V. No. 7 APRIL 1934

The Medical Practitioner

A Monthly Medical Journal

EDITED BY
Dr. M. S. Krishnamurthi Ayyar, M. B. & C. M.,
Retired Sanitary Commissioner, Travancore State.
AND
Dr. V. Rama Kamath,
Member, Madras Medical Council.

CONTENTS.

instead of getting a report from a Committee, which will be by the pen of the Surgeon-General. Honorary Medical Relief is to be given by the members of the Independent Medical Profession to the public and it would have been the duty of the Government to get a Committee appointed by the Legislative Council and get evidence by public enquiry as suggested by us here last month instead of limiting the scope of this Committee to the opinion of the Surgeon-General and of the individual members of the Committee, all of whom cannot be said to be voicing public opinion."

We are justified in our apprehension. The Committee sat only for two days and did entrust to the Surgeon-General the future development of the scheme without even attempting to draw up a skeleton for his guidance, where and how the scheme should be extended with regard to additional staff and also substitution of honoraries for paid medical officers. It is true that Major-General Sprawson, the then Surgeon-General was very sympathetic towards the scheme of honorary medical relief and as such was perhaps considered by the members of the Committee as a safe person to be entrusted not only with the drafting of the report but also in giving effect to the recommendations made by him for the Committee. But the Committee ought to have requested Major-General Sprawson to make concrete proposals to be followed by his successor or successors in office, as the exigencies of service could not permit Major-General Sprawson to continue to be Surgeon-General with the Government of Madras till he puts in practice the general scheme of extension which he had in view or which he perhaps expressed in detail by word of mouth to the members of the Committee. Even before the Committee's report was published Major-General Sprawson had to leave his office as Surgeon-General and his successor or successors could not be expected to know or to do what Major-General Sprawson had in mind.

The first para of the report of the Committee recommends that in out-patient institutions where the daily attendance is more than 100 there should be more than one medical officer and one of them must be an honorary. The wording is very vague. A maximum or minimum number of paid and unpaid medical officers ought to have been mentioned depending upon the daily attendance. In 1931 as soon as the Government appointed the Committee to go through the scheme of honorary medical officers we wrote a series of articles commencing from the June issue of that year discussing about the scheme stage by stage and deprecated the system now prevailing in this country of the Government spending large amounts of public funds in the establishment of the out-patients departments and said that "no feeding house or Chatrum was maintained by the Government out of public funds and similarly no dispensaries which served only the purpose of Chatrums should be maintained at public cost. The patients attending the out-patients department derived little or no benefit, as no careful observation and hence diagnosis could be made in the limited time when the out-patients attend these institutions. We pointed out another serious objection and said, "The most important objection however, is that when the Government is extending the system of honorary appointments in hospitals in conformity with the practice obtaining in other civilised countries and in view of the retrenchment in Government expenditure now under investigation, facilities should be thrown open without any hindrance for these honoraries to earn their livelihood by private practice and the running of dispensaries from public funds will surely go against the interests of these honoraries with reference to their private practice. All dispensaries either wholly supported from public funds or government grants should be closed gradually as medical practitioners come to settle down in villages and smaller towns. Local Boards and Municipalities should not spend money from public funds for these dispensaries. The practice of permitting Local Boards and Municipalities to open dispensaries, which many of them do to gain cheap popularity and at the same time extend the system of honorary appointments in moffussil hospitals cannot go together, as the one is incompatible with the other. It is only in exceptional cases as in endemic malarial areas, special dispensaries may be opened from out of public funds."

In the second para of the report it is said that opinion was divided in the Committee

whether the time was yet ripe for substituting paid medical officers by the honoraries. But the subsequent portion of this para betrays the helplessness of those who were for the immediate substitution of the paid medical officers by the honoraries, as it is said that even in isolated instances where the Surgeon-General might perceive suitable opportunities in time, place and personnel for the introduction of such a change, the Committee opined even such a change should be gradual as suitable officers become available. It looks as if those who formed this Committee did not conceive the idea of subordinate honorary medical staff and were perhaps obsessed by the complex of the superior staff., i. e., the honorary physicians and surgeons. The Honorary system, to be efficient at all, ought to commence its working on sound basis from the bottom and not from the top. It is therefore necessary that all attempts should be made immediately to replace the paid subordinate medical officers by the honoraries. There can be little or no objection for such a change to be introduced immediately. The Assistant-surgeons in charge of moffusil medical institutions and in the city hospitals were recruited from amongst the graduates who had only training as house-surgeons and house-physicians for a year or two at the most. There are now available amongst private practitioners a large number of graduates and licentiates who have not only undergone the training as house-surgeons and physicians but have put in one or two year's training as clinical-assistants in many hospitals. These medical men could not be considered as unfit to hold subordinate appointments as honoraries both in the City and the moffusil hospitals. The administration difficulty suggested by the Committee is certainly a flimsy excuse, and it is most regrettable that the Committee could not suggest ways and means by which the medical relief in Government Institutions could be carried by the honorary staff more efficiently without affecting the present administration routine. It looked as if the members of the Committee had eyes but would not see. They had before them as referred to above the example of the Royapettah Hospital where the experiment of the substitution of the paid staff by the honoraries has not only proved economical but also efficient with regard to the medical care of the patients in the hospitals. The Committee ought to have fixed the strength of the staff required for each hospital both in the City as well as in the moffussil. In hospitals where there is provision for more than 20 beds there should be two paid medical officers, one male and another female both of the same grade of pay as is now given to sub-assistant surgeons, the former being the Resident. We have suggested the necessity of paid women sub assistant-surgeons in moffussil stations as at present there are practically no women practitioners in those places and the services of medical women are much needed in each and every hospital. The Chief Medical Officers for professional work should be honoraries wherever possible and the administration of hospital for non-professional work should be looked after by the paid medical officers. The duties of the honoraries in the subordinate grades appointed in the moffussil hospitals should be the same as those of the paid officers they replace. For the maintenance of records, accounts and the preparations of periodical returns and the internal management of the institution should be carried out by the paid medical officers, male or female, who should invariably be the resident medical officers of such institutions. The honorary should be made always available in case of emergency when requisitioned for help by the paid staff of the hospital. Medico-legal work including post-mortem examination in the state hospitals should usually be done by the paid staff but in their absence, the honoraries should do the work and have to be paid for. Similarly medical certificates for police and other cases may be granted by the honoraries in the absence of the resident medical officers in such hospitals. A schedule of fees for such work should be published for reference. Where there are conveniences for quick traffic the paid assistant-surgeons attached to the District hospitals must be made to go out for performing the post-mortem examination work and if feasible, in some districts a medical officer may be appointed specially to conduct postmortem in the whole district.

Early in 1931 when the Government appointed the Committee to go into the question of extending the scheme of honorary medical officers we pointed out the

desirability of stopping further recruitment of assistant-surgeons. If our suggestion was carried, it would have served the double purpose of not only effecting economy but materially extended the scheme in the true sense. The recommendations of the Committee under reference and also of the previous committee appointed in 1931, have served only as mere eye-washes and enabled the Government to have another department under the control of the Surgeon-General with little or no material advantage either to the independent medical profession or to the Government.

The recommendations contained in the third para of the report regarding the equipment of special departments to the District Head Quarters hospitals has been the policy of the Government these few years and the Committee cannot take credit for the inauguration of this reform.

The other recommendations in the report concern only the Government General Hospital and the Government Royapuram Hospital in the city and the demands for reform in these two institutions seem to be of a personal nature and the Surgeon-General's approval of the demands savours the spirit of a compromise. Two members of the Committee working as honorary physicians in the Madras City Hospitals "expressed the opinion that there were too many beds allotted to some physicians and surgeons at the General Hospital and Royapuram Hospital and that the cases could be better dealt with by an increased number of honorary medical officers or by a more even distribution of beds." "The Surgeon General has approved of their proposals on the understanding that the allotments are personal to the present incumbents and not necessarily attached to the appointment."

The outpatient-departments of the General and Royapuram hospitals are given two honorary medical officers, one male and other female. It is not known of what rank they are. The insistence on the part of the Superintendent, Royapuram Hospital, to have these honoraries in the person of graduates ought not to have been favoured by the Committee as the Royapuram Hospital which trains only Medical Licentiates ought not to have debarred medical practitioners holding the Licentiate qualification from holding these posts. As the wording of the report stands, only graduates of the University have to be appointed for these posts.

It is not known why the Committee did not include the mofussil hospitals in their recommendation with regard to future extension of the staff but made mention only of city hospitals. We trust the omission of the moffussil hospitals is only an accident due to the absence in the Committee of any representative from amongst the honoraries serving in the moffussil.

The recommendation in the report of the substitution of an honorary medical officer for a Government medical officer for special teaching appointment only at the Royapuram Hospital in the city and not at the Madras Medical College and Vizagapatam Medical College is yet another proof that the scope of discussion on honorary system must have been confined only to such of the institutions from where the representatives of honoraries were recruited into this committee.

Regarding the appointment of honoraries, beyond mentioning that it should be done by advertisement, nothing is said in the report about the agency who should select the candidates. We mentioned in these columns more than once that the selection of the officers should be entrusted to a Committee of at least three medical men including the Surgeon-General, the other two being private practitioners who should not be honoraries.

Defective as the report is, we have grave apprehension whether even the half-hearted recommendations would be given effect to, for we find that in spite of the Government having gone through this report they have included in the last budget salaries of the additional staff for the new Surgical Block recently opened at the General Hospital, in direct contravention of the recommendations of this Committee containing in para 8 of the report.

Original Articles

*CALCIUM IN THERAPEUTICS

By

DR. S. W. HARDIKAR, M.D., M.R C.P.,

Professor of Pharmacology, Osmania University, Hyderabad (Deccan.)

Before I enter upon the subject of my paper, I believe a word of explanation is necessary in self-defence from me. When the organisers call upon a person to give a paper on a subject of his own choice, the expectation is, I believe, that the person would choose a subject of which he has made a special study and that the audience would get something new and authoritative from him. On this condition, my honest duty would have been to decline the honour of being here before you, for, there is at the moment at least, no subject on which I am over-flowing with information worth communicating to others. Why then, have I presumed to take up the time of such an assembly as this?

My plea is that the therapeutic use of Calcium is a subject very much in the air at present; it happens also to be a subject about which knowing next to nothing, I am anxious to learn something; and I thought that a promise to address this meeting would be a good way of compelling myself to read up a little about it, and to learn something more from those with a wider and more varied experience, than my own.

As nothing helps to show the imperfections in our knowledge better than an attempt to lay it before others, I shall first try to epitomise the known facts and some opinions about Calcium and its Therapeutic uses. If in doing this, I appear to be too elementary, please do not take it as an insult to your knowledge or understanding, but only as the expression of a beginner's attempt to find his way in a jungle and to be sure of his bearings.

Calcium as we know, is an essential constituent of the body. While the mention of Calcium brings the bones before the mind's eye, it is useful to remember that it occurs and its presence is of vital importance, in the cells of the soft tissues and in all body fluids. The daily Calcium requirements of an adult amount to about half a gramme, being somewhat larger in proportion in the growing child. The bodily Calcium exists for the greater part in the insoluble form in bones; there is however a small but fairly constant amount of circulating Calcium in the blood; partly as non-diffusible Calcium in combination with plasma-proteins, more particularly the albumin, and partly as diffusible Calcium, a small part of which again is ionised Calcium and the rest non-ionised, (normal 10 m.g. per 100 c. c., 50% non-diffusible, 50% diffusible, 20% ionic). There is, however a regulatory mechanism for keeping the blood Calcium constant just like the one we are familiar wiih in the case of blood sugar, and it appears that if the level of ionised Calcium in the blood falls, it is made up from the non-ionised portion, which may be looked upon as an immediately available reservoir and the deficit here is made good from the Calcium absorbed from food material, or if need be, by mobilisation of the calcium stores in bone, resulting, of course, if the drain is excessive, in marked Osteo-porosis.

What are our sources of Calcium income? The suckling gets all its Calcium in the mother's milk. It is worth noting that Calcium equivalent to a day's requirements of an adult is contained in a pint of cow's milk (Ash 0.75% of which 0.12% is Calcium; therefore 1 pint = 0.65 G. Calcium). Other foods rich in Calcium are eggs and green vegetables, but meat and cereals are poor in Calcium; and would require several pounds of these daily to furnish the required amount of Calcium. As regards the absorption of Calcium there seems to be some difference of opinion: some say that the Calcium of milk is absorbed more easily than that from vegetable or mineral sources, while others maintain that even the Carbonate and Lactate serve quite well, for after all, they are partly converted into the Chloride in the stomach and are absorbed from the upper bowel in which the reaction is acid. All are agreed, however, that a fairly large portion, about 40%, of the Calcium given by mouth passes without being absorbed; the exact proportion of this is however difficult to determine for two reasons: (1) while Calcium is absorbed from the upper part of the intestine, its excretion from the body takes place to a

*Paper read at the Fourth Andhra Medical Conference, Bezwada, on 30th March 1934.

certain extent from the lower bowels so that estimating the total excreted in the faeces gives us no clue to the amount that has passed on without absorption and that which is being thrown out after having circulated in the body, (2) secondly Calcium is also excreted from other channels, mainly the urine, the partition between the faeces and the urine depending upon the amount of fat in the diet, the available acid and other factors such as the amount of Vitamin D., the amount of Ultra Violet radiation and activity of the Para-Thyroid glands. Briefly the role of these factors may be stated as follows:—

(1) A certain amount of fat is necessary for the proper absorption of Calcium (according to metabolism observations this is best when the relation of Ca : fat is 1 : 20, which is almost the exact relationship in cow's milk—Holt's Diseases of infancy). If however there is excess of fat, insoluble Calcium soaps tend to be formed and more Calcium passes unabsorbed.

(2) An excess of acid ingested either in the form of acid producing articles of diet or administered as dilute acid or neutral salts which yield acid ions easily such as Ammonium Chloride or Calcium Chloride tends to increase the absorption and urinary excretion of Calcium at the expense of the faecal, (daily urinary excretion—0.15 to 0.5 G., mainly as phosphate—the remainder by the faeces). In other words, acids especially Hydro-chloric or Phosphoric would promote the intestinal absorption of Calcium, but if Calcium supplies are inadequate, these acids during their excretion would deplete the body of its Calcium reserves, that is, ultimately the Trabeculae of bones, leading to their softening.

(3) The function of Vitamin D :—

The mechanism of its action is not known but its administration appears to increase gradually the proportion of inorganic phosphate of the Plasma, restoring it to normal if it was previously low and carrying it to very high values with excessive doses. The results depend upon whether Calcium and Phosphate of the diet are abundant or deficient. In the first case absorption of both Calcium and Phosphorous from the intestine is promoted, there is restoration to normal of the Calcium in the plasma or Hyper-Calcaemia (with over doses) deposition of normal bone salts (with excessive dosage there is Meta-static ossification such as in the large blood vessels). In the second case while the Calcium level in the Plasma is raised this occurs at the expense of the body stores of Calcium and may lead on to Osteo-porosis.

The effects of Vitamin D. and Para—Thyroid Horomone are somewhat similar, but the Vitamin D. effect is apparently not exerted solely through the Para-Thyroid for it can still be obtained after removal of these glands, although the dosage must be a 1000 times more than the ordinary; further, while injection of Para-Thyroid Hormone raises the Plasma-Calcium level in 4 or 5 hours, Vitamin D. requires 30 to 36 hours, though the effect lasts longer.

