

230

The Medical Practitioner

A Monthly Medical Journal

EDITED BY

Dr. V. Rama Kamath,

Member, Madras Medical Council.

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JULY, 1938

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Original Articles.

MADRAS MEDICAL COUNCIL.

REVIEW OF PROCEEDINGS.

April 1938 Session.

By

DR. V. RAMA KAMATH,

Member, Madras Medical Council.

The Madras Medical Council met on 4th April, 1938 and was presided over by Major-General N. M. Wilson, I.M.S., the President of the Council. Before reviewing the proceedings of the Council I wish to let know the readers about the Madras Medical Register at the beginning of the year classified in three groups :

I. Practitioners registered in the British Register.

II. Graduates of the Madras and the Andhra Universities.

III. Medical Licentiate and the rest that could not be registered in Class I and II.

Groups.	Number at the end of 1937.	Newly registered in 1937.	Total at the beginning of 1938.
I	254	10	264
II	1,407	93	1,494*
III	4,199	134	4,327*

N. B.—Variations noted in the total at the beginning of the year 1938 in Group II and III

are due to 4 deaths, 3 transferred from Group II to Group I ; and in Group III due to 4 deaths ; 1 transferred from Group III to Group I and one to Group II.

REGISTRATION.

At the April 1937 Session of the Council, Drs. Bernadine Siebers and Eva Tysse both possessing M. D. qualification granted in America were recommended to the Government under the first proviso to section 13 of the Madras Medical Registration Act as special cases on account of their connection with a Missionary Institution doing meritorious work. But the Government turned down the recommendation and permitted them to hold teaching appointments at the Vellore Missionary School for a period of two years. Dr. (Miss) Eva Tysse did not avail herself of the special sanction and resigned her appointment in the Medical School.

"At its meeting held on 6th April 1937 the Medical Council resolved to recommend to Government the registration of Dr. P. S. Ramaswami Ayyar, L.C.P. & s., (India). In reply to a reference in

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this matter from the Government, the Council resolved again, at its meeting held on 6th September 1937 to inform Government thus:—'That Dr. P. S. Ramaswami Ayyar may be registered, as persons of his qualifications were registered by the Council in the past on the recommendation of Government. The Council desires also to inform the Government that while recommending a person of this qualification for registration, the Council has passed a resolution to the effect that a notification be published that practitioners possessing this (the qualification possessed by Dr. P. S. Ramaswami Ayyar) and similar qualifications which were registered in the past might apply for registration within one year from the date of the notification, after which date no practitioner possessing the qualification under reference will be registered by the Madras Medical Council'. Government, in G. O. No. 3449, P. H., dated 10th December 1937, have permitted the registration of Dr. P. S. Ramaswami Ayyar, L.C.P. & S., (India). His name has since been registered. A notification inviting applications from persons holding the L.C.P. & S. (India) qualification and similar qualifications registered in the past by the Council has also been published by the office on 10th January 1938 in the Fort St. George Gazette, in the medical journals published in Madras and in two of the important Dailies in the City, The Hindu and The Madras Mail."

On the suggestion of the President of the Council, the Council unanimously approved that the Registrar should dispose of applications received by him from practitioners possessing the L.C.P. & S. (India) qualification and from others whose qualifications were once recognised by the Council on the recommendation of the Government such as the Diploma holders of the old Neyyur Missionary Medical School.

One Dr. T. D. Nair possessing the Diploma of Asst. Surgeon granted by Kenya Government, L. M. (Dub.) and D. T.M. (Lond.) applied to the Local Government for his registration under sec. 13 of

the Madras Medical Registration Act. The Government forwarded his application to the Medical Council and the Registration Committee would not recommend his registration but the Council taking into consideration the peculiar nature of the case recommended his registration and the Government accordingly were pleased to pass the following order:

"The President, Madras Medical Council is informed, that Government have permitted the registration of M.R.Ry. T. D. Nair, in the special and peculiar circumstances of the case mentioned by him and that this case should not be treated as a precedent in future."

Dr. Warner Rosenthal and his wife Dr. (Mrs) E. Deuseen Rosenthal both possessing M.D., qualification of the University of Erlangen Germany applied for registration to enable them to work in the Vellore Missionary Medical College. The Council turned down their applications. The Council also refused to register 1. Dr. N. Leckband, M.D., (Chicago), 2. Dr. Gladys Morgan, M.D., (Pennsylvania), 3. Dr. (Miss) H. Erikseon, Licentiate of Medicine (Sweden).

DISCIPLINARY CASES.

On 27-7-'37 a brother of a married woman complained to the Council that a registered practitioner contracted intimacy with his sister while treating her as his patient. The complaint looked belated though the complainant alleged that he was not aware for a long time that the Medical Council could take cognizance of such cases. A registered letter was sent to the practitioner by the Registrar asking his explanation but the letter was returned with an endorsement by the post office at the other end to the effect 'evading delivery.' On 15-9-37 the complainant withdrew his complaint. But the Disciplinary Committee of the Council reported to the Council that this was a fit case to be proceeded with and the practitioner was summoned to appear before the Council on 4.4.38. The accused did not appear but sent a long letter to the Council mentioning that there was no 'vulgar' intimacy and that some of his enemies were working against him. After prolonged discussion the Council passed the following resolution:

"That the case may be referred back to the Disciplinary Committee, which shall obtain legal opinion regarding the further procedure to be adopted."

On 24.8.37 Dr. T. Bhaskara Rao, L.M. & S. of Thanuku preferred a complaint against Dr. T. S. Satyanarayana L.M.P. of the same place alleging that the latter entered his hospital without the knowledge and consent of the former and induced a patient to leave Dr. Bhaskara Rao's hospital by offering the patient better treatment. It was also alleged that the patient was actually removed on a midnight and kept under the treatment of Dr. T. S. Satyanarayana.

Dr. Satyanarayana in his explanation mentioned that on 19.2.38 at about 11 P. M. the brother of the patient mentioned in the complaint went to him and told him that his brother was in a serious condition in Dr. Bhaskara Rao's hospital and the latter advised his brother to remove the patient from the hospital. It was said that Dr. Satyanarayana was requested by the brother of the patient to see the patient. At the time Dr. Satyanarayana went to the hospital Dr. Bhaskara Rao was not found in the hospital and the compounder of Dr. Bhaskara Rao informed Dr. Satyanarayana that he (the Compounder) was waiting to have the patient removed from the hospital as Dr. Bhaskara Rao was of opinion that the patient would not survive that night. Dr. Satyanarayana mentioned that at the time he saw the patient two Ayurvedic physicians were administering some medicine to the patient. Dr. Satyanarayana found the patient in a toxemic condition and had to console the crying relatives of the patient that there was no immediate danger. So saying Dr. Satyanarayana left the hospital. It was further mentioned by Dr. Satyanarayana that the following morning the brother of the patient went to Dr. Satyanarayana and told him that the patient had been removed to his father-in-law's house and requested Dr. Satyanarayana to treat him. It was also mentioned in the explanation that Dr. Satyanarayana suggested that Dr. Bhaskara Rao's treatment might be continued but the brother of the patient told

Dr. Satyanarayana that as Dr. Bhaskara Rao had given up hopes, his treatment was discontinued paying him all his dues. A statement was also found in the explanation that the brother of the patient and another went to Dr. Bhaskara Rao and obtained formal permission. It was said that the patient improved and got well under Dr. Satyanarayana's treatment and the unexpected recovery became a talk of public interest as the patient being a proprietor of Motor Bus Service was a well known person of the town. Dr. Satyanarayana denied all the allegations contained in the complaint and made a suggestion whether the belated complaint might be due to the 'impressions created in the public due to unexpected recovery of the patient' or due to the 'popularity' (of Dr. Satyanarayana) 'as a successful doctor.'

"The Committee is of opinion that though there has not been any gross breach of medical ethics, Dr. T. S. Satyanarayana has been very indiscreet in entering Dr. Bhaskara Rao's private nursing home without asking his permission prior to his visit, or seeing him personally thereafter. The Committee recommends that Dr. T. S. Satyanarayana be summoned before the Council and warned for his indiscretion. The Committee feels suspicious of Dr. Bhaskara Rao's complaint owing to his inordinate delay in preferring the complaint."

Both the practitioners concerned in the complaint were summoned to appear before the Council on 4.4.38. After a lengthy discussion the Council decided that Drs. Bhaskara Rao and Satyanarayana might be advised suitably which was done by the President. Dr. Bhaskara Rao was first sent for and the President said:

"In future when you are up against a case like this, you must inform the Madras Medical Council at once. There is a lot of inconvenience caused and it is very difficult to get proper evidence after such a long period of delay (six months). So, in future, this Council hopes you will take immediate steps, should such a case occur, to report it at once to the Madras Medical Council."

Soon after Dr. Satyanarayana was asked to appear before the Council and the President advised him thus:

"The Council feels that it would have been better had you informed the doctor, by writing,

L. S. Satyanarayana
N.B. - 9.10.12

of the action you were taking in examining his case. There would not have been any cause for complaint against you, had you done so. The Council thinks you were perfectly justified in going to the patient in the middle of night, when called. If, as stated by me, you had explained the whole situation about the case to Dr. Bhaskara Rao, he would not have taken any action against you. In future, in a case like this, write to the doctor, under whose care the patient is, as early as you can, explaining why you called on the patient already under his treatment. This Council advises you to be very careful in future in such matters."

In cases like the above two, the Medical Council is very much handicapped for want of legal opinion and it is necessary that provision is made in the Medical Registration Act for a Legal Assessor to co-opt with the Council. The General Medical Council has the benefit of such co-option. Now that the Medical Schools have been abolished, the Madras Medical Council will have no work relating to the control of medical education as the Medical Council of India is vested entirely with the control of University Medical Education. So in future the Council has to deal only with disciplinary work and the Government would be well advised to make the Medical Council self-reliant and powerful to deal with disciplinary cases. There are no signs in the proposed amendments which the Government will soon introduce in the Legislative Assembly in the form of Bill for the removal of defects in the Madras Medical Registration Act and in the rules framed thereunder which the Medical Council has been experiencing these 23 years and to remove such defects, the Council did send its suggestions to the Government soon after the intention of the Government to amend the Medical Registration Act was announced.

MISCELLANEOUS ITEMS.

Election Procedure Questioned: Election of Major F. M. Collins, I.M.S., as a member of the Madras Medical Council by the Academic Council from among the members of the Faculty of Medicine, was questioned by one Dr. V. V. Krishna Rao who sent a copy of the letter addressed by him to The Hindu and The Madras Mail. He contended that the usual

formalities of nomination etc., were not observed but only a voting paper was sent to the members of the Academic Council to choose one from the four names mentioned in the voting paper. The Registrar of Andhra University was addressed to by the President. The Registrar, Andhra University sent a reply to the President that no notice need be taken about the complaint of Dr. V. V. Krishna Rao. The Medical Council merely recorded this objection. As this item came up before the Council before I attended the meeting I could not have my say. With due respect to the Council, I should say that in a matter like this where the procedure of election was questioned, the Council ought to have gone through the case more thoroughly. Rule 15 relating to the elections to the Medical Council gives the Council absolute powers to hold an enquiry on election even without a regular complaint. In this case allegations were made against the procedure adopted by the Andhra University in returning Major Collins to the Medical Council. The Registrar, Andhra University did not deny the allegations contained in Dr. Krishna Rao's letter. He simply shelved the question by saying that the complaint had nothing to do with the election. Personally I am glad that Major Collins, the Principal of the Vizagapatam Medical College than whom there cannot be better person to represent the Vizagapatam Medical College has been returned uncontested. But public bodies should not fight shy of complaints made in public interest.

Allegations against a midwife's husband: Information was received by the Medical Council that one Mr. G. Wilson had been practising in Villupuram styling himself as L. M. P. The information was further verified by three statements one of which was from a qualified doctor. Mr. Wilson denied the allegations and said that his wife who was a midwife was running a nursing home and that some persons were jealous of him.

This is a case to be gone through under the Medical Degrees Act. The Madras Medical Council has been requesting the

Local Government to conduct criminal proceedings against the offenders with the help of the police as the Council could not afford to have the necessary machinery to conduct proceedings in these cases. As mentioned by me in my last Review, the Government have not so far realised their responsibility in the matter with the result that a number of quacks styling themselves as qualified doctors have been practising. In this case also the Council has once again requested the Government to conduct proceedings against the person mentioned in the complaint, under the Medical Degrees Act.

The Council did actually attempt to conduct the prosecutions under Indian Medical Degrees Act to punish the offenders who assumed recognised medical qualifications and sent a few test cases to the Advocate of the Council. The report of the Advocate was placed before the Council at its last meeting and I moved the following resolution:

"Under the circumstances explained by the Advocate, the Council finds it difficult to undertake prosecutions under the Indian Medical Degrees Act, and requests the Government to take up this work themselves with the aid of the Police Department."

This resolution was seconded by Dr. T. Satakopan and passed unanimously.

Dr. Menzel and his Specific: Dr. P. R. Menzel, a retired Sub-Assistant Surgeon wrote to the Personal Assistant to the Surgeon-General with the Government of Madras that he had found out a specific for Pneumonia to be administered hypodermically and supplied the Personal Assistant a box containing four ampoules requesting him to recommend the use of this specific in the Presidency Hospitals. In the letter Dr. Menzel enclosed a leaflet containing good reports about the specific from prominent public men such as a M. L. C., a District Board Member etc. The leaflet contained reports from qualified medical practitioners also, one of them was a Honorary Physician, Government Head Quarters Hospital, Calicut who tried the specific in the Government Hospital and ordered for

more bottles obtaining the permission of the Superintendent of the Hospital. The Personal Assistant to the Surgeon-General forwarded the letter to the Medical Council received by him with the enclosed leaflet for remarks. Evidently this officer thought that Dr. Menzel had infringed Medical Ethics. After some discussion the Council decided:

"That the Personal Assistant to the Surgeon-General with the Government of Madras might be advised to inform Dr. Menzel that he would be violating the Code of Medical Ethics if he kept the formula of the remedy secret and that he should also be informed that the publication and circulation of testimonials of his preparation would also be a violation of the Code of Medical Ethics."

A Case for opinion: The Surgeon-General with the Government of Madras sent the following letter to the Registrar Medical Council dated 22-2-38:

"I have the honour to forward herewith an extract from The Hindu, dated the 12th January 1938 regarding the opening of a Homoeopathic College at Kurnool and request to be furnished with the views of the Medical Council on the action of Dr. Saiyid Ghulam Hussain, L.M.S., District Medical Officer, Kurnool, in having taken part in the function."

Extracts from the Hindu: "Dr. Saiyid Ghulam Hussain, District Medical Officer, performed the function of opening the Homoeopathic College and Dispensary founded by Dr. N. C. Raghavachar, H.M.B., Principal. The latter read an address which referred to the excellence of Homoeopathic treatment of diseases and the rapid strides, the system had made both in India and the West. The treatment was most scientific and had the advantage of cheapness and safety. A two-year course in English for School-final candidates and a six-months' course in Telugu for others would be given, so as to enable the successful candidates to spread in the village and enable them to make a decent living.

Dr. Hussain, in declaring open the institution, welcomed the starting of a Homoeopathic College, which would train students to become trained doctors who could be of ready service to the rural population. He wished the college all success."

Office note: Under paragraph 1 (e) of the Code of Medical Ethics 'Covering persons who are not registered under the Medical Acts' is an objectionable practice and should be avoided.

Under section 16 of the Madras Medical Registration Act no medical practitioner shall be removed from the Medical Register on the ground of his association, in any professional respect, with a qualified practitioner of Indian Medicine such as Ayurvedic, Unani and Siddha or an unregistered practitioner if such unregistered practitioner is possessed of any qualifications described in the schedule and is not a person whose name the Council has refused to register under the second proviso to section 13 or whose name the Council has removed from the register under section 16. Under the rule framed by Government the term 'qualified practitioner' for purposes of this section means a practitioner whose name has been registered by the Central Board of Indian Medicine, Madras.

The main point for consideration is whether the action of Dr. Saiyid Ghulam Hussain in having participated in the opening ceremony of the Homoeopathic College could be construed as association with an unqualified medical practitioner and thereby covering him. The name of Dr. N. C. Raghavachari, the Homoeopathic practitioner in question, does not appear to be borne on the Register maintained by the Central Board of Indian Medicine, Madras."

The matter was talked over and it was the opinion of the majority of the Members that such a matter could not be taken cognizance of by the Council."

Reciprocity with Portuguese Qualifications: Sir H. N. Colam, Agent, M. S. M. Railway addressed a letter to the President, Medical Council informing him that in Marmagao, an Assistant Surgeon (evidently a holder of L. M. P. qualification) in the Railway service was not permitted by the Portuguese Government to exercise his profession and on a reference to the Portuguese Government at Goa, this Government replied that in case persons with Portuguese Medical qualifications were registered in India, the Portuguese Government would permit practitioners of Indian Medical Qualifications to practise in Portuguese territory. At present the Portuguese Government has been recognising Medical men passed out by any of the Universities of the Presidencies of Bombay, Madras and Burma, or licensed by the College of Physicians and Surgeons of Bombay, or those possessing degrees higher than the last mentioned College obtained in the said Bombay Presidency, or even those who have medical qualifications of the Schools

of Burma equivalent to the course of the medical and surgical schools of Nova Goa."

Evidently the officer of the Portuguese Government did not know about the above information while replying to Sir H. N. Colam. As the Medical Schools in the Madras Presidency are not mentioned in the list quoted, the Medical Council passed the following resolution, on the subject.

"That the Portuguese Government might be written to, regarding the syllabus for the course of the Diploma granted by the Portuguese Government in the 'Medical and Surgical School' at Nova Goa' so as to consider the desirability of conferring reciprocity."

A Letter to the Madras Premier: One Dr. V. R. Menon, L. M. & S., Assistant Medical Officer, Carley Island, Port Swettenham, Federated Malay States wrote to the Hon'ble the Prime Minister, Madras requesting him to use his influence in getting the L. M. & S. Degree Madras recognised by the British Medical Association (evidently he meant the General Medical Council). This letter was sent to the Surgeon-General and the Surgeon General forwarded the same to the Council with the following remarks:

"This is not a question for the British Medical Association to decide. It is the General Medical Council that has to be approached for recognition of the L. M. & S. degree as a registrable qualification. The University of Madras and the Madras Medical Council may move the All-India Medical Council in the matter first and then to General Medical Council."

The Council decided that the above matter was beyond its jurisdiction. When the Medical Council of India does not recognise all the recognised Indian qualifications how can the General Medical Council induce to recognise a qualification not recognised by the Medical Council of India?

Medical Council of India and L. M. Ps. The Secretary, Medical Council of India wrote to the Registrar, Madras Medical Council on 23-10-'37 a letter to inform the Madras Medical Council the decision of the Medical Council of India relating

to the admission of a L. M. P., to the University degree recognised by that Council. The following is the decision:

"(1) His standard of preliminary education must comply with No. 1 (ii) and (iii) of the 'Recommendations on Professional Education' of this Council. (Intermediate Standard).

(2) He must pass the examinations in Anatomy, Physiology, Materia Medica and Pharmacology and Pathology laid down for the qualification for which he is studying.

(3) After passing the examination in Anatomy and Physiology he must spend twenty four months in the Medical and Surgical practice of a Medical School or Hospital recognized by the Institution whose qualification he is taking, during which period he must receive instruction in the special subjects and in Applied Anatomy, Physiology and Pathology, and comply with the Council's requirements in Midwifery and Gynaecology.

(4) He must pass the examinations in the final subjects, including Forensic Medicine and Hygiene, the last two subjects may be taken eighteen months after passing in Anatomy and Physiology."

Before the Medical Council of India came into existence a large number of medical Licentiate both from this Province and elsewhere were able to qualify themselves for M. R. C. S. and L. R. C. P. and similar foreign qualifications more easily and with very much less additional courses now forced upon them by the Indian Universities at the instance of Medical Council of India which is constituted by a majority of Indian members. Under the circumstances, the Madras Council could do nothing excepting to record the decision of the Medical Council of India.

Vaccination Certificates: The readers might remember that a few years ago the Government of India passed an order empowering only a certain class of medical officers to issue vaccination

certificates to persons embarking to foreign countries and as per that order the certificates granted by other practitioners had to be countersigned by the class of officers mentioned in the order. The Madras Medical Council raised a protest against this order at my instance and the Government of India received protests from many other quarters. So last year the Government modified their order and excepting for passengers bound for East and South African ports and Iraq all the rest could get certificates from registered practitioners without countersignatures. This was reported by me in one of the previous reviews. The Government of India modified their previous order on 10-11-37 and a copy of it was sent to Madras Medical Council for information. The order runs as follows:

"Passengers bound for East and South African ports and Iraq and pilgrims proceeding to Saudi Arabia must possess certificates of vaccination granted by (i) Civil Surgeons, (ii) District or Municipal Medical Officers of Health (iii) Director or Assistant Directors of Health, (iv) Port Health officers of major ports, (v) Chief Medical Officers of Railways, (vi) Chief Medical Officers and Directors of Public Health in Indian States who possess a qualification included in the Schedules to the Indian Medical Council Act, (vii) Senior Medical Officers in charge of Military stations and (viii) District Medical Officers of Railways whether in British India or in Indian States who possess qualifications recognised under the Indian Medical Council Act, 1933. If such certificates are granted by other registered medical practitioners, they must be countersigned by one or other of the officers mentioned above. This countersignature shall be obtained free of charge to the passenger by the registered medical practitioner granting the certificate."

As per the above order even the Degree holders recognised by Medical Council of India cannot grant vaccination certificates unless they held the appointments mentioned in the order. The value of registration depended upon Government appointments and not on the virtue of registration itself. I therefore moved the following resolution:

"That this Council requests respectfully the Local Government to find their way to suggest to the Government of India that the vaccination Certificates granted by all the registered medi-

cal practitioners on the provincial medical registers need not require countersignature, as the form devised by the Government for the Vaccination Certificate is fraud-proof."

Continued and persistent agitation has its own reward the agitation regarding vaccination certificates has increased the status of the registered practitioners and brought with it a little more money. Excepting for the African ports the passengers embarking for all other ports in the world could now get vaccination certificates from registered practitioners. It is a slur on the Government of India more than on the registered practitioners that the statutes passed by Provincial Governments in the form of Medical Registration Acts are not respected by the Governments in North and South Africa. The Central Government can certainly remove the stigma on the Medical Registration Acts if they will. When the Governments of all other countries in the world recognise the vaccination certificates of registered practitioners without their being in Government service why should North and South African Governments be exceptions? I trust the existing medical associations will agitate and strengthen the hands of the Madras Medical Council in its attempts in guarding the prestige of the profession.

Separate Buildings for Medical Council: At the instance of Dr. N. Venkataswami Chetti the Council unanimously passed the following resolution:

"The Council feels the necessity for a separate building for the location for the Medical Council Office, and the holding of the meetings, and respectfully requests the Government to

allot a grant of Rs. 10,000 for the construction of the same."

I have not included in the Review certain minor items of the proceedings which have little or nothing to do with the profession. After all the items in the Agenda were disposed of, I made the following suggestion to the Council which was approved:

"That, in order to facilitate the formal confirmation of the Minutes of any particular meeting of the Council, under By-law 26 framed under section 24 (2) of the Madras Medical Registration Act (1914), a draft copy of the Minutes may be circulated to all the members, and they be requested to write to the Registrar, if any corrections are necessary, within four days from the date of receipt thereof; and that if any letter be not received by the Registrar within that period from any particular member, it shall be taken as granted that that particular member has no objection to raise on the minutes."

My object in making this suggestion to the Council was to facilitate the work of the Council. As it is, the Minutes of the meeting of the Council are to be circulated amongst the members within 30 days of the meeting and if no objection is raised by any member about their correctness within thirty days after the receipt of the Minutes by the members, the Minutes are taken as confirmed. If on the other hand, any objection is raised about the correctness, the confirmation of Minutes should await the next meeting of the Council for six months. The informal procedure suggested by me gives an opportunity to all members to correct the Minutes within a few days after the meeting and there will be a likelihood of the Minutes being confirmed within two months.

DYSENTERIES

By

DR. K. NARAYANAMURTI, M. D.,
AMOEBC DYSENTERY AND AMOEBIASIS.
ETIOLOGY AND PATHOLOGY.

(Continued from the last issue.)

As in Bacillary Dysentery I have attempted to give a detailed idea of the aetiology and pathology of Amoebic dysentery and Amoebiasis hoping that with the proper grasp of the knowledge of the cause and history of this infection and its mode of attack on the particular parts and tissues of the body it will be easier to understand the implications of the signs and symptoms of the disease and rational indications for treating the same.

AMOEBC DYSENTERY: It is a tropical disease rarely extending to the sub-tropics. During recent years sporadic outbreak of indigenous cases have been reported from N. Europe and even from Great Britain. It is common throughout India, Indo China, China, North and Central Africa and is wide spread in Southern U.S.A., South America and the West Indies.

Acute Amoebic dysentery is due to the invasion of the mucous membrane of the colon by a protozoa, *Entamoeba histolytica* but is actually an unusual complication of Amoebiasis. When the activities of the parasite are confined solely to the intestinal canal it produces Amoebic dysentery or primary Amoebiasis, a disease insidious in its onset, chronic in its course and with a marked tendency to recrudescences and relapses. When metastatic lesions develop in the liver the state is known as secondary Amoebiasis or Hepatic Amoebiasis. The morphology of this parasite will be described later but it is to be noted that in only 10 p. c. of persons infected with *E. histolytica* is there sufficient ulceration of the mucosa of the colon to give rise to symptoms of dysentery.

Infection is acquired by the patient swallowing the infective cysts of the

parasite. The resistance of the cysts of *E. histolytica* is extraordinary. They are killed by complete desiccation, but will withstand anything short of it for a pretty long time. Yorke, and Adams have made a special study of the viability of the cyst of *E. histolytica* and they found that normal faeces contain a substance which tends to kill the cyst but when the faeces are diluted with water the cysts survived. The cysts die off rapidly in faeces kept at either 0° or 16° to 20° c. and are all dead in 3 to 4 days time. Washed suspensions of cysts may however show viable cysts up to a period of 3 weeks. At 45° c. the cysts survive for 30 minutes but are killed in five minutes at a temperature of 50° c. They are remarkably resistant to Emetine and Yatrene and to relatively high concentrations of hydrochloric acid and chlorine. Chlorine in strengths which are in excess of that used for bacteriological sterilization of water supplies, has no effect on them. It is of interest to note that the following chemicals are found to be lethal to the cyst in the strengths noted below at ordinary temperature.

Mercuric Perchloride	1 in 2,500 solution.
Formaldehyde	·5 p.c. do.
Carbolic acid	1 in 100 do.
Lysol	1 in 100 do.

Potassium permanganate does not kill the cysts even at 1: 100. Yatrene has no effect in 5 p.c. solution. Emetine Hydrochloride no effect in 5 p.c. solution.

Transmission of the disease occurs from man to man by the contaminative method. Considering the susceptibility of the cyst to desiccation it is probable that dust and sand play no part in the dissemination of this disease. Usually in the tropics infection is acquired from

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a "carrier" that is an apparently healthy person who harbours *E. histolytica* in his colon passes the infective cyst in his stool and has to do with the handling of food stuffs. There is also evidence to show that contaminated water and fresh vegetables such as lettuce and other greens may constitute suitable vehicles of infection. Rain may wash sewage into wells and water supplies and thus pollute them with the infective cysts. Tanks, rivers and ponds are frequent sources of infection. The work of Wennyon and O'Connor (1916, 1917) have stressed the importance of flies as carriers and they demonstrated that flies can feed readily on faeces containing cysts of *E. histolytica* and the cysts are found to pass intact through their intestines and are redeposited through their faeces in food stuffs etc. These flies experimentally infected are found to pass the cysts for 16 hours or longer. In addition to this sort of infection a fly first visiting a latrine and then the dinner table may also convey the cysts on its spongy feet from faeces to food stuffs. Generally however, it is the human carrier who is chiefly responsible for the spread of the infection. If a medical officer in charge of a hostel or any such institution finds a number of cases of Amoebic dysentery occurring amongst the residents of these institutions, examination of the faeces of all cooks or mess servants concerned who have to do with the handling of the food will show the presence of one or more active carriers responsible for the epidemic. Walker and Sellards (1913) while working in the Philippines were the first to demonstrate that man contracts the infection by swallowing the infective cyst. They selected 20 jail prisoners in whom on repeated preliminary examination of stools no protozoa had been found. They were placed on a fully cooked diet with nothing but distilled water to drink in order to exclude all the possible channels of infection. They were then fed with capsules containing cysts of *E. histolytica* collected from the faeces. 18 out of the 20 became infected with *E. histolytica* in periods varying from 1 to 44 days the average being 9 days. It is possible

that the dog and rat may play some part in the dissemination of Amoebic dysentery in India, but no worker has yet discovered encystation of *E. histolytica* in the dog. The wild rats have a natural entamoeba in their gut which simulates *E. histolytica*. Kesser (1923) states that rats may be freed from their natural Amoebic infection by feeding them with stale bread soaked in a saturated solution of Mag. Sulphate and claims that in such rats freed from their natural infection he has established *E. histolytica* infection. Kessel further regards the rat (*Rattus Norvegicus*, the sewer rat) as a natural reservoir of *E. histolytica* and may be a probable disseminator of the disease from man to man.

The cyst wall of *E. histolytica* is insoluble in gastric juice but soluble in trypsin. Hence when the infective cysts are swallowed they pass through the stomach unchanged and in the small or the large intestine they lose their cyst wall. Sellards and Theilor (1924) had shown that experimental excystation of *E. histolytica* can be produced in the rectum of the kitten and their work has been confirmed by Knowles (1925) Hoare (1926) and Murthi (1930). Hence it is probable that in man the site of excystation of the cyst is in the large intestine rather than in the small intestine. Yorke and Adams have found in the formed stool of a carrier, cysts at all stages of development. In culture these cysts often develop into the mature state and they ex-cyst; the cyst wall dissolves and from within it a mass of protoplasm containing 4 nuclei emerges, the nuclei being clustered together at the anterior pole. From this four little simple nucleate amoebulae are budded off in turn. Presumably a similar process takes place in the human colon and the little amoebulae creep by pseudopodial movement to the mucosa of the colon which they invade, finally settling in the submucous layer where they multiply by binary fission.

