us out.

Upon reading his morning paper Mr. Raman was appalled to see his own name erroneously listed in the death notices. He charged down to the newspaper office and vigorously upbraided the editor for falsely reporting his death.

'I'm awfully sorry', the editor told him, 'but it's too late to do much about it. As you see, the paper is already out'.

"Is that all you can do?" shouted the man. "Just sit there and tell me the paper's already out?"

"Well," replied the editor calmly. "There is one thing I can do for you. I can put you in the Birth Notices column tomorrow morning and give you a fresh start".

"Let me warn you about that man in Room 807", the doctor admonished the pretty new nurse. "He's a dangerous case".

"Why, Doctor? Because He's so sick?"

"No—because He's almost well".

The mother was having difficulty making the little girl stop sucking her thumb. In desperation one day, she told the little girl that if she continued this habit she would swell up and burst. The possibility of such a calamity made a profound impression on the child and achieved the desired result.

A few days later, the girl's mother was entertaining some friends. Among the women was an expectant mother, whose appearance fascinated the little girl. She stared at the woman in silence for a moment, then could contain herself no longer. "Look at her Mummy!" she cried, "I know what she has been doing?"

The diamond is the hardest mineral - it makes an impression on a woman.

While in a military hospital at Bombay I was in the same ward as a Jamadar. He was continually firing questions at anyone within range. One morning he asked the doctor one too many.

"In civilian life, were most of your cases accidents, Sir?"

"I don't know," replied the surgeon.

"How is it that you don't know?" the Jamadar persisted.

"Jamadar", said the captain as he walked away, "I was an obstetrician".

Earnest Hemingway was being showered with questions following his dramatic adventure in Africa.

"Is it true", someone asked, "that wild beasts in the jungle won't harm you if you carry a torch?"

"That all depends", replied Hemingway, "on how fast you carry it".

A mother hen, experiencing difficulty in keeping a headstrong chick in order, declared, 'If your dad could see you now, he would turn in his gravy'.

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MADRAS-1

Hyperventilation of Muscular Exercise

By

H. D. SINGH, M.B.B.S., M.SC.,

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The respiratory adaptations in muscular exercise has been a subject of much investigation and considerable controversy during the last seventy years. Several theories have been proposed, but no single theory affords a satisfactory explanation of the mechanism of hyperventilation. This is not surprising for the problem of hyperventilation of exercise is intimately associated with the problem of respiratory control, which itself, as Gesell (11) states, "has probably given rise to as many theories as much argument as any single phase of physiology."

As early as 1888, Geppert and Zuntz (10) suggested that some chemical substance liberated by the muscles during exercise increased the excitability of the respiratory centre. Henderson (22) called this substance 'Respiratory X' or Hyperpnein. When Haldane (15) demonstrated that CO_2 was a powerful stimulant to respiration, it was concluded that increased arterial CO_2 tension was the potent exercise stimulus. But subsequent investigations showed that the increased ventilation during exercise was much greater than that which could be produced by inhaled CO_2 (5), and that though alveolar CO_2 tension may be increased in mild exercise, it returned to normal with more severe exercise (16, 28) and was even reduced in strenuous exercise (29).

Ruffel (36) observed that blood lactate increased during exercise, and on this basis it was suggested that arterial pH rather than alveolar CO_2 tension was the effective regulator of respiration (42, 21). This theory could not be supported for long, as it was later shown that

blood lactate did not necessarily rise with exercise (30, 35). Gesell (11) postulated that the H ion concentration of the cells of the respiratory centre, rather than that of blood was the prime factor in respiratory control. Thus, though chemical changes in the arterial blood was inadequate to account for the increase in ventilation, until about 1933, it was generally believed that the hyperpnoea of exercise was due to some chemical stimulus acting upon the respiratory centre.

With the brilliant discovery, by Heymans and his collaborators (24, 25, 26), of the role of the pressoreceptors of the carotid sinus and aortic arch, and the chemoreceptors of the carotid and aortic bodies, in the reflex regulation of respiration and circulation, the emphasis tended to shift from the centrogenic to a reflexogenic control of breathing. Gesell (12) now modified his theory to include the peripheral chemoreflex drives to the respiratory centre. But Schmidt et al (37, 38) showed that chemoreceptors are less sensitive to CO_2 tension than the centre, and under ordinary condition do not play a part in the control of respiration.