(4) Ultra-Violet radiation of the body appears to enable an animal to manufacture its own Vitamin D. and thus help the utilization of food Calcium which in the absence of Vitamin D. is not properly metabolised.

So much for the absorption of Calcium given by mouth, but a more rapid absorption and more rapid effects on the level in blood and systemic manifestations can be obtained through the administration of soluble Calcium salts such as the Lactate or Gluconate, intramuscularly or these as well as the Chloride intravenously.

What are the functions of the Calcium in the body.? Here again perhaps the first thought is that the main function of Calcium salts is to impart rigidity to the bones; there are however other functions of greater importance, if not quite so obvious. You will remember how the presence of Calcium ions is absolutely necessary in the perfusion fluid in heart experiments; and some go even so far as to say that Cardiac-Tonics such as digitalis do not exert their full effect in the face of Calcium deficiency. Calcium is of course necessary for the proper coagulation of blood and milk, for the conduction of impulses in nerve and for maintaining the proper level of excitability of nerve and muscle. Other functions of importance that I might mention are, regulating the permeability of membranes and capillaries

and governing the water affinity of tissues and regulating the acid base equilibrium. I have enumerated these as they are of importance in the Therapeutic employment of Calcium and some of these points might be taken up a little more in detail with profit.

A deficit of Calcium ions in blood such as occurs on the removal of Para-Thyroid glands leads to excessive irritability of nerve and muscle such as is seen in Tetany.

Other symptoms of parathyroid or Calcium deficiency are cramps, numbness, tingling sensations, a feeling of pins and needles, grave depression, pronounced irritability, craving for food, excessive appetite, pallor and undue fatigue. The symptoms of hypercalcaemia are vomiting and diarrhoea which should serve as a warning; more severe symptoms are apathy, lethargy and coma culminating in death. The plasma volume diminishes greatly and the viscosity of blood rises, hindering its circulation.

We shall now review the question of Calcium Therapy, remembering that Calcium effects may be obtained either by administration of Calcium salts themselves by mouth or other channels, or by exhibition of agents like Vitamin D (Cod Liver Oil or Viosterol) or parathormone, which raise the Calcium level in blood by either promoting absorption of it from the intestine or mobilisation of Calcium from the deposits.

Of diseases due to excess of Calcium in blood one sees very little; they are described as occurring in neoplastic diseases of the Parathyroids, as Osteitis fibrosa diffusa and in hypervitaminosis when vitamin D preparations are given in excessive doses, but conditions of calcium deficiency-real deficiency of intake are also and should be very rare. But conditions of deficient assimilation are more often seen;--among these are included Rickets and conditions of parathyroid deficiency from operative removal of the glands. These conditions practically limit the field of specific Calcium Therapy.

What is more to the fore in the literature on Calcium Therapy is its non-specific use in conditions in which a deficiency or excess of Calcium is not definitely proved and it is here that the greatest amount of confusion exists. I shall take up a few of these conditions: 1. Dental caries and deficient ossification. 2. Pregnancy and lactation. 3. Eclampsia. 4. Hepatic insufficiency. 5. Haemorrhage. 6. Oedema, non-inflammatory and inflammatory. 7. Allergic conditions-asthma, hay-fever, eczema, angioneurotic oedema, muco colitis. 8. Tuberculosis.

DEFICIENCY DISEASE AND TRACHOMA.

By

LT. COL. R. E. WRIGHT, C.I.E., I.M.S.,

Superintendent, Govt. Ophthalmic Hospital, Madras.

Lecture No. 1.

(Continued from March issue)

TRACHOMA.

I have linked trachoma with deficiency disease more for convenience in spacing the subject matter of these lectures than anything else. It shares with the latter the distinction of having been well-known to the ancients, but unfortunately hundreds of years of study by the medical profession has not thrown much light on the aetiology or treatment of this affection.

Trachoma is a chronic inflammatory affection of the conjunctiva which sometimes appears to follow an acute onset but frequently sets in insidiously. Its clinical evidences in the early stages are unrecognisable with certainty. All the vaunted criteria for recognising this affection in its beginnings fail again and again so that I personally do not feel justified in teaching students or post-graduates to do anything more than record that a suspicious case is "trachoma-like." This, to my mind, is a safer procedure than labelling a doubtful case trachoma and subjecting the patient to some of the appalling forms of treatment recommended for this disease which may do such damage in a non-trachomatous affection as to produce changes in the tissue as may well be mistaken for the later stages of the disease itself; if indeed the disease has not been grafted on to the individual during numerous attendances with other sufferers at some overcrowded dispensary. Another diagnosis which, in my opinion, should never be made is that of "granular lids." It

is a method of hedging adopted by some members of the profession when uncertain as to what conjunctival condition they are dealing with. This pseudo diagnosis gives a sort of moral support which enables the doctor to proceed at once with methods of treatment which are calculated to transform a relatively simple affection into a condition of misery for the patient. The general public has a sort of horror or "granular lids" whatever that term may mean, and patients are contented to suffer much at the doctor's hands when so diagnosed. I regret to see that the term is still used in anti-trachoma propaganda by a distinguished medical pamphleteer. One of the most frequent errors in this connection is mistaking trachoma for that form of chronic conjunctival irritation associated with inspissation of the contents of the small flask glands of the mucous membrane, in which small yellowish seed-like elevations of the conjunctiva make their appearance. But one need not particularise; practically every variety of conjunctivitis has been labelled granular lids at one time or another and treated for trachoma.

Aetiology. An enormous amount of work has been done and is being done in connection with the determination of the cause of this disease. There are distinguished ophthalmologists who consider that they can recognise the disease even in its earliest stages by the appearances of the tissues under the microscope; others who believe it is due to a specific micro-organism which they can isolate, but many who remain sceptical as to the possibility of early diagnosis. I must confess to belonging to the latter class. Some years ago the distinguished Rocke feller bacteriologist Noguchi felt certain that he had isolated the organismal agent of trachoma. His B. granulosis isolated, (in pure culture), from trachomatous Red Indians, produced a conjunctival condition in chimpanzees very similar to the earlier stages of trachoma in man. In 1927 I was privileged to examine some of Noguchi's chimpanzees and felt sanguine that at last the causative agent had been discovered, for although the clinical evidences in these animals did not include the later stages,—the absolutely certain stages,—of humans, one felt that this might be due to a difference in soil. Laborious work since then all over the world has failed to confirm Noguchi's conception. In Madras, we failed to transmit the disease to animals although with the co-operation of Col. Cunningham at the King Institute, Guindy, we were enabled to undertake numerous animal experiments.

You may ask, but how do you know you are dealing with a pure trachoma case when doing experimental transmission experiments? We do not know and this element of uncertainty amongst observers as to what constitutes true trachoma makes investigation difficult. Experienced observers do not agree amongst themselves as to the diagnosis of the early stages of the disease and the very late stages are so complicated by other factors as to make aetiological investigation impossible. Differences of opinion also make statistics inaccurate and the classification of clinical stages almost hopeless. It almost makes one blush for shame to pick up a modern review of the current work on trachoma. No fair minded reader can assume anything but that the most hopeless confusion exists in various parts of the world in the fields of histopathology, bacteriology, clinical signs and most of all, treatment. Of course there are clinical pictures about which nearly all experienced observers would agree as to a diagnosis of trachoma even before the advanced stages.

In such cases it is possible to so treat the conjunctiva, (by washing) so as to free it from all detectable organisms. Thereafter if some of the affected tissue is removed, and, after suitable treatment, is transferred to the healthy conjunctiva of man or animals, one might reasonably expect to reproduce the disease; because long experience has led us to believe firmly that the condition is contagious. Certain well-known ophthalmologists, careful observers have recorded that they developed trachoma from a splash of infective material. It is said that the incubation period is relatively short - under a fortnight. Still experience does not strongly support the view that under good hygienic conditions the affection is anything but contagious with difficulty. It is of course quite likely that in

this conjunctivitis complex, we are dealing with more than one affection and that in the late stages of one or other of these conditions the picture is complicated by still other infections. In 1932 we tried to find out something about the infectivity of the disease. A case was selected in this hospital in which a number of observers agreed that trachoma was well established, but not too far advanced. With due bacteriological precaution material was transferred from the patient's conjunctiva to that of a blind volunteer in which the conjunctiva was normal. Five days afterwards the patient developed what might well have been the early evidences of trachoma in the eye which had received the implantation. Three days later material collected from this eye failed to give a culture of B granulosis when examined at the King Institute, Guindy. On the ninth day the second eye became infected. At no time subsequently did gross changes appear in the cornea of either eye, (although microscopic vascularisation was observed), which would justify a diagnosis of trachoma. The eye remained in what one might term a trachoma-like condition for a while and then spontaneous improvement took place till in six weeks the patient was apparently normal again. A year later his conjunctiva were normal. The case is an isolated one and therefore of no real scientific value, but it shows that even a deliberate implantation is not necessarily successful in producing this disease under favourable experimental conditions, which is apparently readily transmitted from man to man in almost epidemic form under other conditions e.g., old time warfare. There is no doubt that there are many factors which influence the spread of this disease, the relative importance of which it is impossible to estimate. If we assume an infective agent either a filter passing virus or a microscopic culturable organism we must admit that its conditions of spread are peculiar. This world distribution map of the disease showing approximate percentages of population affected gives you some idea as to its prevalence. It is a rough guide to the possible association with race, religion, social conditions, food supply, density of population, humidity, temperature, elevation, general health etc. In so far as we are concerned in India it would appear to be a disease of Mohammedans than Hindus; in South Indian Hindus it is more common in brahmins. In my experience of Mohammedans it appears to be commoner in women; the same experience is shared by certain competent observers in the north. Col. Kirwan, Professor of Ophthalmology, Calcutta, advises me that it is relatively uncommon amongst Bengalis. The percentages of trachoma amongst the total eye cases treated in several widely scattered ophthalmic teaching centres are approximately:—

Lucknow (United Provinces.)	24%	(treated for trachoma) 55% of the other eye cases seen between 20 to 30% also have trachoma.
Lahore (Punjab)	50%	
Bombay (Bombay Presidency)	14.5%	
Madras (Madras Presidency)	3.5%	
Rangoon (Burma)	75%	

I must here thank Professors N. M. Dick, J. N. Duggan and B. G. S. Acharya for their communication regarding blinding diseases in their areas of work.

It is associated with overcrowding, indoor living, dark confined unventilated housing, the purdah, rather than with poverty per se. It is more frequent in urban than rural populations. It is not necessarily a disease of hot countries; it is about as common in the cold wet dark slums of Dublin as in hot humid poverty stricken areas of Madras. It is of interest to observe here that in some parts of India where there is no real cold season the disease is not so prevalent. In such localities the poor rural inhabitants are of cleaner habits; they go practically naked instead of wearing layers of rancid clothing, they lose no opportunity of getting into water and washing, although unfortunately for many of our South Indian people the water may be green and putrid and contaminated with the causative agent of all manner of bowel infections and infestations. You are all familiar with its frequency in Mongols and Jews; possibly race has a determining influence, we do not know. There are many points in common however between the wretched conditions of life in the lowest strata of society in China, Palastine, the Slav countries and Egypt. It is not a disease of the better classes of Anglo-Saxons even though exposed again and again. It is a disease of the great

unwashed, the greasy and lousy who froust in the fug of overcrowded dark ill-kept and ill-ventilated dwellings. At least these types and conditions,—where coincident,—appear to mark reservoirs of the affection.

For purposes of these lectures however trachoma does not concern us to the same extent as some of the other affections dealt with, as its blinding effect in small children under school age is relatively small. It is more a disease of adolescence and middle life and it is in the later age groups that it produces its effects on the total blind rate. Still we must regard it as one of the responsible causes of preventable blindness in young people. We may now ask ourselves, is it preventable, and if so, what we are doing to prevent it in India. The answer to the first question is, yes, the answer to the second, nothing of any consequence.

The difficulties of prevention in a country like India would be enormous and uneconomical. The chief methods of prevention are inspection with segregation, and control of immigration. However feasible such measures may be in islands like Great Britain and Japan or in a concentrated but strictly controlled population,—e. g., the armies in the great war,—they are out of the question here where the frontiers (N.W., N and N. E.) are uncontrollable. Pending a sound knowledge of the cause of the disease, the conditions which favour its spread, and a state preventive policy based on these, we Govt. medical servants play at prevention here and there and from time to time by means of propaganda through the medical and educational departments, leaflets and posters, lectures, inspections of school children etc.; similar activities are carried on in a tentative way over localised areas by the Blind Relief Association (Bombay), the Junior Red Cross and other similar organisations. Mysore is perhaps most progressive. Dr. B. K. Narayana Rao, Professor of Ophthalmology, Minto Ophthalmic Hospital, Bangalore, advises me that compulsory medical inspection of all students in all grades of education is legislated for, together with adequate arrangements for the treatment of cases in suitable centres and financial help to the needy and deserving for the purpose.

Relief is carried on meantime. The organisations dealing with treatment are the thousands of hospitals and dispensaries maintained by the various local Governments and native states and a few unofficial organisations such as the Blind Relief Association (Bombay.)Such treatment, however humanely intended, can hardly affect to any appreciable degree the total amount of damage to the eyes due to this disease. I will not discuss treatment except to say that our experience goes to show that unless an efficient follow-up system is established, cases which have been brought to a stage of practical cure relapse when they are lost sight of. One of the general and effective form of treatment is by means of the application of copper sulphate ; it is of interest to note that it is one of the ancient methods of attempting to cure this disease. Trachoma is one of those unfortunate diseases which the patient only gets once, as it is never absolutely cured as far as we know even though a practical cure may be effected. In January I was asked by the Chairman of the International Association for the Prevention of Blindness to attend their meeting in Paris in May and also the meeting of the International Organisation Against Trachoma held simultaneously and to send a brief report summarising the public health and administrative measures adopted in India versus trachoma. I regret that I am unable to attend the meeting, but the report is a very easy matter and may be summarised in one word "nothing", except as stated above school legislation in Mysore.

It will be seen from the foregoing that the position with regard to trachoma is very unsatisfactory in India. The Government organisations and the voluntary organisations practise relief in the form of treatment. At school-going age, when the disease really first becomes a serious problem, we find the beginnings of an attempt to stir up an interest in the affection in the sporadic reports of inspecting medical officers and others, but for all practical purposes, the matter ends there. The diagnosis is uncertain and the statistics inaccurate, but nevertheless it appears to be one of the most serious menaces to adult sight in certain areas, notably the Punjab and the United Provinces. It is perhaps as well at the present time that

large amounts of money should not be diverted to doubtful measures for the control of trachoma in India even if this were likely to appeal to our financial experts. The curtailment of trachoma will probably follow on better conditions of housing, feeding, social education e. g., the emancipation of women (notably in Mohammedan races). In brief on a betterment in the general care of the public health, and the beginning of its prevention must originate in the progress made in this important function of the state.

Abstracts

THE FOURTH ANDHRA MEDICAL CONFERENCE.

Bezwada.

30th and 31st March, 1934

EXTRACTS FROM THE WELCOME ADDRESS

BY

DR. P. R. VENKATARAMA IYER, M.B., C.M.,
Dt. Medical Officer, Kistna.
Chairman, Reception Committee.