Intestinal Amoebiasis is a disease of adult life as a rule, though the infection may occur at any age. All races and

both sexes are liable to infection. It is comparatively rare to find the infection in children under 5 years of age. As the disease has long incubation period and is acquired from contaminated water and vegetables it is unlikely to occur among carefully nurtured children in whom the bacillary form is very common. This fact should be borne in mind by every one of the practitioners. Biggam has seen acute Amoebic dysentery with liver abscess in an infant 3 months old. But these are all rare cases.

Once the amoebae are liberated from the cysts they first attack the mucous membrane of the gut. The active vegetative amoebae live on the tissues of the gut wall where they ingest blood corpuscles and multiply by division. In the earlier amoebic lesions the amoebae make their way into the cysts of Lieberkuhan where they multiply and partly by pressure, partly by the secretion of a cytotoxin which disintegrates the tissues they make their way into the interglandular tissue and produce a small amoebic abscess of the mucosa. In course of time the abscess bursts and becomes an ulcer. As the amoebae constantly come in contact with fresh living tissue, they attack, dissolve and destroy them.

The degree of ulceration produced by *E. histolytica* varies very widely. Recently some evidence is gathered to show that amoebae feed on bacteria but it is not supported by any facts. *E. histolytica* is distinctly pathogenic to man. Even in the apparently healthy carrier, ulceration of the gut is present often indeed to a surprising extent even in the absence of the symptoms. A common type of ulcer and one which is generally regarded as typical is one in which the amoebae have penetrated the mucus membrane leaving a breach variable in size at the point of entry and then have spread liberally in the submucous layer where they give rise to a pocket of necrosed tissue, of varying depths. In vertical section the ulcers have the shape of a flask. Deep ulcers

have raised edges and are surrounded by punctate haemorrhages. The smallest ulcers may appear to the naked eyes as tiny hyperaemic patches. All types of ulceration may be seen in different parts of the large intestine simultaneously.

When the ulceration is not sufficiently great to give rise to symptoms, the patient is referred to as an *E. histolytica* 'carrier' and it is clear that such an individual is a danger both to himself and others. He passes cysts in his stools and may thus infect other persons. If at any time his bodily resistance is lowered by indiscretion in diet or by fatigue the ulceration may become severe resulting in the patient passing blood and mucus in stools. Why infection with *E. histolytica* should give rise to Amoebic dysentery in one person but in nine others no symptoms at all, is difficult to answer and a study of this problem is badly wanted. Possibly there is mutual toleration between the parasite and the host and this is broken when the resistance of the host goes down. Sellards and Leiva (1923) suggest that intestinal stasis and the fluid contents of the colon bring about disturbance in the mutual toleration. Observations made at the Calcutta School of Tropical Medicine point out that haemolytic streptococci invade the small amoebic ulcers, produce lactic acid and that this acid environment is favourable for the rapid growth and multiplication of *E. histolytica*; and this passably accounts for the transition from the healthy carrier state to that of amoebic dysentery. But Boeck and Drbohlav (1925) showed that the *E. histolytica* growing in their culture media at a Ph. 7.2 to 7.8. This fact throws a great doubt upon this acid environment view of the Calcutta School of Tropical Medicine. Whatever the cause might be for the onset of Amoebic dysentery, the ulceration which was present in the carrier becomes much more extensive in course of time. The characteristic ulcer of Amoebic dysentery is an exuberant ulcer. The border of the ulcer is raised whilst its base is covered by a shaggy black slough. The lesion commences from beneath the surface of the

mucous membrane attacks from below pushes it up and breaks through; whereas Bacillary dysentery on the contrary begins as a catarrhal inflammation of the surface leading on to colliquative necrosis. In a moderately severe case the whole colon may be covered with 'sea anemone' ulcers with round raised margins and white sloughy bases. In severe cases black sloughs hang into the lumen of the gut looking like seaweed or cobwebs. In the rectum the ulcers are smaller and fewer in number than in the caecum and ascending colon.

The invasion of *E. histolytica* is accompanied by a reaction of the tissues resulting in exudation followed by coagulation necrosis. There is certain degree of round celled infiltration but not suppuration. If suppuration is present it indicates secondary infection. Whereas in Bacillary dysentery the part of the colon most usually attacked is the rectum and pelvic colon; in Amoebic dysentery the lesions are most numerous in the caecum and ascending colon. Clark (1924) has shown that the infection tends to become localized especially at the flexures of the colon. In 186 fatal cases of Amoebic dysentery post-mortem examination revealed the following results:

(1) Ulcers scattered throughout the colon in 113 cases (61%).

(2) Isolated areas alone involved 63 cases (34%) chiefly in the caecum, ascending colon, iliac colon, rectum and hepatic flexure in that order of frequency.

(3) In 10 cases (5%) no ulcers but only scars are found; these were cases of secondary amoebiasis with the infection of other organs where stasis of stool is marked.

There is a tendency for the amoebae to invade the gut and hence ulcers are found more there. The appendix is involved in 41% of the cases and the lower end of the ileum or the ileocaecal valve in 5%. It is to be particularly borne in mind that appendicitis may be the outcome of a chronic amoebic dysentery and there are

cases on record that the patients were operated for appendicitis and the appendix removed without much relief of symptoms. Treatment of Amoebic dysentery will certainly make an inflamed appendix subside and there will be really no need to remove the appendix. Possibly in Madras particularly where the incidents of dysenteries are so great appendectomies are done and subsequently the pathological report of such of those appendices is that the appendix is normal. Musgrave in 1910 reported 3 cases of fatal peritonitis due to invasion of entamoebae into the appendix. There were acute and rapidly fatal cases found during an acute attack of Amoebic dysentery. In convalescent cases after amoebae have been killed off either by treatment or by the natural powers of resistance of the individual, the sloughs separate and granulation tissue appears at the base of the ulcers. Fibrous tissue is gradually formed which contracts giving rise to characteristic parchment like scar. The scars of Bacillary dysentery are always pigmented and are so friable that they break down readily under slight pressure. Adhesions may form between peritoneal coils of intestine; these may be matted together or adherent to the liver or spleen. In bad cases the intestinal contents may be composed of dark black blood exuding out from the haemorrhagic spots mixed with faecal matter and hence the stools of such cases possess a characteristic penetrating bad odour. Carcinoma has been observed to originate at the site of a chronic unhealed amoebic lesion.

Thrombosis of blood vessels in which the entamoebae are often found occurs at the bases of the ulcers and often by a process of erosion an arteriole may be opened and a fatal haemorrhage may result. Perforation by ulcers leading on to a fatal peritonitis especially in the neighbourhood of the caecum has also been noticed.

The cadaver shows no signs of toxic absorption such as is found in Bacillary dysentery. Apart from wasting the other viscera show few, if any changes.

Life history of Entamoebae histolytica: Losch in 1873 discovered the amoebae in stools and since then lot of study is made on the intestinal amoebae. Wenyon and Dobell distinctly showed that though man has *Entamoeba coli*, *Entamoeba banana*, *Iodamoeba butschlii*, *Dientamoeba fragilis*, they are harmless saprophytes while *Entamoeba histolytica* is distinctly pathogenic.

E. histolytica can be cultured on a variety of serum media it grows in ordinary Ringer's solution, Agar and Rice starch. When present in stools the entamoebae are easily found. They are found in clumps or masses and not evenly distributed throughout the stool and hence they may be present in one motion and not in the next. The amoebae live only for two hours after the stool is passed and they are found distorted if the stool is contaminated with urine. *E. histolytica* is a clear, partly greenish tinted transparent body 3 to 5 times the size of an R. B. C. In its vegetative phase it resembles other amoebae but is recognised from others particularly from *E. coli* by the existence of R. B. C. in its interior protoplasm. In stained preparations when the amoeba is fresh and fixed while alive it is seen to be made up of two zones, a granular endoplasm surrounded by a clear protoplasmic zone or ectoplasmic. The nucleus shows a uniform structure. Aberrant forms with fragmented karyosomes are also seen.

The amoebae slowly move throwing out pseudopodia. They quickly die and degenerate outside the body. When conditions are adverse they encyst but before doing so they are reduced in size which are called or named as pre-cystic stage of the amoeba.

Cysts vary in size. Dobell and Japps classified the cyst into 5 distinct races but at present there is no adequate

evidence to support their view. The cysts contain highly refractile masses composed of chromatin generally known as chromatoid bodies which occur in blocks with rounded ends and also a glycogen containing vacuole. At first there will be one nucleus and this by binary fission, four small nuclei are found to occur within the cyst.

The cysts develop and exist in suitable conditions in vitro in Drbohlavy's medium. Dobell has found them to contain bacteria favouring their growth while other bacteria retard their growth. He further showed that cysts can neither develop nor hatch out in a sterile medium. They creep to the sub-mucous layer by destroying the tissues with the help of acetylolsin. A certain number of amoebae leave the ulcers into the lumen of the bowel, encyst and pass out with the stool. The typical cysts are quadrinucleate when matured. When swallowed by another human host they pass into small intestine where they hatch into amoebulae which in turn attack and invade the tissues and recommence the cycle. The periodic variation in the intensity of infection may be either due to a particular feature in the development of the parasite or the degree of resistance shown by the host.

Occasionally the vegetative amoebae migrate and enter the venous system and be transported to the liver exceptionally the spleen, brain or lung; by so doing they are unable to complete the cycle of development as observed outside the body for, forecystic amoebae and cyst are never found in these situations. Amoebae infection of the skin at the site of a sinus discharging pus from a liver abscess has been reported.

Symptoms, complications and treatment will be dealt with in the next issue.

NOTICE.

Subscribers of The Medical Practitioner are requested to note their registered numbers appearing on the postal wrapper of the Journal while corresponding with the Managing Editor.

Abstracts.

THE CHEMOTHERAPY OF BACTERIAL INFECTIONS.

BY LAWRENCE P. GARROD, M.D., F.R.C.P.

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THERAPEUTIC ACTION.

PNEUMOCOCCAL INFECTIONS.

PRONTOSIL was originally said by Domagk to have no effect on pneumococci, but Horlein reported positive experimental results with prontosil soluble. Subsequent studies, which are mainly experimental, with little clinical confirmation, have been devoted mainly to sulphanilamide. Rosenthal found it bactericidal to pneumococci in vitro, and he and others found some curative action in experimental infection in mice, while Gross and Cooper obtained similar results in rats given actual pneumonia by intratracheal inoculation with a suspension of pneumococci in mucin. It seems clear that Type III infections are more amenable to the treatment than others, a singular fact all the more fortunate since this type is the only one entirely uninfluenced by serum. Apart from single case reports, the only record of clinical trial is that of Heintzelman et al. who treated 9 cases of type 3 pneumonia with only 2 deaths, whereas in 10 cases not so treated there were only 2 recoveries; the alternate case system was not used, and the factors of age, past history, &c., appear to have favoured the treated group. Other experimental studies are those of Schmidt and Kreidler. This treatment appears to have a sound if not sensational experimental basis; further clinical studies are needed. Serum, where also applicable and necessary, should probably not be withheld.

STAPHYLOCOCCAL INFECTIONS

In view of the fact that the first therapeutic success with prontosil ever published (by Foerster as long ago as 1933) was in a case of staphylococcal

septicaemia, and of the recognition from the very first that *Staphylococcus aureus* is at least moderately susceptible to this treatment, it is astonishing that so little information on clinical results in this infection has been published. Among brief references to it may be mentioned Colebrook and Purdie's success in 2 out of 3 cases of puerperal staphylococcal septicaemia treated with large doses of sulphanilamide. According to Domagk experimental staphylococcal infection responds better to uleron; adequate clinical verification is so far lacking. It would be of great service in the study if a series of cases of osteomyelitis or carbuncle were submitted to carefully observed treatment; septicaemia has often progressed too far before treatment to afford a fair test.

INFECTIONS OF THE URINARY TRACT

Prontosil was used empirically in Germany for the treatment of *Bact. coli* infections of the urinary tract in both adults and children with uniform success. Later studies of the mode of excretion, and the work of Buttle et al. on the susceptibility of the genus *Bacterium* to the action of sulphanilamide, placed this form of treatment on an intelligible footing. Weiser also records success with prontosil in coccal and mixed infections accompanying urinary obstruction. In the following studies sulphanilamide has been used exclusively, and there seems no reason for believing that prontosil is superior or even perhaps equal to it for this purpose. Kenny et al. treated 46 cases of *Bact. coli* infection, 16 of which were of pyelitis in pregnancy, and invariably secured a sterile urine within a week, often within three days; they point out that sulphanilamide is both cheaper and pleasanter to take than mandelic acid.

Their in-vitro tests sometimes showed urines to be less bactericidal than the progress of the patient led them to expect; this was apparently due to adjusting their pH to 6.0, which is the average pH of normal urine, but not that of urine passed during this treatment, since sulphanilamide, apparently by interfering with the tubular reabsorption of bicarbonate and bases, causes the excretion of an alkaline urine. It has been shown by Helmholtz and Osterberg and by Mellon and Shinn that sulphanilamide is much more bactericidal in an alkaline than an acid urine. The further work of Helmholtz has done much to clarify the position: it is abundantly clear that, in the urinary tract at least, sulphanilamide is directly bactericidal, and urine containing it destroys added bacteria. This treatment and mandelic acid complement one another, and have separate indications. Mandelic acid requires a highly acid urine and good renal function; sulphanilamide acts best in an alkaline urine, and is effective even in the presence of renal damage. Mandelic acid is effective against *Streptococcus faecalis* infection but sulphanilamide fails; mandelic acid is usually powerless against *Proteus* infection, but sulphanilamide succeeds. Another difference is that sulphanilamide can be given in the acute stage. Nevertheless another report from the Mayo Clinic, briefly reviewing results in over 200 cases, advises that mandelic acid should be used where it is applicable, since sulphanilamide is more dangerous, and 15 percent of patients cannot take it. This paper also records the observation that in coexisting prostatitis mandelic acid sterilised the prostatic secretion in only 50 per cent. of cases, whereas sulphanilamide did so in 23 out of 24; the drug was demonstrated in the secretion.

MENINGOCOCCAL INFECTIONS

That sulphanilamide protects mice in experimental meningococcal infections was first observed by Buttle et al. and confirmed by Proom, using Miller and Castle's method of inoculation in a mucin basis; Levaditi and Vaisman later reported similar results. There has been substantial confirmation of this effect in the

clinical field. Schwentker et al. treated 10 cases of meningitis, with only 1 death, giving 0.8 per cent. sulphanilamide in saline by intrathecal and subcutaneous injection; this series has since been extended to 52 cases with a mortality of 15 per cent., comparable serum-treated cases having a mortality of 30 per cent. Eldahl treated 12 cases in infants with 3 deaths, and lays stress on the importance of intrathecal administration. None of these cases was given any serum, although according to Brown and Branham and Rosenthal combined sulphanilamide and serum treatment is more effective in mice than either alone. Carey also reports 5 successes, in only 1 of which the intrathecal route was used. Pongratz records 3 recoveries after prontosil (2 also receiving serum) and Gehrt the recovery of an infant given enormous doses of uleron and no serum. Zendel and Greenberg successfully treated 2 cases of meningococcus septicaemia with prontosil and sulphanilamide. There is thus clear evidence of therapeutic efficacy, but perhaps not yet enough to decide the optimum method of administration or the indications for serum treatment in addition.

GONOCOCCAL INFECTIONS

Its close relationship to the meningococcus justified a supposition that the gonococcus would also react to this treatment. True infection by gonococci is considered unattainable in animals, but Levaditi and Vaisman claim to have produced it, again with the aid of mucin, and to have proved its curability by sulphanamide derivatives. An enthusiastic report by Dees and Colston was the harbinger of a spate of papers on the treatment of gonorrhoea, most of which have appeared during the past few months. It is as if therapeutic enterprise, stated in other directions, has flung itself with renewed energy into another field. To analyse, and even to quote, all these results would occupy a disproportionate amount of space; their judicial analysis is in any case difficult, gonorrhoea being a disease in which the criteria of successful treatment are not readily amenable to exact statement. While almost all authors report

good results, there is frequent mention of a minority of patients (10–20 per cent.) who entirely fail to respond; this may be ascribed to the occurrence of resistant strains of gonococci. Among numerical computations of success, O'Hanlon's statement that the average period of invalidity among troops at Aldershot has been reduced from 62 to 21 days carries conviction. He also concludes that the treatment should be begun in the acute stage, a point on which Hering is even more emphatic, while Herrold obtained a better response at a later stage. Practice in connexion with irrigations and other adjuvant treatment varies widely. Hanschell mentions encouraging his patients to take plenty of fluids; this measure reduces the concentration of sulphanilamide in both tissues and urine, and might therefore be expected to militate against success. It is generally agreed that complications, both local and metastatic, respond well, and the rapid disappearance of gonococci from exudates in distant situations as well as the urogenital tract is a usual finding.

Prontosil appears to be less effective in gonorrhoea than sulphanilamide, but according to Domagk and Grutz, three recently synthesised German compounds, one of which is uleron, are superior to sulphanilamide itself. Seven subsequent German papers on uleron all recommend delaying treatment with it in the male for three weeks, in order to allow the bodily defences to be mobilised; four of them mention palsies due to peripheral neuritis as a complication, and two record cases in which there were signs of renal and even hepatic damage. None of these consequences has ever followed sulphanilamide treatment, and it may well be asked whether the alleged superiority of uleron counterbalances such dangers, but it is obviously too early to form a judgment on this subject.

GAS GANGRENE

Long and Bliss showed that sulphanilamide protected mice against experimental infection with *Cl. Welchii*, and Domagk obtained the same result with uleron. Bohlman's clinical results with sulphanila-

midate are impressive. Three cases of extensive injury due to car or lift accidents developed gas gangrene in spite of prophylactic antitoxin; all recovered under treatment by oral sulphanilamide, two with dramatic rapidity. Since no further serum was given and radical surgical treatment was not undertaken, the drug appears to have been responsible. This report amply justifies further trial in every available case.

TYPHOID FEVER

In view of the observation by Buttle et al. that sulphanilamide protects mice against infection with both typhoid and paratyphoid bacilli, a useful action in enteric fever might be expected, but there is so far no proof of it. Schemidt's report on the response of 3 typhoid cases to prontosil is unconvincing. Barer records success with sulphanilamide in post-typhoid urinary infection.

UNDULANT FEVER

To assess the value of any treatment in this disease is exceptionally difficult, and an apparent effect needs consistent repetition to assume significance. There are enough favourable reports on cases mainly on *Br. abortus* infection but including some due to *Br. melitensis*, at least to justify further trial. Francis describes 2 cases and refers to five other papers; he also reports experiments from which it appears that *Br. abortus* is more susceptible than *Streptococcus pyogenes* to bacteriostasis by sulphanilamide in vitro. Further favourable clinical reports are those of Thevenet, Richardson, and Page.

MISCELLANEOUS CONDITIONS

It is still doubtful whether any virus disease responds to this treatment. Reports from the United States that distemper and lymphocytic choriomeningitis will do so have recently been denied by English workers, and Kelson could obtain no effect in experimental poliomyelitis; he also quotes Long as observing that sulphanilamide treatment for other conditions had no effect on concurrent colds; Elyan, on the other hand, says that it regularly

aborts them. Lymphogranuloma inguinale, according to Gjurić, responds to sulphanilamide. That protozoal infections may be susceptible is suggested by Hill and Goodwin's success in treating malaria with prontosil; this is confirmed by van der Wielen, who observed it accidentally, having given sulphanilamide for cystitis to a case of therapeutic malaria. Rich and Follis observed marked retardation in the progress of experimental tuberculosis in guinea-pigs treated with large doses of sulphanilamide. The attitude prompting other therapeutic attempts to be mentioned was evidently that of Fagerstrom who writes: "Since this drug appeared to be no respecter of bacterial personalities, we decided to test its efficacy on the case at hand"—the drug was sulphanilamide, and the case one of erosive and gangrenous balanitis, with a very mixed flora; it responded to the treatment. Other conditions reported as having been treated successfully are cerebral abscess (bacteriology various), pyelonephritis due to *H. influenza*, appendicitis, and bubonic plague, the two former with sulphanilamide and the two latter with prontosil. Some fungi are susceptible in vitro, but there is no record yet of therapeutic trial in any mycosis.

It seems clear from the careful studies of Swift et al. that sulphanilamide is useless in rheumatic fever; Massell reaches the same conclusion. Another negative finding is that of Campbell, who found experimental syphilis to be uninfluenced.

PROPHYLACTIC USE

These compounds have undoubtedly been widely used in order to prevent possible sepsis, especially in the puerperium or after certain operations, but there are few reports on results. Johnstone gave sulphanilamide or proseptasine to 500 women after labour, but it seems doubtful from his data whether it had any useful effect. The indiscriminate treatment of normal cases is probably unjustified. Smith considers that sulphanilamide has no prophylactic value in an epidemic of tonsillitis, presumably because an adequate dose cannot be given indefinitely. There is no reason for doubting that the development of streptococcal infection can be

prevented, if the time of its anticipated onset be known. It is a serious drawback, however, that previous sulphanilamide treatment can render the bacteriological diagnosis of any infection which may arise exceedingly difficult, and the same difficulty occurs in established infections treated before such a diagnosis is made. In these circumstances I have found numerous though irregularly staining streptococci in pus, the great majority of which must have been dead and the rest damaged, since they grew slowly, atypically, and very sparsely, only assuming normal cultural characters after several days. In another case repeated failure to find gonococci in material expected to contain them was attributable to the same cause. In view of the fact that the sale of these drugs is unrestricted and their anti-gonococcal action widely recognised, it should be known that according to Felke uleron at least has no prophylactic action against gonorrhoea.

LOCAL APPLICATION

The successful action of these drugs depends on their uniform permeation of affected tissues *via* the blood, and surface application seems a poor alternative. Prontosil, having no demonstrable direct action on bacteria at all, seems not the best choice for this purpose, but German authors claim results from applying it in various skin conditions and even from gargling with it. Brown injected it into the pleural cavity in two cases of streptococcal empyema with apparently good results; Nicholson could not reproduce this effect in rabbits, but since all his animals died, however treated, and Gay and Clark have shown that sulphanilamide prevents the evolution of an otherwise fatal streptococcal empyema in rabbits, it may be that he used an excessive inoculum of streptococci. Sulphanilamide was used locally as well as orally by Purdie and Fry for the treatment of two sinuses which had discharged streptococcal pus for three years after a parametritis. The rapid healing in this case indicates that chronic as well as acute infections are amenable to treatment. Theoretically sulphanilamide is preferable to prontosil for local application, and a cavity in which

solution can be retained seems a more hopeful site than skin or mucosa.

OTHER COMPOUNDS

Over a thousand related compounds have now been synthesised by the originators of prontosil, and are undergoing experimental trial. Similar work is in progress elsewhere, and interesting information has been published about various compounds not yet generally available. This review must be confined to those which have undergone clinical trial, and of these uleron has already been described. Another is *p*-benzylaminobenzene sulphonamide, known in this country as proseptasine. The earlier work on this compound was done by French investigators, who found that although approximately equal to sulphanilamide in therapeutic activity (disputed by Gray et al.), it is much less toxic. The principal experiments on it in this country are those of Whitby, which deal also with a companion product given by injection, disodium *p* (γ -phenyl-propyl-amino) benzenesulphonamide α - γ -disulphonate (soluseptasine) the low toxicity of *p*-benzylaminobenzene sulphonamide for mice has some counterpart in the clinical field, according to Bloch-Michel et al., who treated 180 cases of erysipelas with good results and no untoward effects, and Smith, who compared it with sulphanilamide slightly to the latter's disadvantage from this stand point. That it is not entirely non-toxic must be concluded from Model's report of a case of fatal agranulocytosis following treatment with proseptasine; he refers to it as "*p*-aminobenzene sulphonamide"—i. e., sulphonilamide—a mistake which suggests that others may not know these compounds to be chemically distinct. Peters and Havard's results in scarlet fever have already been mentioned. According to both Whitby and Rosenthal et al. *p*-benzylaminobenzene sulphonamide is ineffective against meningococci. It should therefore not be assumed that this compound will always act in the same way as sulphanilamide, and further information about its therapeutic action is clearly necessary.

TOXICITY AND TOXIC EFFECTS

The acute toxicity of prontosil in animals is low, and that of sulphanilamide

even lower; doses in excess of those used in therapeutics cause no demonstrable effects whatever. In striking contrast with these negative experimental findings are the numerous toxic effects which have been observed in man. Apart from mere sensations such as nausea, dizziness, and depression, which are common, the following effects may be produced, some frequently, others fortunately rarely.

ACIDOSIS

Clinically obvious acidosis has been observed by Southworth and by Long and Bliss and some degree of it is a necessary accompaniment of sulphanilamide treatment, unless counteracted by giving alkali. An explanation of this and of the alkalinity of the urine is offered by Marshall et al., who have shown that 70 to 80 per cent. of the drug in the glomerular filtrate is reabsorbed in the tubules; they suggest that this process interferes with the reabsorption of bicarbonate and base. No renal damage occurs, and existing nephritis is not a contra-indication.

CYANOSIS

Whereas sulphæmoglobinæmia, first recognised by Colebrook and Kenny, was originally thought to be an infrequent complication, Discombe showed that some degree of it, though often insufficient to cause cyanosis, is the rule during sulphanilamide treatment. Paton and Eaton discuss the effect of sulphates in precipitating sulphæmoglobinæmia, and record also the occurrence of methæmoglobinæmia; they discuss the treatment of the two conditions. Archer and Discombe explain the occurrence of sulphæmoglobinæmia as due to catalysis by sulphanilamide of the reaction between H S and hæmoglobin; measures for averting it are directed to preventing the absorption of H S from the bowel, and include a low residue diet and the avoidance of all purgatives except liquid paraffin. Marshall and Walzl have recently offered evidence that cyanosis may sometimes be due to a cause other than the formation of either met- or sulph-hæmoglobin. Clinical reports of cyanosis and its treatment are numerous: it can evidently often

be disregarded, and disappears on stopping the drug or even without doing so.

FEVER AND RASH

A bout of fever varying in severity, may occur, usually from seven to ten days after sulphanilamide treatment is begun; it is important to distinguish this from a recrudescence of the disease. Hageman and Blake saw this in 21 out of 134 cases, and 9 of these also had a maculopapular erythema of wide distribution. They comment on the resemblance of this condition to serum sickness, but in common with most other authors and as would be expected, could obtain no evidence of sensitisation to sulphanilamide. It seems much more probable that the fever is a reaction to the products of lysed bacteria. Schwentker and Gelman also give a full account of the condition, and there are several other American reports, mainly on its occurrence in ambulatory cases of gonorrhoea, some of whom had been sunbathing. This, and the occurrence of the rash mainly on exposed parts, suggested photo-sensitisation as its mechanism, and evidence in favour of this is now furnished by Rimington's observation that patients and rats given sulphanilamide excrete an excess of porphyrin.

AGRANULOCYTOSIS AND ANEMIA.— MISCELLANEOUS

Agranulocytosis and anaemia are the most serious complications of sulphanilamide treatment, and the former stands alone in having caused a number of deaths. The paper of Jennings and Southwell-Sander is the best source of information on this subject; they report one personal case and analyse the features of four others. It is noteworthy that in all these five cases administration had been prolonged, and their occurrence affords strong reason for limiting a course to a fortnight, if not less. This disaster is evidently due to idiosyncrasy; many patients have been similarly treated and even given much larger quantities with no ill effect. Special care in debilitated patients is necessary, and frequent blood counts are advisable during prolonged treatment, but Young's case shows that this is not an adequate safeguard, since

repeated counts were being done, and that preceding the development of a complete and fatal agranulocytosis gave no indication of its imminence. Some failure of erythropoiesis may accompany this condition or occur apart from it. Harvey and Janeway and Kohn record cases of acute hæmolytic anaemia during sulphanilamide treatment; this condition develops much earlier (between the third and seventh days) and is amenable to treatment.

Miscellaneous.—Bucy attributes a case of toxic optic neuritis to sulphanilamide. Jaubert and Motz allege impairment of spermatogenesis following its use in gonorrhoea.

CONCLUSION

This account has described the position of chemotherapy with sulphonamide derivatives, as far as I have been able to ascertain it, at the present day. Further extension and definition of its uses will doubtless add to or supersede some of the conclusions arrived at here, possibly within a very short time. Advances are likely in two directions. One is the better employment of existing remedies; it will be noted that several types of infection, among them scarlet fever, pneumonia, enteric fever, wound infections, and staphylococcal infections, have apparently not yet been made the subject of adequate therapeutic trial, while in others optimum dosage and mode of administration remain to be defined. The other line of advance lies in the introduction to therapeutics of new compounds now only in the stage of laboratory trial. It is highly significant that, among these, specificity for individual bacteria varies with chemical structure. Any clue to the mechanism underlying this may place in our hands the means of successfully combating many, perhaps even all, bacterial infection; this goal may indeed eventually be reached by the present laborious method of empirical trial either in the experimental animal or in the human patient. So much ground remains to be explored that extensions of great consequence in the scope and efficiency of this treatment may certainly be expected.

(*The Lancet*, May 21, 1938).

Notes on Therapeutics, Diagnosis and other Medical Subjects.

SOME AIDS IN LABORATORY DIAGNOSIS.

At a meeting of the Independent Medical Practitioners' Association, Tinnevely held last month Dr. N. Seshadrinathan, M.B.B.S., D.T.M., of the King Institute, Guindy gave a discourse of some aids in Laboratory Diagnosis. The following is an extract of the discourse.

The lecturer dealt with some bacteriological aids to the diagnosis of diseases. Methods of taking blood smears were described. The lecturer was of opinion that blood smear examinations should be made by the clinician himself. The utility of such examinations was not only for finding malarial parasites but the various kinds of anaemias and therefore such examination will be of immense value regarding the treatment to be followed.

Examination of discharge for the presence of Gonococci was next taken up. The lecturer was of opinion that cultural methods were not superior to a careful microscopic examination. The complement fixation test is said to be very useful in recognising latent infections and also as an evidence of cure after a course of treatment.