About this time, Harrison and his associates (17, 19) reported that in anaesthetized dogs, passive movements of limbs caused increase in pulmonary ventilation, which was unaffected by occlusion of femoral vessels, but was abolished by section of the spinal cord or sciatic nerve. They concluded that increase in ventilation during exercise was not due to chemical alterations in the blood, but to afferent impulses set up in the moving limbs. Their experimental findings have been confirmed by the author

(40). Comroe and Schmidt (8) repeated and extended Harrison's experiments, and made a number of interesting observations. They found that the respiratory responses to passive movements of the limbs, in cats and dogs, were essentially due to afferent impulses whereas the hyperpnoea of exercise induced by ventral root stimulation, in the dog was due to afferent impulses, but in the cat, due to chemical changes in the blood, acting directly or reflexly on the respiratory centre. They concluded that reflexes constitute only one of the factors involved in the hyperpnoea of exercise. Bahnson et al (3) showed that 'passive exercise' experiments do not provide a different approach to the problem of hyperpnoea of active exercise, but Grodins (13) questions the correctness of assuming that responses to passive movements prove that the same factors operate in normal active exercise. Though the role of reflexes from the active muscles has been generally accepted, Gardner and Jacobs (9) have denied the existence of such a neural pathway.

Other factors besides these central chemical and peripheral neural mechanisms have also been suggested. Harrison et al (18, 20) found that increased right auricular pressure reflexly increased respiratory rate and minute volume, and suggested their possible role in the hyperpnoea of exercise. Their observations have been confirmed by Heyer et al (23) and Singh (40), but contradicted by Aviado and his associates (1, 2) who found that increased pressure in the right side of the heart caused bradycardia, peripheral vasodilation and slight respiratory inhibition, or no consistent respiratory changes. These investigators were unable to confirm the reflexes described by Bainbridge (4), McDowell (31, 32) and Harrison (18, 20).

Rise of body temperature in muscular exercise may also be a factor contributing to the hyperventilation, and may act directly on the respiratory centres (39, 6), or via the sino-aortic chemoreceptors (37), or by altering the reaction or other physico-chemical properties

of blood (33) or by peripheral reflex factors (34, 40).

Subcutaneous injection of adrenaline has been shown to produce a significant increase in respiration in man (41) and the liberation of adrenaline during muscular exercise may be yet another contributory factor.

Krogh and Lindhard (28) suggested that irradiation from the motor cortex may be a cause of increased ventilation during the commencement of exercise, though the limb reflexes that have now been clearly established appear to be adequate to account for this change. From the data obtained from experiments on decerebrate and intact dogs, Kao et al (27) consider it unnecessary to postulate the existence of cortical irradiation.

As distinct from what may be called Single factor theories, discussed above, Gray (14) has postulated a 'Multiple Factor Theory' of respiratory control, and has worked out equations and mathematical symbols, based on three fundamental principles—(i) 'Multiple factor principle' which states that a number of factors exert independent effects of ventilation, the most important being CO₂ tension, O₂ tension and Hion concentration of blood, and reflexes from active muscles; (ii) 'Interdependence principle' which states that a change in one of the factors brings about changes in one or more of the other factors and (iii) 'the Algebraic summation principle' which states that total ventilation is the algebraic sum of the partial effects of the separate agents. He has found this theory useful in respiratory problems in aviation. According to Gray, reflexes from active muscles play a major role in respiratory responses, "but chemical agents carried by blood stream provide, (a) a fine adjustment of ventilation, automatically brought into play when reflex response is not otherwise commensurate with the increased requirements for gas transport and (b) the adjustment required for compensation for the metabolic acidosis of severe exercise."

Grodins (13) analysing the hyperpnoea of exercise on the basis of Multiple Factor

Theory, postulates that in addition to these factors, there probably exists a so-called exercise stimulus, whose nature and the pathway through which it acts is as yet undetermined and which probably acts in an additive fashion.