Dr. P. R. Venkatarama Iyer, while welcoming the delegates as well as the visitors to the Conference, briefly described the importance and sanctity of the river Kistna on the banks of which is situated the important town of Bezwada. He gave a brief description of the past conferences held in the Andhra Desa and said that in the brief period of four years the medical profession in the Andhra Desa did make quick strides through the conferences.

He suggested the need of a Provincial Andhra Medical Association and deprecated the existence of several associations in the same district, and advised that all such associations should affiliate themselves to the Central Andhra Medical Association which should direct the activities of the Andhra Medical Conference by holding the yearly session in various districts year after year. He then dealt with a few vital questions affecting the growth and prosperity of the medical profession : Research, Medical Education and Medical Ethics.

Regarding Medical Research he said Indians are being accused for not taking as much interest as their brethren do in other civilised countries. "Science", he said, "is a jealous mistress who requires the services of sincere and well interested men of sacrificing temperament". The real cause of apathy for research was not want of men but want of funds, which ought to come not only from the State but philanthropic commercial magnates. Andhra Desa had a good field for research work in diseases like juvenile diabetes mellitus amongst the cooly classes, stone in the bladder, beri-beri, tubercular diseases of lungs and bowels and bones, and malignant diseases in any part of the body or organ and also mental diseases.

While speaking about medical profession and medical relief, he deprecated the existence of castes in the profession. He said that the medical schools and colleges are sending out large batches of medical men year after year, a few of whom were absorbed in service and many had to maintain their position by independent efforts. The problem of unemployment was looming large. A few of the members of the independent medical profession were now being employed as honorary medical officers and the subsidised rural medical relief scheme gave employment to a few more but the large majority in the profession have to depend upon private practice.

About subsidised rural medical practitioners he said that they are financially ill-equipped and yet are subject to severe trials on account of lack of gratitude on the part of the people and the existence of party politics in local bodies had operated adversely to a degree and extent that was likely to paralyse the subsidised system of rural medical relief.

Honorary system of Medical Relief was the next topic discussed by Dr. Venkatarama Iyer. He said that it was for "honorary men to make or mar such a laudable idea which though found unworkable in the west, where a reversion to the paid system is sought, can be wrought without any conflict of ideas or interests side by side with the paid system, so much so, that the supposed controversy in interests can be made to appear as a mirage and illusory by a proper understanding and co-operation and co-ordination of men working under the two systems. In this connection let me point out to you that we have secretly wooed and

are wedded to jealousy avarice and greed, and if we divorce from our minds those unwholesome and unworthy objects and if we devoutly contemplate that the happiness and relief of our patients is the primary and fundamental consideration and if we cast our vision through the window of advancement of medical knowledge, there can never arise occasion where the interest of men governed by the two systems would operate antagonistically and prejudicially."

He then dealt with the subject of medical education. He was of opinion that there should be a uniform standard of medical education whether it be for university degree or school diploma, the courses being arranged in such a way that those passed out from both the institutions were considered to be of equal merit and status, facilities being given for such of those who aspired for higher degrees or post-graduate training without any hindrance.

Medical Ethics was yet another item dealt with by Dr. Venkatarama Iyer in his address. He deprecated in strong terms the evil habit of some of the practitioners in condemning their professional brethren in the eyes of the public justly or unjustly with a view to selfish ends. He made an appeal to the members of the profession and requested them to remember the watchwords "Honour thyself (thy conscience) honour thy profession, honour thy colleague, and honour thy patients. Never be a traitor to your conscience, never be disloyal to your patients, never be perfidious to your colleague and never be treacherous to the profession."

He concluded his address by introducing the President—Elect, Major Naidu, and thanking those present who responded to the invitation of the Reception Committee.

EXTRACTS FROM THE PRESIDENTIAL ADDRESS

BY

MAJOR M. G. NAIDU, M.D.

Major M. G. Naidu at the very outset of his address requested the audience to excuse him for not observing formalities, and asked their permission to permit him to cut down the Presidential Address to the narrowest possible limits confining his remarks only to such essential questions as he had studied, and making those remarks as brief as possible. He praised the Andhras as a section of the Indian nation having a high reputation for perspicuosity, purposefulness, and practicality. He wished to be excused if he was brief and blunt in the matter of presentation of his address. From his past experiences of conferences he was of opinion that proceedings at most of them were of a nature calculated not to produce any immediate or permanent results. It was true, he admitted, that such gatherings were useful in crystallising the needs of the medical profession and drawing the attention of the public and the Government to them from time to time. But such a procedure had become "a routine, a mere ritual and like all rituals in India" was losing its force. He therefore wished to have a change in the proceedings of such conferences and suggested that such conferences would do well to take a stock of their duties and their capacities to perform them and arrange their household so that they could conscientiously say, "We have done our best. We want outside help for the rest." Such an attitude in the opinion of Major Naidu, would enhance the self-respect of the medical profession and increase their claim to the sympathy and support of others.

Education being the mainspring of progress, he thought it was desirable to say a few words about Medical education in this country. Medical education was not free from defects in far off western countries as well as in America, and all these countries have thought it fit to replace their curricula and alter the standard of medical education. He then quoted a few sentences from the public utterances of well-known British authorities on medical education, and said that Hyderabad was about a generation behind British India, and British India another generation behind England, which again according to the accredited report, was not the best organised country in the matter of medical sanitary service or education. So it was not surprising that medical education and general professional training in this country was most perfunctory though unnecessarily of a severe type. He said that medical education was born in India as the illegitimate offspring of the exigencies of the I.M.S.

and he after spending 50 years since he was a medical student and 40 years as a teacher, had no hesitation in joining in the chorus of disapproval of the existing conditions. He said:

"According to present methods the two-years' pre-medical subjects—physics, chemistry, botany and zoology, are taught in science schools which have no concern with the medical side of the subjects. One may spend 5 years over any one of these subjects and yet not get through half a section of it. Yet, taught by medical men who are masters of these subjects, with strict limitations to the needs of the prospective medical student, enough can be taught in one year to enable the student to understand the references to these subjects in the course of his later studies. Anatomy, physiology, materia medica and pharmacology, again all important subjects, are taught by specialists who are out of touch with clinical medicine. Far too many details (very interesting no doubt to the professor but of hardly any practical value to the general practitioner), are crammed into the student's head and every examiner expects to find the candidate as well-posted in all the minutae of his subjects as himself. In fact he tries to find out, not what you know but, what you do not know. I am reminded here of my old Geography teacher, in the early eighties, who insisted on our knowing the boundaries of all the cantons in China. He was a sleepy old man and somewhat short-sighted. Names of any few cantons rapidly distributed to the north, south and west of the one in question satisfied him!

Then come the grand subjects, Medicine, Surgery and Obstetrics, which deserve to be studied as thoroughly as possible. The only way to study them, is by clinical work for which there is unfortunately, not enough provision. The so-called minor subjects of pathology, bacteriology, jurisprudence, hygiene, gynaecology, ophthalmology, dermatology, pediatrics, run away with so much of the time and energy of the student that he has no time to grasp even the rudiments of psychology—much less of psycho-pathology, a subject which has recently assumed enormous importance.

Many proposals have been made and many experiments are being tried to evolve as complete and perfect a scheme of Medical Education as possible. Beyond registering our protests and offering our advice, I am afraid we are at present helpless to improve the situation. We have no money, we have no power. Not until we get full control over the educational policy of the country (which by courtesy of the owners we are allowed to call ours), not until we are masters of at least the internal affairs of this land, can we hope to work with success for the betterment of medical education. Now that you have got your own University, with an independent Medical Faculty, you may try as far as possible to make an attempt to shape the working of that faculty in the desired form."

He then dealt with the medical and sanitary service in India which he said was most unsatisfactory. The divisions and subdivisions of two great factors "Public and Profession" were, in the opinion of Dr. Naidu, the causes at work which prevented salutory reforms in medical and sanitary service in India. He made a comparison and contrast between an Englishman in the I.M.S. and an Indian as an L.M.P. "The I.M.S.," he said, "was full of complaints, and backed by the G.M.C. and the B.M.A., pours out his fears and grievances in the lay and medical press from time to time—the burden of his song being that, but for him the poor Indian man, woman and child would perish for lack of medical aid; the Indian student would suffer in his medical education; the developments of medical research in India would be arrested; the Indian Army would be incapable of taking the field—and other fairy tales of altruistic order. As for work—please remember that the Indian Medical 'Sahib' is out in the tropics at great personal sacrifice and has his Club to attend, rich patients to pacify, hospitals to organise and a whole District to administer. Is he capable of catering to the needs of all in the area under his jurisdiction? Even in capital cities, a direct approach to the European Medical Officer working in a large hospital, is difficult. So aloof have been the ways of the I.M.S. man, so little does he understand the reserve and self-respect of the Indian that many a poor or even middle class man hesitates to go to the burra doctor unless he has rupees sixteen in his pocket. True, the fault may in part lie with the patient who fosters that inferiority complex, forgetting that the doctor is a servant of the people, paid by the people, and not an autocrat so far as the patient is concerned. The Assistant-Surgeon is naturally a coloured imitation of his boss whose ways he generally apes; polite to the man who can pay, rude to the moneyless, doing his duty by rote according to the clock and the Book of Regulations."

"The L.M.P.," he said, "is struggling in a up-country town. His grievances are that people either cannot pay or do not pay. His rival, who may be an ignorant Hakim, makes more money than he is able to. In some of our districts the patients offer rice and dal as fees in lieu of money which they do not possess. They are so poor, and complain that the doctor's medicines, diet,

ice-bag, antiphlogistin, enema, hypodermics etc., amount to more than they can possibly afford. And even if they faithfully carried out the doctor's instructions, he is not sure of the result of the treatment he prescribes, whereas the Kaviraj or Vidya offers them an assurance of complete and early cure at very little expense."

He had something to say about the specialist:

"He works in cities usually, and charges high fees. He is not always genuine. Many a general practitioner tries to increment his earnings by tacking the eye, ear, throat, venerial or other specialism to his qualifications on the strength of three months spent at a hospital or with a specialist practitioner. I know a G. P, who is specialist in general surgery, in ophthalmology, has written a popular book on obstetrics and has specialised in radiology. There is, on the other hand, the specialist who, for similar reasons, takes up general practice.

Be this as it may, specialism is a luxury both for the profession and the public. We must have specialists, but they must work with and as auxilliaries to the general practitioner. The general practitioner, too, should be mindful of economy in time, money and energy in resorting to the help of the specialist. I have reason to believe that the G. P. only too often sends his patient to the specialist to save himself the trouble of investigating the case. I have heard complaints, from people who have been through the mill, that in some large cities the Unit System in private practice is conducted on lines which savour of scandal and usury. A patient goes, let us say, to consult a physician for abdominal pain. He is sent to the dentist for his teeth, radiologist for a series of dentograms and barium-meal pictures, cholecystography, pyelography, etc. He then visits the bacteriologist makes an analysis of urine and faeces, examine blood for wasserman, widal, leucocyte count, sputum for T. B., and so on and so forth. The possibility of the opthalmist and rhinolaryngologist being called in may not be overlooked. By the time all these specialists have been paid, the patient has very little money with which to begin his treatment. Our education is expensive and we are taught costly methods of dealing with disease.

I shall not take up more of your time in discussing the effects of contact between our sections of the profession and the people. If you work it out carefully, it will be obvious to you that the general mutual dissatisfaction is based upon a misunderstanding of the conditions and limitations under which they respectively reside and work. Let us first examine our own nest. Are we a perfectly happy family? What are the sins of our brotherhood which need repentance and reform? I shall be told that there is no need to wash our household linen in public. I venture to suggest that the more public the washing, the quicker and more complete the purification and cleanliness of our garments. Better a thorough good cleaning with water and disinfectants than being covered with perfumes and flowers. I have already tried to persuade you that we are not quite the 'Wise Men of the East' that we fancy ourselves to be. We are not a united body, with one purpose, one goal putting forth a co-ordinate and combined effort to fulfil our mission of service to humanity. The canker of communalism has been planted and is eating into the vitals of the humanitarianism which is the soul of our profession. Service-man and Private Practitioner, Hindu and Muslim, Brahmin and Non-Brahmin, Graduate and Licentiate, Specialist and General Practitioner, Tamil and Andhra, etc. Those divisions and cross-divisions characterize the many sections that are proving detrimental to our fraternity. May I express the hope that the Andhra Desa will lead the way to the millenium where considerations of race, religion, caste or condition will not be permitted to interfere with our duty to our country and to mankind? Surely, there should be no quarreling amongst those engaged in a work of mercy, the root-force of all medical work. There is no consolidation because the spirit of team-work and co-operation is so lacking. The distressing spectacle of three separate Medical Conferences in the course of three weeks in the same city the other day, was apt to depress and discourage the most optimistic amongst us. The tragedy of it is that each of them met for the same avowed purposes, passed more or less identical resolutions, and expressed similar thoughts in a common language. Why this internecine struggle which is damaging the structure and functions of medical India? We know that jealousy—that monster who waits at the door of every profession, often operates secretly to ruin many a fair career. But that is a personal failing and must not be allowed to corrupt our ranks. Mass solidarity is essential if we are to make a steady progress and overcome the many obstacles in our path. We must also conquer many of our weakness (engendered, no doubt, by the struggle for existence) and tread the narrow, steep path of duty, if need be with some sacrifice and suffering. There must be no selfishness, no advertisement, no back-biting, no underselling—none of the vices of the hawker. Yours is a noble profession and not a low-class trade. 'Live and let live' must be our motto. I knew a well-known surgeon who charged anything from 500 to a 1000 rupees for an operation, stoop to a fee of 25 rupees because he did not want the case to go into other hands. How are the less-fortunately placed juniors to thrive in an atmosphere where mammonism is so rampant? Before we can claim the right 'to live, live fully and live well' let us prove our credentials and see that there are no flaws in our armour, no stains on our escutcheon. Inspired by a high sense of

duty, united by a common consciousness of service and brotherhood, and equipped with mental and moral training for the task before us, we can face the world without hesitation and try to leave it a little better than we found it.

There are those who assert that if the blessings and benefits of medical service are to some extent lost to the people, it is at least in part due to the fault of the people themselves. We cannot deny that the indifference, ignorance, superstition and obstinacy of the people severely handicap the work of the modern medical man. Experience has taught me that, with rare exceptions, the average Hakim or Vaid ranges himself against us, whilst the family priest and astrologer is usually a thorn in our side. In the matter of payment for services, also, the patients are not impeccable. Those who have money will not pay and those who have not, cannot pay So the doctor is generally to the bad! When all is said and done, the people are what they are. They are what we the 'intelligentia', have made them through generations of neglect and ill-treatment. If they are poor, the rich must have robbed them; if they are ignorant, the wise men have witheld knowledge from them; if they are full of superstitions, you must hang the priests who fed them on lies in order to perpetuate human slavery. If the poor are sick and dirty and weak, why—brothers and sisters, it is *your* fault! You have neglected to look after their sanitation, their food and their health. Of course, you will ask me, 'what can we do?' That is the question I want *you* to answer. There are forces beyond our control which operate powerfully against any efforts we may make to improve the miserable condition at present existent in our country. The financial and social questions loom large against us. Politics, modern Indian Politics, rears its ugly head every now and then when we attempt to break off the shackles that bind our people to ignorance and poverty.

It cannot be denied that we, as a body, have work to do in creating a civic sense of sanitation and health. Be it acknowledged to the credit of our brethren that such work has been and is being done. but it is isolated, half-hearted and on an infinitesimally small scale. It is easy to make appeals to Government but difficult to get a hearing.