He next took up the serological tests for syphilis. The importance of correct technique is to be insisted upon. Even in well equipped laboratories puzzling results were sometimes produced. Co-operation between the clinician and the serologist brought about maximum help in diagnosis. The lecturer was of opinion that among the numerous precipitation tests the Kahn test was the most reliable and popular. He said that the ideal thing to do was to get both the Wassermann and the Kahn test done in every case, since in many cases one of the tests alone might pick up a syphilitic case while the other might give a negative result. The Wassermann test though complicated was easy to read while the Kahn test though simple was difficult to read. For early syphilis the dark ground examination of

material from the chancre for spirochete was the best for diagnosis. The lecturer laid special stress in the early diagnosis of syphilis as early diagnosis meant a shorter course of treatment. In cases where a negative result was given when syphilis is clinically suspected the blood should be sent again after a provocative injection of an arsenical drug.

Regarding the Wassermann test in Malaria and Leprosy, the lecturer was of opinion that no non-specific positive result was given in Malaria, but some cases of Leprosy give non-specific results. For diagnosing syphilis in Leprosy cases, the Kahn test was to be preferred.

The lecturer then dealt with the various methods of diagnosis in the Typhoid fever. He explained that clot culture for typhoid bacillus was a good and easy method. The clinician had only to send a capsule of blood to the laboratory. Strict aseptic precautions had to be taken in sending the blood. He was of opinion that the charges for diagnostic examination should be normal.

In the Widal reaction some of the discrepancies were explained by the fact of the variations in the strains of typhoid bacillus. The importance of performing agglutination test with both O and H strains was described for the diagnosis of enteric fever in a person who had prophylactic inoculation.

Cultural examination of the urine was next taken up. The lecturer advised the use of sterile screw-capped bottles for sending samples of urine for culture. He preferred always Catheterised specimens.

For the cultural examination of faecis, the lecturer advised the faecis to be sent to the laboratory in 30 per cent. glycerinated saline.

(Extracts from the Eye, Ear, Nose and Throat Monthly, May 1938)

COD LIVER OIL FOR THE LOCAL TREATMENT OF TUBERCULOUS PHARYNGITIS AND LARYNGITIS.

ANDREW L. BANYAL.

Arch. Otolaryng. 27:154 (Feb.) 1938.

A report on the topical application of cod liver oil in one hundred and twenty.

six cases is presented. Of these, ninety-one cases of laryngeal and six of pharyngeal tuberculosis were analyzed. Thirty-seven patients with laryngeal tuberculosis died, twenty-nine in less than two months; their cases were not analyzed.

Cod liver oil can be used with safety in tuberculous pharyngitis and laryngitis.

Pharyngeal and laryngeal ulcers showed rapid epithelization and healing. A favorable therapeutic response was seen in cases in which there was localized infiltration of vegetative granulation. Laryngeal tuberculosis with marked edema is rather resistant to this treatment.

Of ninety-one patients with laryngeal tuberculosis, whose treatment lasted from two months to one and a half years, twenty-four or 26.3 per cent, remained unimproved, forty-two, or 46.2 per cent, improved subjectively and objectively and twenty-five, or 27.5 per cent, healed. In the majority of the cases in which healing occurred, it was established before the patient recovered from the pulmonary tuberculosis.

The evidences of symptomatic relief such as elimination of pain, dysphagia and irritation in the throat, diminution of the cough, and easier expectoration, were promptly noticeable. Restoration of the normal voice, better sleep and improvement in the patient's general well-being accompanied the objective manifestations of healing.

LOW-GRADE FEVER, THE RESULT OF NASOPHARYNGEAL INFECTION.

THOMAS P. O'CONNOR.

Laryngoscope 48:38 (Jan.), 1938.

1. Fifty-five cases of fever and fatigue were found to have definite nasopharyngeal infection and no other significant abnormality.

2. Cultures taken from the area revealed the presence of large numbers of some pathogen in most of the cases.

3. Treatment of the nasopharynx resulted in eradication of the focus and

relief of symptoms in approximately 80 per cent of the cases.

4. The method of treatment is discussed.

5. Reinfections brought a return of the symptoms, but yielded to treatment more readily than the initial attack.

6. Seven case histories are presented.

TONSILLECTOMY FOR RHEUMATISM: A STUDY OF 3,172 CASES.

WM. H. TURNLEY.

Ann. Otol., Rhin., Laryng. 46:1050 (Dec.), 1937.

In conclusion rheumatism is one of the great problems of civilization in the temperate zone. It is a lesser problem as one nears the equator, following that source of all energy, the sun. It is in some mysterious way related to focal infection; but this focal infection does not explain the entire problem. Since the tonsils are probably the greatest source of infection, because of their direct communication with the lymphatic system it would seem logical to advocate their removal in all rheumatic cases until the etiology of rheumatism is better known.

1. Rheumatism is benefitted by removing a focus of infection, chiefly the tonsil.

2. Sluder's syndrome seems to be one of the first manifestations of rheumatism through the tonsillar portal of entry.

3. The tonsil is the most frequent portal of entry for bacteria, due to its uniquely direct connection with the lymphatic system and blood stream.

4. The rheumatic type is not the enlarged acutely inflamed tonsil; it is rather the small, chronic, juicy tonsil.

5. All rheumatic patients should have their tonsils removed, if their general physical condition permits.

CALCIUM METABOLISM AND TEETH.

ISAAC SCHOUR, D.D.S., PH. D.

Jour. A. M. A. 110:870 (March 19), 1938.

General considerations and conclusions of this timely and important study are:

1. It is important to distinguish between the adult tooth, which is essentially completed in formation and calcification and is fully erupted, and the tooth that is still in growing and formative stage. The biologic reaction of the tooth naturally varies with the different periods of its life span.

2. Present evidence establishes the fact that the adult and fully erupted tooth is as a whole not subject to modification in structure or calcification by changes in calcium metabolism. The calcium content of dentin may be slightly increased with age by secondary calcification. However, unlike bone, enamel and dentin are not storehouses of calcium and are not subject to withdrawal.

3. Present evidence has not established a correlation between calcium metabolism and caries and offers no factual basis for the view that the incidence of caries is increased because of the metabolic changes that occur during pregnancy. Clinical and statistical evidence shows a similar incidence of caries in pregnant women and in nonpregnant women of corresponding age.

4. The indications are that the response of the growing and calcifying tooth to changes in calcium metabolism induced by endocrine factors and vitamin and other dietary factors is characteristic and to some extent pathognomonic because the calcifying dental tissues are uniquely specialized and sensitive structures.

5. Most of the evidence on the delicate, accurate and prompt response of the calcifying tooth to calcium disturbances is derived from data obtained from animal experimentation, especially on the incisor of the rat, which is a tooth of

continuous growth. Nevertheless, recent results of studies on human beings indicate that human teeth are also very sensitive and possess similar kymographic qualities.

6. The kymographic qualities of human teeth facilitate the analysis of the calcification pattern of teeth and constitute the basis for tooth ring analysis as an aid in the assessment of health and disease.

7. The employment of calcium therapy in dentistry per se is not justifiable. There is no evidence to show that alterations in calcium metabolism give rise to oral or dental disturbances without producing other systemic symptoms. When systemic manifestations are present, the responsibility for calcium therapy should rest with the physician.

IS QUININE A HARMFUL DRUG SO FAR AS ITS TOXIC ACTION OR EFFECT IN OPHTHALMOLOGY AND IN OTOTOLOGY IS CONCERNED?

No doubt many ophthalmic surgeons, especially in the north, where quinine is not used very much, would state that the toxic effects of the drug on the eye were practically of negligible import. In the south, however, quinine amblyopia has been occasionally observed all cases following direct administration of the drug to the patient. Richardson (South. M. J. 29:1156 (Dec.), 1936) believes that quinine may have a prenatal effect. Some of the so-called congenital cases of blindness may be attributable to its administration to the mother during pregnancy.

Experimentation with animals indicates that the toxic effect of quinine on the ganglion cells of the retina is the primary cause of damage to the eye and that vasoconstriction of the retinal vessels is a secondary factor.

This question has reference to the toxic action of quinine and not to the ordinary use of the drug in ointment or solution for ophthalmic therapy.

That prenatal medication with quinine is an important cause of deafness at birth is mentioned by Taylor (Surg., Gynec. & Obst. 64:542 (Feb.) (No. 2A), 1937) in a report of recent experiments by Wittmaack showing that quinine has a definite toxic action on the ganglion cells of the cochlea and the associated nerve fibres, the drug acting as a protoplasmic poison on these cells. The cells of the cochlear ganglion are more susceptible to injury by quinine than those of the vestibular ganglion or any other cranial nerve. It has been recently found that when quinine was given to pregnant guinea-pigs the changes in the foetal cochlea were similar to but more profound than the changes in the mother's ears. It has been emphasized that the history of every child with nerve deafness is incomplete without a history of the mother with especial reference to a record of the intake of drugs during pregnancy.

WHAT IS THE PRESENT TREND CONCERNING RADIATION THERAPY OF LARYNGEAL TUBERCULOSIS?

Under this heading must be included photo-therapy, roentgen therapy and radium therapy. It has been said that the advances made with photo-therapy have secured for it the place in the conservative treatment held by electrocauterization in the surgical management, while local photo-therapy will often heal a tuberculous lesion, combined general and local irradiations are essential for good results. These depend on the resistance and the reaction of individual patients. The methods by which healing of tuberculous lesions can be achieved differ according to the type of apparatus and the special technics employed. Cemach, for example, does not rely solely on light therapy in building up general resistance, but utilizes also hygienic, dietetic and stimulation treatment. He applies direct local irradiation preferring it to operative intervention, from which he has seen little good. Light therapy will attain a *restitutio ad integrum* with soft flexible scars in virtually all cases in which laryngeal

disease has not yet developed to an advanced stage.

The solar laryngoscope which was popular in its day has now been replaced by direct methods of irradiation, employing an ultra-violet lamp for the energy source. This is particularly true in this country, although the carbon arc source still has its advocates abroad.

The consensus of opinion concerning roentgen therapy of laryngeal tuberculosis is far from encouraging. Isolated favorable reports are available, but they have not established a superiority over cauterization and photo-therapy.

So far as radium goes, the results of its use in laryngeal tuberculosis has failed to enthruse workers in further experimentation.

When all is said and done, the rationalization of local treatment of laryngeal tuberculosis points to: (1) The undisputed value of galvanocauterization for extensive infiltrates, granulations and ulcerations; (2) the palliative and curative effects of photo-therapy in extensive ulcerations and as a post-operative aid to cauterization; (3) the occasional beneficial effects of roentgen therapy.

CICATRICAL ENTROPION.

Kiparisov reports a new operation consisting of shortening the skin of the lower lid by excision of a strip of 0.5 to 1 cm. wide and changing the direction of the deformed tarsus by sutures introduced in such a manner as to turn the upper edge outward.

TRACHOMA.

Derkac treats trachoma patients with intravenous injection of freshly prepared 1 per cent sterile solution of antimony tartrate, in doses of from 2 to 3 cc. every second day. The treatments are given in series of ten, with an intermission of from ten to fourteen days.

RATIONAL CALCIUM-THERAPY

CALCINOL

TABLETS POWDER GRANULES IRRADIATED DRAGEES WHIPPLE PLAIN DRAGEES WHIPPLE IRRAD. DRAGEES R.B. PLAIN DRAGEES R. B. IRRADIATED AMPOULES	The enthusiastic appreciation by a great number of physicians of the favourable therapeutic results from CALCINOL seems to have fully justified their confidence in it. If you happened not yet to have experienced the favourable action of CALCINOL — not yet to have enjoyed the satisfaction of using a calcium preparation ready to be applied to all the requirements of your cases — not yet to have realised that it costs no more to use this reliable and handy calcium preparation, then please ask us to satisfy with our samples and particulars your intention to try it.	ACIDOSIS PREGNANCY LACTATION DENTAL CARIES RICKETS BONE & GLAND TUBERCULOSIS PULMONARY T.B.
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SOCIALISED MEDICINE.

Ever since the Hon'ble Dr. T. S. S. Rajan, the Public Health Minister of Madras announced his intention to extend the system of Honorary Service in State Hospitals, a small section of the members of the medical profession counting amongst them very few official graduates and a larger number of non-official licentiates have been condemning Honorary System. Dr. U. L. Narayana Rao, a popular medical practitioner in the City of Madras who recently presided over the Provincial Conference of the Madras Branch of All-India Medical Licentiates' Association held at Vellore while favouring the system of Socialised Medicine defined it as one, "*which aims to employ every doctor available and to give efficient timely medical relief to all the citizens of the State*". He attempted to strengthen his view by quoting Dr. M. R. Guruswami Mudaliyar till recently one of the Stipendiary Physicians of the Madras Government General Hospital who, at a function arranged for honouring him a few days before he took leave prior to retirement observed:

"I wish you all to look forward to a condition wherein every medical man would be paid by the State and every person would have a claim on the State for his or her ailment being treated without payment. The State collected taxes and provided for the necessities of life. Similarly the State should also provide free medical aid. But meanwhile, on that account, no medical man should be asked to render service free and go without employment."

It is indeed a strange irony that a medical licentiate who is commanding a large practice in the City of Madras and who is every day treating all his patients in his consulting room charging only for the medicines supplied and a medical

graduate who all along his career as a paid Physician of the biggest State Hospital in this Presidency, did not demand any fee but gracefully collected the small amounts his grateful patients placed on his table while consulting him at his residence, could not conceive the inherent ideals of socialism in medicine though both of them have been actually practising socialism. Both these doctors seem to think that Socialised Medicine is more for finding employments for the medical men than for giving medical relief to the masses. It is a surprise to us and must be to many in the profession that these two prominent members of the medical profession should preach State Socialism as against individual Socialism especially when the Government in India is not socialised and with it all other professions. Compulsory Socialism as now preached by the so called Socialists is against the fundamentals of the science of evolution otherwise called as Karma theory by the Hindus. The last sentence in Dr. Guruswami Mudaliar's observation, "*no medical man should be asked to render service free and go without employment*" leads us to believe if the Hon'ble Dr. Rajan's demand of 'free service' from medical men is the cause for the wrong conception of 'Honorary Service' by Dr. Mudaliar and a few others. The Hon'ble Dr. Rajan's offer of a petty honorarium of Rs. 20 per month for the honoraries and his justification that this amount is a living wage for a member of the medical profession might have indirectly set a few to think a wrong way.

The ideals of Socialism in vogue outside India and those inherent in Indian philosophy are quite distinct from each other. The society as a whole is built on materialism in all other countries but in India it

has been resting on spiritualism. This is why the people in India have survived and could assert themselves against other nations including the nation which rules India. When the nations outside have been threatening one another with machine guns, bombs from the air and misusing their scientific knowledge for the destruction of society, India has been so far able to threaten its rulers by making use of spiritual science. Therefore members of the medical profession in India cannot and should not forget that it is possible for them to socialise medicine themselves without the help of the State. Let them remember that in India medical science is called Ayurveda literally meaning the science of making people live long. No other profession in ancient India has the sanctity of a Veda. There is a popular belief in the so called uneducated people that the medicines prescribed by a physician who does not charge either for advice or for the medicines supplied by him, have better effect than those for which the patients have to pay. There are also stories that the formulae of wonderful specifics were given by Sanyasees to some of their disciples who on oath declared that they would not only keep the formulae secret but would also treat the patients free. It is well known that in ancient India and in modern India till the indigenous systems were recognised by some of the provincial Governments the physicians were paid in kind and commanded respect from the people. We have stated all this to convince our readers that from ancient days the people in India connected Medicine with godliness; be their faith scientific or superstitious.

What we narrated above, will, we hope serve as an introduction to the topic of Socialised Medicine with which we are concerned; so that the members of the profession can conceive that Socialised Medicine is not foreign to the members of the Indian Medical profession and it is possible for them to look after the indigent quite satisfactorily without forgetting their individual self by being less materialistic and more spiritual. All over the Christian world medical relief to the indigent started from the Church and

later the cure of the indigent sick took different forms in different countries depending entirely on the political currents. From the reports available Russia alone 'has a full fledged system of State administration of medicine. Her example has been followed by Hungary, Sweden, Denmark and Norway, by Yugoslavia, Bulgaria and, to a certain extent, Switzerland. France has a system, better than some of the others. England and Germany have long been socializing their medical aid to the indigent.' In America the introduction of State Medical Service seems to be a matter of time. But the medical profession is so well organised in that country that the politicians will certainly find it a very hard task to introduce any revolutionary method of medical service which is not in keeping with the mode of living of the people and against the wishes of a strong and united medical profession. The American medical profession is preparing itself for a warfare against fussy politicians. It is said that the profession has been conducting nearly two hundred experiments 'to discover the best method for distributing the economic burden of sickness'. An American doctor says,

"If we glance at those countries that are frankly socialistic in their leanings, we observe that in Germany, where State medicine in some form has been in use for fifty years, the system is not yet satisfactory to the people. The same is true of England's attempts, which have been undergoing modifications during twenty-five years of experimentation. In Hungary, where politics has been allowed to interfere with medical practice, physicians have had to fight for their professional freedom, and in the end the right of patients to a free choice of a physician has been suppressed. This has also occurred in Bulgaria. In Yugoslavia the doctors are limited to forty-eight kinds of medicine which they may legally prescribe. Denmark's system includes compulsory insurance."

It is also mentioned by the same doctor that Lord Holder who recently paid a visit to America as a representative of the British Medical Association expressed that 'in the past twenty years, respect for the doctor and his prestige in England have been decidedly lessened.' In paid service responsible work will depend upon the amount paid and not on the

efficiency and bulk of work turned out. Medical service cannot be counted in rupees, annas and pias.

It is an idle dream to conceive of Socialised Medicine in India of the type obtaining in Russia. Indian temperament is against materialistic socialism and India cannot at any time be a Soviet Russia and without a Socialistic Republic, one cannot think of Socialised Medicine. If the system of medical relief is a criterion to judge about the welfare of the people Socialised Medicine is to be condemned in favour of Medical Relief by the independent medical profession. In America which is the only country on the continent where medical relief is entirely controlled by members of the independent medical profession, the death rate is the lowest. So for the welfare of the public it is safer to depend on the members of the independent medical profession than on the Government.

In India 150 years of State Medical Relief has been a failure in every respect. Because the Government have no funds to extend paid service they have supplemented medical relief by entertaining honorary service. Combination of paid and honorary service in one and the same institution cannot show the merit of honorary service and the honoraries cannot be as enthusiastic and zealous as they would have been otherwise, at least a few of them. The tardy eye wash methods of extending honorary service has materially retarded the growth of the independent medical profession and there is an evil tendency for the independent practitioners to depend on Government. The talk in State Hospitals seems to be: How is X getting on? 'How long Y is to remain in this Hospital? How does Z manage to be in good books of the authorities?' Talks on professional matters are very much limited. It seems to us as we have mentioned once before in these columns that the salvation for the healthy growth of the Medical Profession cannot be with the State. It is high time that at least a few patriotic medical practitioners should make up their minds to

agitate and demand from the Government the entire control of medical relief and medical education. Mere agitation will not succeed. The State Medical Relief is now chiefly confined to higher middle class and the rich. The poor hesitate to enter the gates of the hospitals. Let such of the patriotic young and old practitioners who wish to render honorary service form a team and start cottage hospitals in the labour areas and places populated by the poor and the middle class people beginning the work in villages. For treating more than 90 per cent of patients that require institutional treatment the knowledge gained in the medical college and schools which was tested at the examinations, is more than enough under the guidance of experienced senior practitioners. The entire medical profession started in India from the State paid members of the profession. Even for the starting of nursing homes the private practitioners had the lead from the Government medical officers. So the private practitioners should not hesitate to request the retired officials once holding high positions as Civil Surgeons to join them to do socialised medical service. They get a pension and such of those who are physically fit can take up this work as a hobby, the entire responsibility being taken up by the younger practitioners. All the professions in the whole world have to depend upon the poor and the middle class for their existence nay even the Governments cannot exist without them. The clever politicians know this secret more than anybody else. Therefore it is, in highly politically advanced countries State Socialised Medicine is more in evidence. A false notion of economy is infused in the minds of the people by the offer of State Medical Service though it is paid for directly by the people themselves, the only difference being that the doctors are not paid directly by those whom he treats but paid through State agency. It is the duty of the members of the medical profession to educate the public not only about the importance of their welfare but also about the necessity of paying for it directly to those who look after them and not through the State. In the latter case the responsibility is likely to be less and with it the zeal and enthusiasm for service.

News and Comments

Supplementary Memorandum to Bombay Minister: As reported in these columns last October a memorandum was submitted last August to the Hon'ble Dr. M. D. D. Gilder, Minister of Health, Bombay by three Medical Associations (1) the Bombay Branch of the Indian Medical Association, (2) the Medical Association Bombay North and (3) the Bombay Obstetrical and Gynaecological Society. The subjects referred to in the memorandum were: (1) reorganisation and extension of Medical Relief in urban and rural areas, (2) the Civil side of the Indian Medical Service; abolition of the post of Surgeon-General and of the entire Civil side of this service, (3) the Public Health Department, Haffkine Institute and the Health Board, (4) the better organisation of Medical Education; Post-graduate teaching and Medical Research and (5) Sickness Insurance. We remarked at the time that the Memorandum did not deal with many important matters concerning the rank and file in the profession but concerned only with the transfer of power from the I. M. S. to the B. M. S. services. With regard to honorary service the memorandum dealt only with the higher appointments. We learn that a Supplementary Memorandum has since been presented to the Health Minister recently and out of three Associations mentioned above the Bombay Obstetrical and Gynaecological Society did not interest itself in the drafting of the Supplementary Memorandum, instead, the Bombay Branch of the All-India Medical Licentiates Association joined the two Associations in drafting the Memorandum. Seven more subjects are discussed in the Memorandum. The first amongst them was Medical Education. The Minister was requested to close down the existing Medical Schools and convert them into medical colleges as was done in Madras. The necessity of starting a School for Post-Graduate study was urged on the lines of the London School. It was also pressed that classes should be opened in the Bombay City hospitals and in well equipped District Hospitals for 'Refresher Courses' especially for rural practitioners.

Rural Medical Relief was the next subject and it was said that there was too much competition in the Cities and towns and that a large number of practitioners should be tempted to practise in rural areas and that they be given decent subsidy for a period of ten years till they are able to depend upon private practice.

Urban Medical Relief was the third subject in the Memorandum. The necessity of introducing Panel System was suggested and the need for Health Insurance Act.

Facilities for Laboratory Diagnosis was the next topic and the Minister was requested to provide facilities in the Haffkine Institute for laboratory investigations at cheap rates.

Hospital Practice was the fifth item in the Memorandum. It was pointed out that after the introduction of Honorary System of Medical Service the hospital wards contained rich and upper middle class people and the general practitioners were losing their income. It was strongly urged that the Minister should take steps to prevent misuse of the hospitals by those who could afford treatment outside the hospitals. It was pointed out to the Minister that experienced and well qualified resident medical officers should be appointed in the hospitals to treat emergent cases. It was also complained that due care was not bestowed in the selection of Honoraries and a suggestion was made that in addition to high Academic qualifications the candidate to be selected must have put in not less than three years practice.

The last subject dealt with in the Memorandum was relating to the indigenous systems of medicine and Homoeopathy. The Memorandum stressed the need of starting medical schools and hospitals by the Government to import sound knowledge to the students of Indigenous systems. Regarding Homoeopathy it was said in the Memorandum that it was a matter of surprise that Homoeopathy did not require more than a year to be mastered and practised. Minister was requested to take steps to stop quackery and not to allow foreign nationals to practise in Bombay.

With due regard to what has been expressed in the Supplementary Memorandum, we regret we have to mention that the Memorandum would serve the purpose of having told a tale which must be stale to the Minister who till recently was one amongst the members of the medical profession in the Bombay City. The authors of the Memorandum would have done much better service in putting before the Minister a concrete scheme of Medical Relief to suit the conditions of the people in Bombay and the capacity of the existing medical profession not forgetting the state of public finance and consistent with the Congress programme. The most important riddle the Governments in India and the medical profession have to solve as a preliminary to other reforms in the medical administration and medical relief, is about a fact that nowhere in India there is one qualified practitioner to a population of 24,000. Yet it may be safely said that more than 50 per cent of the existing qualified practitioners find it hard to maintain themselves. Can it be said that there is no work? There is plenty of it. But there is nobody to point out different fields. State hospitals and other State Medical Institutions have been a curse to the healthy growth of the medical profession in India. The Memorandum of the quality submitted to the Bombay Minister will not improve matters either relating to medical profession or medical relief to the public. Government either in Bombay or elsewhere cannot feel and act for the medical profession in the way the profession itself can do. Post-graduate studies, Refresher courses and other details are to be initiated by the profession and not by the Government. It has been so in every other civilised country. Having a Minister of Health in the person of a medical man is a mere accidental coincidence in democratic Government. This has not been an unmixed good in Bombay and Madras if we may say so. Political Science is uppermost in the mind of any Government and not Medical Science. Prominent leaders in the medical profession and the Associations led by them will do well to agitate pressing the Government to hand over the

entire control of medical relief on its curative side to the independent medical profession; at the same time organise the profession on sound lines so that the profession is able to take the people in its confidence and socialise medicine on the lines suggested by us elsewhere.

Medical Licentiates' Conference: The Madras Branch of the All-India Medical Licentiates' Association organised a Conference at Vellore on 18-6-1938. Space would not permit us to report the proceedings of the Conference last month as The Medical Practitioner being the official organ of the Madras Provincial Subsidized Rural Medical Practitioners' Association we had to utilise all the available space for publishing the proceedings of a Conference organised by the latter Association. News about the affairs of the Medical Profession cannot be stale in the columns of The Medical Practitioner as the majority of medical journals interest themselves more about scientific topics apart from the topics concerning the life and prosperity of the members of the profession. We have chosen this path for serving the profession for, we consider that contented members of the profession can tackle scientific problems with little or no help. Viewing from our aims and objects of service the Welcome address of Dr. E. Vijayam Naidu and the Presidential address delivered by Dr. U. L. Narayana Rau at Vellore deserve the attention of the members of the medical profession even outside the fold of the Medical Licentiates. Dr. Naidu concentrated his attention on only one subject *i.e.*, Honorary Medical Service and denounced it in strong terms and expressed his anxiety that the Licentiates were not likely to fare well during the regime of the Hon'ble Dr. T. S. S. Rajan as the Health Minister though Dr. Rajan was a Licentiate himself. Dr. Rau's address was a master-piece, he outlined the subject-matter of his address into as many as fifteen main heads and amplified the possibilities of a sectarian association to be non-sectarian in its actual working. After expressing fond hopes in the Congress Ministry with a medical man in charge of Medical Portfolio in the person of the Hon'ble Dr. T. S. S. Rajan

a Medical Licentiate, Dr. Rau consoled his comrades in Northern India who are led to believe that the closure of Medical Schools would be a death blow to the Medical Licentiates. Dr. Rau pointed out that it was possible for the provincial Governments to make amends by reviving the L.M.S. Diploma and making it possible for the Licentiates to qualify for the same. He condemned the action of the Medical Council for India in forcing the Madras University to stiffen the facilities so far allowed to the Licentiates to appear for M.B.B.S. degree. In addition to demanding Intermediate standard as general educational qualification, many other restrictions have been introduced by the Medical Council of India making it very hard for the Licentiates to aspire for University Degree. Dr. Rau was of opinion that the Medical Council of India did not serve any purpose either to the profession or to the public when it had left out from its purview 30,000 Medical Licentiates who form the bulk of the qualified medical profession in India. He hoped that the leaders in the future Central Assembly would spare no pains to amend the Indian Medical Council Act suitably at the earliest favourable moment and unless this was done Dr. Rau said India would have neither peace nor safety under the regime of the Indian Medical Council. Dr. Rau did not favour the Honorary Medical Service and agreed with the observations of Dr. M. R. Guruswami Mudaliar referred to in the Editorial Columns of the current issue. Regarding stipendiary service he appealed to the Government to find their way to absorb the Licentiates in the subordinate service in the Madras Medical Service as the former cadre of service had been abolished. Such absorption Dr. Rau said would not entail much extra expenditure as almost all now in the Subordinate Service were getting a pay almost equal to that of those in the Madras Medical Service, as Assistant Surgeons. He congratulated the Hon'ble Dr. Rajan for introducing an amending Bill for the Madras Medical Registration Act, but deplored the objectionable feature in the Bill relating to the nomination of the President even for a period of four years.

The lot of the Subsidized Rural Medical Practitioners did not escape his notice. He opined that these practitioners were smarting under barbed wire restrictions and though they were called independent practitioners the whole scheme had degenerated into a form of enlightened slavery. He expressed his satisfaction that the Minister of Public Health had shown some signs of generous attitude towards these practitioners and hoped that the Minister could pursue a policy which would make the scheme contented and efficient.

Matters of general importance to the profession such as the Bill to regulate the import of drugs and medicine into British India attracted the notice of Dr. Rau. He deprecated the short sighted policy of the Central Government in not making this Bill applicable to indigenous products and suggested to the local Government to interfere and advise the Central Government to include within the purview of the Bill drugs and medicines manufactured in India. Regarding the Reorganisation of the Indian Medical Service he considered that time had come when the Medical Department should be totally Indian. Indigenous systems of medicine formed part of the address of Dr. Rau; he was not for the division of medical science into compartments and desired that what was best in the indigenous systems should be absorbed into one Scientific System. He appealed to the Government to organise the indigenous systems on a scientific basis and suggested to create a Chair for Indian Medicine in the University and make the study of indigenous systems compulsory in the University medical study.

He informed his audience that the Government of India were organising a Conference of representatives of Provincial Governments, Medical Councils and Examining Bodies to discuss about the future of Medical Education in the Medical Schools in India and expressed his surprise that the All-India Medical Licentiates' Association which was directly concerned in the matter was not asked to send its representation to this Confer-

ence. He hoped that the omission would be made good by Major-General N. M. Wilson, the acting Director of Indian Medical Service. In conclusion he exhorted the Licentiates that after the abolition of the Medical Schools there was a greater need for united action and that every medical licentiate should enroll himself as a member of the Association. He advised the Licentiates not to be dishearted on account of the abolition of the Medical Subordinate Department and on account of restrictions in their way to enter honorary service. He said there were ample opportunities for service as private practitioners. He suggested the starting of clinics on co-operative lines so that every one might have facilities to serve the public with devotion not forgetting the obligations of the medical profession to the country and its people. He appealed to the profession not to think in terms of medical licentiates and medical graduates and to evolve a plan of medical relief which would save people from premature death and suffering.