The present position has been admirably summed up by Comroe (7) in the following words. "Probably the most important discovery in the last century—more important than the findings of any new reflex of chemical stimulant—has been the realization that respiration is controlled not by reflexes alone, not by chemical stimulation of the medulla alone, but by the proper interaction of both factors.....Respiratory alterations in general and the hyperpnoea of exercise in particular, cannot be explained by any single simple theory, but only by a consideration of a number of known and probably many unidentified factors."

Though the vast amount of experimental work in the last few years has advanced our knowledge of respiratory control, the problem of hyperventilation of muscular exercise remains as yet unsolved, and further experiments need to be devised and conducted, and interpreted in the light of recent trends in order to obtain satisfactory solution of this intricate and complex problem.

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A P A R T H E I D

By

G. NITHYANANDHAN, B.Sc., IIIrd Year, M.B.B.S.



Is God, white or brown or black or yellow? Is He a combination of all these colours? What language does He speak? What is His Religion?

There are churches meant for white people though some churches arrange services at separate times for domestic servants, but there are missionary churches where you would find all races attending with probably separate seating and separate facilities for refreshments. Separate facilities for non-Europeans are provided on all forms of public transport including the railways, at work and in public offices, post offices, in hotels and restaurants.

The problem of human race in South Africa is a race problem, because today, we find in many countries, where different races had from time immemorable been in such close friendship and understanding beyond recognition of race and religion, are today trying to cut one another's throats. Malaya, Ceylon, Burma, India and Pakistan can be undoubtedly cited as examples, and some of the surprising incidents that speak of the newly created hatred of the Africans against the Indians of South Africa is very agonising and regrettable. With the very little knowledge we have about these minor unpleasant incidents, we cannot venture into hasty judgments that when there are differences among the coloured people themselves, how great will be the difference between a white man and a black man.

"White" is symbolic of purity of spirit and love but is that so in South Africa?

How does an African himself react to the pattern of European domination to which he is forced to respond? No doubt he expresses a large amount of hostility towards Europeans and in particular against the African's speak-

ing groups of people. We can call it a white-phobia. This attitude becomes so deeply ingrained in the personality of the people that it assumes an independent psychological function in the process by which an individual adjusts himself to his society.

Europeans generally think that the African is a child who cannot be expected to show much intelligence or ability, who is fundamentally happy because he cares for nothing other than food, drink and sex, who is liable to sudden outbreaks of brutality. "Thus the greatest conflict arises from the cleavage between black and white, the existence of colour-bar in employment and in other spheres in South Africa and the authority which the European administration exercises over the Africans". Although there is a feeling of unity in opposition to white supremacy and domination, there are a few who dare to resist openly. The causes of this reluctance of a particular set of non-Europeans to resist openly and co-operatively are many such as there exists many differences in languages, religions and racial groups and of economical status.

This colour prejudice is a kind of a defence mechanism arising from the incapacity of a minor group to make a completely successful adjustment to society.

Nevertheless it is important that a dispassionate analysis be made of racial attitudes existing in South Africa today. There are three main factors which are inseparable and together provide the foundation of racial conflict in South Africa. They are the complex ethnic composition of the population, the wide difference in cultural background between the various groups and the fact that the Europeans are so heavily outnumbered by non-Europeans.

Therefore every individual should realise that pain, pleasure and passion and hunger and thirst are common to every living being irrespective of creed, colour or religion.

It is surprising to note the Europeans who constitute 20 per cent of the population in South Africa, receive 75% of the National income. Non-Europeans who constitute 80% of the population, receive only 25% of the National income. Is this the justice of the White race of South Africa?

To give a vivid description of the daily life in South Africa and the practice of Apartheid would mean no end to this essay. One thing is certain, that this separation of races has no biological or intellectual or social basis. It is based on the pigmentation of the skin of the body and on one's birth both of which owe their loyalty to the genes of parentage and nothing else. A white in Africa has got as much below the dermis as a non-white anywhere; then why on earth should there be this social separation? They say that "Partnership in South Africa only means the eventual disappearance of the 'Whites South African Nation'..... and that the White Nation is not prepared to commit National suicide, not even by slow poisoning." This clearly shows their primary motivation to preserve the racial and cultural identity of the European people in South Africa.