Two years ago I ventured to submit the skeleton of a scheme emphasising the necessity of having a national—that is to say, indigenous, organisation on a permanent basis, which will have its ramifications reaching right down to the villages, for the amelioration of the present unsatisfactory state of things. That scheme was variously received. It was opposed on theoretical grounds by some of my most intimate colleagues, while—strange to say, people I had never met before (Europeans amongst them), not only approved of it but adopted work based on my plan. Dr. Ansari, in his Presidential speech in Bombay last December, blessed the idea with a modified approval. I have been waiting for alternative schemes to be put forward. I admit that there are many flaws in my plan, but considering the means at our disposal—both men and money being scarce at present, I have not been able to improve on my original proposal. I will not linger on the subject except to request you to think it over seriously and see if you cannot apply it in some form or other to your province. I am all the more emboldened to do this when I see, from statistics supplied to me, that the conditions of medical aid in rural areas of Andhra Desa are in no way different from those obtaining elsewhere in India:—

Qualified Medical men (in and out of service):	1,726
Area to be served:	82,950 sq. miles.
Population to be served:	20 millions.

This works out roughly to one medical man for every 11,529 and one medical man per 47 square miles—not taking into account the vexed question of crowding in towns and cities.

I was never so forcibly and clearly struck by the necessity of such an organisation as when I received the following circular letter from that great and sincere Servant of India, Babu Rajendra Prasad".

After quoting the letter of Babu Rajendra Prasad he made an appeal to Andhra Desa to extend its hand to distressed Bihar and said in conclusion that though objections in his opinion, unreasonable, were raised against his propcsal to rope in Hakims and Vaids into the rural medical service contemplated by him, there was no dissentient voice against advocating the use as far as possible, of *indigenous drugs*.

Before concluding he approved the idea of the Andhra Medical Association joining hands with the Indian Medical Association and said that the advantages were enormous and disadvantages practically none, and finished his address by saying,

"Comrades! Fault-finding is cheap work. Exhortation is for the weak and wavering. Flattery is a sin against truth. I have tried to avoid all these while presenting to you the main poi ts of our assets and liabilities as an essential limb of the nation. You may or may not agree with me. I thank you for giving me a patient hearing and will feel well rewarded if you will devote some of your spare attention to the subjects with which I have dealt, and attempt to work out the solutions for some of the problems I have placed before you. It is not given to any man to dictate to such a democratic body as ours. We accept no authority but Truth. Our service is to humanity and not to men or nations or even Governments. Broad-based as are our interests and our labour, let us proceed steadily on our pilgrimage of service, unmindful of snobbery, heedless of sneers, and undeterred by temporary obstacles. Above all, gentlemen, let me implore you to work in unison—for 'Unity is Strength'. Do not speculate or theorise: that involves waste of time and energy. Neither do you need to ask or beg. Asking is a symptom of inferiority and begging a sign of slavery. There is an old Christian saying:—"Ask and it shall be given". but the modern materialist adheres to the formula 'Ask for bread and you shall get stone'.

Notes on Treatment of Diseases.

N. B.—These notes are intended to supplement the treatment given in ordinary text books and are neither expected nor possible to be exhaustive.

Morphinism: Preparation of sex glands hypodermically every day for a long time. Choline Hydrochlor 0.06 grams daily. Tr. Belladona oz. 2, Fluid Ext. of Xanthoxylin, Fluid Ext. of Hyosciami, each 1 oz.; 5-7 mms., to be given every three hours increased by 2 mms. every 6 hours until 16 mms. are given. If the signs of Belladona poisoning occur stop the mixture and commence again when the poisoning symptoms disappear.

Mucous Colitis: Ext. of ox gall has been given with success. Clean the intestines with castor oil, then give cotton seed oil enema 4 ozs. which should be retained during the night until the membranes come out. Then put the patient on para-thyroid. (Harrower.) To relieve pain and flatulence Balladona grs. ½, Menthol grs. ¼, Ext. Valerian grs. ½, made into a pill and given twice or thrice a day. In children Red Mixture consisting of Rhuberb grs. 10, Mag. Carb. grs. 30, Spt. Aromaticus mms. 30, Oleum Anisi mms. 2, Aqua add 2 oz, a teaspoonful 3 or 4 times a day until the tongue clears. Cascara Evacuant or paraffin with Milk of Magnesia may also be given.

Myalgia: If due to Rheumatism, Salicylate or Pot. Iodide should be given. If bruise or cold is the cause, Amm. Chloride grs 10-20 with Fluid Ext. of Glycyrrhiza 1 drm. Aqua add 1 oz., a dose to be given 3 or 4 times a day. Locally, Chloroform Liniment.

Nephritis (Paranchymatous) **Acute**: Rest in bed with hot compresses or leeches over the kidneys but not blisters. Aconite in the early stages is good. Cannabis Indica to be given if there is blood in the urine. Chloral Hydras should not be given. If there is dropsy and symptoms of coma, Elaterium should be given or Jaborandi or Pilocarpine to induce sweating and if the heart is weak Strychnine also should be given. If convulsions, vomiting, headache appear, 10-15 c.c. of 1 per cent solution of Mag. Sulph per kilo body weight is given intravenously, slowly at the rate of 2 c.c. per minute and repeated after 12 hours. Fresh vegetables has a protective action on the kidney (Clark). In children after scarlet fever, oral administration of Adrenalin mms. 2-8, 1 in 1000 for a child one year old has very good effect. Adults may be given the same preparation, the maximum daily dose being 60 mms. (Sagous).

Nephritis (Paranchymatous) **Chronic**: The total quantity of chlorides in the urine should be determined and if it is retained, salt-free diet must be insisted on and only milk should be given. The use of diuretics if there is salt retension is of no use. Digitalis or Liquor Amm. Acetatis 2-4 drms when the kidneys are able to secrete salts. Bicarb of Potash 1 oz. in a pint of water to be taken as a drink in 24 hours. When there is dropsy, hydrogogue cathartics such as Colocynth, Elaterium and Jalap may be given. They are contra-indicated if there is salt retension. Pot. Iodide is useful as it will cause great increase in the flow of urine and will relieve dropsy. 80-100 grs. of Urea per day is said to promote diuresis. (I. M. J.) When there is oedema the diet should be solid with plenty of protein.

Nephritis (Interstitial) **Acute**: Rest for the kidneys should be given by withdrawing fluids which work upon the kidneys. Cream, Arrow Root, Oatmeal, Jelly, may be given. Epinephrine is good for a child 5 years, 16 drops 1 in 1000 may be given a day at the rate of 4 drops every 4 hours.

Nephritis (Interstitial) **Chronic**: Strontium Bromide grs. 60-100 per day is said to have very good effect. Thyroid is also recommended and also Epinephrine 1 in 1000 in acute cases. Nephritine is also given in these cases. Calcium Chloride 5-15 grs. has been tried with success. Urotropine intravenously 15 grs. dissolved in 4 ozs. of sterile double-distilled water is recommended. (I.M.J.) If there is oedema Mag. Sulph. must be given by Hay's method; 2 oz. of Mag. Sulph. is dissolved in 2 oz. of water given after 12-18 hours of fasting. As a diuretic Bashyam's Mixture is useful: Tr. Ferri Perchlor parts 4; Acid Acetic Dil. parts 6; Liquor Amm. Acetatis parts 50; Aromatic Elixir parts 12; Glycerine parts 12; Aqua parts 12. 1-4 drams to be given diluted with water. (Hall). Urea 15 grs. 4 times a day is also given. Diet must be alkaline and basic. Basic vegetables are fruits, potatoes, etc. Acid foods are bread, oatmeal, meat, fish, eggs, liver, etc. In cases where there is retention of Nitrogen without oedema the diet must be low in protein and fruits to be taken in large quantities. When there is oedema, the quantity of water should be limited and protein diet given.

Nephrosis: Calcium Gluconate may be given intravenously or intramuscularly even in cases of children; high protein and low fat diet.

A FEW DIAGNOSTIC POINTS.

Symptoms	*Interstitial Nephritis*	*Paranchymatous Nephritis.*
Oedema	Absent	Present.
Protein in Urine	Slight or moderate	Present in large quantities.
Chloride secretion	Normal	Impaired.
Urea secretion	Impaired	Normal.
Urea in blood	Increased	Normal.
Cardio-vascular changes	Marked	Less marked.
Uremia	Frequent	Less Frequent. (Clark.)

Notes on Therapeutics, Diagnosis and other Medical Subjects.

Causes of the Failure of Bacteriophage Therapy.

The preparation of cultures of Bacteriophages according to D'Herelle's method is very easy. Any Bacteriologist can do it. All that is necessary is a simple outfit for culturing bacteria, and some patients who are recovering from an infection against which a phage is required.

Cultures are prepared from such patient following the usual technique, and after keeping the tubes at a suitable temperature for a long enough time some of those tubes are almost certain to be autolysed. If not then more tubes are prepared till one is found which becomes autolysed after a time.

The bacteria concerned are then cultured in bulk, a loopful of autolysed culture is added, then after some days the culture so infected will also be autolysed.

This autolysed culture will contain the phage and can be filtered through a bacillus proof filter and filled into previously sterilized ampoules.

Where it is essential that the product must be sold at a cheap price, and where, besides that, big discounts have to be given to distributors, the public cannot expect much more than a phage prepared on such lines. Where it is desired to issue for sale to the public a phage culture which can be depended upon to do the maximum that a phage can do and that in a minimum time, the process of preparation is a labour extended over several years. A recently isolated and cultured phage is one such as is normally found in Nature.

The contest for supremacy between bacteria and phages in Nature is evenly balanced. Many individual bacteria are attacked by "phage disease" and recover, like a patient suffering from typhoid and being nursed back to health. The bacteria which have so recovered have gained some degree of immunity, in the same way as the typhoid patient gains immunity. The process of changing a culture phage from one of "natural strength" to one of intensified powers such as those issued for sale by the D' Herelle laboratories is one which takes years to complete, and is therefore relatively more costly.

Where phages are recently isolated from Nature, a platinum loopful of one flask of culture may take several days to lyse a second flask of full grown bacillus culture. A loopful of lysed culture from the second flask may take a few seconds or a few minutes less than last time to lyse a third flask. And a similar quantity taken from the third culture after lysis may again take a shorter time to lyse a fourth. This process, when carried on daily or at as short intervals of time as possible for a number of years reduces the time taken for lysis of fresh cultures to periods which can be measured in minutes. The cultures now being issued from the D' Herelle Laboratories in France have now in most cases been sub-cultured continuously in this manner for ten years or more. Another advantage that comes from this multiple subculture process is the permanency of the activity so acquired. It is found that when cultures have been so trained by daily practice for so many years,

there is no subsequent deterioration detectable in their efficacy. The phage cultures now being issued can be expected to have the same efficacy as they now show, even after being kept for twenty years.

So the causes of the failure of the action of Bacteriophages usually complained of by the members of the medical profession must be attributed to the process adopted by greedy firms who dump into the market cheap and inefficient Bacteriophages.

Prevention of Toxemias of Pregnancy

Theobald believes it improbable that any one toxin could cause the widely varying symptoms associated with the toxemias of pregnancy, or that a number of separate toxins should originate in the products of conception. The fact that the hepatic lesions peculiar to eclampsia may be caused by dietetic or mechanical factors, or a combination of the two, disposes finally of the strongest argument in favor of a toxin of pregnancy. He suggests that the fetus affects the fixity of the internal environment and that all the toxemic disorders may be regarded as deficiency diseases. It follows that there is no fundamental casual difference between ordinary morning sickness and eclampsia. This hypothesis is not contradicted by any known fact and is supported by the results of calcium therapy. If excessive salivation, vomiting, cramps, dermatitis herpetiformix, edema and other symptoms can be cured by the injection of calcium, it is logical to suppose that they are caused by its deficiency. The number of patients who have been treated is small, but the success that has attended calcium therapy in such a variety of conditions warrants its extended trial. A great disservice has been done to the science of dietetics by those enthusiasts who stress this or that vitamin without considering the diet as a whole or the importance of personal hygiene. The author claims that a complete, well-balanced appetising and easily digested diet, rich in the vitamins and in calcium, iron and iodine, if given early in pregnancy, will prevent the onset of toxemias (but not always of albuminuria), although it may be necessary to increase the available amount of calcium by the injection of calcium gluconate; indeed, it might be expedient and, in the end, economical to give routine injections of this mineral at the thirty-sixth weeks of pregnancy. He further believes that such a diet would increase the resistance of the woman to puerperal infection. The one advantage of this hypothesis, which is possessed by no other, is that it can be put to the test, and even under "field" conditions.

(J. A. M. A. Jan. 6, 1934)

Cardiac failure

By

CAREY F. COOMBS, M.D., *Bristol, Eng.*

All causes of cardiac failure are effective by reason of their action on the myocardium. It is almost safe to say that, in the treatment of these cardiac emergencies, reliance must be entirely placed on making the best of the existing myocardial power: what is not there cannot be put into it. The various stimulants in common use are no exceptions to this rule: strychnine, camphor and alcohol are held actually to increase the work done by the heart, but it is doubtful if they exert sufficient influence in this direction to make them actually harmful. Nitrites undoubtedly heighten the cardiac load by lowering arterial tension, but probably their value is partly due to a dilatation of the coronary arteries and the resulting flushing of the myocardium with oxygenated blood. Caffeine, diuretin and the like also exert this action on the coronary circulation and thus help to put into the cardiac wall something that would otherwise not be there.

(Practitioner, (Lond.) March, 1933.)

High Blood Pressure Not a Calamity.

By

R. H. ROSE, M.D., *New York City.*

High blood pressure should be regarded as a warning. Its cause should be sought and treated. It has frequently been reduced by diet, attention to focal infections or by glandular therapy and, therefore, it may be assumed that faulty eating, infections and glandular dyscrasias are causes of hypertension.

The above-mentioned measures benefit the kidneys. They may lower the blood urea nitrogen and cause albumin and casts to disappear from the urine in mild cases of Bright's disease. They also operate against the most frequent causes of death among adults—heart, arterial and kidney diseases. They constitute the best measures for rejuvenation and life extension.

(M. J. & Rec., May 4, 1932.)

CLINICAL NOTES AND PRACTICAL SUGGESTIONS.

Modern therapy of Pthisis.

The treatment of patients with tuberculous lungs has at present been classified under the following three heads:

1. Change of climate specially to a dry place.
2. Specific therapy by means of injections or by active immunisation.
3. Drugs.

The first one can hardly be over-emphasised. It is well-known that change to a dry place will do more good to the patient than any other treatment. As regards specific therapy opinions are still divided and no one so far has been able to say with any amount of certainty whether these vaccines or Tuberculins are of any benefit. The last one is the treatment by means of drugs and this is the one with which we propose to deal in this article as it at least ameliorates the symptoms though it may not be able to cure the disease.

This medicinal treatment is essentially meant to relieve as far as possible the symptoms accompanying the tuberculous processes of the lungs.