After going through the above extracts from the address of Dr. U. L. Narayana Rau will not our readers agree with us when we expressed our surprise that this Doctor was against the honorary system of medical service!

Indian Medical Degree Act of 1916: This Act came into the Statute Book of the Government of India in 1916. The object of the Act was to prevent unqualified persons assuming titles implying qualifications in western medical science which was defined as not including Homoeopathic or Ayurvedic or Unani Systems of medicine. The punishment contemplated for violating the sections of the Act was a fine which may extend to Rs. 1,000. This Act prohibited person or persons to confer titles denoting that the holder of these titles is qualified to practise western medical science. The wording and the interpretation of the sections in the Act were so loose and ambiguous that it was not possible to punish persons who added an additional alphabet after the recognised titles which indicated that the holder therefore was qualified to practice western medical

science. Quacks assuming M.B. (H) or M.D. (H) titles escaped punishment as it was interpreted that M.B. (H) or M.D. (H) were quite distinct from M.B. or M.D. and that the additional alphabet H indicated that the practitioner assuming M.B. (H) or M.D. (H) was not one practising western medicine. So, on legal technicalities some offenders of the Act escaped punishment. There have been instances in Madras where quacks assumed F.R.C.S. title and practised even in the City of Madras and escaped punishment. It is not specifically mentioned in the Act as to who should be the prosecutor. It is only said that cognizance of the offence could be taken only on a complaint made by the order of the Government or on the complaint made by the previous order of the Government by a Council of Medical Registration. So when cases were reported to the Government in Madras they asked the Medical Council to take the role of prosecutor. The Madras Medical Council having neither the means nor the machinery for conducting prosecutions requested the Government to conduct the prosecutions themselves. But the Government have been refusing the request of the Madras Medical Council. In between, the offenders escaped. So there have been no prosecutions at all in Madras these 22 years after the Act came into force and all this time requests from the Medical Council and refusals by the Madras Government was the order followed in Madras. The last refusal of the Government of Madras has been followed by yet another request by the Madras Medical Council at the last April session of the Council. In the Punjab there seem to be a few successful prosecutions recently. In Bombay it appears that the only prosecution failed due to a legal quibble. In 1927 the Bombay Medical Council thought it was desirable to amend the Act to avoid failure in prosecutions. The draft of Bombay amendments were approved by the Madras Medical Council some years ago but the Government machinery moved so slow that the Central Government took no action till the passing of the new Govern-

ment of India Act. The latter Act makes a measure of this nature a subject for the Provincial Legislatures. So recently the Government of India asked the Madras Government to amend the Indian Medical Degrees Act with the help of the Provincial Legislatures. The Madras Medical Council appointed a Committee to draft amendments and the Committee's report as approved by the Medical Council was published in *The Medical Practitioner* in April. We learn that the Punjab and the Bombay Medical Councils have taken up the question of amending the Act. Though the Act is provincial the interests of the profession and the dangers to the public on account of quacks assuming false titles being identical in all provinces, it would be a wise step if a conference of the representatives of all the existing provincial Medical Councils is arranged in a central place to draft suitable amendments to the Act. The same Conference may also discuss many other questions pertaining to the provincial medical Acts and arrive at concerted opinion about these matters especially about the code of Medical Ethics. We wish any one of the Provincial Medical Councils take the initiative in the interests of the profession and the public throughout India.

A Catching Measure: It is said that the United Provinces Government have decided to bring forward a Bill to recognise and regulate Indigenous systems of medicine. The Bill is being drafted on the lines of that introduced in Bombay. All credit to the Hon'ble Dr. Gilder, the Bombay Public Health Minister, the origin founder of this unique measure. It cannot be a surprise that other provincial Governments especially those under the Congress will catch the idea underlying this Political Bill. On scientific grounds, taking into consideration the welfare of the public, this measure cannot but be a risky step which will retard development of Medical Science. It may temporarily strengthen the existing Ministries. But it is a false safety. The Public Health Minister of the United Provinces is a lady, sister of Pandit Jawaharlal who in unequivocal terms told the students of Unani System at Delhi a few months ago that

he could not find way to employ practitioners of indigenous systems in the new hospital to be built in Allahabad to commemorate the name of his beloved departed wife. It is a thousand pities that the Congress High Command could not conceive the idea of discussing the relative importance of all prevailing systems of medicine to evolve only one system of medicine that is the Scientific System. As in all existing religions where the fundamental idea is the existence of something superhuman, in medicine of whatever system the underlying principle is the relief of human suffering. Nobody can deny that the indigenous systems of medicine do not relieve human suffering. But it is the recognition of the self-made, existing practitioners of indigenous systems and of Homoeopathy that is to be seriously taken into consideration by all right-thinking people apart from the members of the Scientific System. Evolution of a comprehensive Scientific System of medicine taking from all systems all that is scientifically sound ought to be aimed at by those who love their country for all purposes and not particularly for political purpose. The Congress Ministers on account of Congress majority may feel bold to enact any legislative measure but to rush legislation concerning the welfare of the public without caution and patience will amount to culpable negligence. There exists an All-India Medical Association, the Indian Medical Association of which the President for the official year is Dr. B. C. Roy, a staunch Congress man who though belonging to the Scientific system of medicine, has a soft corner in his heart for indigenous systems. The persons who have been guiding the destinies of this Association are all first rate Congressmen. It cannot be said that these Congressmen do not know what is going on round them. The unadulterated Political Science is not incompatible with the Medical Science. If Congress Ministers do not feel it necessary to consult this All India Medical Organisation, it is up to the latter to interfere before it is too late. Will the Indian Medical Association interfere not so much in the interests of their members

but to avoid a grave danger to the public welfare?

A Complaint: It is customary in any teaching institution to invite the old boys for any function to be held in the institution and many a school and a college celebrate a special function called the 'Old Boys' Day'. The Royapuram Medical School was not an exception to the custom and we remember to have attended the 'Old Boys' Day' at the Royapuram Medical School once or twice. We have not heard these few years if the 'Old Boys' Day' was celebrated at all. An old boy of the Stanley Medical School, a popular practitioner in George Town and the Secretary of the local branch of All-India Medical Licentiates' Association has sent us a communication which we have published in Correspondence columns, complaining that for the past five or six years he never received invitations for the public functions held in the School though he was invariably an invitee for the functions in the school before that period and he with many more old students of the School are very much disappointed that none of them were invited for the inauguration ceremony of the Stanley Medical College. They naturally feel the disappointment as they missed hearing the popular Minister of Public Health, the Hon'ble Dr. T. S. S. Rajan, himself an old boy of the School. The disappointment is felt all the more as the topic of the address at the inauguration function was all about the present and future of the Licentiates. It is just possible that on the day of the opening of the Stanley Medical College the person who took the responsibility of inviting had to take into consideration the available accommodation for the guests before they were invited. The Secretary of a well known and perhaps the oldest Medical Association and who usually arranges meetings of this Association in the Stanley Medical School, cannot be considered as too insignificant a person to be one of the invitees for the function, so also some of the members of the Madras Medical Council, a Statutory Body having control over the whole medical profession in this province. The

fact that Dr. U. D. Gopala Rau and a few more old boys of the school were on the list of invitees for some years and were omitted later, leads us to surmise whether personal considerations were the causes of such omissions. The organiser of the inauguration function of the Stanley Medical College was, we are told, Lt. Col. Alagappan who has succeeded Lt. Col. Mahadevan the latter being transferred to General Hospital. The new Superintendent of the Stanley Medical School is not likely to be conversant with the past history of the school so soon and is likely to be guided by his immediate assistants. We trust Lt. Col. Alagappan will walk in his own groove. He belongs to a service which usually does not require leading. Lt. Col. Alagappan has much to gain and nothing to lose if he minds correcting the impressions of omissions relating to the very first public function which he organised. At the same time his Assistants will do well to remember that they are under new order of things.

Indiscreet Scrutiny of Indents: The Subsidized Rural Medical Practitioners are supplied for a year drugs worth Rs. 360/- including cost of packing and transit charges. They are asked to prepare an yearly indent and submit to the D. M. O. for scrutiny. The D. M. O. strikes some items and adds a few more. The former is the routine and the latter is rarely done. The practitioner is not informed about the changes affected in the indent. Such a course is bound to be a hardship to the practitioner. When medicines beyond the sanctioned amount of Rs. 360/- are not supplied to a practitioner we fail to appreciate a need for the scrutiny of the indent and if a strict scrutiny is absolutely necessary the practitioner must be given a chance of explaining the excess or deficit in the indent as the prescribing officer is the rural practitioner and not the D. M. O. If a D. M. O. strikes an item for the supply of bandage cloth which is daily required for outpatient work and adds to the indent syrups and olive oil and such items without which a practitioner can run a dispensary in a village, the value of scrutiny may be easily imagined than described by us. If once the indented supply is received by the

practitioner he can neither return what is not required nor replenish what is actually wanted by him. The best course seems to us is to permit the practitioner full discretion to prepare his own indent the D. M. O.'s office serving only as a gateway for the indent to pass to the Government Medical Stores. The ideal will be to supply Rs. 360/- cash to the practitioner and allow him to buy drugs himself.

Stanley Medical College: The Hon'ble Dr. T. S. S. Rajan, the Madras Minister for Public Health opened on 2.7.38 the Stanley Medical College, a new institution brought into existence by himself as a result of the abolition of the Licentiate course of medical study in the Madras Presidency. The credit of the latter reform goes also to the Hon'ble Dr. Rajan. Before formally opening this institution the Minister addressed the gathering specially invited for the function and before doing so announced the sad news of the passing of Lt. Col. Rt. Hon'ble Sir. George Fredrick Stanley the Ex-Governor of Madras. The Minister said that it was a tragedy that on the eve of the opening of the College (transformed from the Stanley Medical School) with which the name of the Ex. Governor was associated that he should take eternal rest.

The Hon'ble Dr. Rajan began his address by recapitulating the justification of his policy in abolishing the L.M.P. course and in adding one more Medical College to the existing two Colleges one in Madras and the other at Vizagapatam. He said that after the abolition of Medical School in the Madras Presidency he had to consider two proposals. One was to create an examining board and constitute a College of Physicians and Surgeons, who like similar bodies in England and elsewhere would confer diplomas, which would in a way get over this inferiority complex. The other was that facilities should be provided by the University authorities to encourage L.M.P.s. to appear for the University degrees. He felt that the complex superiority and inferiority were likely to persist if there were two examining bodies. Regarding the admission of Licentiate to University

Degree he was conscious of the recent barriers kept in their way. He consoled the Licentiates by saying that he would not allow such amongst them who aspired for higher qualification to drift but would consider any proposal that was worth the consideration of the Government.

Referring to the agitation that the Government was not justified in starting a new Medical College when an existing College at Vizagapatam did not get recognition on account of defective equipment of that College, the Minister said that the Government have done all that was possible and sanctioned a sum of 3½ lakhs but it was not possible for the P. W. Department to execute work to the aggregate amount of Rs. 1,20,000 during the current year. All the same he said the Government was in communication with the Medical Council of India and expected that time would not be far for that Council to recognise the Vizagapatam Medical College. The Minister added that the Andhra University has been directed to apply to the Council once again for recognition. The Minister added that the Government learnt that all the Provincial Councils in India had recognised the M.B. B.S. degrees of the Andhra University. He was of opinion that the apprehension of the medical students of the Andhra University that the M. B. B. S. Degree was not recognised was not justifiable as on enquiry he learnt that the Degree was recognised by all the Provincial Medical Councils. The Minister allayed yet another fear lurking in the minds of the Andhras that the Stanley Medical College was likely to deplete the strength of the Andhra Medical College. From what could be judged by the recent admissions to the three Medical Colleges he said 93 students could not be admitted for want of accommodation and he deplored that the communal G. O. was working as a great hardship to only one community i. e., the Brahmins as could be evidenced from the fact that all the 93 students that could not be admitted belonged to this community.

The Minister took advantage of the function and answered his critics amongst the practitioners of indigenous systems of medicine who pressed that the Stanley Medical College should be converted into

an Ayurvedic Institution. He said that it was impossible to achieve this as the materials available in the Stanley Medical School could not be made use of for advancing the knowledge in Ayurveda.

The Minister availed himself of another opportunity to explain the policy of the Government in closing down the Lady Wellington Medical School for women. He said the women students preferred to get themselves admitted in the Stanley Medical School rather than go to Vellore Missionary Medical School and the Minister concluded that women students were in favour of co-education. He added that women students would have much better facilities for clinical training in the Stanley Medical School than they had in the past and assured the women students that in course of time he would provide all the necessary amenities in the hostel and the inconveniences they might have at present would be temporary.

Dr. Rajan paid a tribute to Lt. Col. Mahadevan, Ex-Superintendent of the Stanley Medical School who gave unstinted help to the Government to convert the School into a College. Major General Wilson, the Surgeon-General with the Government of Madras now temporarily acting as the Director-General, Indian Medical Service has his share of praise from the Minister relating to the conversion of Stanley Medical School into a College.

Dr. Rajan's dynamic zeal and enthusiasm to do quickly what he feels the best, has necessarily created many admirers as well as critics who judge him by their own perception. In public interest as well as the interest of the medical profession the abolition of L.M.P. course is the wisest step taken by Dr. Rajan. Side by side he ought to provide additional accommodation for the candidates who wish to prosecute medical studies, in proportion to the loss of medical practitioners due to the closure of medical schools. This he could do by providing an additional Medical College, whose creation was amply justified from the applications received for admission into the Medical Colleges. The non-recognition of Andhra Medical College is a self

acquired disease which started in that College itself.

If the parents of the pupils in the Lady Wellington Medical School were asked to give their opinions before the Government amalgamated this women school with that of men, their opinions could have been quite different from that deduced by Dr. Rajan. Even the girl pupils would have thought twice before they entered the boys' school if they were given the option of choice between Stanley Medical School and their own Lady Wellington School. Evidently this was not done. After the closure of women school was announced the girl pupils were asked to choose between a boys' school at Madras and a girls' school outside Madras. It is said that majority chose Madras in view of large expenditure and other inconveniences at Vellore. It was a moral obligation on the part of the Government to consult the parents of the girl pupils before the Lady Wellington Schools was closed for good. The parents have executed a bond with the Government on behalf of their daughters and the first stipulation was that the girls were to undergo training in the Lady Wellington Medical School.

The Government took a very wise step in appointing a senior and a capable educationist, a member of the Madras Medical Service as the very first Principal of the new College. The policy of transfers in Government service has been rather very slack especially in the medical institutions in the City and it is hoped that the new policy of transfers inaugurated by the sagacious Public Health Minister before he performed the inauguration ceremony of the new medical college would be a beginning of a healthy policy in the interests of the public and the Medical Department. Transfers have also a tendency to make institutions more active and popular.

Leprosy and Government's Responsibility: The speech of the Hon'ble Dr. T. S. S. Rajan, Minister for Public Health, Government of Madras, delivered on the occasion of the opening of the Madura Silver Jubilee Hostel for Boys at the Dayapuram Hospital and Homes

for Lepers, Manamadurai on 23.7.1938, gives an idea of the policy of the Government of Madras regarding Anti-Leprosy campaign. After going through the history of the disease and its insidious course with the attendant misery to the patients and risk of infection to the public, the Minister complimented the British Empire Leprosy Relief Association and the Mission of Lepers for their humanitarian work and accepted that apart from imperialism, organised medical relief is a land mark in the British rule and said:

"The Government will be justified in spending its money more on the efforts for eradication of the disease than of doling out relief, which is an uneconomic investment upon human beings who have ceased to be an economical unit for the State. The State can take cognisance only of those people who are a danger to others on account of the disease they have. They should not spend their money in mere relief work of the incapacitated but should leave that sort of humanitarian work to the charitable instinct of people and allow them to do what they can in relieving the sufferers from the crippling effects of the disease."

He advised all Leprosy Relief centres to be guided by the advice obtained from the Leper settlement at Tirumani which has been recognised as a Research Institution which would spread up-to-date knowledge in combating Leprosy. He added that the Government would endeavour to give discriminating help to research workers for a period ranging from 5 to 10 years.

One cannot be on a sure ground to comment on the policy of Government in this country relating to Medical Relief in general. The Provincial Governments, Congress or non-Congress have been so far walking in the groove of old Governments with little or no initiation of their own and are adding to this responsibility by taking over the control of indigenous systems which had an existence independent of the Government during the bureaucratic days. The tendency for philanthropy regarding medical relief is deteriorating to the extent the Government has been taking over charge of the entire control of medical relief. The anti-Tuberculosis Campaign of Lady Linlithgow should serve as a lesson to the Governments in India that initiation

for public philanthropy should start from persons in the position of that lady. Till she came forward the ravages of Tuberculosis were not made to be felt. The flood relief fund recently initiated by the Premier of Madras for the people of Madras had not a response it deserved. So it is too much to depend upon the public charity unless the Government changes entirely its policy of medical relief. Even the rich are made to feel that State hospitals should provide for their treatment. This is why well organised nursing homes and private hospitals have not made their appearance in India as in foreign countries. Under the prevailing conditions and circumstances it is too much for the Government to depend upon public charity for medical relief till the Government initiates a policy relating to medical relief by associating the public and the independent medical profession in the management of State medical relief on a large scale.

The Madras Premier Under Fire: To our knowledge history has no parallel to the scenes enacted by the students of the Andhra University on 24.7.1938 when the Hon'ble Sri. C. Rajagopalachariar, the Premier of Madras was received by the public at Waltair Railway station and later addressed a crowded public meeting at Vizagapatam. The medical students past and present are naturally exasperated on account of the Andhra M.B.B.S. Degree not being recognised by the Medical Council of India. It cannot be a surprise that the medical students are in a desperate mood when it is known that the Madras Medical College and even the Tuberculosis Hospital both under the entire control of the Madras Government would not recognise the course of studies at the Andhra Medical College and we are astonished indeed to hear for the first time that the Government Tuberculosis Hospital did not permit Andhra Medical Graduates to undergo special training in that hospital. It is no wonder that the medical students did lose their balance and kept the Premier under the fire of a volley of questions without listening to the sensible statements made by the Premier to clear the misunderstanding in the minds of the

students that the Congress Ministry was not sympathising with them. The Premier stood the fire most peacefully and those who are not prejudiced are glad that the Government of Madras have made up their mind to fight the Medical Council of India; to us it looks the real fight will be between the Government of Madras *versus* the General Medical Council. We trust the Premier who demonstrated at Vizagapatam that he was fire proof will stand the intrigue of non-recognition of the Andhra Medical Degree by the Medical Council of India which as has been stated repeatedly by us started in Vizagapatam itself. The Madras Government must have by this time known who are at the bottom of this intrigue. We are hopeful that Congress-minded Madras Government will be able to disentangle the knots in the intrigue even at the cost of the Madras medical College suffering temporarily as envisaged in the Premier's address at Vizagapatam. We trust the medical profession in this province will value national prestige more than anything else, strengthen the hands of the Madras Government and bring honour not only to the Andhra University but to the Indian nation as a whole. We will revert to this subject in the next issue.

Correspondence, Reports, Etc.

To

THE EDITOR,

Sir,

I wish to bring to your kind notice the invidious distinctions made by those concerned while inviting the members of the medical profession to important functions such as the 'Annual Day' and inauguration ceremonies.

The Superintendent or whoever it may be concerned in organising such functions seems to ignore the old students altogether from the list of invitations. Even a most active and popular medical

association, the Madras Branch of the All-India Medical Licentiates' Association goes without an invitation for such functions. This has been happening since five or six years. On February 4th when Dr. Rajan attended a function and addressed the students of the Stanley Medical School, many of the old students of the school desired to listen to the Minister, himself an old student of the school. But could not attend this function for want of invitations. The same thing happened relating to the inaugural function of the Stanley Medical College.

It seems at the last function there was hardly a sprinkling of private medical practitioners.

I am at a loss to understand the purpose of the powers that be of excluding old boys of the school from such public functions.

The old students of the medical school are deprived of the privilege of attending public functions and hear the speech of one of the old students of the school who now occupies a unique position holding the reins of the Medical Administration. It is a matter of very great pride and pleasure for the old students of the school to attend functions organised in the school and hear important announcements made by one of them relating to the medical profession in general and specially concerning the medical licentiates. We are sorry we are not having the privilege of listening to one whom we respect as our own.

There is something wrong somewhere in the Stanley Medical School and I request you on behalf of the Madras Branch of the All-India Medical Licentiates' Association to bring the grievance of the old students of the school to the notice of the Government so that invidious distinctions are not made in the matter of invitations for public functions organised at the Stanley Medical School.

U. D. GOPALA RAU,
Secretary,

Madras Branch of A. I. M. L. A.

The Madras Provincial Subsidized Rural Medical Practitioners' Association. NOTICE.

(1) Dr. M. Krishna Rau, (Bellary District); (2) Dr. K. Srinivasa Rau, (Godavery District); (3) Dr. C. Kunhjunni Nayar, (Malabar District); and (4) Dr. K. Govindan, (Tanjore District) have been chosen to serve as members of the Working Committee tentatively till the District Branches of the Association are organised and the Provincial Committee is brought into existence. The General Secretary is also a member of the Working Committee and needs no selection as he is an ex-officio member of the Provincial Committee as well as of the Working Committee by virtue of his office. He is the Secretary of both the Committees as provided for in the Memorandum and Rules of the Association.

A meeting of the Working Committee has been notified to meet in Madras at the residence of the President on 31-7-'38. The proceedings of the Working Committee will be published in the August issue of The Medical Practitioner.

V. RAMA KAMATH.



THE PERFECT
POULTICE AND
DRESSING FOR
INFLAMMATION
AND
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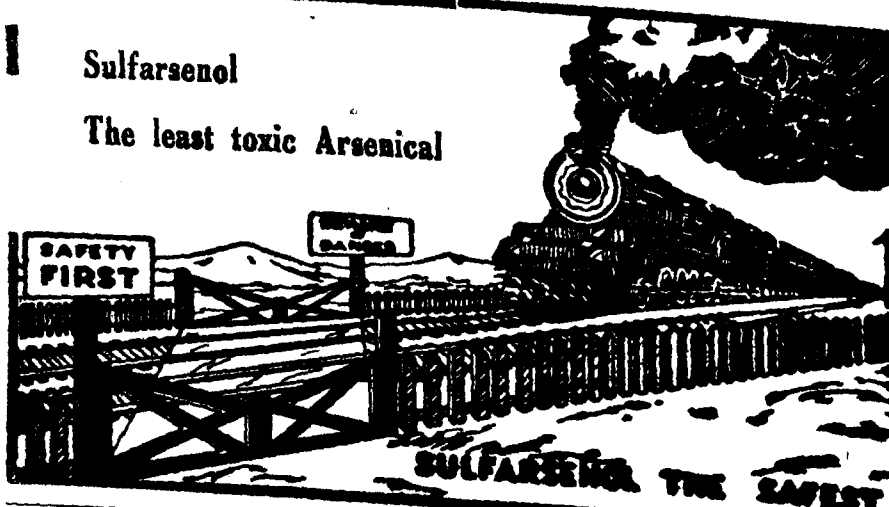
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AUGUST, 1938

[No. 11

Original Articles.

TUBERCULOSIS OF THE LUNGS AND THE GENERAL PRACTITIONER.

By

DR. K. N. PISHAROTI, M.D., D.T.M., M.R.C.P. (LOND.),

Physician, Govt. Royapuram Hospital, Madras.



It goes without saying that Tuberculosis of the lungs is one of the commonest disease in our country. It causes a lot of suffering and disability and is attended with a heavy mortality rate. It is an accepted fact that the disease may be cured and with much less expense if detected in the early stages. Early diagnosis of the disease is very important not only on this account, but also for the reason that early diagnosis and treatment will have an important effect in the prevention of spread of the disease. The poor economic condition and the ignorance of the people are the main causes for the prevalence and the spread of the disease on a very large scale in this country. It therefore behoves every one belonging to the medical profession to be familiar with the earliest manifestations of the disease, so as to spot it early. The policy of the Government in extending the scope of medical relief so as to make it available to the people of the villages through the Rural Medical Practitioner has not only given the opportunity to, but also has thrown a responsibility on the Rural Medical Practitioner to spot out tuberculosis and similar diseases in their very early stages. The general practitioner as well as the specialist know that the successful treatment and prevention of Tubercular infection in the lung depend entirely on early diagnosis of the disease when the infection is not open. And for an early diagnosis X-ray or even a microscope is not necessary and at times of no avail. When a skiagram reveals Tubercular infection or the microscope shows Tubercle bacilli, the case is pretty far advanced and the patient is an uncertain economic drain to the society and an active source for the dissemination of the infection. Keen observation, an intelligent training of the senses of touch and hearing and a thoughtful understanding of the history of the symptoms must be the only dependable resources which should guide the general practitioner for the diagnosis of Lung Tuberculosis. The growing tendency of referring every case of Tuberculosis to the specialist has a repercussion on the responsibilities of the general practitioner in the treatment of this most common disease to combat which successfully the general practitioner

It goes without saying that Tuberculosis of the lungs is one of the commonest disease in our country. It causes a lot of suffering and disability and is attended with a heavy mortality rate. It is an accepted fact that the disease may be cured and with much less expense if detected in the early stages. Early diagnosis of the disease is very important not only on this account, but also for the reason that early diagnosis and treatment will have an important effect in the prevention of spread of the disease. The poor economic condition and the ignorance of the people are the main causes for the prevalence and the spread of the disease on a very large scale in this country. It therefore behoves every one belonging to the medical profession to be familiar with the earliest manifestations of the disease, so as to spot it early. The policy of the Government in extending the scope of medical relief so as to make it available to the people of the villages through the Rural Medical Practitioner has not only given the opportunity to, but also has thrown a responsibility on the Rural Medical Practitioner to spot out tuberculosis and similar diseases in their very early stages. The general practitioner as well as the specialist know that the successful treatment and prevention of Tubercular infection in the lung depend entirely on early diagnosis of the disease when the infection is not open. And for an early diagnosis X-ray or even a microscope is not necessary and at times of no avail. When a skiagram reveals Tubercular infection or the microscope shows Tubercle bacilli, the case is pretty far advanced and the patient is an uncertain economic drain to the society and an active source for the dissemination of the infection. Keen observation, an intelligent training of the senses of touch and hearing and a thoughtful understanding of the history of the symptoms must be the only dependable resources which should guide the general practitioner for the diagnosis of Lung Tuberculosis. The growing tendency of referring every case of Tuberculosis to the specialist has a repercussion on the responsibilities of the general practitioner in the treatment of this most common disease to combat which successfully the general practitioner

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tioner has to be depended upon more than the specialist. It is therefore essential that the general practitioner should cultivate the habit of being self-reliant which he could afford to be without additional cost if he spends some time and trains his tactile and auditory senses by making intelligent use of them by the bedside remembering always that for such training a knowledge of normal conditions is essential.

A patient who has the tendency to catch Tubercular infection will have vague symptoms such as loss of breath on slight exertion and disproportionate feeling of fatigue. Slight rise of temperature a few points above normal in the evening worse after exertion; the fever is popularly known as 'bone-fever or asthi-jvarum.' He complains of flying stitch like pain in the chest probably due to dry pleuritic patch. Though regular and temperate in habits he suffers from dyspepsia, acidity very much resembling gastric ulcer, being a marked symptom. Such a patient is prone to catch cold very frequently or he is one who has suffered from Influenza very often attendant with lung complications. If a careful physical examination is made of a patient complaining of one or more of the above vague symptoms one would observe feeble or impaired breathing without any adventitious sounds. Very often a symmetry of muscular development may be noticed in the chest wall and while breathing dragging in of inter costal spaces here and there may be seen, indicating patches of pleuritic adhesions. A fourth hourly record of temperature would help the practitioner to have a correct grasp of the symptoms. The following is a detailed account of the important symptoms in Lung Tuberculosis which should guide a practitioner to come to definite conclusion about the infection.

A patient may consult a practitioner for one or more of the following symptoms from which he is suffering.

1. Fever.
2. Cough with or without expectoration.

3. Haemoptysis.
4. Pain in the chest.
5. General weakness and loss of weight.
6. Dyspeptic Symptoms.
7. Other intercurrent diseases.

FEVER: This is one of the earliest and most important manifestation of Tuberculosis. It is a truism that early Tuberculosis is diagnosed more by the thermometer than by the stethoscope. In the very early stages of the disease fever will often be the only indication. The fever is a long continued one, it is very irregular, the temperature being normal or subnormal in the morning and rising to a variable height in the afternoon or evening. Of all the various characteristics two features are of diagnostic value:—

(1) The first feature is that the fever is a prolonged one. If a patient complains of fever of some duration (several days, weeks or months) we can presume it is Tuberculosis in the absence of any other apparent causes. Of course it does not mean straight away that the lung is the seat of the disease; the infection may be anywhere else. For example, in one case a girl of 14 years complained of fever of about six months' duration; she had also slight pain in the right iliac region after food, which was relieved by gentle massage; palpation revealed resistance in the region. She had no symptoms or signs pointing to lung involvement. The diagnosis was clear. The prolonged fever and the abdominal signs and symptoms were enough to lead to a clear diagnosis that the caecum was the seat of infection. Radiological examination and subsequent course of the disease confirmed the diagnosis.

(2) The second feature is that the patient does not feel any discomfort on account of the fever. He may only complain of a feeling of warmth or a sensation of 'heat', he does not have headache or pains or other features usual in febrile

conditions. The only two diseases generally manifesting this characteristic are Tuberculosis and Kala-azar. The former is universal, while the latter is endemic to certain areas. So if in a non-endemic area a patient develops a fever of the above description it may be presumed that he is Tubercular. For example, in Tanjore where Kala-azar is non-existent, a patient suddenly developed fever soon after recovery from an attack of Bacillary dysentery, he was not keeping to bed in spite of repeated advice, he felt quite cheerful and was moving about. This gave rise to the suspicion that he was suffering from Tuberculosis; careful examination elicited a few moist sounds over a small area in the right infraclavicular region, and examination of the scanty sputum showed the presence of Tubercle bacilli. He had subsequently repeated attacks of haemoptysis, but since he was put under proper treatment immediately he recovered completely and has been keeping quite fit for several years.