The idea of sexual intimacy between persons of different social origin appears at the present day to stir the deepest emotions and evoke the maximum hostility not only in South Africa but in other parts of the world as well though on the contrary there are people who even feel a positive attraction between opposition i.e. the ultimate creation of a hybrid race in South Africa.

Mr. Alan Paton well known as the author of "Cry the beloved Country" has depicted a correct picture of every day life in South Africa. Here I shall quote a few sentences taken from his book "..... there is hardly a white house in Johannesburg (or in South Africa) that does not have its servants' quarters ranging from well built cottages to mere sheds...

the bus stops in the streets, the buses themselves, the seats for the bus passengers are some for Europeans and some for non-Europeans. If you go to the Cinemas you will find only white people. If you visit a school, you will find only white children unless you visit a school for native children in one of the locations or a school for Indian children in one of the mixed areas or a school for coloured children..... you will find also that education is compulsory for white children but not for non-whites. If you visit a hospital, you will find in the ward (or perhaps even in the entire hospital) only Europeans or only non-European patients. If you have cause to visit a doctor, you will visit a white one and you will find only white people in the waiting rooms. Occasionally you will see a black person (who may be ill) waiting outside the corridor. You will no doubt find this painful, but you must know that white doctors who have mixed practices usually make separate provision for waiting patients..... you must know that a black doctor would never attend to a white patient except under the most urgent circumstances or secretly....."

A black will never be expected to shake hands with a white person and a European who shakes hand with an African is likely to be ostracized.

The University of Natal has recently established the Durban Medical School for African Doctors. Although the school is separate from the Medical School meant for European students, the standards demanded are precisely the same. The students sit for the same examination, but are not eligible for the same degrees when they pass out.

I have only tried to put before you some salient features of the problems confronting the coloured peoples of South Africa. I sincerely hope that the United Nations will try its utmost to do all that is within its power to allenate the sufferings, to better the standards of living and most important of all to ensure that equal opportunities are afforded to the coloured peoples of South Africa.

"My Only Wish"

I wish I live unseen, unknown,
This world is not for me,
I seek no honour nor renown,
But where my Lord may be.

I long to see the Promised Land;
True Love I shall find there,
I find no hope or helping hand
And none to show me where.

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No one shall feel the loss,
No stone to mark the place I slept
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A Case of Gastric Ulcer with peculiar features

By

DR. T. A. K. RATHNAM, M.B.B.S.



The abdomen is a temple of surprises, but stomach is only a park with well-laid paths of pathology. Novel features in lesions of the stomach are rare. As a general rule, with a careful history and clinical examination, the trouble can be traced to the stomach, if that is the case. Once this is done, the stomach can be investigated by biochemical, radiological and endoscopic methods. Thus a complete or nearly complete pre-operative diagnosis can be given in a gastric lesion.

Case Report

A hindu, nonvegetarian male, aged 47 years from Madras, reported for pain and a lump in the upper part of the abdomen, of three month's duration. On interrogation, the history of abdominal pain extended further back to two years. The site of pain, relation to food and periodicity of pain were all typical of a gastric ulcer. But during the last three months, the dull boring epigastric pain had become almost constant and increased soon after food. Somewhat simultaneously he had noticed a lump about the size of a lemon, near the umbilicus. He had no pain in the lump itself. At the height of the epigastric pain, he used to press on the lump, which led to belching giving him some relief. There was no vomiting. His appetite was poor (he was unable to say since when), bowels normal and sleep was disturbed by the pain. At no time did he have any acute illness or fever or colicky pain in the lower part of the abdomen.

He was thin but not anaemic and bore a countenance of suffering from chronic pain. On abdominal inspection, a lump could be seen, two finger's breadth above

and to the left of the umbilicus. It moved with respiration, a finding which was confirmed by palpation. The abdominal skin was normal, there was no visible peristalsis. Most of the lump was beneath the left Rectus abdominis muscle, not warm, not tender on ordinary palpation, but had pain on deep pressure. It was of a lemon's size, firm with a smooth surface and edges not definite. Movement of the lump itself could not be elicited. Percussion over the lump produced a dull note, but all round its periphery it was resonant. Liver and Spleen were not palpable, other parts of the abdomen normal. External genitalia and spine were normal. Rectal examination did not reveal any abnormality. Other systems were normal.