Pyrexia: This is the most important symptom that we have to combat in this disease. The temperature when it rises every day not only makes the patient uncomfortable but is also positively injurious to the heart. It tends to lower the resistance of the organism. The only proper way of reducing pyrexia is the administration of Cryogenine especially in large doses. It is a powerful antipyretic and a very effective analgesic. It brings down the temperature with profuse perspiration and relieves the pains. The sense of depression soon disappears. The large doses of this remedy taken for a continued period do not produce any by-effects such as upsetting the stomach or depressing the heart etc. The other preparations that can advantageously be employed are Aurothysin and Biocholine. The injections of these if given alternately produce very encouraging and favourable results. While Aurothysin influences such conditions as lessening of cough and expectoration, gradual disappearance of Tuberculous Bacilli and increase in weight, Biocholine effects an important increase in cholesterolemia in the blood steadily and regularly. These two also assist in the defervescence of the temperature. The exudative type of Pulmonary Tuberculosis is not suitable for this line of treatment. By the careful administration of Optimum dose of Aurothysin according to the needs of the individual not only can the improvement in the general condition be brought about but the disease can be checked and in very early cases cured. It has been found out from clinical experience that treatment with Aurothysin and Biocholine carried on systematic lines prevents in the majority of cases any recurrence of the disease.

Cough: The painful and distressing coughs of Tuberculosis can only be relieved or mitigated by Syrup Creosal. Due to its Guaiacol content it acts almost as a specific for these tuberculous coughs. It relieves respiratory oppression, soothes the pain and irritation of bronchi, and as a result the expectoration is either reduced or is facilitated. The calcium and the Phosphoric acid in this Syrup serve the very useful purpose of promoting calcification of the tuberculous centres, or resorption of exudates and of general toning of the system.

Hemoptysis: This is a very troublesome and dangerous symptom to deal with in Tuberculous patients. It not only causes loss of blood but reduces physical vigour and lowers the resistance of the organism. It may at times even prove fatal. In order to overcome this symptom we have a useful preparation in Pharmasol Collo Calcium. Besides the administration of this Pharmasol, either by intravenous or oral route, absolute rest and ice compresses are essential. This Collo Calcium increases the coagulability of the blood and promotes calcification of the tuberculous foci in the lungs. Pharmasol Collo Calcium specially in chronic cases brings about striking improvement in the local condition of the lungs. It facilitates expectoration and soothes and diminishes irritation. It exerts so to say an aggressive influence on the tuberculous processes in the lungs. The lesions either heal by induration or cicatrices under

its influence. When the local condition is thus improved there will be some betterment in the general state as is manifested by increase in appetite, weight and suppression or diminution of fever. Pharmasol Collo Calcium increases the defensive reaction of the tissues and the organic fluids of the system and this effect goes a long way in bringing about a cure of the disease. The best method therefore of effecting cicatrization of the bacillary foci is by calcification, and Pharmasol Collo Calcium is the best means at our disposal to bring about this effect rapidly. When injected intravenously it does not cause any injurious by-effects and is indicated with impunity even in sensitive patients.

Anorexia: In Anorexia and other dyspeptic symptoms, which these Tuberculous patients usually suffer from, Papyta is the best remedy which effectively overcomes hyperacidity as well as other gastric disorders. In intestinal fermentation or enterocolitis arising from gastric or pancreatic deficiency, Papyta, due to its composition (Papain with Pancreatic and Bile extracts) disinfects the intestines and also tends to restore their regularity of function.

Diarrhoea: The best means of combating tuberculous diarrhoea is Thoroxyl. It acts as an excellent intestinal antiseptic and astringent in tuberculous enteritis. It diminishes the sensibility of the intestines and protects their mucous membrane from irritation by the faeces.

General weakness and exhaustion: In order to overcome these states in this disease a suitable form of cacodylate, strychnine and iron medication is available in Hypercytol which is effectively able to fortify blood. It thus combats anemia, builds up the strength and restores vigour to the organism. These means are the surest defence against the infection. The sodium cacodylate in Hypercytol promotes deposition of fat and helps the utilisation by the organism of albumen. As a result of this, it restores the loss of weight, overcomes weakness and exhaustion and the patient is thus greatly benefitted. As a general tonic and as a supplementary to gold treatment Hypercytol is very serviceable in these cases. The injections should however be avoided when the temperature is ranging above 102° or when the patient is troubled too much by haemoptysis.

Besides this line of medicinal treatment, as has been referred to above, absolute rest in bed and open air is essential and unless blood traces in the expectoration have ceased for nearly a month the patient should not be allowed to move about. If the line of treatment indicated above is followed scrupulously we can at least ease and prolong the life of the patient if not absolutely free him from this fell disease.

Tic Douloureux and its treatment.

Tic Douloureux is a disease which consists of spasms either of the whole trigeminal nerve or one of its branches. The etiological factors have not been ascertained so far. Pathological examinations, however, have demonstrated that it is a disease of the nerve-cells but as this is not a constant factor in all the affections it cannot by any means be called the real cause.

As a rule this affection commences with numbness in one of the branches of the trigeminal nerve, which becomes more frequent and severe. Although the disease starts in one of the branches later on it may involve all the branches. If the disease is limited to the supra-orbital nerve, pain will be marked over the forehead and the brow or sometimes in the eye. The pain in the eye will occasionally be so severe as to cause closure of the eyes with profuse flow of tears. In case the middle or the infra-orbital nerve is involved there will be numbness followed later on by pain in the upper jaw and upper teeth and at times in the tongue. When the inferior or the mental branch is affected, the lower jaw, the teeth as well as the tongue give much pain which becomes worse after eating or talking. There is also tenderness over the regions supplied by the nerves. When the whole nerve is involved, which is often the case in the later stages of the disease, very severe pain is felt over the whole side of the face accompanied by contractions or spasms of the muscles. There is intense tenderness over the exits of the nerve and the flow of tears is profuse. Slightest exertion such as talking or eating is always followed by a fresh attack. Occasionally hyperesthesia over the distribution of the whole nerve is a prominent symptom.

There are two types of Tic Douloureux, the major and the minor. The patient with the major type complains of severe neuralgia and presents a definite history of the onset of symptoms followed later on by increasing severity. The same sort of irritant or some normal necessary act always gives rise to sudden severe pain. These attacks recur at definite periods and after definite intervals. Because in some persons these attacks have followed mastication of food, some physicians are led to believe that some abnormality exists in the teeth, which usually results in their removal. This is done despite the fact that the teeth are quite normal. The result is that these patients are worse for their loss of teeth because they served as a protecting element over the affected tissue.

It is difficult to describe a typical seizure of Tic Douloureux as it varies greatly as regards the type, degree, and location of symptoms. Generally, there is a sudden pain in the major type or a simple muscle-twitching in a given area in the minor type. This lasts for a definite period and is subsequently followed to greater or lesser degree, according to the type, by soreness over the same area. Sometimes the attacks last for a few seconds, sometimes for hours. The frequency of these attacks also varies from an occasional to daily or even hourly one. The patient is mostly over 40 but it is possible to get cases even among the younger people.

The treatment of this disease both of the major and the minor type was hitherto quite unsatisfactory. Surgical treatment viz. the removal of the Gasserian Ganglion or some of the sensory branches of the trigeminal nerve was not without its dangers. Another common procedure adopted was injecting alcohol (90 percent) into the nerve or the Gasserian Ganglion, which also has its risks and disastrous consequences, chief among which is sensory paralysis of the whole area supplied or controlled by the nerve or the ganglion.

Our object in the treatment of this disease should either be the destruction of the sensory nerve-fibres or the stimulation of fibrosis. This has been attained by the injections of Quinine-Urethane ampoules, as they help to stimulate non-pathological fibrosis. The contents of one ampoule are injected in the area between the malar and the alveolar process of the cheek-bone upwards and inwards. The injections should be made slowly and the point of the needle should be moved in all directions while injecting, so that the solution may spread over the whole area. This also prevents the solution being deposited at one particular point of the area. It is true that some swelling appears almost immediately after the injection, but the pain becomes decidedly less. The swelling also disappears soon afterwards and it does not make its appearance after subsequent injections, which should be done weekly or twice weekly according to the severity of the case. Sufficient time must however be allowed for the fibrosis of the sensory branches of the nerve to take place.

These injections, unlike the surgical operation or the alcohol treatment, are not followed by any appreciable degree of anaesthesia. This being an ambulatory form of treatment the patient can continue his daily avocation without the least difficulty. Again, it is absolutely a safe procedure as it does not give rise to any kind of paralysis nor is it attended by any risks that usually accompany the use of toxic and destructive solutions. Further, this form of treatment eliminates strict sterilization, previous anesthetisation or any such hospital preparation. Further it does not destroy the sense of taste or smell to such an extent as to result in dangerous sequelae.

Besides these advantages that this treatment ensures it is admitted on all hands that it is followed by marked improvement in the condition and that the seizures become gradually less severe and less frequent. The happy results that it promises should encourage its employment in this condition more widely and freely.

Illustrative Cases.

1. Sometime in December last a young man working in a local mill came to me with two large suppurating wounds on the medial side of the left leg. One was 8 inches long and 2 inches broad and the other was only of the size of a rupee. He gave history of guinea worms

and he said he had suffered from it for the last eight months and these wounds were not amenable to treatment. The wounds, he said, were much worse for the past one month. There was not much pain in them but they were foul smelling and badly suppurating. Before instituting the treatment I made sure there were no more guinea worms and then the wounds were dressed in the usual way. Every known antiseptic was tried for more than three weeks but the wounds did not show any signs of healing. They were discharging as before, only the foul odour had disappeared. I then began with Bacte-Pyo-Phage treatment. After cleaning the wound with ordinary hot water I dressed it every day with gauze soaked in Bacte-Pyo-Phage lotion. He was taking at the same time two ampoules of 2 c.c., of the Phage in alkaline water morning and evening. A week of this treatment produced wonderful results. Improvement was distinct as was evidenced by complete absence of suppuration and presence of granulation tissue. The treatment was continued for a week more when the wounds completely healed. With Bacte-Pyo-Phage therefore he could dispense with troublesome dressings in about a fortnight's time, whereas other antiseptics had absolutely no effect even after a month's use.

2. A Hindu gentleman aged about 38 came to me with a carbuncle of the size 3½" × 5" on the posterior aspect of the neck. He had a temperature of 102.6° and much pain. The carbuncle had characteristic red, infiltrated and honey-combed appearance with several holes in it discharging pus. I took a free crucial incision and dressed it in the usual manner. The patient was in a poor debilitated state of health. The urine showed not even a trace of sugar and there was absolutely no symptom of Diabetes. The culture of the discharge showed numerous staphylococci. I therefore decided to dress the wound with Stannoxyl lotion (4%) which I did every 24 hours and kept the patient on Stannoxyl tablets. After this it took only six days for the dead tissue to slough away and to leave a clean, healthy, granulating wound. There was no more discharge. It took nearly 22 days for the wound to completely heal. The remarkable way in which the wound infected with Staphylococci healed up quickly will impress even a sceptic. Later I advised him to take Fer-Ma-Pho on account of exhaustion and weak state of his health. He finished three bottles of this tonic and he is at present feeling very much better.

3. An elderly woman of about 46 came to consult me two months back for scanty and irregular menses with extreme flushing and heavy sweats. She was feeling depressed and exhausted. She was much upset and was not able to do her usual work. The increasing irritability worried her as she was not able to control it. Added to all this she had occasional headaches and insomnia which would not allow her to have complete rest, which she needed badly. Treatment with Ovaro-Pituitary ampoules was at once started, with one injection every other day. The subjective symptoms were treated with Bromide mixture together with Cryogenine for headaches. Six injections were required to bring about a perceptible change in the condition. The flushing and profuse sweating were relieved to a great extent. There was very little headache and she was able to have at least a few hours sleep every night. The injections were continued until she had about a dozen. At this time Bromides and Cryogenine were discontinued and she was kept on the Opocrins of Ovaro-Pituitary. She was taking six of these per day. About one and a half months of this treatment not only changed her outlook on life completely but had improved her subjective symptoms also. Flushings, sweatings, headache and insomnia —all these disappeared. There are now no outbursts of temper and irritability as before. She is quite calm and collected and is able to do her usual work without much trouble. After this her menopause cleared well but she is still taking these Opocrins, with some intermissions. The dosage has been reduced to four. The improvement continues and although there has been no resumption of the usual function of the ovaries there is at least no recurrence of the distressing symptoms which so much troubled her.

4. I was called one night to see a lady, nearly 32 years old, suffering from Haemoptysis. The history was that she had suffered from Bronchitis off and on for the last one year and since then she was always troubled with coughs, catarrh, asthenia and anorexia. She told me she was losing weight and had lost to the extent of 10 lbs. during the last six months. On examination I found that she was fairly well-nourished and was not very anemic. Nothing abnormal was found in any organ except the lungs. In the apex of the right lung rough breathing could be heard but in that of the left crepitations could be distinctly heard. The temperature though normal in the day time rose to 102° or 103° in the evening. She coughed a good deal, expectorated a lot, at times even blood, and perspired freely at night. I commenced treatment of Haemoptysis because that needed attention first and hence injected Pharmasol Collo Calcium 1 cc. intravenously at once. Coupled with this, I advised her to take other lines of treatment such as Cod-liver Oil, Aurothysin etc., but I laid stress on her taking complete rest in bed as I wanted first to combat bleeding. At the same time I asked her to take two teaspoonfuls of Pharmasol Collo Calcium by mouth twice daily after her nourishment. The injections were given on every alternate day. A month and half of this treatment proved beneficial in many ways. Not only did the haemoptysis stop shortly after the treatment, but her expectoration was very much less. In all 15 c. c. of Pharmasol Collo Calcium intravenously was sufficient to stop her haemoptysis. Despite the fact that her weight has not increased appreciably and that there are still signs of congestion in the apex of the left lung, Pharmasol Collo Calcium has undoubtedly proved of great value in so far as her haemoptysis, expectoration and distressing cough were concerned.

News and Comments.

Death of Dr. S. Rangachari : We deeply regret to record the death of Dr. S. Rangachari, at 3-45 p.m., on 24-4-34 after an illness of about 5 weeks. He was born on 28th April 1882 and joined the Madras Medical Department in 1905 and after serving as Assistant Surgeon in various stations acted as the D. M. O., Tanjore from 1914 to 1915 and of Ganjam in 1916. In 1919 he was appointed as Assistant Superintendent, Government Maternity Hospital, Madras, and later was made one of the Surgeons, Government General Hospital, Madras, which post he held till 1926 when he retired from Government service on invalid pension. His mad love for professional work forced him to treat rich and poor alike with no consideration of money for services rendered. His versatile ability in Medicine, Surgery, Obstetrics and Gynaecology has been appreciated by the public as of a very high order and he did not stint his services to anybody who wanted them. Sir Allady Krishnaswamy Iyer rightly said of him as one who subordinated professional rules, etiquette, and conventions to the supreme demand of service to humanity. Whether this attitude was right or wrong would be out of taste to discuss at a time when all had to mourn over the passing away of this great and good doctor. The gratitude felt by the public in the city of Madras is evinced by their starting a memorial fund on the very day of his passing away and we agree with Dr. U. Rama Rau that the most suitable memorial to remember Dr. Rangachari would be a hospital in the city of Madras, which could be adorned with a life size statue of Dr. Rangachari. May the departed soul rest in peace.

Andhra Medical Conference: Members of the medical profession in Andhra Desa met for the fourth time at Bezwada on 30-3-34 and continued the deliberations for two days. The extracts from the addresses of the Chairman, Reception Committee, Dr. P. R. Venkatarama Iyer, and of the President, Major M. G. Naidu, have been published in the Abstracts columns and the resolutions in the Correspondence columns of the current issue. Scientific papers read at the Conference will be published in the columns marked for Original Articles and one on Calcium Therapy appears in the current issue. We are obliged to the organisers of the Conference for allowing our readers the benefit of the experience of various authors who read these papers before the Conference.