In another case a student studying in the B.A. class was getting a rise of temperature upto 102° F or 103° F every afternoon, but he did not mind the fever, and would sit and work as usual. Being in Madras, there was the possibility of Kala-azar, but he had slight cough and expectoration and the sputum was blood stained. The diagnosis was confirmed by the finding of acid fast bacilli in the sputum. In this case also there was complete recovery under treatment.

In a doubtful case an attempt should be made to get four hourly record of temperature and note the same on a chart. If this is impracticable it may not be difficult to keep a regular record of at least the morning and evening temperature until definite diagnosis is made.

COUGH AND EXPECTORATION: Cough is also one of the earliest symptoms, and at times the most constant one, although in a certain number of cases there is little or no cough. It is at first of a hacking character, and later attended with expectoration. The cough and expectora-

tion vary with the stage of the disease, but we are concerned here with the diagnosis in the early stages. The persistent nature of the cough must lead the practitioner to make a thorough examination of the patient.

Any expectoration must be examined to see if it is blood tinged and wherever possible microscopically examined for the presence of Tubercle bacilli. Care must be taken to select the thick mucoid portion of the expectoration and in case of a negative result repeated examinations must be made. Absence of Tubercle bacilli does not mean that the patient is not tubercular. It must be remembered that a persistent cough may be due to such throat conditions as a chronic pharyngitis or tonsillitis. Such coughs are usually worse at night and there is often no expectoration and if at all it consists of watery or thick glairy mucoid matter. Fever is absent in most cases, and examination of the throat reveals the condition.

HAEMOPTYSIS: Tuberculosis of the lungs being the most common cause of haemoptysis, this should be thought of and ruled out in every case before considering other causes. About 60 to 80 per cent of the cases give a history of haemoptysis and in many cases the first manifestation of the disease is a haemoptysis. The haemoptysis may be profuse, or it may be slight and repeated. There may or may not be cough; there may be no fever. The lung signs may be evident at the very outset of haemoptysis or the patient shows signs of Tuberculosis later. On this account it should not be construed that every case with a speck of blood in the sputum is a "T. P."

PAIN IN THE CHEST is often one of the early symptoms, since some cases begin with a patch here and there of pleurisy. This may go on to pleurisy with effusion. Pleurisy without a definite cause is most probably tubercular. If pleurisy is not attended with any other affection of the lung, pleurisy should be considered as the first evidence of tuberculosis and proper treatment should be begun. About 50

per cent of cases of pleurisy develop into phthisis later.

GENERAL WEAKNESS AND LOSS OF WEIGHT may be the first manifestation. The onset is very insidious and careful observation may show that the patient has a cough, or has dyspeptic symptoms, or he gets an evening rise of temperature.

Tuberculosis is one of the most common causes of emaciation and although usually emaciation occurs only towards the later stage of the disease, it may sometimes be the presenting symptom. In the case of a boy aged about 15 years the boy's father complained that the boy was not growing, he was on the other hand getting reduced. He had no fever, cough, expectoration or any other symptom. On examination the lungs showed a widespread affection of Tuberculosis of both lungs. Shortly afterwards this patient developed fever and all the symptoms of Tuberculosis and he expired within a few weeks.

DYSPEPTIC SYMPTOMS such as loss of appetite, indigestion, flatulence, vomiting and perhaps diarrhoea form the first manifestations in a certain number of cases of Tuberculosis. Gradually there will be loss of weight and fever. Hence in all cases of dyspepsia the lungs should be properly examined.

In one such case patient consulted the doctor for dyspeptic symptoms and weakness. The patient was inclined to believe that he was suffering from pulmonary Tuberculosis, but there were no symptoms pointing to affection of the lungs and examination of the chest did not show anything abnormal. In course of time the patient developed cough and fever and the disease manifested itself. A skiagram showed that the disease had been existing for sometime. It is just possible in this case that the lung signs were undetected.

Lastly, it should be remembered that Tuberculosis may be associated with other diseases. It may follow an attack of influenza or pneumonia. It may be

superadded over a chronic bronchitis or asthma, or the infection may spread to the lungs from Tuberculous lesions elsewhere in the body, such as Tuberculosis of the cervical glands or of the abdomen. Many a time cases of lung Tuberculosis manifest themselves as asthma in early stages. In all cases of asthma presence of fever should serve as a clue for detecting Tubercular infection.

When a patient consults a practitioner complaining of any one or more of the symptoms discussed above it is incumbent on the part of the practitioner to get an intelligent history including that of the family. Though Tuberculosis is not inherited there cannot be any doubt that in certain families there is found Tubercular diathesis and a large number of the members of such families fall a victim to Tuberculosis. Too much reliance should not be placed on the duration of symptoms revealed by the patients. It must be the experience of many practitioners that physical examination in many such cases indicated that the lungs must have been infected much earlier than the effects of the infection were felt by the patient.

After listening patiently to the history of the patient a systematic and thorough examination should be made. In early cases practically there are two groups of cases the one with symptoms and no physical signs, and the other with physical signs and no symptoms. The symptoms are more important than the physical signs in early diagnosis. By the time physical signs are evident the disease will have probably established itself well, and the chances of recovery be comparatively less. The case of the boy mentioned in the previous column is an instance. He had no symptoms at all. Signs of consolidation need not be expected in all cases; for example a well-built adult was having cough and expectoration, and a remittent type of temperature. The physical examination revealed a condition of bronchitis, but no consolidation. The fever in bronchitis is however of short duration and pulmonary tuberculosis was thought of. Examination of sputum showed acid fast bacilli.

A general examination should first be made. Particularly look for a "Phthisical facies" any emaciation, or enlarged lymphatic glands.

The examination of the chest should be systematic. Corresponding areas of the chest should be examined front of chest, sides and then the back. Inspection may not show anything abnormal in an early case. Note the type of chest normal, or flat or long and narrow chest with wide intercostal spaces and very narrow costal angle. Diminution of movement of one side or other should not escape notice. Palpation also may or may not reveal any abnormality or it may show variable increase of vocal fremitus in the affected area and detect the characteristic pleural rub in a painful chest. It should be remembered that any associated pleural thickening will cause diminution of vocal fremitus. On percussion there may be nothing abnormal or there may be relative or appreciable loss of resonance. Even experienced physicians sometimes go wrong in percussion of the chest; they get also biassed at times. The history of prolonged fever in a case led to the finding of dullness over the right apex, but the case was actually one of abdominal Tuberculosis. The auscultatory signs will often be of help in an early case where the first three steps may not have revealed any abnormality. There may be diminution of breath sounds over the affected area, or there may be prolonged expiration or granular or interrupted breathing. An alteration of breath sounds is the earliest recognisable sign in pulmonary Tuberculosis. In a typical case only broncho-vesicular or tubular breathing may be present—a sure sign of consolidation. The vocal resonance may or may not be increased like the vocal fremitus. Adventitious sounds may be totally absent even when all the other signs of consolidation are present; they are not an essential feature of consolidation, although they are present in the majority of cases. Persistent crepitations over a localised area may be on the other hand the only abnormality detected on physical examination, a valuable diagnostic sign in the early stages.

In a well established case or in advanced cases there will be the characteristic sign of consolidation or cavity formation and the diagnosis will be quite obvious. Note that rarely signs of consolidation may be absent, there may be only signs of bronchitis as in the case mentioned on the last page.

The pulse is rapid in many cases as a result of the toxæmia. But there are cases where pulse was normal in spite of infection. Therefore the rate of pulse alone cannot be depended on for diagnostic help.

Certain investigations may be possible.

1. In a doubtful case the temperature must be properly taken at definite hours and recorded on a chart. The patient's weight also may be taken from time to time to see if there is any progressive loss of weight.

2. Examination of the Sputum for Tubercle bacilli. This may not be possible for all. But in these days many general practitioners do not feel their equipment complete without a microscope, and stains are easily available in the market. The presence of tubercle bacilli in the sputum is of course definite evidence of infection. If they are not found on one examination, the sputum should be repeatedly examined at intervals so as to establish or exclude the presence of T. B.

3. X-RAY: This is not possible in the majority of cases. But its value is limited. It is very doubtful if a skiagram will show any abnormality in very early cases. Possibly there may be evidence of a primary focus, or there may be evidence of involvement of glands at the roots of the lungs, indicating infection of the lung since infection passes from the lung to the glands and not *vice versa*, or there may be haziness at one apex. Some skill is required in properly adjudging the value of the shadows that may be seen in a skiagram. "Positive hilar shadows" are common, particularly in town-dwellers, they should not be taken

as evidence of Tuberculosis. So too is peribronchial fibrosis. It is possible from the skiagram of a chest either to establish existence of Tubercular affection of the lung or to exclude Tuberculosis on the score that the appearances can be passed off as normal.

The skiagram merely indicates the anatomical extent of the disease; it does not differentiate an active from a healed lesion. It has however its uses. It may be of help in the diagnosis of an early case as mentioned above, especially in cases where the physical signs are not marked. It assists us in finding the extent of disease where this information is necessary to decide about the suitability or otherwise of the case for artificial pneumothorax treatment. It helps also in controlling A. P. treatment.

In arriving at the diagnosis of pulmonary Tuberculosis other causes of long continued fever should be borne in mind. A patient began getting fever in the evenings, cough and expectoration, and he began losing weight. The case was thought to be one of pulmonary Tuberculosis, but examination of the chest revealed no abnormality, and the skiagram was normal. He was found to have 'septic tonsils' the removal of which resulted in complete recovery. Malaria and Kala-azar will have to be considered, but prevalence of either in any particular

locality, the character of the fever, the enlargement of spleen and of liver and where possible blood and serum tests, should help in the diagnosis. Sometimes therapeutic test has to be employed in these cases. Bacillus coli infection of the urine is a fairly common cause of long continued fever. The fever is attended with shivering and sweat and examination of the urine will decide the diagnosis. Leucocytosis is also a feature in coli infection. A probable history of dysentery, fever with shivering and sweats, enlarged tender liver, leucocytosis and prompt response to emetine injections will be the characteristics of amoebic hepatitis. Typhoid fever and broncho-pneumonia are acute conditions which will not be mistaken for Tuberculosis. Rheumatic fever will be characterised by involvement of the joints and possibly affection of the heart.

In conclusion I wish to impress on the general practitioner that for the diagnosis of Lung Tuberculosis the bedside methods are very reliable and may be depended upon for all practical purposes. If Tuberculosis is diagnosed in the very early stage, the number of advanced cases will be very much less, so also the risk of the treatment of such cases not to mention the cost. The success of diagnosis and treatment of cases in early Lung Tuberculosis depends entirely on the training of the powers of observation with the eyes, the hands and the ears.

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DYSENTERIES

BY

DR. K. NARAYANAMURTI, M.D.

AMOEBIC DYSENTERY.

(Continued from the last issue).

Symptoms: The incubation period of Amoebic dysentery in man from the time the cysts enter into the intestinal canal until the development of symptoms is found to be of a considerable length of time. The fact that amoebic cysts are found in the stools of persons who never had dysentery apparently suggests that the disease depends upon some secondary condition which brings about an ultimate determining factor of the explosion of the active disease. A great majority of cases run a chronic course characterised by afebrile diarrhoea with several voluminous fetid stools daily containing brownish mucus and dark red blood, attendant with tenesmus if the rectum is involved. In fact the capacity for latency of the disease is one of the most striking and characteristic features of Amoebic dysentery. In 10 per cent of patients the condition is more acute, fever is present and the bowels may move a dozen times in 24 hours.

The mode of onset of amoebic dysentery differs very markedly from that of Bacillary dysentery. In the latter disease the onset is usually sudden and the patient gets ill as suddenly by the toxæmia present which confines the patient to bed. In Amoebic dysentery the onset is usually gradual and progressive and the patient gets along with his usual work for a day or two. Frequently Amoebic dysentery begins as a mild diarrhoea which gradually develops into dysentery in the course of one or two days. Even severe and ultimately fatal cases may begin in this mild fashion. There is considerable abdominal discomfort but not the marked abdominal pain of Bacillary dysentery. Tenderness on pressure is elicited over the caecum and transverse colon in Amoebic dysentery. The stools in acute

Amoebic dysentery are fewer, larger, darker sometimes tarry in colour and very offensive. In old and long standing cases the thickened caecum may be mistaken for a chronic appendicular abscess. So one has to guard against in opening up the abdomen without taking the history of the patient. Progressive emaciation is often a marked feature of the disease.

In fulminant cases the onset may be sudden; the condition may be reached progressively and nothing but blood may be found in the stools. If the ulceration is near the hepatic flexure the stool may be small, black and tarry and there may be severe epigastric pain. If there is gangrene the gut may become paralysed and the passage of stools may stop. There may be severe abdominal pain and all the symptoms and signs of early peritonitis may be present. The leucocytes increase in number and if the caecum and ascending colon are palpable without being tender in an acute case, it can be presumed that the gangrene is present and the prognosis is bad. There are cases on record where perforation of the bowel occurred leading to fatal peritonitis where the patient judged by clinical data was not considered to be suffering from dysentery. Unless a case is complicated by hepatitis, when the liver is painful and definitely enlarged there is seldom any fever, nor or are there any toxic manifestations. In spite of repeated attacks of dysentery there are patients who move about fairly and attend to their avocations. As a general rule patients having prolonged low fever for months might be mistaken for cases suffering from tuberculosis of the lung particularly the right. Cases of Amoebic hepatitis with periodic rigours

are sometimes mistaken for malaria. The study of the clinical manifestations of Amoebic dysentery is an extensive subject and there still remain a number of obscure conditions which have to be diagnosed. Intestinal Amoebiasis is not always associated with dysentery or diarrhoea as it may occasionally manifest as an obstinate constipation, vague intestinal pains, neurasthenia, mental lassitude, disordered digestion what is more popularly known as the "uncomfortable belly" or "growling abdomen". In these cases the examination of stool reveals amoebic cysts if appropriate treatment is carried out the clinical condition of the patient marvelously improves. Pathological changes in the bowel may lead to saccululation and even to dilatation of the colon which is often noticed in early cases of sprue as past amoebic sequelae.

Prolonged amoebic infection may lead to intestinal toxæmia resulting in cachexia. The patient has a muddy yellowish complexion and often complains of inability to concentrate himself for any work and becomes easily fatigued. His case resembles very much that of 'diverticulosis'. Often without treatment the condition may subside and the patient may be apparently cured only to have a relapse within an interval of time ranging from a few weeks to several years. More often the patient passes loose semiformed stools alternating with constipation. Physical exertion, chill, or any indiscretion especially due to alcohol may lead to a fresh exacerbation of symptoms. The variable nature of the symptoms, shifting nature of the pain, occasional appearance of tarry stools, are likely to confuse the diagnosis between a duodenal ulcer, gall bladder disease, pancreatitis, or intestinal growth.

There are two well marked types of the carriers of Amoebic infection. The first is a lean, thin individual with muddy complexion and usually neurasthenic. He cannot assimilate his food. He is irritable and is vaguely ill without knowing what is wrong with him. He is habitually constipated and so is found to take some drug or other for relieving constipation.

The second type is a fat individual, jovial. He suffers from chronic morning diarrhoea especially if he had a small drink of alcohol the previous evening. He feels vague pains in his liver and apt to get a little fever in the evenings. In this case the intestinal stasis is less marked, but signs of active disease are rather more pronounced. It is particularly in this type that there is danger of embolism either of *E. histolytica* into the portal circulation or of streptococci into the general circulation. Hence these patients appear to run a definite risk of liver abscess.

The absorption of toxins give rise to chronic indigestion as the toxins cause pyloric spasm (which is very well seen by X-rays), and hyperchlorhydria. These cases are frequently mistaken for gastric or duodenal ulcers and not infrequently operated upon without relief of the symptoms. There are cases which also show hypochlorhydria, depression of the general metabolic functions leading to neurasthenia. Stimulation of the blood vessels and involuntary muscles may give rise to such symptoms as asthma, and urticaria. The Calcutta School of Tropical Medicine found Amoebic infection in the stools of patients suffering from asthma and urticaria and these patients were cured by emetine treatment.

The caecal stasis may give rise to a patent appendix containing faecal matter, the mucous membrane of which may from time to time get inflamed due to catarrh. Many of these patients show the scar of an appendectomy but complain that the operation has not cured the symptoms.

A condition which is not infrequently associated with chronic intestinal amoebiasis is leucoderma. The bacterial content of the gut associated with amoebic infection, affects the black pigment (Melanin) in the body resulting in leucoderma. So in all cases of leucoderma it is essential to examine the stools for *E. histolytica* infection. The treatment with emetine may cure leucoderma in such cases.

Acute hepatitis may supervene at any time during the course of the disease. It is generally associated with great pain over the hepatic area together with symptoms of toxæmia and temperature. The liver itself may be felt projecting below the costal margin and is extremely tender. The pain is referred frequently to the right shoulder. There is considerable leucocytosis and it is strange that such a condition may subside without any active treatment. There is a good deal of evidence to show that the amoebae stick to the walls of the small amoebic abscesses in the liver though they may not be found in the pus. Fortunately this condition is also amenable to emetine treatment. Rogers is inclined to believe that chronic amoebic infection of the liver gives rise to cirrhosis among Indians.

Death may result from simple exhaustion, intestinal hæmorrhage, perforation or liver abscess.

Complications and Sequelae: In Egypt intestinal Amoebiasis is often found in association with *Bilharzia mansoni*. Visceroperitonitis, great distention and saccululation of the gut leading to intestinal stasis constitute some of the most distressing complications of the infection. Surgical stricture of the bowel is no longer recognised as a complication of Amoebiasis.

Several obscure clinical conditions may be explained by the existence of Amoebic infection. Very often intestinal conditions

such as appendicitis, mucous colitis, duodenal ulceration are associated with the infection *E. histolytica*, so also cholecystitis and renal calculus.

Diagnosis: The differential diagnosis has to be made from all other forms of dysentery, colitis, and even intestinal disease where we may notice blood and mucus in stools. We have to bear in mind the existence of the malignant disease of the bowel from other dysenteries. James, Willmore, Howard have described a hypertrophic form of intestinal Amoebiasis as a granuloma affecting different portions of the large bowel, caecum, sigmoid flexure, the tumour reaching an extent of 10 to 12 c.m. On account of these physical characters the tumour may resemble a carcinoma. Long continued secondary infection with streptococci, etc., may produce a progressive erosion of the bowel wall. Large amounts of oedematous granulation tissue appear over the entire bowel wall and the neighbouring mesocolon. Differential diagnosis from several other conditions wherein blood and mucus occur in stools will be considered in more detail later, but it is important to remember at this stage the close resemblance of diverticulitis to Amoebic dysentery. The diagnosis from B. dysentery was given in a tabular form in the June number of the Journal.

The treatment of Amoebic Dysentery will be discussed in the September issue of The Medical Practitioner.

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Abstracts.

ACUTE INTESTINAL OBSTRUCTION.

Colicky abdominal pain, vomiting, visible peristalsis, is the classical triad set down in text-books for our guidance in the diagnosis of acute intestinal obstruction. The sudden appearance of these symptoms in a patient otherwise in good health should suggest to the clinician some serious disturbance in the alimentary tract which should be thoroughly investigated with a view of determining the presence or absence of an obstruction. Abdominal pain is a concomitant of numerous intra-abdominal pathological conditions, however, there is usually something distinctive of obstruction in by far the greater number of instances.

Pain in the beginning of the attack is severe, continuous and is usually referred by the patient to the region of the solar plexus, the pain is accompanied by pallor, a thready pulse, cool moist skin, rapid, labored breathing and other manifestations of shock, ending in a few hours, in some instances, in utter collapse of the patient.

Characteristics of the pain in the early hours are their forcible prolonged duration, which shortly give place to interruptions of varying degree, the typical colicky pains of obstruction, which are not in the least relieved by frequent violent attacks of vomiting which shortly ensue. A depressant nausea appears early in the onset of symptoms which is soon followed by the ejection of copious amounts of bile stained stomach contents, in the course of hours the bile stained fluids are supplanted by large quantities of semi-solid or liquid vomitus of a dark color and of distinct feculence.

The patient has a constant desire to evacuate the bowels, his efforts at stool, however, are unavailing save for the passage of a small amount of residuary feces present below the site of the obstruction, the passage of which neither relieves the severity of the pain nor the urgent desire of the patient to return to the toilet.

There is no tenesmus following these abortive attempts to empty the bowels. The patient is possessed of an inordinate thirst impelling him to take large, frequent drafts of fluid which are almost immediately expelled by the stomach, the kidney output is scanty, the urine is highly colored with liver products, expressions of the dehydration taking place in consequence of a siege of persistent vomiting and perspiring.

Both the heart action and blood chemistry are markedly altered by acute intestinal obstruction, but there is little change in the patient's temperature, if any a tendency to subnormal, until peritonitis develops.

In the early stages of obstruction the musculature of the abdominal wall is flaccid permitting the examiner to palpate abdominal contents and observe the effect of disturbed peristalsis. The patient is alert mentally and apprehensive, although he may be suffering of intense pain he takes a sharp interest in all of the movements of the hospital attendants.

Following the period of flaccidity the abdominal wall becomes tensely rigid rendering physical examination of the region difficult and the findings of little help in establishing the diagnosis.

Later in the course of the attack the sensoria are blunted or held in abeyance by loss of fluids and chemical contents of the body, spasticity of the abdominal muscles is supplanted by relaxation, giving distention of the proximal bowel full sway in ballooning the peritoneal sac.

If the obstruction is located several feet below the duodenal junction distention of the abdomen may take an almost unbelievable proportions, the paries becoming as tense as the proverbial drum-head. A distressing singultus, always an ominous clinical sign of impending danger in those seriously ill, is not infrequently superimposed upon this list of

enervating, death dealing phenomena which are threatening to terminate the life of the patient.

The closing scene is ushered in by general muscular relaxation, a flagging heart, dry purplish-red skin covering the limbs, dilated pupils, slow shallow respirations and cessation of emesis, these signs portend the approach of death, and practically 100 per cent of such patients will succumb with or without operation.

In the differential diagnosis of acute intestinal obstruction one should keep in mind perforation of the appendix, acute cholecystitis, perforation of duodenal or gastric ulcer, strangulation of an incarcerated hernia, ruptured ectopic, adhesions, intussusception, volvulus, twisted cyst pedicle, kidney calculus and acute hemorrhagic pancreatitis.

The foregoing named pathological lesions occur clinically in frequency about in the order named. There is some degree of retardation of intestinal peristalsis and fecal stream accompanying all of these lesions and at times a remarkable similarity of symptoms existing between them and those of obstruction.

A review of the history sheet, however, plus a painstaking physical examination made in the early stage, operative hours, of obstruction should develop a correct diagnosis in all save a few instances and these will require laboratory assistance or/and exploration to complete the differential diagnosis. The internal crux of the entire situation lies in whether or not the patient has passed gas or feces since the beginning of the attack.

One should not be deluded into a sense of false security by the history of the patient having passed a small amount of residual lower bowel contents.

Failure to properly evaluate or to disregard the passage of a small stool which took place in the early hours of obstruction has caused delay in the use of operative measures for relief in an untold number of patients.

Delay is the besetting sin of all urgent surgery, but in the presence of acute intestinal obstruction each hour of delay in instituting remedial measures diminishes the patient's chances for recovery. Delay on the part of the patient and his medical and surgical attendants, and the injudicious use of morphia, cathartics and enemata are in a very great measure responsible for the unwarranted high death rate of patients suffering of acute intestinal obstruction.

In most instances the onset of symptoms of acute intestinal obstruction is insidious, the patient may have made a strong physical effort in lifting, or in straining at stool, following the use of drastic cathartics prior to the appearance of symptoms, but in by far the greater number of patients there will be nothing in the history which could be interpreted as having a provocative causal relation to obstruction. The patient's general physical condition on admission should be the determining factor in deciding whether or not time should be taken for laboratory confirmation of the diagnosis, in making this important decision one should keep clearly in mind, if the patient is dangerously ill, the X-ray has no place in the diagnosis. Time thus spent were more profitably employed in an attempt at saving life by immediate operation.

There is something deadening to one's enthusiasm and initiative in the sight of laboratory diagnoses of all patients charted for the morning's operations pasted on the wall of the operating room, patients with whom perhaps the surgeon had not been even remotely in touch.

Extensive use of laboratory diagnostic methods has latterly well-nigh robbed surgery of romance and reduced to the level of carpentry the art thereof, not the carpentry of wood, mind you, but the carpentry of human tissues.

We sometimes wonder whether the modern surgeon, forearmed with his laboratory diagnosis, gets the genuine thrill and stimulating experience important to the surgeon by the removal of a kidney

calculus wherein the diagnosis had been established by the use of fingers, eyes, ears, and experience.

Prior to the era in which the X-ray is almost universally employed in making the diagnosis in this field clinicians were quite accurate in their analyses and interpretation of symptoms pointing to the presence of stone in the kidney, they were not always right to be sure, but neither is the roentgenogram, hence (*sic*) honors are easy. We are not inveighing against the use of laboratory methods, but endeavouring to emphasize the imperative importance of clinical methods to indoctrinate the fundamental basic principle of urgent surgery, more especially the urgency existing in acute intestinal obstruction.

The populace looks with discomfiture and suspicion upon the ability of a doctor of medicine who after a physical examination does not have an opinion as to what is wrong with the patient, he is regarded in the light of a medical guide post, a species of toll-gate on the road which the patient takes to the laboratory.

With the present state of social bewilderment and uncertainty, national and local, relating to investigating medical activities, regimentation of humanity, state medicine, legislative gaps and other drastic changes in American life, it behoves the profession of medicine to leave no flag-stumps protruding whereby a little adverse tugging might unravel and bring the whole structure tumbling about our ears. Selah!

An important observation formerly made by clinicians postulated the close resemblance existing between the symptoms of acute intestinal obstruction and those of heat exhaustion, but they were at a loss to rationally account for the almost identical physiological manifestations in two such widely separated divergencies. Biochemistry, a recent, important addition to clinical medicine has demonstrated the cause of this similarity as being due to alterations in the blood chemistry, outstanding constant

changes are found in the blood of patients suffering of obstruction or heat exhaustion, in the chlorides, nitrogen and the alkali reserve. Numerous observers have shown there is a marked decrease in the chlorides, a sharp increase in the amount of non-proteinurea nitrogen, also an increase in the carbon dioxide combining power, resultant effects of dehydration.

All of the tissues of the body are adversely influenced by this perversion of the patient's physiology which if not promptly recognized and corrected will end in the death of the patient.

Application of the discoveries of biochemistry has changed the entire picture in the management of acute intestinal obstruction and made mandatory a drastic change in charting these patients on admission, they are no longer subjects for *observation*, they are patients for urgent surgery, the results of which will be in keeping with the promptitude and celerity with which surgical intervention is instituted following the onset of obstructive symptoms.

Prior to the epoch-making work of the biochemist death from acute intestinal obstruction was said to be induced by liberation through the intestinal wall of death dealing toxins, the physiologist, however, has shown this translocation does not take place in any of the abdominal viscera in the absence of damaged endothelium, a late circulatory manifestation of obstruction. Admittedly destruction of the endothelium may and does at times occur early in the attack if the obstruction completely stops the arterial supply to the segment of bowel involved, but the arteries usually continue to function long after oedema of the bowel wall has stopped the return flow, and the veins have collapsed. In the course of time compression of the arteries by the swollen surrounding tissues cuts off the circulation to the site and gangrene ensues, this may be very early in the attack, twelve or fifteen hours, or comparatively late, one or two days, the gangrenous process is wholly regulated by the amount of interference with the local blood supply.

There are no other surgical emergencies which call for more critical discernment in their successful management than acute intestinal obstruction. While one may earnestly desire, nay need, the assistance which the laboratory offers in instances of doubt relative to the diagnosis, experience teaches that procrastination is one of the chief hazards to life in the category of urgent surgery.

A cursorial review of any hospital's history sheets will confirm the foregoing sentiments, and show the time of admission of patients suffering of intestinal obstruction usually ranges between seventy-two hours and ten days after the symptoms began, furthermore, that many of these patients were in a moribund state when they came to the hospital.

The well known lethal portent of unrelieved intestinal obstruction demands action, prompt decisive action to assist nature in thwarting the inevitable in the absence of action.

An assessment of the physiological upset which the patient is harboring should engage the attention of those in charge of the patient, with a view of correction by replacement of salts and fluids lost in the course of the patient's illness.

The indispensability of these measures has been made probable by experiment and demonstrably proven in practice as being of prime importance in lowering the mortality of acute intestinal obstruction. The process of replacement should be set in motion while preparations are going forward for immediate operation, and continued during the operation until the present needs of the patient are fulfilled.

We are not here discussing the management of the patient who has been sent in soon, hours, after his obstructive symptoms began, whose physical condition will admit of sufficient delay for laboratory confirmation of the diagnosis, if this is deemed advisable, but discussing the management of the patient who is admitted one or two days later. Unhappily

the former type of patient with obstruction is seen more frequently on paper than in the operating room. Extreme simplicity and celerity are essential in operating for the relief of acute intestinal obstruction. Although a causal operation is ideal the patient is too ill to withstand the added shock incident to manipulation necessary to locate and remove the obstruction at the primary operation, this entails altogether too much surgery.

The abdomen should be opened under local anaesthesia, but no search should be made at this time for the cause of the obstruction, if the patient survives the obstruction may be removed by a second operation. As soon as the abdomen is opened a distended loop of bowel will protrude through the incision, this should be fixed by one or two sutures to the parietal peritoneum. The operation is terminated by opening the bowel and inserting two tubes into the lumen, one distal, one proximal to the incision with a view of deflating the distended bowel and relieving some of the circulatory disturbance.

In desperately ill obstructive patients, the kind with which the surgeon is usually confronted, many more lives will be saved by the foregoing simple surgical procedure than by the more elaborate technic involved in seeking and removing the obstruction at the first stage operation.

Theories and ideals in surgery are all very well from a polemical standpoint, their place, however, is in the forum not in the operating theatre, captivating though they may be as subjects from oratory, they are exceedingly poor guides in the realm of utilitaria.

The post-operative care of the patient should include the use of dry heat, morphia, oxygen stimulants, champagne given by rectum is preferred by British surgeons, continuous lavage and drainage of the stomach by using an indwelling double tube and the prevention of a break in the water intake.

Continuous introduction of fluids into the stomach and the return flow through the indwelling double tube obviates the exhausting influence and discomfort in the patient occasioned by frequent lavage of the stomach employed in the usual manner.