From the history and clinical features, it was found that the patient was suffering from chronic gastric ulcer, which perhaps had turned malignant. However, since a gastric ulcer does not usually occur so far down and out to the left of midline, we thought the lump may be a growth in connection with the transverse colon. The age, sex and some of the clinical findings were in favour of both but the history was in favour of a gastric ulcer and against a colonic growth. There was no history for evidence of obstruction or any clinical features of colonic growth.

The routine investigations of urine, motion, blood, and X-ray of lungs were done. F.T.M: Total and free acidity were within normal limits and there was no blood in any of the specimens. Fluoroscopy with barium meal revealed findings of great interest. There was a large ulcer in the anterior wall of stomach, very clearly seen in the lateral view; it emptied

easily showing that the ulcer crater was shallow and smooth. It was adherent to the anterior abdominal wall and did not shift with peristalsis. The pattern of rugae close to the ulcer could not be made out. There was also another ulcer in the lesser curvature. Rest of the alimentary tract was normal.

The final preoperative diagnosis was gastric cancer of ulcer origin and a radical gastrectomy was decided.

Under general anaesthesia, a high left paramedian laparotomy was done by Dr. A. Venugopal. In the anterior wall of the stomach an ulcer about the size of an eight anna coin was adherent to the anterior abdominal wall at the place where the lump was felt.

The stomach was cut all round from its attachment to the anterior abdominal wall. This opening in the stomach was closed by a purse string suture. In the abdominal wall, there was a deep crater, in which the tip of the thumb could easily fit in. The crater had penetrated the muscle layers and its floor was nothing but subcutaneous tissue which was just outside the lateral border of the rectus. The fibrous wall of the crater was dissected out from the abdominal wall and sent for histopathological examination. In addition to, there was another ulcer in the lesser curvature and yet another in the posterior wall; but otherwise the stomach wall was supple and not at all thickened in relation to the ulcers. There were no glands either in the cardia, or along the omenta. In view of the multiplicity of ulcers, a sub-total partial gastrectomy was done. After the duodenum was closed an antecolic isoperistaltic gastro jejunal anastomosis was done.

The defect in the anterior abdominal wall was closed by deep catgut sutures. A rubber drain was inserted near the duodenal stump region through a stab incision in the right hypochondrium and the abdomen was closed in layers.

Post operatively continuous Ryle's tube aspiration, intravenous fluids, antibiotics and sedation were given for four days. On the fifth day continuous suction by Ryles' tube was changed to fourth hourly aspirations and intravenous fluids were replaced by oral feeding. On the sixth day the rubber drain was removed, and all the antibiotics were stopped on the eighth day. On the tenth day sutures were removed; wound had healed by first intention.

The pathologist's report was that there was no evidence of malignancy in the ulcer margins.

Gastric ulcers are more common along the lesser curvature but in this case ulcer was situated on the anterior wall of the stomach which is very rare. How the ulcer on the anterior wall of the stomach could have become adherent to the anterior abdominal wall is very difficult to explain. If he had neglected his condition for some more time, he would have developed a gastric fistula.

Conclusion

This case is presented because of the following features:—

- (1) Ulcer over the anterior wall of the stomach is very rare.
- (2) Even if he had an ulcer on the anterior wall of the stomach, it was very difficult to explain how it could have become adherent to the anterior abdominal wall.
- (3) The barium meal pictures revealed typical ulcer but did not show where exactly it was situated.
- (4) A sub-total gastrectomy is the treatment of choice in such cases.

Acknowledgment

My thanks are due to Dr. A. Venugopal, M.S., F.A.C.S., F.I.C.S., for his guidance and to Dr. A. Umapathi, M.S., for his help and assistance in bringing out this article.

Inaugural address to the Medical College Union on 6th August 1956 by Sri J. M. Lobo Prabhu, I.C.S.