Though we had not the good fortune of being present at the Conference due to unforeseen domestic circumstances, the report of the proceedings received by us indicate that the Conference was a grand success in every way. It is said that as many as 200 delegates mustered from all parts of Andhra Desa consisting of not only members of the Independent Medical Profession but also a large number of Government Medical Officers holding high positions, such as District Medical Officers, professors of Vizagapatam Medical College, all of whom mixed freely as brethren of one common fraternity. All the three previous conferences were also attended by men in service but not in such large numbers nor did they take any prominent part in the proceedings. We congratulate the Andhra medical fraternity on their wisdom in choosing Dr. P. R. Venkatarama Iyer, the D. M. O. of Kistna District as the Chairman of the Reception Committee, thus demonstrating to the rest of the medical world that it is possible, nay essential, in the interests of medical profession and its scientific growth, that its members should not recognise caste distinction both in service and outside service.

Though for want of space we had to publish only the extracts from the addresses of the Chairman, Reception Committee and the President, we did not omit the main features and ideas conveyed in these addresses. Both the addresses are worth the attention of our readers, one coming from the head of the medical department of a district and the other from a veteran leader of the medical profession in India, who year before last, had the unique privilege of presiding over an all India Medical gathering at Lucknow. We have quoted the remarks of Dr. Venkatarama Iyer regarding honorary system *verbatim* and such of our readers who are serving the State as honoraries would do well to know the views of a District Medical Officer on the honorary system. Major Naidu's address naturally covers a large field likely to interest both the state paid and private practitioners throughout the country.

Thirty-six resolutions were passed at the Conference. Though many of them are pious hopes and expectations, it is note-

worthy that they covered a large field of subjects concerning the life and prosperity of the medical profession in India. We endorse every word of what Major Naidu said about the Andhras and hope the Andhra Medical Association which has been playing its part most worthily at the last four annual gatherings, will soon be a reality under the able guidance of Dr. D. S. Ramachandra Rao, the Convener of the Committee appointed to draw up the constitution and frame rules and regulations for the efficient working of the Association.

Health and Population in India: Major-General Sir John Megaw, who is now the Chief Medical Adviser to the Secretary of State for India, gave a lecture to the East India Association, London, on 2-3-34 on the above subject. Broadly speaking the thesis of the late Director-General of the Indian Medical Service was that India is now so rapidly increasing in population that her production of necessities will not be able to keep pace with this advance. He avoided advocating any particular form of population control, but advocated very strongly the instruction of the people in the hard facts which had to be faced. He said that remedial action ought to be prepared in a thorough investigation of the case by the best brains of India and England.

Sir George Newman who occupied the chair said that in 1800 the population in England was 9 millions and "to-day it was between 40 and 42 millions—far too many of us on this little island in a Northern sea—and yet we had contrived, or our forefathers before us had contrived, to produce out of this critical situation the healthiest nation in the world. We had done that, not because of medical science so much as because of social circumstances, which had been controlled by Government and by the individual combined with education. The people of England, had learned how to control disease, and by the understanding of the common people of the art of living, they had been able to survive and rise from 9 millions to 42 millions in 134 years. They had been able to reduce their high mortalities by a recognition of the facts of nature and of more and more biological, though still not enough biological, true understanding of these facts. He had endeavoured to point out for many years to this country that the health of the people was dependent not upon drugs, but upon a fuller and fuller understanding of what he called the art of life. Leprosy, plague, cholera, —three diseases which India knew all too well to-day to its terrible cost,—had been banished from England. From this illustration the deduction is that what man had done man could do, with the strange but all-powerful thing—understanding and goodwill."

"Miss Eleanor Rathbone, M.P., who has just published a striking book on *Child Marriage: The Indian Minotaur* asked Sir John Megaw what steps he would like the Government to take. What was the use of a survey such as he had proposed unless they could be sure that they had a Government which would be willing to carry out the recommendations of the survey even if those recommendations should prove to be unpopular."

Sir John Megaw in reply suggested that the Government could not do anything against public opinion. The need was to stir public opinion and when that was done, Government would surely respond to the demand of the public.

The above is the opinion of a loyal servant of the Government but our opinion is that India will continue to be a death trap till the system of Government in India is brought to a level as obtaining in England.

Amalgamation of Health Associations: Lady Brabourne, wife of His Excellency the Governor of Bombay, gave quite frank and sound advice to the local (Bombay) branch of the Bombay Presidency Baby and Health Week Association, when she presided over the annual meeting of the Presidency and the local branch of this Association on 23-3-34 and exhorted that body to amalgamate with the Infant Welfare Society in Bombay. "This amalgamation, she said, might involve some sacrifice of individuality on the part of these two bodies, but they must bear in mind that they were working for the alleviation of suffering of the women and children in the Presidency." We gave the same advice in Madras to the two health associations sometime ago and would repeat it again with a suggestion to read what Lady Brabourne said in Bombay. If only the spirit of service prevailed amongst the chief office bearers of all health associations in this country, there cannot be any room for the spirit of rivalry which had been the cause for the growth of multiple associations with identical interests. A closer scrutiny of these associations whether in Bombay, Madras or elsewhere will disclose that important office bearers of these several associations are Government servants holding important positions, their wives or near relations. There is no need for the officers in high position in the Medical and Public Health Department to be office bearers of so-called non-official organisations—as these officers in their official position could do as a matter of daily routine what these associations are expected to do non-officially. If the chief organisers make an effort to sacrifice their 'individuality' then, not only the amalgamation of such bodies feasible but there would be more room for non-officials to co-operate and co-ordinate with the Government Departments and better health ensured to the public.

German Doctors: The medical profession in general will be disappointed at the reply given on behalf of the Government on the floor of the Legislative Assembly that the Government do not intend taking any action to prevent German doctors practising in India in spite of the fact that Indian doctors are not allowad to practise in Germany without special licence being obtained from the German Government. While we sympathise with the members of the medical profession who have been driven out of their native land for political reasons we cannot approve the non-intervention policy of the Government of India, as such a policy will surely affect the self-respect of India as a nation and not merely of the medical profession.

Drug-Faking in Bombay: The drug merchants in Bombay are getting agitated over the spurious imitations of drugs and medicines which are being sold in the open market in Bombay. Some make up their bottles and packages exactly like the original articles which come from Europe and America; the more daring act is that empty bottles which originally contained the genuine stuff and which have their labels intact, are filled up with the spurious drug or medicine and sold as the real thing. There is a market called the "Ebdonian market" in Bombay where regular trade is being carried on empty bottles of genuine medicine containing the original labels. A few months ago at the instance of the Manager, Messrs. Muller & Phipps, the agent in India for the manufacturers of Antiphlogistine, one Atma Ram, formerly employed under chemists, was arrested, tried and convicted for selling spurious Antiphlogistine and ever since the Company has been taking every step to safeguard their interest with tremendous cost. Though it is usually possible to get people convicted for fraudulent imitation it is found rather a costly job to file civil suits to prohibit branded articles. Proceedings in civil courts not only take a long course but involve the manufacturers in heavy expenditure and many a time it is found impossible to recover the damages awarded as the imitators are usually men without any substance. Spurious imitations of drugs and medicines apart from causing heavy losses to manufacturers are dangerous to the health of the public and the only remedy seems to be for the India Government to bring into force a Food and Drugs Act on the lines of the English Act so that the imitators could be easily and expeditiously dealt with in police courts.

Sympathy for Licentiates: We have published in the Correspondence Columns extracts of the proceedings of the sixth Mysore Medical and Sanitary Conference held on 10-3-34 at Mysore. The advice contained in the inaugural address delivered by Lt. Col. Hance to the medical profession is worth reading. The feelings of sympathy expressed by Lt. Col. Hance for the present anomalous condition of the Medical Licentiates in India are very touching. Medical Licentiates owe their very birth to the members of the I. M. S. who brought this class of medical men into existence in India soon after the British occupied this country. So nobody could recognise the usefulness and merit of this class more than the I. M. S. and the very slow evolution attained by these medical men was entirely due to the I. M. S. It has also to be said to their credit that the recognition of Medical Licentiates as medical practitioners was to a great extent due to the encouragement received by them from the I. M. S. and if the Medical Licentiates still occupy the anomalous and 'tragic' position referred to by Lt. Col. Hance in his address, it was

entirely due to the callousness on the part of the I.M.S. The members of the I.M.S. as heads of the medical department are the only advisers of not only the provincial Governments but also of the Central Government and if they so wished it, they might have without any difficulty lifted them up. No better evidence we could adduce for the unsympathetic attitude of the I. M. S. towards the Medical Licentiates than the passing of the Indian Medical Council Act of 1934.

Recent Advances: The transfer of Lt. Col. Paton till recently the Superintendent of the Government Hospital for Women and Children in Madras, as Civil Surgeon of Delhi and the posting of Lt. Col. Plumptre from Bombay to Madras, is the latest development in the policy of the Government regarding the transfer of the members of the I. M. S. It is true that the I. M. S. is an all-India service but like officers belonging to this category in the other departments of Government such as Education, Police, etc., these officers continue to serve in the same province where they were primarily posted, till the end of their career. This policy underwent a change in connection with the appointments of Surgeons-General with the Provincial Governments and about ten years ago Madras was the first province where this change took place. We now find an advance in this policy as is the case with the transfers of two I. M. S. officers referred to above. Such an advance in the policy of the Government may perhaps advance the interest of the officers concerned in such transfers; otherwise it is as undesirable as it is unnecessary in the interest of efficient administration of the departments concerned.

Is it Exploitation ?: A perusal of the proceedings of a meeting of the Nuzvid Medical Practitioners'Association published elsewhere when a resolution was passed by that Association protesting against the sanctioning of a pucca District Board Dispensary by the Kistna District Board at the village Gollapalli where a subsidised rural dispensary has been in existence for over 6½ years, should surprise all. It looks as if those concerned in starting the regular dispensary are anxious to provide an appointment for one in whom they are interested more than in the medical relief at Gollapalli. We are led to this conclusion on the information we have received that this regular dispensary is to be under the charge of a medical practitioner newly appointed for the post instead of in charge of the existing rural medical practitioner of the locality, as was required by a G. O. passed by the Government some years ago calling upon local bodies that in case they wished to convert a subsidised dispensary into a regular one the existing subsidised practitioner should be appointed for the place. A G. O. recently passed by the Government prohibits local bodies from creating new appointments or sanctioning new expenditure without the previous sanction of the Government and we trust the Government would not permit the Kistna District Board to set at naught their (Government's) Standing Orders. We are told that according to the existing contract the present subsidised practitioner at Gollapalli has still to serve a period of 1½ years and a standing order of the Government prevents local bodies in terminating the services of subsidised practitioners except for bad behaviour so long the local bodies could afford the expenditure incurred for running the subsidised dispensary. In this case the local body cannot legally terminate the services of the existing rural medical practitioner. We also wish to point out to the Government the reply of the Rajah Saheb of Bobbili on the floor of the Legislative Council when a complaint was made during the discussion of the last budget about inefficient rural medical relief. The Raja Saheb said that practitioners were unwilling to settle in rural areas. May we ask the Government whether the attitude of the local bodies towards rural practitioners as displayed by the Kistna District Board is not one of the many causes which prevent practitioners to settle in rural areas.

The final order of the Government on this subject will be watched with interest by all concerned.

Dr. P. K. Warrier: Rao Bahadur Dr. P. K. Warrier, L. M. S., relinquished his office as Personal Assistant to the Surgeon-General with the Government of Madras on 21-4-34 on which date he retired from service. He was one of the members of the provincial medical service who led a pure and devoted life both in his professional as well as administrative capacity. He entered service in 1906 and after serving for three years as Assistant Surgeon in the General Hospital, Madras, was transferred to moffusil stations. He was sent on plague duty and later served as Assistant D. M. O. of Kurnool and Malabar, and in 1919 was posted to the Government Reformatory School, Chingleput, being promoted as Civil Surgeon. In 1922 he was transferred to Cochin as Civil Surgeon and later acted as D. M. O. of Bellary and Anantapur from where he was posted as Civil Surgeon, Negapatam in 1926. He was appointed as Personal Assistant to the Surgeon-General with the Government of Madras in November 1929 and served in this capacity till the day of his retirement.

His devotion to his duty was so remarkable that all through the period of 4½ years of his service as Personal Assistant he did not take leave for a single day and one could see him at his desk punctually at 11 a. m. and working till 6 in the evening. The regard, which the members of the provincial medical service as well as in the subordinate service had for him was demonstrated by his being entertained by them on 13-4-34 at the Madras Medical College grounds where they mustered strong to wish Dr. Warrier good-bye. Of the five Indian personal assistants to the Surgeons-General, he was the first in receiving such an honour from his brethren in service. His relationship with his subordinates in the office of the Surgeon-General must have been very cordial as could be evidenced from the fact that he was entertained by them on 19-4-34. The Government also appreciated his services in his capacity as Personal Assistant and conferred upon him the title of Rao Bahadur in 1932. He had few friends and as few enemies in his official capacity and this was why his tenure of office as Personal Assistant was uneventful either ways. We wish Dr. Warrier happy days during his retirement.

Correspondence, Reports, Etc.,

Report of the Government Committee on Honorary Staff for Hospitals.

1. In every hospital or dispensary where the daily average of out-patients exceeds 100 there should be more than one medical officer and one of the medical officers should be an honorary officer.

2 In the future it may be possible that an honorary medical officer in a small hospital or dispensary, after a few years service therein, might be able to take the entire charge of the hospital with the assistance of another honorary officer in professional work. The Committee was divided in their opinion whether the time was yet ripe for such a change in administration, though its possibility might be considered after some years. It is possible also that until such changes can occur in any number there may be isolated instances where the Surgeon-General might perceive suitable opportunities in time, place and personnel for the introduction of such a change and might be able to introduce it forthwith as an experimental measure. But the Committee consider that development should be gradual and only as suitable officers become available.

3. In all District Headquarters Hospitals provision should be made as far as possible for opening special departments, e. g., ear, nose and throat, venereal, leprosy, ophthalmic etc., and to work these departments honorary officers should be trained on the lines of paragraph 3 of G. O. No. 1610, P. H, dated 29th July 1932. It is not intended by this employment of honorary medical officers in special work that they should not also be employed in general hospital work.

4. (a) The Superintendent of the Government General Hospital considers that additional to his present staff one male and one female honorary medical officer may be appointed to work in the Government General Hospital out-patient department and that their services will be required between 7 and 9 a. m.

(b) The Superintendent of the Royapuram Hospital asks for two additional honorary medical officers, university graduates to work in his out-patient department.

5. The Superintendents of the Government General Hospital and the Royapuram Hospital have since submitted proposals for the redistribution of their medical beds. The Surgeon-General has approved of their proposals on the understanding that the allotments are personal to the present incumbents and not necessarily attached to the appointment.

6. The Committee considered that an honorary medical officer of a hospital attached to a teaching institution should be considered also for appointment to the academic post in his special subject when such post becomes vacant and that he should be paid for such teaching work, if appointed.

It is a corollary from the above that a particular physician's appointment at the hospital does not necessarily imply that the holder should also fill a particular academic appointment.