Post-operative dilatation of the stomach is one of the most dangerous sequella of acute intestinal obstruction and will cause death in 90 per cent of the patients if not overcome, placing the patient prone in bed with the head slightly lowered conjoined with the stomach tube has served a useful purpose in relieving distention of the stomach.

This general outline is based upon a comparatively generous personal experience in dealing with acute intestinal obstruction, a surgical emergency which has

an inordinately high mortality rate, a mortality rate which we believe may be greatly improved by adopting the methods herein set forth.

We trust our readers will not regard this discussion on acute intestinal obstruction as being reactionary, on the contrary we desire to sharply call attention to the prime necessity of referring to the surgical side all patients suddenly stricken of colic abdominal pains, nausea, vomiting, persistent desire and unavailing attempts to pass gas and feces. Moreover to admonish surgeons to promptly do as little surgery at the time as is consistent with deflating the intestine, reserving for the future removal of the obstruction, resection of gangrenous bowel and other necessary operative procedure.

—*The Journal of Medicine, April, 1938.*

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BREECH DELIVERY: COMPARATIVE STUDY OF LOCAL AND GENERAL ANESTHESIA.

Magnus P. Urnes and Harris J. Timerman, Chicago (*Journal A. M. A.*, November 13, 1937), present the results of 346 breech deliveries in the home and the technic employed, with special reference to the use of local anesthesia. These breech presentations occurred in 336 cases of the 11,772 patients delivered during a period of four years at the Chicago Maternity Center, an incidence of 2.8 per cent. Seventy patients were primiparas and 266 multiparas. The authors' technic for pudendal block differs somewhat from the others but accomplishes the same result. They have found it particularly adaptable for breech deliveries. With the patient in an exaggerated lithotomy position, intradermal wheals are made bilaterally half way between the rectum and the tuberosity of the ischium. One per cent procaine hydrochloride with 2 minims (0.12 cc.) of epinephrine (1:1,000) per ounce (30cc.) is used. The index finger of the left hand inserted into the rectum palpates the left ischial spine. A 10 cm needle is passed horizontally through the cutaneous wheal directly to the spine and then allowed to slip just under and beyond it. From 10 to 15 cc. of solution is deposited at this point, blocking the internal pudic nerve as it passes dorsal to the spine of the ischium just before entering Alcock's canal. The needle is then withdrawn until it lies just beneath the skin. The direction is changed laterally toward the tuberosity of the ischium, and the needle is inserted until the point strikes the bone. Five cubic centimeters is injected while the needle is gradually being withdrawn. This anesthetizes the large perineal branch of the posterior cutaneous femoris. Again the needle is withdrawn until it lies just under the skin, and its direction is changed vertically upward. While it is advancing, 5 cc. is deposited in the subcutaneous tissue of the labium majus, blocking off the perineal fibers of the ilio-inguinal nerve. The

procedure is repeated on the opposite side. The vaginal mucosa and the skin of the perineal area as high as the clitoris become anesthetized within five minutes. Relaxation of the levator ani and the perineal muscles is usually complete. An analysis of this series of 346 deliveries reveals that eightysix, or 24.9 per cent, were terminated by operative intervention. Two hundred and sixty patients delivered spontaneously. Should an indication arise necessitating breech extraction, parasacral block anesthesia is induced. Contraindications to the use of local anesthesia for extractions, or even for the simpler operations, are threatened rupture of the uterus, severe fetal asphyxia and inflammatory lesions of the perineum and ether should be used. Postpartum hemorrhage was the most frequent and the most serious maternal complication encountered; twenty-eight times in the entire series. Manual removal of the placenta was performed thirteen times, an incidence of 3.8 per cent. Six of these cases were in the spontaneous group and seven in the operative group. Four of the extractions under ether required this intervention while only two of those under parasacral anesthesia needed it. The remaining case occurred in a forceps delivery with ether anesthesia. There was one ruptured uterus, following a difficult extraction with high forceps to the aftercoming head, with the patient under ether anesthesia. There was one maternal death in the series, a mortality of 0.3 per cent. Of the 346 babies born, sixty-five were stillborn or died during the first two weeks of life, a gross mortality of 19 per cent. Of this number twelve were nonviable (under 1,500 Gm.), eleven monsters and nineteen macerated. Deducting these cases, twenty-three babies were lost, giving a corrected fetal mortality of 6.6 per cent. The authors conclude that parasacral anesthesia for breech extractions is preferable to ether anesthesia, since in this series the fetal mortality was slightly lower and the incidence of maternal complications definitely lower when it was used. It possesses the added advantage that its use does not require the presence of a skilled anesthetist in addition to the operator, and it may be used in cases of toxemia or pu.

monary complications. Pudendal block anesthesia is particularly adapted to spontaneous delivery with episiotomy and forceps to the aftercoming head. It produces no relaxation of the uterus, so that the serious complications of postpartum hemorrhage and manual removal of the placenta will not occur as frequently as with the use of ether.

—*The Journal of Medicine, June 1938*

ANTISEPTIC PROPERTIES OF HUMAN MILK

In an attempt to demonstrate "inhibins" and bacteria-transforming enzymes in milk, Dold and his co-workers obtained both human and cow's milk in a practically sterile condition by combined antiseptic and aseptic technics. To test for bacteriostatic properties, 5 cc. of fresh milk was mixed with an equal volume of 3 per cent melted agar that had been previously cooled to 50 C. The resulting 50 per cent milk agar was poured into a petri dish and allowed to solidify. After solidifying, the milk-agar plate was inoculated with one loopful of a 1:2,000 to 1:4,000 dilution of a twenty four hour broth culture of the test micro-organisms and the inoculum spread evenly over the surface by means of a glass spatula. The micro-organisms thus tested included the diphtheria bacillus, *Staphylococcus aureus*, streptococcus, *Bacillus coli*, *B. prodigiosus*, *B. pyocyaneus*, *B. anthracis* and an unidentified wild yeast. As controls, the same inoculation was made on heat-inactivated (100 C.) 50 per cent milk-agar plates. A profuse (+++) or very profuse (++++) growth was usually noted on the heat-inactivated controls, with no demonstrable growth (—) or only slight growth (+) on the unheated milk-agar plates. Study of the thermostability of the growth inhibiting factor showed that the "inhibins" in cow's milk are not inactivated by heating 80 C. for seven minutes but are destroyed quantitatively by seven minutes' heating at 85 C. In human milk the "inhibins" are completely inactivated by heating at 56 C. for thirty minutes. Human milk can be repeatedly frozen and thawed without reducing its "inhibin" titer. Human "inhibins," however,

gradually deteriorate on standing, almost complete inactivation being noted after from twelve to twenty-four days' storage in the ice chest (5 C.). In their study of the bacteriostatic factors in saliva, these workers had previously shown that saliva which does not completely suppress bacterial growth has the property of transforming virulent diphtheria bacilli into nonpathogenic strains. These transformed strains give subcultures apparently identical with stock strains of the pseudo-diphtheria bacillus. Similar salivary transformations of toxic or virulent pneumococci, *B. anthracis* and *B. prodigiosus* have been reported by other investigators. Practically identical transformations were demonstrated in fresh human milk. The bacteria transforming factors ("mutines" in milk are slightly more heat-resistant than the "inhibins.") Thus far, however, no serious attempt has been made to identify the natural milk antiseptics.

—*Jour. A. M. A., November 13, 1937.*

The therapeutic uses of Human Milk were known in India from time immemorial though empirically. Human Milk has been a domestic remedy for conjunctivitis. Its local application on the forehead in cases of headaches attendant with high temperature must be known to every practitioner in Southern India. After reading the above one can now value the use of Human Milk in infections but its value in reducing fever by local application seems doubtful till some scientist is able to discover the therapeutic effects of Human Milk by local application. The healing effect of Saliva especially in animals is universally known as every animal keeps licking fresh wounds till they heal unless they are very extensive. Even in human beings constant licking of small fresh wounds and abrasions has a healing effect especially in children who usually do not have foul mouth.

—Editor.

TREATMENT OF INTRA-UTERINE ASPHYXIA

H. DORR (*Mschr. Gebursh. Gynak.* February, 1938, p. 129) states that at Seitz's clinic the good effect of treatment of foetal asphyxia by pentamethylene-tetrazol (cardiazol) has been confirmed and no evidence found of an injurious effect due to premature stimulation of the foetal respiratory centre. Access to the foetal circulation is more quickly attained

by intravenous injection in the mother than by direct injection into the foetal scalp or breech. Dorr found little or no effect from giving the mother intramuscular injections, or intravenous injections of less than 2 c.c.m. He records nine cases of severe impairment of foetal heart function (with notable slowing) in which intravenous administration of cardiazol was followed within twenty-five seconds by an improvement lasting four to five minutes and judged in some cases to have saved the child's life. There was no case of aspiration pneumonia.

—*B. M. J., 11th June, 1938.*

CHEMOTHERAPY OF GONORRHOEA

N. NANDER (*Ugeskr. Leag.* March 17, 1938, p. 279) gives an account of his experiences of the treatment of gonorrhoea with a derivative of prontosil sold in Germany as uliron; it is not identical with sulphanilamide. One tablet was given three times a day till some twenty had been administered; then, after an interval of three to seven days, this treatment was repeated. The author has found that this procedure is just as effective as a more heroic one with six tablets daily. His general impression of five female and twelve male cases of gonorrhoea is that the chronic and complicated forms of the disease respond more dramatically than does early uncomplicated gonorrhoea. In one of his cases, complicated by severe prostatitis, marked improvement both local and general was demonstrable only twelve hours after the commencement of treatment.

—*B. M. J., 4th June, 1938.*

MISCONCEPTIONS OF HILAR TUBERCULOSIS.

F. HAMBURGER (*Dtsch. Tuberk.-bl.*, March, 1938, p. 53) deplores the mischievous myths which have grown up around the conception of tuberculosis of the bronchial glands. Strictly speaking, it is a condition to be found in nearly all persons infected with tubercle bacilli by inhalation. In other words, almost every one who is tuberculin-positive may be said to be the subject of bronchial gland tuberculosis. Yet this nearly always innocent

condition has been exalted to the position of a real danger signal, and radiological hilar shadows have been allowed to darken the lives of countless children who would have been both happier and healthier had they never been branded with this term. According to Professor Hamburger, the radiological demonstration of bronchial gland tuberculosis should be ignored unless tuberculin skin tests are positive, the sedimentation rate is abnormally high, percussion and auscultation sound a note of warning, and the radiological examination itself shows something more definite than a hilar shadow. To condemn a child to months and even years of a valetudinarian life on the strength of only a hilar shadow and without other confirmatory evidence is not in the best interests of either the child or its parents. It often happens that a child is subfebrile, suffers from a chronic cough, and looks poorly, but is definitely non-tuberculous, as shown by the negative findings of a tuberculin test. A hilar shadow in such cases may be due to a non-tuberculous pneumonia which may clear up in two or three weeks. Were the clinical and radiological picture really due to tuberculosis a year or two would be needed for recovery.

—*B. M. J., May 28, 1938.*

NEOSALVARSAN FOR BRONCHOPNEUMONIA.

B. EBENIUS (*Klin. Wschr.*, November 13, 1937, p. 1611) describes the results of the administration of neosalvarsan for bronchopneumonia occurring in two patients with cancer of the hypopharynx and one with cancer of the tongue. In each case 0.3 mg. of neosalvarsan was given intravenously. The injection was followed by rigor within one and a half hours in all three patients. The temperature fell to normal in twenty-four hours in two and in six hours in one patient. A rise of temperature is noted in some susceptible people after the administration of salvarsan. Four further patients were then treated; three of them had cancer, one erysipelas, and bronchopneumonia was not present in any of them. No rigor or rise of temperature was noted. The

author believes that a salvarsan reaction is specific in cases of bronchopneumonia and that it kills a large number of organisms the toxins of which produce the rigor. When the toxins are dealt with the temperature falls. Further experiments are being carried out to determine whether salvarsan is specifically bactericidal to certain strains of pneumococci and haemolytic streptococci.

—B. M. J., May 28, 1938.

OTITIS MEDIA AND VITAMIN C

M. BAER (*Rev. Laryng.*, February, 1938 p. 165) attempts to establish a relation between poor states of nutrition due to absence or deficiency of certain vitamins and the development of otitis media. Twenty-six cases of acute middle-ear suppuration were investigated. Middle-ear suppuration in children is often connected with adenoids and gastro-intestinal disturbances. In adults there are other predisposing factors such as nasal sinusitis or influenzal infections. In order to concentrate entirely on the vitamin factor cases with obvious predisposing factors were eliminated. In the remaining fifteen cases an analysis of the urinary output of vitamin C gave figures which invariably indicated a deficiency. Treatment by the administration of ascorbic acid was only started when the otitis had reached a condition at which it was unlikely to respond in any way to local treatment. In all the fifteen cases it was clearly demonstrated that the administration of vitamin C had a most beneficial effect in resolving the middle-ear suppuration.

HYPEREMESIS GRAVIDARUM.

E. KEHRER (*Z. Geburtsh. Gynak.*, 1931. 116 3, 333) distinguishes between psychogenic hyperemesis occurring in those with hyperexcitability of the vegetative nervous system, but not necessarily with neuropathic or hysterical attributes, and the more severe toxic form, which may be "pernicious" from the first or may be superimposed on the psychogenic form. After a detailed review of the pathology, in which he stresses the importance of chloride loss and hypochloreaemia,

and of diminution of hepatic glycogen from excessive vomiting and from hypersecretion of some of the anterior pituitary hormones he defines three successive stages in hyperemesis. In the first an unexplained primary component in the central nervous system causes exaggeration of physiological vomiting. The second component, psychogenic in origin, causes (1) vagotonia and hyperexcitability of the vomiting centre; and (2) partial hyperpituitarism with hypersecretion of the gonadotropic hormones and those stimulating thyroid secretion and fat and carbohydrate metabolism. In the third stage, characterized by disturbed metabolism, toxaemia, and hepatopathy, there is a severe auto-intoxication due to the presence in excess of normal or abnormal metabolic products; there is loss of water, chlorides, carbohydrates, proteins, and vitamins, followed finally by degeneration of the liver. In an exhaustive discussion Kehrer deprecates local gynaecological treatment; advocates derivatives of bromine or luminal as sedatives; and emphasizes the importance of psychotherapy. Admission to hospital eliminates disturbances from coitus as well as from family influences. The rectal or parenteral exhibition of normal saline solutions is recommended, or the intravenous administration of 10 c.cm. of hypertonic saline (10 to 20 per cent.) twice daily when hypochloreaemia is found. The combination of such treatment with glucose-insulin therapy is often of value. Hypocalcaemia calls for the administration of calcium, preferably by intramuscular injection. Alkalis given in large amounts or intravenously may be dangerous, for alkalosis, not acidosis, is present in some cases. Suprarenal cortical extracts and vitamins C and/or B have proved effective in some cases. Kehrer is less convinced of the efficacy of follicular, luteal, or male sex hormones, or of feeding through the duodenal tube; induction of labour is very rarely justified. Kehrer has abandoned his former opinion that the decision as to induction should be based on clinical findings rather than on biochemical investigations, and now thinks that these should be studied jointly and equally; oliguria is less important than in

the nephropathies of pregnancy; ketonaemia is more important than ketonuria; increased bilirubinaemia than increase of urinary urobilinogen.

—B. M. J., May 28, 1938.

HEADACHES CAUSED BY EYE STRAIN.

BY M. CARL WILENSKY.

Southwestern Med. 22 :43 (Feb.), 1938

As to the character of ocular headache, there is no pathognomonic feature, but it is suggestive, when associated with other signs or symptoms of ocular disturbance. The headache may be constant or periodic, of long duration or of shorter periods, or occur at regular or at irregular intervals. The personal and family habits often are of great value, though usually one finds that ocular headaches are associated with eye use. We cannot get away from the fact we are dealing with functional conditions where we have a great variation not only in the powers of different individuals, but also at different times and under different conditions in the powers of the same individual. An error of refraction which will cause much discomfort of various sorts in one person will in a subject with a more stable make-up produce no symptoms worthy of notice.

The location of headaches of ocular origin is most frequently supra-orbital. The complaint may be of an ache in and around the eye-ball, the headache may be referred to the temporal or parietal region. Those cases that suffer due to muscle imbalance usually locate their headache in the occipital region and sometimes this may go down the neck and even between the shoulders.

There can be no question that many lives have been made miserable by manifestations of uncorrected eye strain, especially in the form of headache. Too often is this fact overlooked by careless refractionists. The incidence of headache due to disturbed ocular functions being

high, renders it advisable to thoroughly examine the eye and its adnexa as a possible cause even to applying the therapeutic test of a proper lens correction.

ANI LINE DYES AND DEAFNESS.

On this subject, Taylor (*Laryngoscope*, Sept., 1937) states:

"Numerous authors have reported deafness from poisoning by anilin dyes. It may be accompanied by tinnitus, often annoying and persistent, and vertigo, which are to be regarded as of central origin in the opinion of Beck. This condition is attributed to the toxic action of the methemoglobin formed by anilin. Other poisons that form methemoglobin also may cause pathologic changes in the VIIIth nerve. Deafness from this cause is characterized by a decrease both of air and bone conduction, with a positive Rinne.

"Of particular interest is poisoning by paraphenylenediamine, a derivative of anilin used in hair dyes, which produces labyrinthine symptoms. In two of the 18 cases reported by Laurens, the onset of symptoms was rapid, vertigo, marked tinnitus and some diminution of hearing by air conduction following soon after application of the dye. In the others it was more gradual; occurring after prolonged use. Tinnitus, sometimes accompanied by attacks of vertigo, especially after fresh application of the dye, and progressive loss of hearing resulted. The deafness was characterized by diminution of both air and bone conduction with a positive Rinne, the symptoms in many respects resembling those of otosclerosis. Some of these cases presented general symptoms indicative of poisoning, such as neuralgic pains, headache and weakness.

"A fur dyed with paraphenylenediamine and worn almost daily was the cause of a case of poisoning by anilin reported by Watson Williams. Tinnitus, at first occasional, became incessant and was accompanied by vertigo; severe nerve

deafness also developed. In about 10 weeks after the fur was discarded, the symptoms disappeared."

QUININE IN OPHTHALMIC THERAPY.

Numerous reports have appeared in the literature on the local use of quinine in Ophthalmology. One of the more recent is by Robinson (New Orleans M. S. J. 90:30 (July), 1937). This writer suggests its use in 2 per cent solution in catarrhal conjunctivitis, and with other preparations in pterygium, postoperatively, as well as in cataract. While the author feels that this ocular therapeutic agent is still in the experimental stage, the drug (quinine bisulphate) is highly beneficial in its effects on infectious microorganisms of the conjunctiva and the repair of ocular aduexa. The fact, too, that the drug may be combined with other drugs without detracting from its usefulness and effects is also an interesting observation.

Quinine bisulphate ointment has been employed successfully in the treatment of certain forms of keratitis. Selinger of Chicago, not so long ago, reported his experience with quinine in certain ocular conditions.

SUPPURATIVE OTITIS MEDIA.

The use of antiviral solution (antigen) in this condition with perforation, by dropping the solution freely into the canal after the latter has been well dried, is being practised in certain quarters with reported success. It is apparently valueless, however, after mastoiditis has developed.

BLENNORRHEA.

Since gonorrhoeal antiviral in the form of an ointment or cream has been tested in specific urethritis and found effective in cutting short the duration of the attack by about one half, it would seem to be a good idea to try it in gonorrhoeal conjunctivitis.

THYROXIN.

It has been found that, applied locally to the eye, a solution of thyroxin moderately reduces intra-ocular tension, aids in removing floating vitreous opacities, is of benefit in keratitis, in ciliary tenderness, and slightly improves the vision in incipient cataract.

FURUNCULOSIS OF THE EXTERNAL MEATUS.

A method of treatment suggested is that as soon as a point can be localized or even where there is general pain in the ear canal which if one suspects may indicate furunculosis, one packs the ear over the tender spot with a cotton wad as solidly as can be borne, to remain for twenty-four hours.

DENDRITIC KERATITIS.

Based upon experience in 200 cases, Gundersen of Boston extols the use of tincture of iodine, applied locally, in the treatment of dendritic keratitis (herpes corneae). He regards it as superior to any other mode of treatment, especially in chronic cases.

—The Eye, Ear, Nose and Throat Monthly, July 1938.

SURGEON-GENERAL'S ADVICE.

On 10-8-1938 Col. Shortt, the officiating Surgeon-General with the Government of Madras addressed the out-going students of the Madras Medical College and enunciated to them five rules of Conduct that should guide medical men in the exercise of their profession. The occasion was a 'Farewell' function organised by the Madras Medical College Association and it was an irony to hear the brightest out-going student, who while thanking the Association on behalf of himself and his comrades said amongst other things that the future of the profession was gloomy. He referred to the changed administration which claimed from the profession that which it could not give. He perhaps alluded to the Honorary System which was caricatured on a placard hanging in a prominent place in the hall where the gathering met. The student pertinently asked ;

" But where and what was to be their income? It was all very well for people to say that their interests had been safeguarded. How could they serve the people if they were oppressed by hunger? "

The Surgeon-General chose a path of least resistance and placed before the entrants to the medical profession five golden rules to be followed by them in the course of their career under whatever conditions. Col. Shortt must have listened to the story of the gloomy future given expression to by the best out-going student who was the spokesman representing those who took their degrees. But perhaps on account of official modesty he did not ease the minds of those who saw a gloomy atmosphere at the very threshold of their career. We are almost sure that all the 104 newly passed

graduates do not entertain any idea of fat or lean posts under the Government. In fact they are in an atmosphere of pessimism being entirely dependent upon private practice to eke out their livelihood. This is why their spokesman pertinently asked "*How could they serve the people if they were oppressed by hunger?*". The service referred to here is honorary service as it is the policy of the present Government to depend entirely on honorary service relating to medical relief on the curative side.

As mentioned by Col. Shortt in his address, panel practice and private clinics are great opportunities for the members of the medical profession. Knowing, as every one does, the helpless condition of the members belonging to the independent medical profession, it is rather too much to expect from those who are just entering life, organisation of schemes of panel practice or private clinics. A few private clinics that now exist in the Madras City were the outcome of enterprise of a few who were in Government service and who could command State hospital influence for canvassing admissions of patients into their private clinics. The scientific medical profession was started in this country by the Government and not by the members of the independent medical profession. The Government hold on the affairs of the medical profession has completely paralysed all incentive for private enterprise. It is therefore too much to expect from the members of the profession, either the new entrants or the older lot, any initiative to organise work of the magnitude of panel practice or private clinics unless the policy of Medical Administration is completely changed to enable the medical profession to evolve itself independent by of the



**THE PERFECT
POULTICE AND
DRESSING FOR
INFLAMMATION
AND
CONGESTION.**

The Denver Chemical Mfg. Co., New York.

Government. Col. Shortt was perfectly right when he said 'there is no approaching to overcrowding' in India. This is the view expressed in these columns over and over again. Yet it is a painful riddle that majority of members of the medical profession are not above want. Indiscreet admissions of the out and in patients into State hospitals and the consequent unequal and unwholesome competition between the State paid practitioners and private practitioners has been one of the chief causes hampering the growth and prosperity of the medical profession. The wreckless political methods as against scientific measures adopted by the Government to encourage indigenous systems of medicines are yet another menace to the growth of the scientific system of medicine. The above are some of the most important features which have created the gloomy atmosphere in the scientific system of medicine. The intensity of the gloom is felt the more in Madras and Bombay as the scientific medical profession has been naturally expecting reforms in the administrative policy of the medical department to make the profession thrive and live independent of the Government. The effect of all this has been a tendency to demoralise a noble profession.

Though Col. Shortt had no opportunities to come in contact with general practice being engaged in research work, if one goes through his address carefully it is plain that he is quite conscious of the state of affairs of the profession in Southern India if not throughout India. The five rules of conduct enunciated by him must be the fruits of his research outside bacteriological laboratory. We are as happy as Col. Shortt himself that the Principal, Medical College gave Col. Shortt an opportunity to give the out-going students of the Medical College valuable advice having all the virtues of a sermon. Over-crowding of the medical profession is real in countries like Great Britain and America. In India it is imaginary. In India the members of the profession suffer on account of full time officers in

State hospitals having unrestricted privileges of private practice. If Col. Shortt was not an official he would have perhaps endeavoured to show the ways and means to dispel the gloomy atmosphere surrounding the profession which was not due to over-crowding and his address would then have gone deeper in the minds of the young graduates. Even as it is, Col. Shortt's advice to the newly passed medical graduates is worth the attention of the entire profession in India. It has been published in the correspondence columns in full. We lay particular stress on two paras appearing in the five rules enunciated by him. Col. Shortt said:

"It is the greatest fallacy to suppose that anyone ever succeeded by pure luck alone; luck may help but there must always be the background of hard work to make the opportunity and seize it when it comes."

Let the members of the medical profession always remember that luck on the background of hard work is everlasting and luck without hard work is as fleeting. The other para appearing in the address is worth the attention of the Government not only in Madras but throughout India:

"The medical man who has consistently been taught to reason, to weigh facts to draw logical conclusions from given data, is the best educated citizen in the State, because he has been taught how to learn. This gives him the opportunity and imposes on him the duty to lead the people by precept and example in a way which falls to the lot of no other profession."

Recently when the subsidized rural medical practitioners met in conference, Dr. V. Rama Kamath, the President of the Subsidized Rural Medical Practitioners' Association, who has been entertaining a vision that the real organisation of the medical profession should commence in villages and that the rural medical practitioners should be important units in rural uplift scheme, gave expression to the same view as appearing in the above para but not so forcibly and as elegantly as was done by Col. Shortt.

News and Comments

Preventive Medicine: Col. A. J. H. Russell who is on a tour in Southern India addressed the staff and the students of the Vizagapatam Medical College on 6.8.1938. The subject of his address was 'Prevention of Disease and not Cure ought to be the Future of Medical Profession'. He said that preventive medicine is the real social service to which every individual in a country is entitled and therefore the members of the medical profession should give a lead to such social service if they were going to be leaders of Society. He placed before the audience two important problems in which the medical profession should concern itself. The first was the question of an ever increasing population which in India was between three to four millions every year and the other was the important question of nutrition basing on sound dietary. Therefore he said that the medical practitioners of the future should concentrate their attention on the prevention of diseases to maintain health. He gave an example of a large insurance company in America which undertook to examine its policyholders by medical men periodically and though it meant a huge expense, Col. Russell said that the company saved large amounts of money which the company would have had to pay to policyholders on account of premature deaths. He opined that spending money on prevention of diseases paid well in the long run. Col. Russell gave out the future policy of the Government regarding Public Health in the country. It was to provide health centres and health dispensaries in every village where practitioners would start ante-natal clinics and child-welfare centres. There would also be a need for practitioners to specialise in the prevention of industrial diseases. He said that the business man, the manufacturers and the doctor agreed that 'health is better than wealth.' But the main aim of everybody was to acquire wealth. He stressed the necessity of modifying the curriculum in the medical colleges so that every subject was taught so as to enable the future medical practitioners to deal with prevention of

diseases more successfully than now. He wished it to be understood that he did not belittle the curative side of medicine but only wanted to impress that Preventive Medicine should be encouraged as much if not more than the Curative Medicine.

Incidentally he referred to the danger of infection of Yellow Fever being carried to India by passengers arriving in India from Africa by the air route and said that the Government of India had constructed a mosquito proof detention hospital at Karachi and made his audience to realise the danger to India on account of Yellow Fever when it was known that the Stegomyia mosquito which caused the infection of Yellow Fever was found in myriads all along the coasts in India.

An ideal student of Medicine while at the Medical College and more so while practising Medicine in all its branches must know that at every step of curing human ills, he should have a fund of knowledge of preventive methods. His success in life depends entirely in preventing complications and sequelae which are at times more serious than actual diseases. If Preventive Medicine is less in evidence and the Curative Medicine is thriving at the cost of the former the entire blame is on the head of the Government in this country. A former Surgeon-General of Madras Major-General T. H. Symons said when he opened the Great Eastern Health Conference in Calcutta some years ago that the Government conducted medical institutions of Curative Medicine to popularise Preventive Medicine. We remember Col. Russell having said once soon after his American tour that there was no need for the office of the Surgeon-General as such as the Government should concern itself entirely with Preventive Medicine. It will be possible for one in the position of the Public Health Commissioner with the Government of India to put in action his cherished views.

The vision of Col. Russell seems to be to socialise Preventive Medicine through Government agency paying those engaged for this social service adequately by the

Government. We wonder if Col. Russell knows that at least in Southern India the benefits of curative medicine have been made so attractive by all concerned that here and there paid medical staff of Preventive Medicine are found practising the Curative Medicine. The Public Health Commissioner should know that there is little or no co-ordination between the curative and preventive departments under the Government ever since the District Medical Officer ceased to be the District Sanitary Officer. This has given rise to rivalry instead of co-operation between two departments at the cost of public health and loss of public finance.

Though Col. King is the founder of a separate Public Health Department in the Madras Presidency, the credit of organisation of the Public Health Department goes to Col. Russell who was the Director of Public Health in Madras before he was elevated to the present position. Col. Russell has unique experience which we doubt if any other sanitarian had in the past or will have in the future. Before he was transferred to the Public Health Department he served as a Professor of Pathology, Madras Medical College. He was one of the Physicians in the Government General Hospital, Madras and was also one of its Surgeons sufficiently long. A Sanitarian who practised Curative Medicine and Surgery and who is now the chief adviser to the Viceroy in matters of Public Health, can command unbiased respect and regard from the practitioners belonging to both Curative and Preventive Medicine. While addressing the staff and the students of the Vizagapatam Medical College, Col. Russell made it known that there was a provision in the Government of India Act of 1935 for the constitution of a Central Board of Health and that the Board was brought into existence last year and its members consist of the Health Ministers of the various provinces and States and its work was to solve the problem of preventive work. We see that Col. Russell has a very important part to play in India in the preservation of health of its people. From

what we know about him and his work in Madras we may safely say that Col. Russell will play his part well and with credit. We feel that our views on Social Medicine on the curative side as expressed last month were in time. Though the Curative and Preventive Medicine may be two separate departments in the Government machinery for administrative purposes the medical profession and more so the Government should realise that these are inseparable branches of medical science and cannot exist and function separately. We trust Col. Russell, the Public Health Commissioner with the Government of India will keep always in view the inseparable existence of both the functions of the medical profession, and in the meanwhile the Provincial Governments would concentrate to socialise Preventive Medicine entrusting the independent medical profession with the entire control of Curative Medicine.