Seven years ago, as Health Secretary, I addressed your union. Since then, I do not know, if I have gone up or down to be Home Secretary. One thing however is certain, that in the seven years while you have grown from school or college, I have commuted at the same level, gaining if at all, the experience that there is so much to do, so little done. In those seven years though in the State the number of hospitals has risen from 489 to 791, and the number of doctors from approximately 800 to 1600, no one can pretend that medical services and facilities are available to any large proportion of the people. Rural areas where the majority of the people live, probably continue to be as badly served. In towns and cities, there may be more doctors and equipment making life last a little longer for those who have a some more money. But medicine makes people no more healthy than imprisonment makes them law abiding. It is generally curative and not formative. I would take this opportunity to talk about the formative aspects of public health.

It has been observed cynically that whether an apple a day keeps a doctor away or not, good surroundings, a full plate and some laughter keep doctors at some distance. The basis of health is a clean, cheerful and full life. In India, where 80% of the population live in houses dank and dark into which they have to crawl, health is to the largest extent already lost. In the villages of the Madras State the largest number of houses are such that dogs cannot be persuaded to stay in them. Until houses with light and air, with some furniture and conveniences are available, the hospitals will be full of sick and dying people. It has appeared strange to me

that the Medical faculty has not been conscious of this aspect, and has failed to raise its voice in favour of better housing. In respect of food also there has been similar inattention. People are in poor health because their diet, largely vegetarian lacks the right proportions and is colorifically sub-standard. Nutrition studies no doubt are made, but there are no nutrition programmes to remove a basic cause of poor health. What one wonders are doctors doing, when they ignore something more deep seated than all the diseases they treat.

In respect of the generally depressed state of the people there is similarly a conspiracy of indifference. While it is recognised that laughter is good both for the body and soul, for the nervous as for the endocrine system, what are we doing to provide people with the right amusements and recreations? In the villages life is a monotonous process of eating, breeding and dying—Not even the children laugh or play.

It may seem far fetched to accuse doctors of a conspiracy to promote bad health, but that is actually what they are doing when they fail to agitate for better conditions of living. Their opinion in these matters must influence those who are in a position to change living conditions. Their silence would be an excuse for the prevailing default to provide the ineluctable necessities of health.

It sounds ungrateful that in a medical institution, I should criticise doctors. It is not that I do not value their services. Their difficulties are first their patients. Without proper housing, food and interests, they lack the preliminary qualifications for good health. Some of them add to this a refusal to disclose their symptoms. Many of them tell the doctor

to find out what is wrong with them. I know one doctor say that he was not a veterinarian to make a diagnosis without asking questions. On the other hand, there are many who exaggerate symptoms. One patient complained that he was haunted, that his dead relations came in numbers and sat on the posts of the fence. "What should I do". The doctor replied, "Sharpen the tops of the posts." Some patients show lack of faith. One is reported to have said "Other doctors seem to differ from you." The doctor cheerfully replied, "The post mortem will show that I was right." But there are doctors who make mistakes. The story is told of a local doctor, famed for his penetrating diagnosis that he looked into the eye of a patient and proceeded to find degeneration of the heart, liver and kidney. The patient told him that he was looking into his glass eye, and may see his good eye for other symptoms. There is a similar story about Doctor Hill. When the medical faculty were extolling the qualities of penicillin, he wrote that he was trying it on a broken leg of sailor and would communicate the results after more prolonged observations. Ultimately he reported a complete cure, adding as a post-script that the leg was a wooden one. Very recently two specialists were examining a lady under her bed clothes. By mistake one got hold of the wrist of the other. "I am surprised", he declared, "looks like a case of drunkenness." Another egregious diagnosis was by a professor, not of your college. He advised the patient, outdoor life, atleast two miles of daily walking. The patient declared that he pulled a handcart and did not have a house. In another case, the patient came to thank the doctor. "How many bottles did you take?" The patient replied, "I did not

take any of it. My uncle took one bottle and I am his sole heir."

It is said that doctors think only of their fees. The classic story in this respect is of a doctor, who told his friend, "There goes the only woman I ever loved."