7. Honorary medical officers who in accordance with paragraph 10 of G. O. No. 1610, P. H., dated 29th July 1932, impart clinical instruction recognized as such by the Surgeon-General should be entered on the roll of the college or school, to which the hospital is attached.

8. The Committee considered that for any future extension of the staff required in city hospitals the possibility of appointing honorary medical officers in such posts should be considered when suitable men are available.

9. A majority of the Committee supported substitution of an honorary medical officer for a Government medical officer in a special appointment in the Royapuram Medical School when opportunity should arise. They considered that an honorary physician could be appointed to one of the two medical academic appointments at the Royapuram School and so relieve the Government medical officer when such appointment should fall vacant, provided that an honorary officer suitably qualified for this appointment was available. They did not propose that there should be reservation of this appointment for an honorary officer, but considered that a paid Government Officer could be appointed, the selection being made on the merits of the officers available.

Resolutions passed at the Fourth Andhra Medical Conference, Bezwada.

The first three resolutions dealt with the starting of an Association to be called The Andhra Medical Association with branches in various districts of Andhra Province. A provisional Committee consisting of Dr. D.S. Ramachandra Rao, Major M.G. Naidu, Major T. S. Sastry, Drs. M. V. Krishna Rao, P. Gurumurti, Ch. Suryanarayana, M. V. S. Prakasa Rao, M. Rangayya, K. Ullaki, G. M. Sivasubramanyam, P. R. Venkatarama Iyer and Ranganayakamma, with Dr. D. S. Ramachandra Rao as the Convener, was appointed to frame the constitution and draft rules and regulations for the Association with power to co-opt other such members. This provisional Committee was empowered to act as the Committee of the Andhra Medical Conference for the purpose of taking necessary action regarding the resolutions passed by the Conference.

The fourth resolution thanked the Government of Madras for extending the Government General Hospital and the Madras Medical College and requested the Government to employ Honorary Medical Officers to do the work involved by the extension of the two institutions.

5. The Conference urged the necessity of providing funds for completing the building plans contemplated to afford efficient teaching facilities at the Medical College, Vizagapatam, and pointed out the desirability of having an up-to-date Infectious Diseases Hospital and a Tuberculosis Hospital in Vizagapatam.

6. The Conference thanked the Chief Minister, the Rajah Saheb of Bobbili and Major-General Sprawson for the extension of the Honorary System of Medical Relief and congratulated the latter on his promotion as the Director-General of Indian Medical Service.

7. Major-General Sprawson and Lt. Col. V. Mabadevan, were thanked for the introduction of the five years' course for the Medical Licentiates and the Conference hoped that other provinces in India would follow the example of Madras.

8. The Conference requested the Indian Universities to have Faculty of Medicine to afford facilities for the Licentiates to qualify for University degree.

9. The Conference urged on the Andhra University the desirability of framing regulations on the lines of the Madras University to enable the Medical Licentiates to qualify for the M. B. B. S. degree without insisting on any extra academic qualifications

10. Dr. T.Krishna Menon, Rao Bahadur Dr. A. Lakshmanaswami Mudaliar and Rao Bahadur Dr. T. S. Tirumurti were congratulated on their election to the All-India Medical Council.

11. The Conference congratulated the Andhra University on having secured the continuation the services of Dr. Sir S. Radhakrishnan as the Vice-Chancellor and felicitated Dr. Sir S. Radhakrishnan on the uncontested election.

12, 13 and 14. The Andhra University was thanked for conducting the M. B. B. S. examinations of the University independent of the Madras University and the Conference urged on the Andhra University, the Surgeon-General and the Principal of the Medical College, Vizagapatam, the desirability of having the final year clinical examinations held at Vizagapatam itself, as the K. G. Hospital afforded sufficient facilities for the small number of students who appeared annually for the examination, and supported the proposal of the University to take over the hospital and the Medical College under its control and requested the Surgeon-General and the Government of Madras to consider sympathetically this proposal.

15. The Conference pointed out to the Director of Public Instruction the need for teaching the elements of Hygiene and Physiology as compulsory subjects in all high schools.

16, 17, 18, 19, 20 and 21. The Conference requested the Andhra University to reconsider favourably the affiliation of the Medical College, Vizagapatam, for the B. Sc.. course in Physiology and thanked the University for the institution of the Ph. D. degree and hoped that the M. D. and M. S. degrees would soon be instituted. The conference requested the Andhra University to institute two research studentships for the postgraduate medical students tenable for a period of 2-3 years and pointed out the need to grant diplomas and degrees in Pharmacy and Pharmaceutical Chemistry. The Andhra University was also requested to appoint whole-time medical officers to conduct examinations of the students of the University and the affiliated colleges and finally suggested to the University the desirability of starting a University Training Corps independent of the Government, as the Government persistently refused to do it themselves.

22 & 23. The Conference expressed its opinion that the Provincial Medical Act should be amended to provide for increased number of elected members both graduates and licentiates and resolved that the election to these Councils should be conducted on the basis of joint-electorates.

24, 25, 26 & 27. The Conference recommended the immediate resumption of open competitive examinations for the recruitment of the officers of the I.M.S, and opined that the competitive examinations should be held in India and that no member of the I. M. S. should be employed on the Civil side on any consideration, such as war reserve, etc., condemned the views expressed in the Memorandum of the British Medical Association submitted to the Joint Parliamentary Committee, condemned also the policy of the reservation of posts in the Medical Research Department for the members of a particular service, and recommended that recruitment to this department should be made by advertisement, the selection depending solely on merits.

28. The Conference urged on the Government of India the necessity of the appointment of a Commission to report on the present working of the Indian Research Fund Association.

29. The Conference pointed out to the Government of India the necessity of appointing a Commission to inspect the existing Government Research Institutes and report on their satisfactory working and on the possibility of linking them with medical schools and colleges and the clinical hospitals.

30. The Conference urged on the Government of India the desirability of transferring the Karnal School of Malariology to the School of Tropical Medicine, Calcutta.

31. The Conference recommended to the All-India Medical Council the necessity of laying down a minimum standard of

medical education in this country raising the standard of "license" diplomas to the same standard, bearing in mind the peculiar circumstances and needs now prevailing.

32. The Conference recommended to the Government of India, the provincial Governments and the Government of the Indian States the desirability of instituting studentships, fellowships, and grant-in-aid for the purpose of carrying on research at the university centres and in close co-operation with the staff of the medical colleges.

33. The Conference requested the Managing Committee of the Conference to take steps to obtain concession from the railway authorities for travelling of the delegates attending the Andhra Medical Conferences in future.

34. (a) & (b). The Conference requested the Government to operate Sec. 77-A (1) of the District Municipalities Act of 1921 as amended in the case of Medical Officers employed by the Municipalities just as in the case of Health Officers and Sanitary Engineers and take steps for the early provincialisation of the services of this class of employees and further requested the Government to provincialise Local Fund Medical Institutions also.

35 & 36. The Conference suggested to the Government to appoint a Committee to go through the working of the subsidised rural medical scheme, the committee to consist of two members of the Provincial Legislature and three independent medical practitioners nominated by the Provincial Rural Medical Practitioners' Association and pointed out the desirability of affording proper facilities to the subsidised rural medical practitioners for higher medical training by giving them study leave on full subsidy once in every five years for a period not exceeding one year at a time.

Arsenical Preparations.

An eminent Veneriologist writes :—

I have on my table as I write, a pamphlet which would urge me to use a particular arsenical product in cases of syphilis because it contains arsenic.

Now that seems at first sight a good reason. All the remedies for syphilis which I have ever used, (except the old mercurials occasionally) have contained either arsenic or Bismuth.

But is this quite a right reason? Why not liquor arsenicalis? Why not Cacodylate of Soda? There are numerous and cheap solutions of Cacodylate of Soda ready for injection, painless enough, no danger of decomposition or oxidation. They can be given either in a vein or in a muscle quite conveniently.

Why all this fuss then about a discovery of a new arsenical compound? Or is it new? Did not Professor Ehrlich discover nine hundred and fourteen new chemical compounds of arsenic? Is this one of Ehrlich's discoveries? If so why did he not recommend it at the time?

Why did Professor Ehrlich spend all these years of his life studying the effect of arsenicals on the spirochaete. Was that all humbug?

Is any arsenical organic compound equal to another in antisyphilitic power?

Then why were "Soamin" and "Atoxyl" so dramatically discarded in favour of Salvarsan when the discovery of the latter was made? Why was not Cacodylate of Soda applauded as a cure for Syphilis long before Salvarsan was discovered? Was Cacodylate of Soda unknown to the Professor Ehrlich, who studied the spirillocide properties of nine hundred and fourteen different organic arsenical compounds?

Cacodylate of Soda has been applauded and discarded as an antisyphilitic remedy since Ehrlich's discovery, the same as many other organic salts of arsenic have been applauded for a time then discarded.

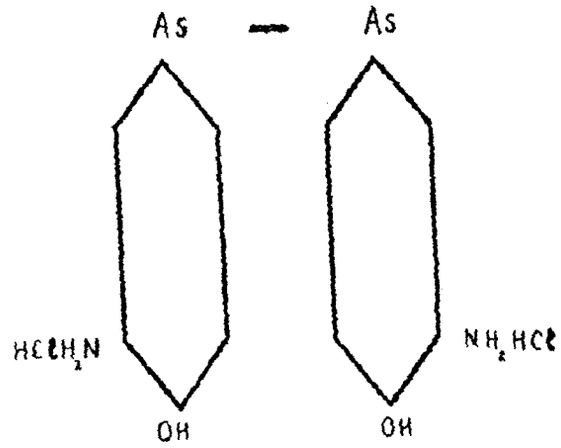
Let us turn to Authorities, and we find three groups of arsenical compounds are given authentic support. A study of the chemical formulae published for them shows that they are all closely alike, identical in fact except for the substitution of one or two of the hydrogen atoms of the amido group by one or two side chains containing CH2 with sulphur, oxygen and sodium.

Curious, is it not? After more than twenty years experience with all kinds of organic arsenicals, many new and old being tried and discarded during the period, only three chemical compounds have survived and receive general approval by authorities.

Those three compounds are made by many different firms, but chemically they are the same three.

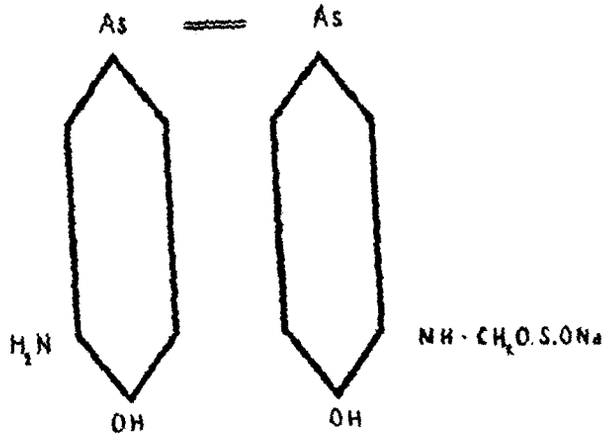
They are the three which are found by long experience to be capable of yielding a permanent Wassermann Negative reaction Ehrlich's work was no sinecure, it was an epic.

Of those three the first, Arsenobenzol, (variously known as Arsphenamine, 606, Salvarsan, Arsenobillon, Kharsivan etc) is still used to a considerable extent, but requires care and preparation of the patient.



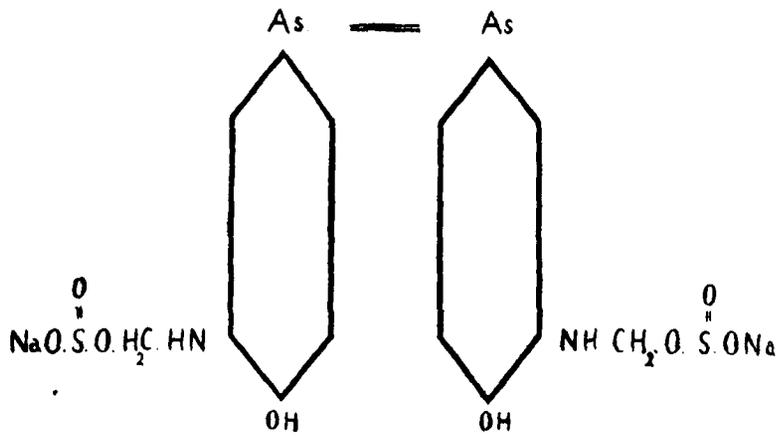
ARSENOBENZOL

The second is Novarsenobenzol (variously known as Neoarsphenamine 914, Neosalvarsan, Novarsenobillon, Neo Kharsivan etc) is now very largely used, being sufficiently free from the trouble associated with the first. This is preferred for intravenous use.



NOVARSENOBENZOL

The third, Sulpharsenobenzene (variously known as Sulfarsenol, Sulpharsphenamine etc) is preferred for intramuscular use.



SULPHARSENOBENZENE

The Mysore Medical and Sanitary Conference.

The sixth Mysore Medical and Sanitary Conference was held on 10-3-34 at the Apex Bank Hall, under the presidency of Shastra Vaidya Pravina Dr. S. Subba Rao, Senior Surgeon in Mysore. There was a large gathering of medical men from all over the State. Lt.-Col. J. Hance, O. B. E., Residency Surgeon, Civil and Military Station, delivered the inaugural address.

In the course of his opening remarks, Dr. Subba Rao, after welcoming the delegates to the Conference, referred to the loss the medical profession in the State had sustained in the death of Dr. H. B. Mylvaganam, retired Senior Surgeon in Mysore and the Vice-President of the Mysore Medical Association. The late Dr. Mylvaganam, he said, had rendered valuable and meritorious services in the cause of medicine in the State. Dr. Subba Rao next referred to the recognition promised to be given by the Examining Board, London, for sympathetic consideration of the claims of Mysore medical graduates, to attain British Medical Degrees. One Mysorean Dr. B. Venkatasubba Rao, had already got his M. R. C. P. Degree. The Senior Surgeon, proceeding, referred to the presence of Lt.-Col. Hance in their midst and on behalf of the Association offered him a cordial welcome.

LT.-COL. HANCE'S ADDRESS.

Lt.-Col. J. Hance then delivered his inaugural address. After thanking the members for the great honour done to him, Lt. Col. Hance invited the attention of those present to the writings of Hippocrates, the greatest of all medical geniuses and the father of modern scientific medicine, whose principles "both of practice and others have never been controverted to this day." The medical men belonged to the finest and noblest of professions, he continued. There was a great necessity of a genuine sense of vocation in the medical student. "He who would," Hippocrates said, "truly acquire a knowledge of medicine must possess natural ability, teaching, a suitable place of instruction from childhood, diligence and time." This, the speaker would say, was as true, if not truer at the present day, than when written. Hippocrates was also very insistent upon the inculcation of a scientific spirit in the student, as well as a healthy scepticism—"for there are" he said "two things—science and opinion." In no other profession was the danger of the fixed idea—of opinion too hastily formed on insufficient evidence—as great as in the medical profession. Personally, he thought, that there was still room for members of the profession for the healthy scepticism that Hippocrates urged.

POSITION OF LICENTIATES.