One Medical Science: Dr. P. T. Patel, M.D., M.R.C.P. (Lond.) Member, Bombay Medical Council Physician, K. E. M. Hospital, Medical Superintendent, City Fever Hospitals and Maratha Tuberculosis Hospital, Bombay has sent us a paper embodying his personal views and the opinion of Sir. Shah Muhammad Suleman, Judge, Federal High Court regarding the necessity of having 'one Medical Science in India'. The Bill to recognise the Indigenous Systems of Medicine and to prevent quackery introduced by the Hon'ble Dr. M. D. Gilder, the Health Minister of Bombay must have set the members belonging to the Scientific System of medicine, thinking about the need of having one Scientific System of Medicine in India. The readers of The Medical Practitioner are quite familiar with our views on this subject and in the May number of The Medical Practitioner, we discussed how futile it was for the Bombay Minister to conceive the idea of preventing quackery by recognising the practitioners of Indigenous Systems of Medicine and also the Homoeopaths of every denomination when he knew for himself that many of these were actually dabbling Allopathic drugs putting on a

cloak of a Vaidyan, Hakim or a Homoeopath. Dr. Patel argues that the basic science to diagnose and treat human ills must be the same whether it is Allopathic, Homoeopathic, Ayurvedic or Unani system and says that even Maharshi Charaka desired that Ayurveda should be 'corrected and enriched by progressive observation and experiment'. He makes an appeal to all concerned to discourage communalism in Medical Science and believes that the Ministers in charge of Public Health and Medical Education throughout India will have the welfare of the people at heart and hopes that they will inaugurate a scheme of medical relief of uniform scientific efficacy so that both the rich and poor in the urban or Rural areas will have the same standard of treatment.

The gist of the opinion of Sir. Shah Muhammad Suleman relating to Indigenous systems of Medicine is contained in the following para :

"The present state of affairs is that the Western doctors treat the Indian sciences as antiquated and worthless, while the Indian physicians treat the western sciences as somewhat undesirable and useless innovations. Both should recognise that so far as old medicines and prescriptions are concerned the Indian sciences possess them in plenty, and have demonstrated their efficacy. But the Indian sciences of medicine and surgery are professedly antiquated, and have admittedly not kept pace with the advance of the European Science. Only a proper co-ordination between these different systems can help to make a valuable contribution to the advance of human knowledge and be of everlasting benefit to humanity."

We are afraid even the opinion of a Judge of the highest Tribunal in India is not likely to move the Bombay Government which has to depend not on judicial scientific findings but on mob democratic dictations. Unless the members of the Scientific Medical Profession give up the purdah and come out and boldly enunciate to the public the value of Scientific Medicine, there can be little or no hope for the medical profession in India to make scientific progress. We inform Dr. Patel through these columns that tame papers of the type he has put in our hands would not do ;

public opinion should move with lightning speed to keep pace with Congress activities and the scientific medical profession should mobilise and have an army of selfless workers to guard the interests of scientific system of medicine and of the public. The columns of The Medical Practitioner will gladly welcome any amount of publicity and propaganda work to popularise the activities of such an army.

An Ineffectual G. O.: A G.O. 2232 Public (Services) dated 22.11.37 was published in the Fort St. George Gazette on 21.12.37. In the part relating to the Madras Medical Services, rule No. 13 prohibits private practice to certain officers in the Medical Department. Amongst these are mentioned Non-Clinical Professors, Lecturers, Tutors, and Assistants belonging to category 8, 9, and 10 of Class I. The Non-Clinical subjects were not defined in this G. O. In the meanwhile we received information that an Assistant to the Professor of Pathology and another Assistant to the Professor of Bio-Chemistry, Madras Medical College were as usual engaging themselves in general private practice. As there was difference of opinion amongst the staff of the Medical College regarding clinical and non-clinical subjects, we thought it best to refer the question to the Government. We got a reply from the Government that Anatomy, Physiology, Bio-Chemistry, Pathology, Pharmacology, Bacteriology were non-clinical subjects. It is presumed that the Government must have had sound reasons to restrict private practice to the members of the Madras Medical Service only in that branch of medical science which they teach, as the Government must have thought that apart from a special medical officer exhausting himself in general practice and thus indirectly not doing justice to his legitimate work, it was not ethical for a Physician to do Surgery and *vice-versa*. The unethical conduct is more glaring if one employed in Pathology Department does the work of a physician surgeon and gynaecologist and must look still more flagrant if one engaged in Bio-Chemistry does likewise. The

Government must have also felt that rules of medical ethics did not deter their officers from unethical practices and therefore promulgated a G. O. on the subject. The Medical Department seems to enjoy a special monopoly in honoring G. Os. in the breach, at least some of them and the nature of the breach usually depends upon the person not any rule or G. O. Such breaches are also due at times to the difficult interpretation of the rules; for example, it is said in the Civil Medical Code that the officers employed in Bacteriology and Research Department may have practice relating to those Departments. The Bacteriologist may argue that for carrying certain bacteriological investigations he has to do the work of a physician, surgeon or a gynaecologist. Research medical officer may go a step further. Having all these difficulties in view the Government must have prohibited private practice to all their officers engaged in non-clinical appointments. If the wish of the Government is not heeded to by its officers, claiming privilege of a rule or rules published in the Service Manual which lays down that any service rule coming into force cannot effect those in service before March 1933 or those who held appointments before the date of any new rule the object of the G. O. is defeated. Almost all the teaching appointments have special pay ranging from Rs. 50/- to Rs. 200/- and there is no dearth of qualified medical men. If those holding non-clinical appointments have special knack for general practice they will have less energy or time left for non-clinical work. The Government will do justice to these officers and to the public by transferring them to general line and post to these posts persons who having no knack for general private practice will necessarily devote themselves to their legitimate work. We trust the officiating Surgeon-General who must have experienced difficulties on this score in the Research Department would find ways to give effect to the G. O. and make the erring officers honour the prestige of the Government as well as the profession by putting down unethical medical practice, remembering the funda-

mental rule that full time medical officers cannot claim private practice as a matter of right and that the opinion of the Government whether private practice interferes with the legitimate duties of a medical officer is final. There can be very little doubt that the Assistants to the Professor of Pathology and Bio-Chemistry whose legitimate work is not treating of patients will not be able to devote their undivided attention to the special work of the departments to which they belong. Since writing the above we have come to know from a local Daily that Government contemplate forbidding private practice to all officers of the Madras Medical service. We reserve our detailed comments till the order is actually issued. We will only say here that such an order must give satisfaction to the public as well as to the profession or at least to such members thereof as realise that theirs is a profession and not a trade and that dignity of service and not money is the objective. We congratulate the Health Minister on his having taken this step which is one of those measures that bring Government into line with the Congress spirit and Congress policy.

Ex Post Facto Comments:—A Bill further to amend the Madras Medical Registration Act, 1914 for certain purposes was presented by the Public Health Minister to the Madras Legislative Assembly on 16.8.1938 and was passed without any discussion and had the approval of the Legislative Council on 18.8.1938. A member of the Legislative Assembly moved that the Bill might be sent to a Select Committee and this motion was seconded by another member. But the Minister said that in case the Committee could meet immediately and submit its report to the Assembly that very evening he had no objection for referring the Bill to the Select Committee and added that he had received the opinions of various medical associations, relating to the subject. The motion for referring the Bill to a Select Committee was then withdrawn.

If the objects and reasons for which the Bill was introduced are carefully

examined we should say that there was no need for the haste exhibited by the Minister in the passing of the Bill. It is even doubtful if the Act would serve the purposes for which it was enacted. The objects of the amended Act as stated by the Government are:

1. to make the Madras Medical Council a predominantly elective body;
2. to throw open the Presidentship of the Council to election after a period of four years; and
3. to abolish distinctions between the different classes of registered practitioners and provide for a common register in which the names of all practitioners shall be arranged in the alphabetical order.

The Council which will be constituted will have a predominance of official element as against non-official representation though the officials are to be chosen by election. The voters in the electorate will not be even one hundred all told. The seven members of the Medical Council are to be elected by registered practitioners, and of the five more to be elected two are to be elected by the Academic Council of two Universities (Madras and Andhra) and the other three by the staff of the three Medical Colleges, (Madras Medical College, Stanley Medical College and Vizagapatam Medical College). The Medical members of the Academic Council are Government Medical Officers; so also the staff of the three Government Medical Colleges. The voters to elect the seven members from amongst the registered practitioners will be nearly 7,000 whereas the five officials to be elected by officials themselves will not have to face an electorate even one hundred in number. In addition to the five Government officials there will be three more Government nominees. To this number must be added the nominated President. So in effect there will be in the new Council nine persons representing the Government as against seven representing the registered practitioners. Therefore the new Council can never be a democratic body. In spite of the predominance of officials in the new Council, the Government officials can contest the seven seats reserved for the registered practitioners. It looks as if the Govern-

ment who abolished the medical schools in Madras did not take notice of the fact that there is not need for the representation of educational institutions in the Madras Medical Council as the control of the University Medical Education is vested in the Medical Council of India and the local Medical Council will have nothing to do regarding Medical Education. Its only function will be relating to the disciplinary control over the registered practitioners. The Medical Practitioners are supposed to get some rights and privileges by virtue of registration. But actually the practitioners who enjoy the monopoly of these rights are the officials. Medical certificates issued by practitioners to their patients in service are a condition precedent to the treatment prescribed by them in as much as the patients require rest during the course of treatment and even after. At present no private practitioner can be sure that his opinion regarding the rest he prescribes for his patient would be approved by the Head of the Government Department to which his patient belongs. But a Government Medical Officer can be sure of this. The certificate issued by private practitioners had to be countersigned by a Government medical officer till a few years ago. At the instance of the Madras Medical Council the unethical procedure of countersigning was given up and in its place the Government has substituted as unethical a practice *viz.*, that of a securing a second opinion. If a second opinion is needed at all why should not another private practitioner be asked to give it? The Government and the Law Courts value the official position of the registered medical practitioner more than the registered qualifications however high they may be. It must be within the knowledge of all those who were members of the Madras Medical Council what a difficult thing it is to bring the official ridden Medical Council to persuade itself to grant all the registered medical practitioners equal rights and privileges. Such difficulties are likely to be more and surely not less, in the new Council which will have six Government officials, three Government nominees, as against seven non-officials. Even this number cannot be relied upon as

Government servant may compete for these seven seats.

The second object of the amended Act is to have an elected President after four years. Why this trial of four years? The Minister made it plain on the floor of the Legislative Assembly that the nominated President is to be the Surgeon-General as in the case of the old Council. The election of Major General Sir. E. W. C. Bradfield, Director-General, Indian Medical Service as President of the Medical Council of India is full of significance in this connection. The holder of the post of Director-General was for 4 years of the life of the Medical Council of India, its ex-officio President. On the expiry of this experimental period that Council unanimously elected the same officer. This shows that there was no need for the Government to feel nervous about the competency of the Madras Council to elect the right person as its President whether he is an official or non-official. It should be mentioned here that the Council as constituted under the amended Act is bound to be a predominantly official body as explained above. A Council so constituted will naturally elect the head of the Medical Department as its President. With a safeguard of this nature the election could have been held at once without waiting for four years.

The third object intended to be secured by the amended Act is the abolition of distinctions between the different classes of medical practitioners. The provision bearing on this point is the one which directs the compilation of a Medical Register in alphabetical order. We have in these columns repeatedly deprecated "caste distinctions" in the medical profession, and any provision which effectively abolishes such distinctions would give us sincere pleasure but we regret to say that mere compilation of a register will no more secure this object than the seating together of a Brahmin and a Harijan will secure the abolition of their castes. There were two ways of bringing about the reform in question *viz.*, (1) the incorporation of a provision in the Act to the effect that all

the registered medical practitioners are entitled to the same rights and privileges irrespective of their qualifications or of their position official and non-official (2) the issuing of an executive order to the Government officers that in acting upon a medical certificate produced before them they should not be influenced by the fact that it was granted by a private practitioner or by a person of a comparatively lower medical qualifications and that they should not lower the practitioner in the eyes of the public by calling for a second medical opinion merely on the ground that the person granting the certificate is a private practitioner.

In the result we can only congratulate the Government on their intention rather than on their achievement. This enactment is another proof that opposition changes colour when it becomes Government even if it be Congress Government. For, the present Act we regret to say, withholds in our opinion the substance of independence from the medical profession while it seems to confer the form thereof. There is all the need therefore for the profession to be vigilant and to keep the objective of independence ever in view and not be lulled to sleep by the idea that their interests will be looked after by Government whatever be the complexion of that Government. No one can achieve independence by proxy but each man or each profession should work for his or its own salvation.

Selection of Honoraries: The Government have recently called for applications for all the honorary posts now existing in all the State Hospitals and now occupied by honoraries. It is said that this notification was published to give effect to the Government's intention relating to five years term of service to honoraries. It is also reported that the Government will replace old honoraries by new candidates if the latter possessed higher qualifications and better merit and not otherwise. It should be the concern of the State that the Public outside the hospitals get as efficient medical relief as those inside and this is possible if all the practitioners are given equal opportunities of serving in State Hospitals. For this

purpose we proposed in these columns a few months ago that the Government should provide for the posts of House-Surgeons and House Physicians in all the State Hospitals so as to accommodate about 200 newly qualified medical men and women paying them at the rate of Rs. 40 in the mofussil and Rs. 50 in the City. We said that those holding house appointments should be prohibited from private practice. We also pointed out that the Assistant Medical Officers should be selected from amongst the House Surgeons and House Physicians by a committee consisting of Physicians and Surgeons (both Honorary and Stipendiary), the test being clinical demonstration by the candidates. Those possessing foreign medical qualifications should also undergo training as House Surgeons and Physicians before they are entertained as Assistant Medical Officers. The Hon. Assistant Medical officers should be those who could afford to work in the State Hospitals without depending upon dispensary practice as they are expected to evolve as the future honorary Physicians or Surgeons and occupy the position of consultants. They should engage themselves only in institutional practice by starting private clinics. Selection of Physicians and Surgeons should be done from amongst those who have put in not less than 15 years practice (out of which at least 5 years must be hospital practice) and command the respect of the medical profession in the locality where they practise. The general practitioners who are in the Provincial Medical Register for 20 years should be constituted as a panel for the selection of Honorary Physicians and Surgeons. In the City of Madras the panel should be the resident general practitioners and for the mofussil the general practitioners of the particular district should be the panel. Personal canvassing or through agents should disqualify candidates for selection. The State Hospitals being the property of the public all the practitioners should have equal opportunity of service in State Hospitals and the selection of Honorary service should be on democratic lines consistent with efficiency and merit. At present the honorary

medical officers with the exception of very few are not as popular with the general practitioners as they ought to be and the status they earn in State Hospitals being artificial they have not been able to command as good practice as their official brethren do.

As it is expected that in the long run all the medical officers in State Hospitals will be honoraries occupying the position of future consultants, it is essential that the honoraries and general practitioners should be made interdependent. We have suggested the above plan for what it is worth with the hope that the members of the medical profession may chalk out the best plan regarding the selection of honorary medical officers. As per the existing rules the selection entirely rests with the Surgeon-General who sends his recommendations to the Government for final sanction. Judging from the information now in our possession there is a general feeling amongst the members of the profession that there is a need for general practitioners to be well trained in all branches of medical science and the Government should give opportunities to such of the practitioners who had no chances of serving in hospitals and therefore all the old Assistant honorary medical officers should be discharged and new candidates be appointed in their place. Their demand does not look unreasonable both in their own interests and in the interests of the public. There are a few possessing foreign qualifications and a few M. Ds. and M. Ss. who opine that Physicians and Surgeons who have put in 15 years service may be relieved giving room to those who had no chance to serve. This is also a modest suggestion and is reasonable.

Coming to the choice of new additional honoraries advertised for the Government General Hospital there are three vacancies one for a Physician, two for two Surgeons. The applicants are not likely to be many. From our knowledge of the profession at present and the qualifications demanded for these posts we do not expect more than three including the honoraries working outside the General Hospital who are likely to compete for the

post of Physician and perhaps an equal number for the two posts of Surgeons. The Officiating Surgeon-General who is not likely to be in touch with Physicians and Surgeons having been long in Research Department is sure to make an unbiassed choice as his talents in Scientific Research will serve him in good stead to find out talent and merit in the selection he makes. The task of displacing the existing honoraries and putting in their place new persons may look a little complicated as we learn that the Superintendents of almost all the State Hospitals have recommended the existing incumbents.

"Save me From my Friends": We congratulate Dr. Bail and Dr. M. Sanjiva Rau who till recently were working as Honorary Assistant Surgeons E. N. T. Department, Government General Hospital, Madras on their success in the libel case against the Editor "The Madras Mail." The services of these two honorary officers were terminated by the Government after giving them three months' notice in July 1936 and the notice did not convey any idea as to why the services were terminated. This notice naturally surprised the honoraries and many interested in honorary medical service including ourselves as it was said that till the day these notices were received by the honoraries they discharged their duties quite satisfactorily and it was also said that the Surgeon in charge of E. N. T. Department expressed his astonishment in a letter addressed by him to one of the Honoraries who had communicated the news to him while the Surgeon was on a continental tour at the time. The comedy of guesses worked as a tragedy on the minds of these two honoraries when as a result of correspondence in the Columns of The Madras Mail, the Editor added a foot note to the following effect:

"The services of the two men (Hon. Asst. Surgeons) were dispensed with as they were very irregular in their attendance and as they did not pay proper attention to their duties. They were dismissed with a view to give others who were more deserving an opportunity to gain necessary experience by being appointed Honorary Asst. Surgeons".

This note naturally upset Dr. Bail and Dr. Rau especially so when the notice of

discharge did not contain anything adverse against them and the news of discharge was a surprise to the Surgeon under whom they served. It is not our province to assess the justification of the editorial note which appeared in the Madras Mail and which was the subject matter of the libel suit. Suffice it to say that the City Civil Judge, Madras who tried the case found after an elaborate proceedings that there were no materials before him to justify the Editorial note but on the other hand, the then Superintendent of the General Hospital and a Surgeon who was for some time in charge of E. N. T. Department swore before the Judge that both the Honoraries served quite satisfactorily. All the same we should say that the Editor, Madras Mail bore no ill will towards these two medical practitioners nor could he have known them personally. The Honorary Service under the immediate control of paid Service is however subjected at times to such experience that it may well exclaim "Save me from my friends."

Will the Health Minister please interfere? A letter received by us from a Registered Medical Practitioner has been published in the Correspondence Columns. This practitioner complains that the Commissioner of the Hindupur Municipal Council refused to accept the Medical Certificate granted by him to his patient who is a clerk serving under the Commissioner and that the Commissioner directed this patient to get a certificate from the local Sub-Assistant Surgeon though the latter possessed no better medical qualification. This is one of several instances which have come to our notice and which demonstrate that the grouping of all the registered medical practitioners in an alphabetical order in one list irrespective of their qualifications will not abolish the invidious distinctions in the profession. These discriminations have been the result of the existing orders of Government which give their officers the option of not accepting the opinions of the practitioners who are not in Government employ. It is needless to point out that this option weighs the scales against the private practitioner as regards private practice not to speak of the humiliation it

inflicts on him. As suggested by us elsewhere in these columns unless the Government make a special provision in the Madras Medical Registration Act or issue an executive order that the medical certificates issued by registered medical practitioners must be given the same weight as those granted by Government employees, the distinctions amongst the members of the medical profession will continue and qualified medical practitioners will be subjected to unmerited humiliation and will lose their faith in the utility of Registration so far at least as the grant of certificates is concerned. That the door is still open for the executive to defeat the intentions of the legislation is much to be regretted. For the redress of this grievances as of several others the profession has now a golden opportunity. One who was himself a medical practitioner is now the Public Health Minister and it is natural for the members of the profession to expect the Hon'ble Dr. T. S. S. Rajan to interfere on its behalf and see that the recent amendment to the Medical Registration Act is a reality and confers equal rights and privileges on those who come within its purview. Such conferment will bring about the declared intention of the amended Act.

A Questionnaire: The Joint Hon. Secretaries of the Bombay Medical Union one of the oldest or perhaps the oldest Medical Association in India have sent us a Questionnaire evidently intended for circulation amongst the practitioners practising in the Bombay Presidency. It is said that the Managing Committee of the Union intend to conduct an enquiry in the interest of the medical profession to improve the condition of practice and status of the profession. The Bombay Medical Union does not admit Medical Licentiates of India as members of the Union but does not object admission to foreign Licentiates of Medicine and Surgery. So we presume that the Questionnaire is meant only for medical graduates and others holding foreign qualifications. The Questionnaire has been published in the Correspondence Columns. The questions relate (1) hours of practice, (2) fees and other

charges, (3) holidays, (4) consultation practice, (5) practice by foreign doctors or by doctors belonging to Indigenous systems, (6) admission of rich patients into charitable hospitals as a matter of right. The Managing Committee of the Bombay Medical Union might have included one more query in the Questionnaire whether those to whom the questionnaire is sent recognise the Medical Licentiates of India as qualified practitioners. Of course the purpose of this is not to clear any doubt as to the capacity of Medical Licentiates as medical practitioners, as their capacity as such is recognised by the Bombay Medical Registration Act. The Managing Committee of the Bombay Medical Union would have had a splendid opportunity to judge if the Union was still justified in treating the Medical Licentiates as a 'distinct caste'. The Bombay Medical Union cannot be recognised as a body which represents the entire scientific medical profession in the Bombay Presidency and any decision arrived at by this Sectarian Union will be proportionately defective regarding its representative nature. All the same the intention of the Managing Committee is laudable and worth the attention of those to whom the Questionnaire reaches. Matters relating to fees and other charges are beyond the control of the doctor who has to depend for these on his patients. The welfare of a practitioner does not depend entirely on the money he earns. We have been noticing especially in the City of Bombay that the practitioners work till a late hour in the night. The average latest hour one would see a doctor in his consulting room is 10 P.M. The specialist and the consultant are on their chairs long or perhaps longer than the general practitioner. Whether this is due to competition or overwork the effect cannot but be the deterioration of health of the practitioners. Examples being always better than precept we wonder if the patients in Bombay can realise that doing work till a late hour in the night undermines health. It cannot be said that the Bombay doctors are not conscious of their responsibility to themselves. They are perhaps waiting for the seniors to lead. Signs are not wanting for such leadership. We are told that at the instance of Dr. S. S. Rau, M. D., the

members of the Medical Association, Bombay North have been enjoying half a day every Sunday as a holiday in the week. We trust the circulation of the Questionnaire by the Bombay Medical Union will have the desired effect.

Rural Maternity and Child Welfare Work: A correspondent writes to us from the Tanjore District that a few months ago the Public Health Department opened a Maternity and Child Welfare unit close to the Subsidized Dispensary at Thalanyar. The subsidized dispensary has a qualified midwife. She assists the Subsidized Practitioner only in the morning hours and attends to maternity work the rest of the day. It will be a distinct advantage to the people if the maternity and child welfare work is entrusted to a medical practitioner. We are at a loss to understand why the concerned District Board which we are told finances the maternity and child welfare centre should agree to have two midwives in one village. This arrangement is likely to interfere with the work of the subsidized midwife who is expected to conduct a minimum number of labour cases to justify her employment. We are told that the Public Health Bill which will be soon introduced by the Hon'ble the Public Health Minister, contemplates to entrust Public Health Work in rural area to the Subsidized Practitioners. Maternity and Child Welfare on a large scale will be naturally an important feature in the Public Health work in future. Therefore such of the District Boards which intend starting maternity and child welfare work will do well to entrust this work to the subsidized midwives working under them giving them an additional allowance instead of entertaining midwives separately for this purpose in villages where subsidized dispensaries exist. The duplicate work turned out by two midwives at Thalanyar is likely to effect the popularity of the subsidized midwife and will give rise to unhealthy rivalry which is not in the interest of the public and medical relief work in the villages. It is said that the maternity and child welfare centre was transferred to Thalanyar from Tiruturaipoondi, a

locality more thickly populated. The Government know more than we do that medical relief under local bodies—curative or preventive—depends upon the whims of local factious parties more than the actual needs of welfare of the public. We trust the Government will be pleased to interfere in this matter if they have not done so already.

An Ideal Health Association: We have received the Report of the Saidapet Health Association for the year 1937 with a copy of a neat booklet titled, 'Saidapet Health Project'. We went through both with lively interest and found that the Saidapet Health Project Scheme is a corollary activity of the Saidapet Health Association. We are really proud that the foundation of the Association was laid by a small band of private practitioners who with the co-operation of a few members of the lay public of the small suburban town of Saidapet started and worked a Leprosy Relief Centre calling it 'the Saidapet Leprosy Relief Association'. It is mentioned in the report that in 1935 the latter Association was amalgamated with the Advisory Committee of the Red Cross Centre at Saidapet as the personnel of both was almost the same. The two amalgamated Associations merged into one is now called 'the Saidapet Health Association'. Though the members of the Association are not many in number proportionate to the bulk of useful and benevolent social work turned out by them, the representative feature of this small Association is as noteworthy as the work turned out by the Association is praiseworthy. The combination of officials one of whom is the officiating Director of King Institute with the non-officials including amongst them the peoples representatives in the local municipal council and the help which the Association has been able to get from an eminent member of the medical profession Dr. R. G. Cochrane, the Leprosy Specialist in charge of Tirumani Leper Settlement with Mr. H. C. Buck as the President of the Association, have made the Association not only attractive but an important centre of social work worthy of emulation by others interested in such work. The disinterested laudable work

turned out by the Association attracted the attention of the Committee in charge of the King George V Silver Jubilee Fund and with the financial help from the latter fund a Leprosy Children Clinic is being worked with the active help and co-operation of Dr. Cochrane. With the help from the Red Cross Society the Association is running a Health Centre with five in-patient beds and a staff including a resident nurse and a visiting lady doctor. There are two health visitors, one for Leprosy work and the other for Maternity and Child welfare work. The Public Health Department is co-operating with the Association and a medical officer is conducting Research in Filariasis with the help of the King Institute. In

addition to house to house inspection conducted regarding Leprosy and Filariasis work active steps are taken by the Association to improve the Sanitation of the town with the object of attaining the ambitious 'goal of making Saidapet the cleanest and healthiest town in a decade.' We congratulate Mr. H. C. Buck, the President at the driving force of the Association and his Secretary Dr. P. Sundaresa Rau who has been the Secretary of the Association from its very inception. We trust the Government and the public will watch the activities of this unique body which is representative of variety of interests and has fixed ideals to serve the public.

Correspondence, Reports, Etc.

FIVE RULES OF CONDUCT FOR MEDICAL MEN.

SURGEON-GENERAL'S ADDRESS.

11th AUGUST, 1938.

Rising amid applause Col. Shortt said:

"When, a few days ago, I was asked by your Principal if I would address the students passing out of the College at the term which has just come to an end I gladly agreed. I felt that the occasion was a somewhat special one and that I would like to give some advice and encouragement to those of you who have successfully passed the test of your final examinations and are now on the threshold of your future careers as medical men.

"Now, too often, the advice given under such circumstances is based on details of experience which have no general application. I shall try to give you five rules which, if you observe them, you will find to be of general application, and a true guide to conduct under all circumstances.

"It has always been the habit of the middle-aged and the old to say that 'things are not what they were in our young days', implying thereby that times have changed for the worse. Now if you are going to be successful, put

that out of your heads at once; it is a defeatist creed and not worthy of you who live in a time when both material and spiritual progress is being made in the world, at a pace never before approached. The very variety and wide scope of progress should thrill you as it certainly opens up to you avenues of adventure unknown to your fathers.

"To get down to your own immediate interests there was a time, it has not yet quite passed, when the chief ambition of men passing out of the Madras Medical College was to get into Government service with the least possible delay. It meant immediately an assured income which kept one out of the fear of actual want; as one progressed in the service it meant comparative affluence and an assured position, and it meant security almost as great as that of a great insurance company. For you conditions have changed; there is still Government service—possibly less attractive and well paid than in the past—but there are a host of other lines of work which you can take up. The very overcrowding of the medical profession—but if the needs of all the people of India are considered, there is no approach to overcrowding—should

itself be an incentive to you to branch out on individual lines, to take up the various specialities, to take thought as to where the need is greatest and then to make up your mind to supply it, for the first in the field will reap the richest rewards.

"Many aspects of medical practice in the West—including in the term, Europe and America—have hardly appeared at all in India and those introducing them will surely not regret it.

"Think of the opportunities which the introduction of panel practice would create; think of the advantages both to medical men and patients of combined clinics—where specialists in various lines combine and share work and profits—where a patient is assured that whatever his complaint may be he will, at the clinic, be in the hands of a specialist in that line; think of the special branches of Medicine, Surgery, Bacteriology, Public Health and so on—there are adventures and to spare for you all if you have the spirit and the will to imagine and to do. I have said enough on general lines to show you that there are opportunities galore for you to explore; so I shall now come back to the few specific rules of conduct I mentioned which, being of general application, you must continue to observe under all conditions and which you must carry with you along the path of whichever of the various adventures I have mentioned you intend to pursue.

"The first of these rules is 'Play the game.' I do not need to explain to you what is meant by this and the precept is wide enough in its application, to embrace every aspect of life. It will keep correct your relations with your professional brethren, with your patients and with the public. It may sometimes make you unpopular but in the end it will pay you because the reputation for straight dealing which you will acquire will be worth more to you and will be more lasting than any occasional advantage acquired by less direct and more questionable means.

"The second rule is 'work hard'. This may seem a bit hard. After five years

of work and examinations you feel as if you would like to slack off a bit. Well that is quite right. An occasional holiday after a spell of hard work is very necessary but, that apart, you will find that hard work is very necessary if you are to succeed. You are now 'on your own' and that means that when decisions have to be made and crises faced you alone are competent to decide on your line of action. Slacking and waiting for things to come to you will get you nowhere. You must be, to use an extremely expressive American term, a 'go better' and this means being always alive to the main chance and ready to seize it when it comes. All this means hard work and plenty of it because it is the greatest fallacy to suppose that anyone ever succeeded by pure luck alone—luck may help but there must always be the background of hard work to make the opportunity and seize it when it comes."