"Why did not you marry her?"

"I cannot afford to. She is my best patient." Perhaps it is unfair to accuse only doctors of fondness for money. They are no worse than others though because they are dealing in human lives, their demands show a little differently. We all live two kinds of lives, one for ourselves, another for others. The greatest of us adopt the whole world as their family for whom they live and die. For the smaller among us, our work provides those whom we can serve. As far as doctors are concerned, they literally save the lives of others. What is important is that they regard this not as a necessity, but as a fulfillment of their own lives.

It is also said that doctors in this country are not sufficiently interested in study and research. This may not be true of a College like yours which produced Donavon. His tradition must still be alive. There is nothing more fascinating than the use of the mind. The challenge that anything we do, can be done better, is the very basis of civilisation. And anyone can contribute to civilisation, if only he turns things round to see some better way. In an unforgettable poem, Masfield refers to the No Highmore more which is the thoughts men encounter. And he concludes—

"From the littlest clue has come
Whatever worth man ever knew
And next to lighten all mankind
May be you."

*The future destiny of the child
is always the work of the Mother*

—NAPOLEAN.

Members of the Student Delegation from the University of California who paid us a visit recently



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Miyakawa

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Just A Minute!

By Varma

Onam Day Celebration Report



We have great pleasure in submitting the report of the Onam Day Celebrations held in the Madras Medical College on the 2nd September 1956.

A committee was formed with Dr. C.P.V. Menon as President, Dr. Govinda Menon and Dr. Krishnan Kutty as Vice-Presidents, Dr. R. A. Varma as Treasurer and Miss C. P. Kalyani Kutty and Mr. A. V. Abdul Azeez as Secretaries.

The function was celebrated on a grand scale. Prominent amidst the large gathering were such eminent personalities as Mr. Gopala Menon, former Speaker of the Madras Assembly, Justice Kunhi Raman, Justice Govinda Menon, Dr. Prasada Rao, Dean of the Madras Medical College and Dr. Pisharoty.

The guests were served light refreshments at 5-30 p.m. after which a programme of variety entertainment was gone through. Each item in its own way, represented some aspects of the culture of Kerala. The floral Carpets, drawn by our talented students, were well appreciated by the guests. The dance items, Mappila patu and the Shadow play deserves special mention.

We take this opportunity to thank our beloved Dean, our teachers and our dear friends whose unstinted help and encouragement helped to make the function a grand success.

Thank You.

Miss C. P. Kalyani Kutty
Mr. A. V. Abdul Azeez
Secretaries.

Mr. K. C. Rajagopalan
Entertainment Secretary.

Book Review

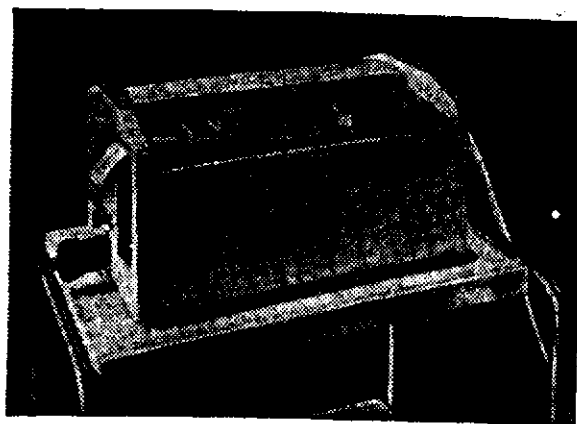
NEW BURMA ROAD,
By Norman Cliff

This booklet published by the WHO tells the story of resurgent Burma's progress along the new road of prosperity. Mr Norman Cliff has managed to capture and put into words something of every grand programme and every effort undertaken by the WHO to ensure better health to the people of Burma.

Indeed, it is a fine little story of a great war waged against poverty, squalor and disease by the people of Burma with the help of the WHO. With courage, faith and hope they are marching on—along the new road of peace and prosperity. Ere long they are bound to succeed.

The booklet is well laid out and attractively designed. Copies can be had from Public Information Unit, WHO Regional Office for SE Asia, Patiala House, Prince's Park, New Delhi.—C. A. A.