Referring to the curriculum of medical studies, Lt.-Col. Hance said that he had always been and was a fervent admirer of the Indian Medical student who studied and qualified himself for the most technical profession in the world in a foreign language. Dr. S. Subba Rao had referred in his opening address to the last Conference to what he aptly described as the caste system among medical men, and advocated a single portal of entry to the profession, and that the M. B. B. S. degree. The speaker would like most heartily to endorse this recommendation. He considered the position of the Licentiates in India as not only anomalous but in many cases as tragic. The licentiate acquired, it was true, a licence to practice by an abbreviated curriculum. The price he paid for the gain of one year was a qualification with a purely local recognition, which was no barrier to the mediocre man, who was not required in an already overcrowded profession, while it closed for ever the door of advancement to the good man.

MEDICAL PRACTICE.

Lt.-Col. Hance next dealt with medical practice and healing, the principles of which also Hippocrates had laid down, and which "stand as true to-day as when he laid them". To Hippocrates, they owed the fundamental conception that nature himself was the healer. "Everyone of us" Lt.-Col. Hance continued "has frequently had the experience of being called in consultation for a patient, who in an illness of say 4 days has been attended by at least as many doctors. The colleague with whom we see him is the latest and too frequently the last. If happily, it is otherwise and meeting him subsequently we ask after the patient, how often do we not receive the reply, 'Oh, he has left my treatment; I do not know how he is.' Gentlemen, I suggest that it is high time that our profession in India altered this state of affairs, and both by practice and precept conveyed to the lay public what has long been a truism among medical men, namely, that in this frenzied and frantic rush from doctor to doctor, there is only one person who stands to lose and that is the wretched patient. Rightly or wrongly, rightly I think, the lay public collectively expect from our profession a higher standard than that which governs the transactions of the 'market place'; however much in their frenzied immediate interests they may individually tempt us to descend to them. In proportion as we resist this temptation individually and collectively, our individual and collective prestige will rise, for the lay public are not fools."

Papers were then read. Dr. B. K. Narayana Rao, Superintendent, Minto Ophthalmic Hospital, read a very interesting and instructive paper on 'Diabetes—its relation to eye disease.'

Dental Quacks.

Want of proper facilities for a clear knowledge of Dental Surgery and absence of any kind of legislature in this country to prevent quackery have been solely responsible for creating a situation in India and especially in the Madras Presidency, which has not only degraded the profession but flooded the country with dental quacks, a large number of them hailing from foreign countries. It is a pity that Dentistry is being practised as a trade and not as a profession. It has been made possible by greedy private dentists to let loose on the public so-called dental surgeons who are supposed to be trained under them with little or no knowledge of anatomy, physiology, or pathology much less medicine and surgery, a knowledge of such subjects being highly essential for the practice of Dentistry. It is no wonder that cases of fracture of the mandible, necrosis of the jaws, dislocation of the temporomandibular articulation, infection of the antrum with its series of complications, injury of the mandibular nerve, etc., have been of common occurrence in patients treated by the quack dentists. Cases are also on record of deaths due to haemorrhage, after extraction of teeth in patients who must have been suffering from conditions like Haemophilia, Pernicious Anaemia, Scurvy etc.

It is an impossibility for lay people to master the subject of Dentistry within a few months. A student should have at least a course from 3—4 years to have a knowledge of Dentistry. It is therefore necessary that the existing qualified dentists and members of the medical profession

should agitate and bring about reform in preventing quacks in Dental Surgery.

C. Seetharam,
Hony. Clinical Asst.,
Dental Department,
Govt. General Hospital, Madras.

Masulipatam Medical Association.

The first anniversary of the Masulipatam Medical Association was held in the local town hall on 16-4-1934 under the presidency of Dr. D. S. Ramachandra Rao, M. A., M. D. The meeting was largely attended. Many practitioners belonging to the indigenous system of medicine were also present. The function began with tea and photo. A resolution expressing sympathy for Dr. K. Sithapathi Rao who lost three of his children due to small-pox within a week, was first passed. Next Dr. P. R. Venkataramier, D. M. O., spoke on "Medical Fraternity;" Dr. A. Umapathi Mudaliar demonstrated an interesting case of "Cirrhosis of Liver." Dr. M. Seshacharyulu read a paper on "Dynamic Physiology" and Dr. R. Venkata Rao on "Duodenal Ulcer." Dr. P. R. Venkatarama Iyer was elected as President for next year, Dr. K. Sithapathi Rao as Vice-President and Dr. A Seshagiri Rao as Secretary and treasurer. A sub-committee consisting of Drs. M. Seshacharyulu, A Seshagiri Rao and A. Umapathi Mudaliar, was elected to give suggestions to the Provisional Committee of Andhra Medical Association regarding affiliation of local associations. The function came to a close with a grand dinner.

A. SESHAGIRI RAO,
Secretary.

Prome District Medical Fraternity, Burma.

The eighth annual dinner of the Fraternity was held on 2-1-34 at the Free Mason Hall, Prome. The function was presided over by Capt. Davidson, I. M. S., Civil Surgeon, Prome, Major-General C. A. Sprawson, Director-General, Indian Medical Service, Col. A. Gill, I. M. S., Inspector General of Civil Hospitals, Burma, and Mrs. Gill, who were at Prome on their tour, were amongst the "guests of honour". Medical men from the Prome District largely attended the function. After the toast of the King Emperor by the President, Dr. R. L. Soni, proposed the toast of the Prome District Medical Fraternity and Dr. Brahuspathy, K. I. H., proposed the toast of the guests.

Major-General Sprawson thanked the fraternity for their cordial welcome and expressed his happiness to be amongst medical men representing various departments and particularly private practitioners. He emphasised the need of such gatherings as they would rub off all sharp corners and he pointed out the necessity for the young practitioners when they enter the profession to get themselves registered, read medical journals to keep in touch with the latest improvements in the Science, join and take lively interest in medical societies which would give them ample chances to improve their knowledge. He was very much pleased that the women folk take great interest in the medical profession in Prome. Col. Gill on behalf of himself and Mrs. Gill thanked the members for the sumptuous dinner and the nice things said of them. He was very pleased to see cordial relationship existing between private practitioners and Government Medical Officers quite in consonance with the designation of the Association. He was also of opinion that such functions would bring fraternal feelings amongst the members of the profession and advised those present to remember the good words of advice given by Major-General Sprawson.

The members assembled again under the presidency of Capt. Davidson when the toast of the President was proposed by Dr. Andy, which was supplemented by almost all other members. Dr. Ramchandar gave the history of a very interesting case of cerebral haemorrhage in a patient in whom the beatings of pulse stopped, and with it respiration both of which being revived by triphining.

The Trichinopoly District Medical Association.

The fifth Inaugural Meeting of the above Association was held on Saturday the 24th, February, at 5 30 P. M., in the Railway Hospital, Golden Rock, under the Presidency of Dr. C. E. R. Norman, F. R. F. P. S., D. P. H., Chief Medical Officer, South Indian Railway and President of the Association. About 60 doctors were present. In his opening remarks the President said that he felt gratified at the large number of members present, on the occasion which testified to the interest taken by them, and called upon Dr. A. Vasudevan, M.B.B.S., Asst. Pathologist, Medical College, Madras, to deliver his address on "Clinical-Methods in Diagnosis"

Dr. A. Vasudevan, then delivered an interesting and instructive lecture, and demonstrated a few simple tests which could be carried out by the average practitioner in the diagnosis of diseases in the moffusil. He demonstrated a simple test for bile in the blood, the Halometre for testing blood in Pernicious anaemia, and simple tests for diagnosis of early Typhoid by Diazo-re-action and Gel. Test for Kala-Azar etc.,

There was then demonstration of cases and Dr. T. S. S. Rajan, demonstrated two cases, one of Intestinal Tuberculosis and another of Tubercular sternum which he had removed. Dr. Sambasivan, demonstrated a case of Vitamin-B deficiency. Dr. Iravatham of Thirukkattupalli demonstrated a case of ulcer of Pudenda about which there was lot of discussion as to diagnosis and treatment. Dr. R Kalamegham, demonstrated a case of compound-fracture being treated by the Winnet ORR method—(Plaster of Paris Jacket.)

The monthly meeting of the above Association was held on 24-3-34 at 5 P M., in the Govt. Head Quarters Hospital, Trichinopoly. About 40 members were present. Drs. M. V. Sunderasan and A. Raghava Rao, were "At Home." Dr. C. E R. Norman, F.R.F.P.S., D.P.H., Chief Medical Officer, South Indian Railway, and President of the Association presided.

Dr. V. Subramanyam, Hony. Dentist, Govt Hospital, read an interesting paper on "Surgical Dentistry." After the lecture, there was demonstration of cases, two by Dr. Rajan, one of gumma and another a fusiform aneurism of descending aorta, and two by Dr. V. Subramanyam, one of enlarged liver and another of "Tubercular-Hip." After demonstration of clinical cases, there was discussion about each case. After vote of thanks to the hosts, the Lecturer and the President, the meeting terminated.

P. A. S. RAGHAVAN,
Secretary.

Nuzvid Medical Practitioners' Association.

An ordinary meeting of the Association was held at Veeravalli on 22-4-34 when Dr. D. Suryanarayana Naidu occupied the chair. Dr. S. Hanumantha Rao was at Home. After discussion of various scientific subjects, the following resolution was passed unanimously:

"This association resolves to protest against the proceedings of the President, District Board, Kistna, while converting the Gollapalli Rural Dispensary into a regular one, in appointing a new practitioner in place of the already existing one that has been serving for over 6½ years, without any grounds, thus ignoring his claims according to G. O. No. 1626 P. H. dated 29-6-'29; and requests to reconsider the matter and remove the injustice".

List of Postings of Sub Asst. Surgeons for the month of March, 1934.

No.	Names of Sub-Asst. Surgeons.	From.	To
1	Dr. S. Ramachandra Rao	Leave	Govt. Hl., Parlakimedi.
2	,, M. Satyanarayana	,,	L. F. Dy., Kalyandrug.
3	,, A. J. C. Joseph,	,,	Agency Duty, Koraput.
4	,, O. S. Venkataraman	L. F. Hl., Manamelgudi	C/o D. M. O., Vizag.
5	,, C. Kameswara Rao	Govt. Hl., Parlakimedi	Govt. Dy., Harpanahalli.
6	,, J. Ponnuswamy Pillai,	,, Attur	L. F. Dy., Peddampatti.
7	,, A. Ambalavanam	L. F. Dy., Peddampatti	,, Kaity.
8	,, M. Gopala Acharya	,, Duggaraja-patnam	,, Indukurpet.
9	,, C. Ramamurthy	,, Indukurpet	Govt. Hl., Kanigiri.
10	,, M. Gopala Menon	,, Cheyyur	L. P. Dy., Satyavedu.
11	,, S. Kuttalam Pillai	,, Satyavedu	,, Chevvur.
12	,, A. R. Venkata Rao	Leave	Govt Hd. Qrs. Hl., Kurnool.
13	,, K. R. Parthasarathy	Agency Duty, Vizag	Govt. Dy., Ponneri.
14	,, C. Venkatanarasimham	Govt. Dy., Ponneri	Police Hl., St. Thomas Mount.
15	,, M. Kunjunni Menon	Leave	Mental Hl., Calicut
16	,, S. M. Natesa Mudaliar	,,	Medl, School, Rovapuram.
17	,, B. S. Sahasranamam	Medl. School, Roya-puram	Leprosy Duty, Trichinopoly.
18	,, A. Gurumurthi	Agency Duty. Vizag	K. G. Hl., Vizagapatam.
19	,, B. Singaravelu	,, ,, ,,	L. F. Dy., Manamelgudi.
20	,, B. K. Narayana Rao	L. F. Hl., Avanigadda	L. F. Hl., Gannavaram.
21	,, Muhd. Khasim Khan Sahib	,, ,, Gannavaram	Govt Hl., Bhimavaram.
22	,, J. Pappaya Raja	Govt Hl., Bhimavaram	L. F. Dy., Avanigada.
23	,, Venkataraman Orr	Govt. Hd. Qrs. Hl., Trichy	,, ,, Aravakurichi.
24	,, M. H. Dorairaj	L. F. Dy., Aravakurichi	Govt. Hd. Qrs. Hl., Madura.
25	,, P. Sekhara Menon	Leave	L. F. Dy., Trithala.
26	,, K. N. Chamukutti	L. F. Dy., Trithala	Govt. Hd. Qrs. Hl., Calicut.
27	,, B. Rukmangada Rao Naidu	,, Kalyandrug	Agency Duty, Koraput.
28	,, P. P. Narayana Nair	Agency Duty. Vizag	L. F. Hl., Nannilam.
29	,, K. Vallabha Rao	Govt. Hd. Qrs. Hl., Coca-nada	L. F. Dy., Baruva.
30	,, R. Krishnamurthi	L. F. Dy., Baruva.	c/o D. M. O., Ganjam.
31	,, P. S. Kalyanasundaram	Govt. Dy Gugilabadi	L. F. Dy., Mantapam.
32	,, K. N. Chamukutti	L. F. Dy., Trithala	Govt. Hd. Qrs. Hl., Madura.
33	,, P. Rama Rao	Govt. Hl., Chatrapur	c/o D. S. P., Chatrapur.
34	,, K. Satyanarayana	L. F. Hl., Yemmiganur	Govt. Hd. Qrs. Hl., Nellore.
35	,, P. Seshagiri Rao Naidu	Govt. Hd. Qrs Hl., Guntur	Govt. Dy., Gurzala.
36	,, V. Jaganadha Rao	Govt. Dy., Gurzala	L. F. Hl., Bobbili.
37	,, Mrs. M. Kuruvilla	Leave	Govt. Hl., Villupuram.
38	,, Miss M. S. Ponnurangam	Govt. Hl., Villupuram	L. F. Hl., Pithapuram.
39	,, V. Gnaniah	Leave	Govt. Hd. Qrs. Hl., Salem.
40	,, M. Adinarayanaswami	,,	,, ,, ,, Chingleput.
41	,, K. V. Dhanakoti Naidu	L. F. Hl., Nannilam	L. F. Dy., Watrap.
42	,, R. V. Narasimham	Leave	Govt Dy., Tiruvallur.
43	,, M. S. Narayanaswami	,,	S. G.'s Office, Madras.
44	,, K. V. Subba Rao	L. F. Dy., Thanakal	L. F. Dy., Uravankonda.
45	,, K. Srimantha Rao	,, ,, Uravankonda	,, ,, Thanakal.
46	,, N. P. Subramaniam	Govt Hl., Tellicherry	C/o I. G. of Prisons, Ooty.
47	,, C. H. Venkateswaran	Central Jail, Cannanore	Govt. Hd. Qrs. Hl., Chingleput.
48	,, C. Manicka Mudaliar	Govt. Hl., Conjeevaram	L. F. Dy., Uttiramerur.
49	,, S. Krishnamurthi	Govt. Hd. Qrs. Hl., Trichy	C/o D. M. O., Ganjam.
50	,, V. Ramakrishnan	L. F. Dy., Gingee	,, ,,
51	,, J. Appa Rao	,, Porumamilla	L. F. Dy., Jammalamadugu.
52	,, A. M. Kandaswami	,, Jammalamadugu	,, Onipenta.
53	,, G. Sooryanarayana	,, Onipenta	,, Sidhout.
54	,, Bhavanarayana	,, Sidhout	,, Rayachoti.
55	,, T. Ramadoss	,, Rayachoti	,, Porumamilla.

Reg. No. M. 2528.

Printed at THE INDIA PRINTING WORKS, "Sri Nivasam" Mylapore and Published by the Managing Editor, Dr. V. RAMA KAMATH, 147, Purasawalkam High Road, Vepery, Madras.