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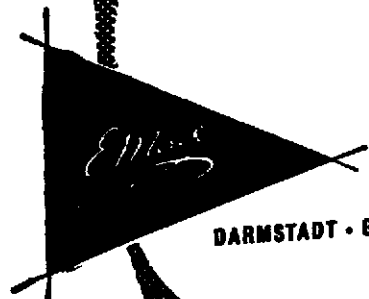
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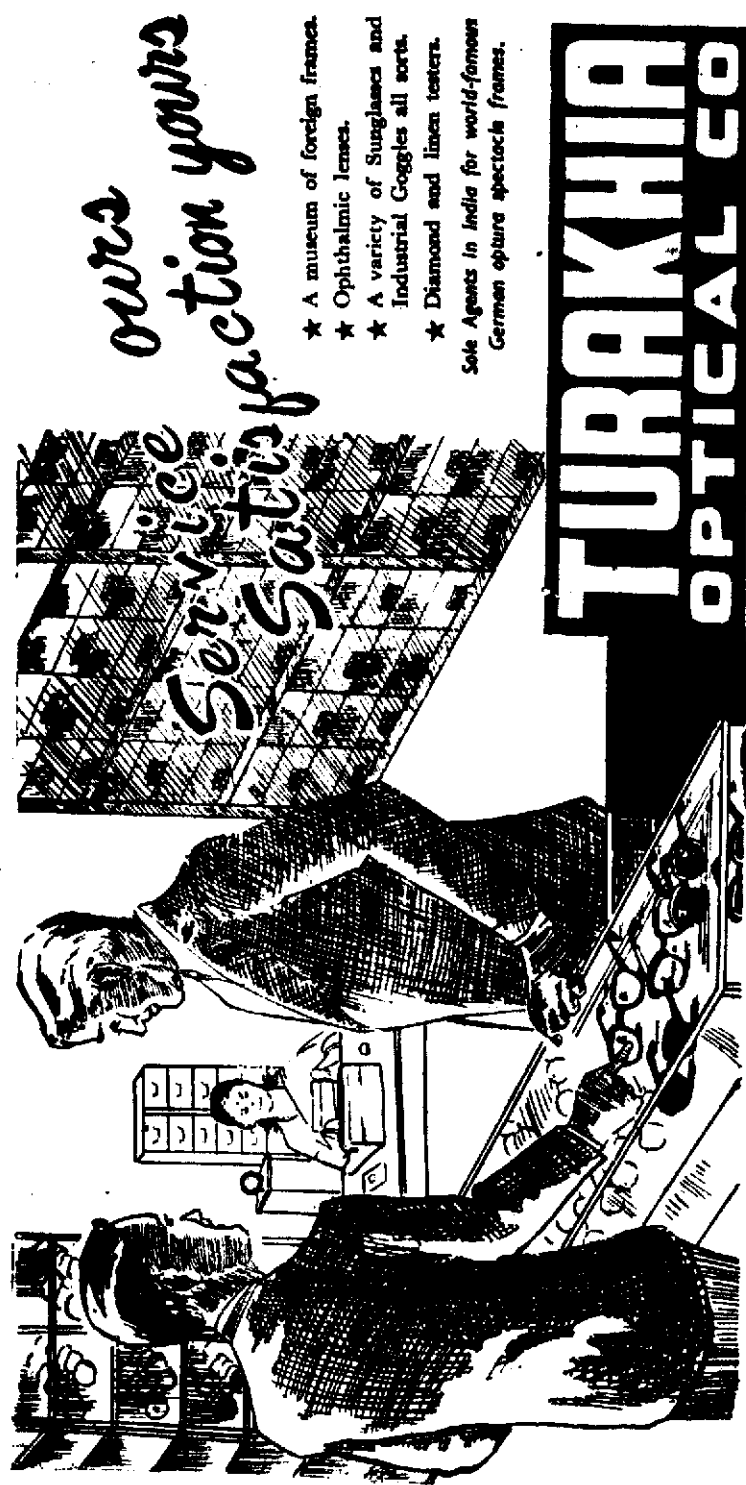
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