"The third rule was that 'even after passing your final examination and qualifying remain always a student. "You may ask what I mean by this. Well, I mean that your college career has been a waste of time if it has not taught you how to learn. Medical and Surgical science, like all other sciences, does not stand still and the man who retains only the knowledge he possessed at the time of qualification, even if he remembered it all would soon be left behind in the race and he would see others, more wise and more industrious stepping over him. In other words, the medical graduate must take every opportunity to continue to learn new methods and new ideas and keep up-to-date in his reading. Only so will he deserve to succeed and I would strongly urge you, therefore, each one of you, to subscribe regularly to at least one really reputable journal which will keep you up-to-date with regard to all advances in medicine, using the term widely to include all its branches and also related sciences."

"The fourth rule is 'welcome all experiences' which comes to you, whether bad or good. The attitude to welcome to good fortune is easy to express and to maintain but the attitude of welcome bad

fortune while difficult to achieve, is even more valuable. It enables one to make the best of existing circumstances and either to endure until better times overcome bad fortune or to fight it and eventually turn it to one's advantage. In either case the gain to one's moral fibre is great and worth the effort.

"The fifth and last of the rules I commend to you," "is keep your ideals. When one is young one has ideals, of service to mankind, of service to country and the King. The man or woman who would remain young all his or her life must keep these ideals of youth. They act as a spur to remember that the medical man, who has consistently been taught to reason, to weigh facts in the balance, to draw logical conclusions from given data, is the best educated citizen in the State because he has been taught how to learn. This gives him the opportunity and imposes on him the duty to lead the people by precept and example in a way which falls to the lot of no other profession."

Letters to the Editor

To

THE EDITOR,

Subject :—Medical Certificate for sick leave issued to Mr. L. Sreenivasamurthy, 1st Assistant Municipal Boys' School, Sreekanthapuram, Hindupur:

Sir,

I should like to submit the following for kind consideration and necessary enquiry in the matter.

I issued a sickness certificate to Mr. Sreenivasa Murthy, on 13.6 '38, and recommended one month's leave for rest and treatment. But unfortunately, Mr. B. Mallappa, Municipal Commissioner, Hindupur (now on leave) to whom the certificate was submitted by the patient, seems to have ignored it and issued a requisition to the local Hospital Sub- Assistant Surgeon for recommending leave. The patient was in consequence subjected

to unnecessary trouble and anxiety in his then state of health.

I fail to understand why the Commissioner acted as he did, when the party was really sick, and had obtained the certificate from a Registered Medical Practitioner. I cannot imagine how the requisition to the Government doctor, who has the same qualification and status was warranted, and why the patient also incidentally subjected to physical hardship and worry.

I am constrained to observe that the Commissioner has not respected in his procedure the Independent Medical Profession in the way in which he should, and thus has thrown the challenge, as it were. Moreover, the reputation of the profession as a whole is slighted and the Public given a further opportunity to widen the gulf between the State and Independent Services.

I therefore request you, on behalf of the whole profession, to look into the matter impartially with the attention it deserves.

HINDUPUR,

20th July, 1938.

(Sd) T. NARASINGA RAO.

QUESTIONNAIRE.

Circulated by the Bombay Medical Union to the Members of the Medical Profession in Bombay Presidency

General :—(1) What are the hours of work in your Rooms? (a) Are you satisfied with them? (b) Do you want any change, if so, what change? (c) What are your visiting hours?

Fees :—(a) What fees do you charge for consultation at your Rooms for the first and subsequent consultations? If you do not charge anything, do you think that this fee should be charged? (b) What fees do you charge for first and subsequent visits &c., when you visit a patient at his residence? Do you consider this fee adequate? If not what would you consider as adequate? (c) Do you think that fees should be graded according to the

seniority of the practitioner? (d) Do you keep a Dispensary? (e) What are your other medical sources of income? (Insurance, Mill, Charitable Dispensaries, Hospitals, Offices, Teaching appointments and Coaching class?)

Other charges:—(a) What are your charges for medicine including Mixtures, Pills, Powders &c.? (b) What are your charges for Injections? Subcutaneous and Intravenous, Minor operations and for Dressing? Are they adequate? (c) Do you charge extra if you attend to these things at the patient's residence?

Holiday and other matters:—(a) How many years have you been in practice? (b) Do you have an Annual Holiday? If so, how many days? Have you any other suggestions in general which would raise the standard of medical practice? (c) Do you close once a week for one day or half a day? If so, would you prefer a uniform day for all or a different day for different localities? (d) What are your views about consultation practice, Indigenous and by Foreigners? (e) What is your opinion of the practice of allowing even rich people admission as by right, in public general hospitals?

CHILD WELFARE WORK IN RURAL AREAS.

Sir,

Ever since the Congress came to power and Dr. T. S. S. Rajan took charge of the Medical Portfolio, the Hon'ble the Minister has been paying much attention to improve the Health and Sanitary conditions of the Rural population.

In 1933 Dr. Rajan in his address as Chairman of the Reception Committee of the Trichinopoly District Medical Association stated:

"Thanks to the Late Raja Sahib of Panagal, we are to-day having a system of aided Rural Medical Relief in our Province. Though there are many defects in its working, still none of us can deny that it is fulfilling a long felt want and I hope you would agree with me in saying that the Scheme must be worked up still more elaborately till at last there is one medical man available for every thousand of the population in the Rural parts."

Accordingly the Health Minister has been improving the Scheme further by increasing the number of Rural Dispensaries and providing a qualified mid-wife for every one of the dispensaries for attending to Maternity work.

In opening the Fourteenth All India Medical Conference during the last Christmas at Madras, the Minister publicly said that he was preparing a scheme of utilising the services of the Rural Medical Practitioners (about 500 in number) for sanitary work in their respective locality to deal with epidemics, inoculation, village sanitation, etc.

As the intention of the Government is to provide every rural dispensary with a mid-wife and in future the rural practitioner is expected to do Public Health work, a good beginning may be made at once regarding Child welfare work in the dispensaries which are provided with midwives. Such an arrangement makes the Rural Public appreciate the work of both the doctor and the midwife.

Recently the East Tanjore District Board has transferred the child welfare centre of Tiruturaipoondi to Thalanayar a small minor panchayet union where there is already a qualified first midwife attached to the Rural Dispensary. The Village has no work for two midwives. So much so the work of both of them clash with each other and confusion prevails in the discharge of the work of both.

The town Congress Committee of Tiruturaipoondi has sent a resolution to the District Board protesting against the transfer of the welfare centre and the District Board seem to have taken no notice of the protest. If the Board considers that there is no need of a Child welfare centre at Tiruturaipoondi the service of the midwife might be utilised in any village where there is no midwife. The Child welfare work at Thalanayar may be entrusted to the midwife attached to the subsidized dispensary. She will be able to do much better work under the direct supervision of a medical man.

I make an appeal to the Health Minister who is very keen regarding the Health

and Sanitation of Rural parts to advise the District Boards to take advantage of the services of midwives wherever they exist and run child welfare centres with the help of the Subsidized Rural Practitioners. This will be a good beginning for Public Health work by the Rural Medical Practitioners.

Medico.

MADRAS P. S. R. M. Ps' ASSOCIATION

Proceedings of the 1st meeting of the working Committee of the Madras Provincial Subsidized Rural Medical Practitioners' Association held at the residence of the President, No. 147, Purasawalkam High Road, Vepery, Madras, at 2 p.m. on Sunday, the 31st July, 1938.

PRESENT:—1. Dr. V. Rama Kamath, (*President*). 2. Dr. M. R. Bhat, (*General Secretary*). 3. Dr. K. Govindan. 4. Dr. K. Srinivasa Rao, 5. Dr. C. Kunjunni Nair, 6. Dr. M. Krishna Rao, (*Members*). Dr. C. Rama Kamath, Retired Civil Surgeon was present by special invitation.

The following resolutions were passed unanimously:

1. Resolved that the office of the P. S. R. M. Ps' Association be located at No. 147, Purasawalkam High Road, Vepery, Madras.

2. Resolved that the Funds of the P. S. R. M. Ps' Association, Madras be deposited in the Vepery Postal Savings Bank by the Treasurer Dr. K. Govindan, Rural Medical Practitioner, Aduthurai, Tanjore District and that the said Treasurer Dr. K. Govindan to operate on the accounts of the Association in the Postal Savings Bank.

3. Resolved that a part time clerk on Rs. 10/- a month be appointed.

4. Resolved that the official year of the Association be from 1st of July to 30th June of each year.

5. Resolved that a monthly statement of accounts under the signatures of the President and the Treasurer be published in The Medical Practitioner.

6. Resolved that all the districts in the Madras Presidency be constituted into two territories comprising the districts shown under each heading below:

North Madras: Vizagapatam, Godavari East, Godavari West, Krishna, Guntur, Nellore, Chittoor, Cuddapah, Bellary, Kurnool, and Anantapur.

South Madras: South Kanara, Malabar, Coimbatore, Salem, Trichinopoly, Madura, Ramnad, Tinnevely, Tanjore, Chingleput, North Arcot and South Arcot.

7. Resolved that the Application Form for membership be prepared in two parts consisting of (1) General, (2) Confidential and the details of the Form be drawn up by the President with the help of the General Secretary on the lines of the draft approved this day by the Working Committee.

8. Resolved as understood at the General Body meeting held on 26-6-1938 the yearly subsidy at the rate of annas eight per member, enrolled be paid from the funds of the Association to The Medical Practitioner for this year and the Managing Editor of the Medical Practitioner be requested to supply copies of the Journal to all the Rural Medical Practitioners in this Province for three months irrespective of their being members of the Association or not.

9. Resolved to authorise the President to submit a memorandum to the Government relating to such of the resolutions passed at the VII Conference held at Manachanalloor, Trichinopoly District on 26-6-1938 and requiring the kind attention of the Government.

The memorandum is ready and will be submitted to the Government on or before 5-9-38. It will be published in the next issue of the journal.

V. RAMA KAMATH

President.

Statement of Receipts & Charges of the P. S. R. M. P. Association for the period from 25-6-38 to 30-7-38.

RECEIPTS.	AMOUNT.	CHARGES.	AMOUNT.
	Rs. A. P.		Rs. A. P.
Cash Balance with the President on 24-6-38 (as per previous statement of account) ...	145 14 6	Postage for correspondence ...	2 9 3
Subscriptions received from members from 29-6-38 to 30-7-38 ...	31 0 0	Stationery ...	0 2 0
Entrance fee received from 2 new members ...	0 8 0	Remuneration to Clerk ...	10 0 0
		Travelling allowance paid to Messrs M. R. Bhat and B. K. Shenoi ...	10 10 0
		Amount credited to the 'Medical Practitioner' from the subscriptions received from 3 members ...	1 8 0
		Amount credited to The 'Medical Practitioners' from 93 members who are in arrears of 8 as. each.	46 6 6
			71 3 9
		Balance with the President ...	106 2 9
Total ...	177 6 6	Total ...	177 6 6

31-7-38 (Sd.) V. RAMA KAMATH,
President.

(Sd.) K. GOVINDAN,
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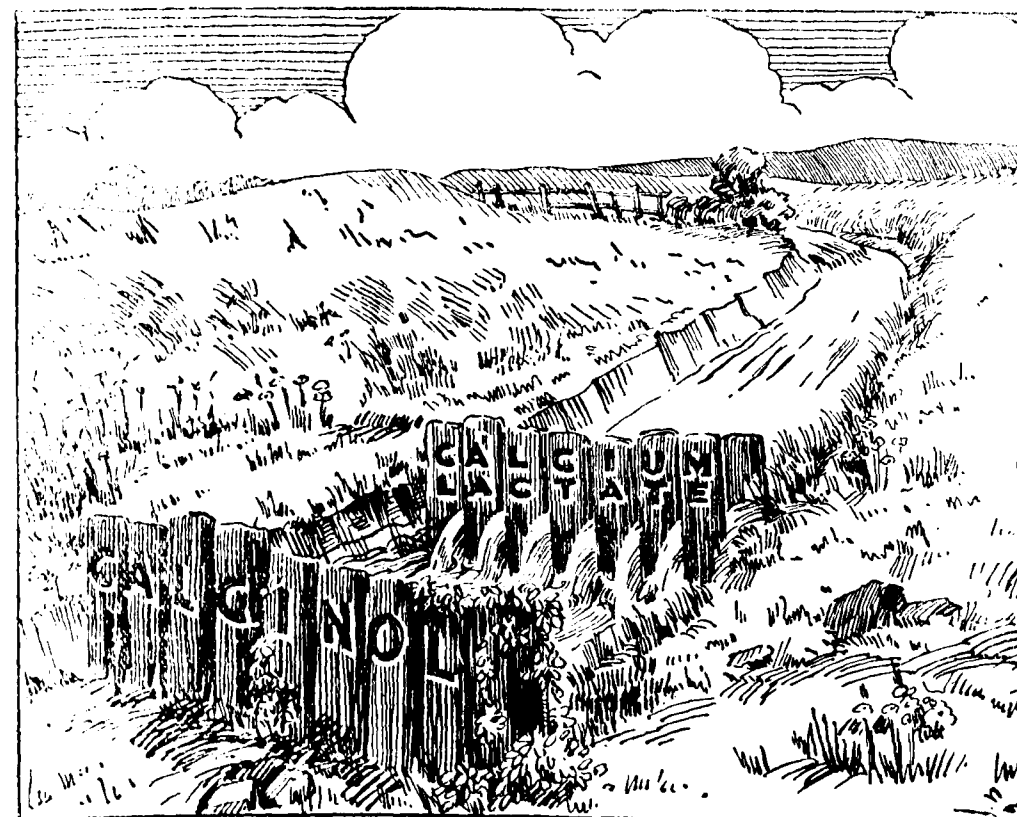
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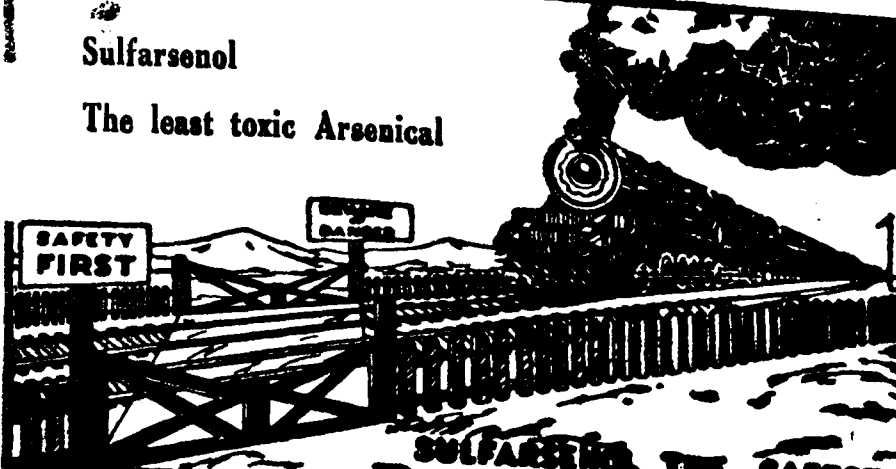
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The Medical Practitioner

A Monthly Medical Journal

EDITED BY
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Member, Madras Medical Council.
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Vol. IX]

SEPTEMBER, 1938

[No. 12

Original Articles.

JAUNDICE.

By

DR. S. S. RAU, M.D.,

(Bombay).

Jaundice is a symptom characterised by increase of bile pigments in the blood and the staining of the skin and conjunctiva by it. Normally the blood contains 1-250,000 of bile pigments.

To understand the subject it is necessary to understand fully the formation and function of bile pigments and bile salts.

The bile pigments are two in number, bilirubin and biliverdin. The latter is formed by the oxidation of the former in the bile passages. Bilirubin is formed from the dead R. B. C. by the reticulo-endothelial cells which are found chiefly in the liver (Kupffer's cells) spleen and bone-marrow. The average life of the R. B. C. is about three weeks ; before death it throws out a process and is called a poikilocyte, the process separates, fragmentation takes place and fragments are taken up by the reticulo-endothelial cells which manufacture from it haemosidin an iron containing substance which is used for the manufacture of fresh haemoglobin and bilirubin which is handed over to the hepatic cells where it undergoes certain changes and then passed on to the minute bile capillaries.

From the bile capillaries it goes through the hepatic duct to the gall bladder and from it *via* the common bile duct to the descending part of the duodenum. It mixes with the food and no change occurs in it until it reaches the colon where the bacteria transform it into stercobilin, a part of which is excreted through the faeces imparting it the yellow colour ; the other part is absorbed and goes back to the liver from where some is excreted as urobilinogen in the urine and the rest used for the manufacture of haemoglobin of the R. B. C.

The bile salts are also two in number *viz.*, Sodium glycocholate and Sodium taurocholate. They are the sodium salts of Sodium glycocholic and taurocholic acids respectively. Both of them are derivatives of the amino acids, glycine and cystine. The bile salts are most probably manufactured by the hepatic cells and together with the pigments are poured into the duodenum. They increase the activities of the pancreatic enzymes *viz.*, trypsin, amylase and lipase and also increase the permeability of the intestinal mucosa to the products of fat digestion. The bile salts are not excreted but reabsorbed and stored in the liver.

The signs and symptoms vary according to the site of jaundice and hence are described under the respective varieties.

VARIETIES.

Jaundice may be divided into Latent Jaundice and Dissociated Jaundice.

LATENT JAUNDICE: Here the urine is not coloured bright yellow though the blood contains a very large amount of bile pigment. This condition is found in Addisonian anæmia where on account of the dissemination of a large number of R. B. C. the liver cells are not able to cope with the large amount of bile pigments, brought to them by the reticulo-endothelial cells. The excess flows into the blood and stains the skin—faint lemon yellow. The urine does not contain the bile pigment because the kidney threshold for the variety of bilirubin which has not passed through the liver cells is much higher (1—12,000) than for that which passed through it (1—50,000).

DISSOCIATED JAUNDICE: In this condition as the name indicates, there is dissociation between the bile pigments and bile salts in the blood. It is found in Haemolytic Jaundice when though the concentration of the bile pigments in the blood increases the bile salts flow into the intestines as there is no obstruction to their passage. Hence their concentration in the blood does not increase.

Clinically Jaundice is divided into:

1. Obstructive Jaundice,
2. Haemolytic Jaundice,
3. Toxic and infective Jaundice.

OBSTRUCTIVE JAUNDICE.

As the name indicates there is obstruction to the flow of bile, the obstruction is generally found in the main bile passages though it may occur in the bile capillaries on account of their obstruction by the fibrous tissue as in cirrhosis or by the malignant growth in cancer, sarcoma or by the scar tissue of a gumma.

The obstruction to the main bile passages may occur either inside the passages as by a gall-stone or round-worm; in the wall as by inflammation cicatrice or malignant changes; or outside the wall as by the pressure of enlarged glands mostly malignant or Hodgkin's, by malignant growths as in cancer of the head of the pancreas or fibrous changes as in chronic pancreatitis.

SIGNS AND SYMPTOMS: The sign usually noticed first is the change of colour in the urine which becomes bright yellow, on account of the bile pigments found in it. The stools are whitish or clay coloured and stinking. The change in colour of the stools is due to want of stercobilin and the bad smell on account of the large amount of fatty acids and soaps which have not been absorbed in the intestines due to the lack of bile salts. The conjunctiva is yellow. This change of colour can best be observed in natural light and in the early stages by asking the patient to look down without bending the head when the bulber conjunctiva covered by the upper eyelid shows the earliest manifestations.

The skin has a yellow tinge best seen in fair patients; this colour sometimes changes to a deep olive green when the obstruction is due to cancer of the liver pigmentary deposits of the nature of xanthoma are sometimes seen specially in the eyelids.

The pulse is slow, most probably on account of the action of the bile salts on the heart. There is pruritus also on account of the irritation due to the bile acids.

The coagulation time of the blood is increased due to the binding of the blood calcium on account of excess of bile pigments.

The cause of obstruction may be found only by the history and physical examination. In the case of gall-stones there is a history of biliary colic and the jaundice varies in intensity according to the amount of obstruction. X-ray examination after administration of tetra-

iodo-Phenophthalin will confirm the diagnosis.

Examination of the stools will show the characteristic ova of the round-worms in rare cases when the obstruction is due to that parasite.

Catarrhal Jaundice is a very common disease. There is fever, vomiting, high coloured urine, clay coloured stools, yellow conjunctiva and enlargement of the liver which is tender also.

Malignant growths of the liver are mostly cancerous and generally secondary to cancerous growths of the digestive tract. The primary growth should always be looked for. The liver is enlarged; there is ascites and the colour of the skin and conjunctiva change soon to a deep olive green tint.

Jaundice occurs in cirrhosis of the liver in the early stages in Hanot's unilobular cirrhosis which is very rare, fairly early in syphilitic cirrhosis of the congenital type and gumma of the liver and in the last stages in the portal cirrhosis and in infantile biliary cirrhosis. Hanot's cirrhosis is familiar, the liver is enlarged and smooth and the jaundice very deep. Syphilitic cirrhosis occurs generally in congenital cases. The liver is enlarged and the other stigmata of syphilis like snuffles, the napkin rash, separation of epiphysis are present. In portal cirrhosis, the characteristic facies, the enlarged veins of the abdomen, the hobnailed liver and the ascites are diagnostic. The infantile biliary cirrhosis is a fairly common disease among the children in South India. It is familial and hereditary. Children above the age of four are not generally attacked, a low grade fever, obstinate constipation, lead shot like hard clayey stools, high coloured urine are characteristic in the early stages. The liver is definitely enlarged and painful, jaundice, ascites and cholaemia close the final scenes of this disease which carries a heavy toll.

In cancer of the head of the pancreas the gall-bladder is always enlarged and

secondary deposits are found elsewhere. In chronic pancreatitis though the gall-bladder is enlarged there is less pain and there are no secondary deposits. In both the diseases there is hyperglycemia, sugar in the urine and the stools contain undigested fibres and globules of neutral fat.

DIAGNOSIS: The urine should always be examined by Gmelin's test for bile pigments by Hay's test for the bile salts and by Benedict's test for presence of sugar. The naked eye examination of the stools have already been referred to. It should be examined for gall-stones. Microscopical examination may reveal a large number of crystals of fatty acids.

Blood examination for bile pigment by Van den Bergh test is useful not only for diagnosing jaundice, but for differentiating the three clinical varieties of it. The principle of the test depends upon the fact that the bile pigment becomes altered during its passage through the hepatic cells, and colour changes produced in the reaction depend upon this change which is produced during the passage through the liver cells.

Briefly described if 1 c. c. of Ehrlich's diazo reagent is added to 1 c.c. of blood serum the following changes may occur:

1. A change in colour to bluish violet within 10 to 30 seconds. This is called positive direct reaction, and is found in obstructive Jaundice when the bile pigment has passed through the liver cells.
2. No change in colour for 1 to 15 minutes and then a change to reddish violet. This is called a delayed reaction and is found in haemolytic Jaundice, when the blood pigment circulating in the blood has not passed through the hepatic cells. The change in colour may be hastened by the addition of absolute alcohol. This is called positive indirect and is also found in Haemolytic Jaundice.

3. An immediate change to red becoming violet after 10 minutes. This is called biphasic reaction and is due to a mixture of pigment some of which has

passed through the liver cells and some not. This reaction is found in infective and toxic jaundice where because the liver cells are diseased only a small amount of the pigments pass through them.

WASSERMANN'S TEST: should be done to differentiate cancer of liver in early stages from gumma of the liver.

PROGNOSIS: This depends upon the cause and whether it can be removed or not and also upon the stage at which the disease comes under treatment. The prognosis is very good in catarrhal jaundice and in round-worm obstruction. In syphilitic cirrhosis and gumma the prognosis is also good provided suitable anti-syphilitic treatment is adopted. In gall-stones the prognosis is good provided surgical treatment is resorted to before extensive adhesions of the gall-bladder have taken place.

In malignant growths the prognosis is uniformly bad. Cirrhosis of the liver when it has attained the stage of jaundice is mostly fatal.

TREATMENT: The diet and regimen in all cases whatever be the cause, are usually the same, the patient being restricted to bed and given food which does not contain fats. Liquid diet such as skimmed milk, butter milk, fruit juice etc., should be advised. Spices should be avoided. In catarrhal jaundice, a saline diaphoretic mixture containing Soda-Bicarb, Ext. Kalmegh Liquidum will usually suffice. Bowels should be kept open by gentle aperients such as Magnesium Carb. Bile pills and small doses of Hexamine may be given in the later stages. In severe cases of epidemic catarrhal jaundice, glucose and Soda-Bicarb in saline should be given intravenously. Obstructive jaundice caused by roundworm is relieved by a dose of Santonine followed by a suitable purgative.

For jaundice caused by gall-stones cholecystectomy is indicated. When cancer of liver or pancreas is the cause of jaundice the treatment is only palliative.

The cases where Jaundice develops in Portal or Infantile Biliary Cirrhosis are always fatal.

If Jaundice is due to Syphilitic Cirrhosis of liver of congenital type, it may be successfully treated with iodides, mercurial injections and Bismuth injections. Later, Arsenical injections in small doses should be had recourse to. In adults if it is a gumma that caused jaundice large doses of Iodide should be given along with injections of Bismuth. And later small doses of suitable Arsenical preparations should be resorted to.

HAEMOLYTIC JAUNDICE.

In this variety there is a large destruction of R. B. C. either due to the immaturity of the cells as in Addisonian anaemia, due to excessive fragility as in acholuric jaundice, to the presence of toxins as in black water fever and to redundancy as in the jaundice of the new born.

The large amount of bile pigment which is formed is not capable of being dealt with by the liver cells. Hence a large part of it circulates in the blood without passing through them and stains the skin and conjunctiva. A small part which passes through the liver cells undergoes the usual changes and is partly excreted in the stools which are yellow. The kidney threshold for this kind of bile pigment being high, the urine is not affected.

SIGNS AND SYMPTOMS: Generally there is no fever in this jaundice; but high temperature is found in Black Water Fever and a low grade fever in Addisonian anaemia. The skin and conjunctiva are yellow, the colour varying according to the amount of blood deterioration. The stools are always yellow and the urine not coloured. The Van den Bergh reaction is delayed positive and positive indirect.

The chief varieties of Haemolytic Jaundice may be discussed under the following 4 Heads:

1. **ADDISONIAN ANAEMIA:** The patient though seemingly well nourished com-

plaints of extreme weakness, the skin is slightly lemon yellow, conjunctivae and finger nails pale. There may be slight fever.

On examination the heart shows murmurs especially well marked in the pulmonary area; the liver and spleen are enlarged, the knee jerks lost and the plantar reflex is extensor. Blood examination shows diminution of R. B. C. poikilocytosis, anisocytosis, megalocytes, magaloblasts, polychromatophilia and sometimes punctate basophilia. There is leucopenia with diminution of polymorphonuclear leucocytes. The percentage of haemoglobin is diminished and the colour index more than unity. A fractional test meal reveals achlorhydria.

The treatment consists of administration of liver extract by injections. The disease being due to deficiency of the antianæmic principle, the injections should be continued even after the blood picture becomes normal.

2. **ACHOLURIC JAUNDICE:** There are two varieties in this; the hereditary and the acquired. In both, there are jaundice and anaemia but the latter is more in the acquired type than in the congenital. The patient seems to be all right but for these two symptoms. The jaundice becomes more on exposure, exertion or excitement. Attacks of biliary colic occur on account of the concretions of pigment.

The most characteristic feature in this jaundice is the excessive fragility of the R. B. C. Normally the R. B. C. begin to haemolyse in 4 per cent saline and the haemolysis is complete in 3 per cent saline. In this disease the fragility commences at 0.6 per cent saline and is complete at 0.4 per cent saline.

The treatment is mostly surgical. Removal of the spleen ameliorates the symptoms.

3. **BLACK WATER FEVER:** In this fever as the name indicates the passage of urine which is black in colour due to excess of haemoglobin is the characteristic feature. It occurs in certain endemic areas where malaria is rampant. The

persons who are attacked had previously malarial fever and have resided in the endemic area only for a short time. The malarial parasite is not found in their blood during the attack of fever. Taking of quinine precipitates an attack; the patient gets suddenly a rigor followed by fever. Soon after there is haemoglobinuria which goes on even to suppression of urine. There is intense jaundice and severe vomiting.

The treatment consists in giving large doses of glucose in saline intravenously. Soda bicarbonate both by mouth and intravenously is very useful. Quinine should not be given. After recovery iron by mouth should be given for the anaemia.

4. **JAUNDICE OF THE NEW BORN:** Soon after birth there is a large destruction of R. B. C. which are not necessary after the lungs begin to act. This produces slight jaundice which disappears after a few days and for which no treatment is necessary. Sometimes this destruction exceeds normal limits and there is intense jaundice with drowsiness and enlargement of liver and spleen. This is a serious disease and should be immediately treated by daily injections of 15 c. c. of parental blood for 3 or 4 days.

TOXIC AND INFECTIVE JAUNDICE.

In this condition a poison acts upon the liver cells which become diseased and hence are capable of dealing with only a part of the bile pigment brought to them. The same poison acts upon the bile passages also causing a swelling of their walls which produce a certain amount of obstruction. Hence the bile pigments circulating in the blood are partly those which have passed through the liver cells, but have been reabsorbed into the blood on account of obstruction and partly those which have not passed through the liver cells because they are diseased. The Van den Bergh reaction is therefore biphasic.

The toxin acting upon the liver may be:

1. Bacterial as in typhoid fever, pneumonia, portal infections and ascending cholangitis.

2. Spirochaeta as in spirochaetosis ictero-haemorrhagica.

3. A Virus as in Yellow fever.

4. Poisoning by inorganic substances such as phosphorus and arsenic.

5. Poisoning by organic compounds like chloroform.

6. Metabolic causes as in pregnancy.

A brief description containing a few diagnostic points of each of the causes is given below along with treatment:

Jaundice occurs as a complication of typhoid fever in the 2nd and 3rd week. The Widal's reaction and the characteristic physical signs of typhoid fever are present. In pneumonia one sometimes meets with jaundice on the 5th day onwards. The physical signs and the pulse respiration ratio are diagnostic. In addition to the usual treatment large doses of soda-bicarbonate and glucose should be given.

Spirochaetal Jaundice is caused by infection taking place through the skin or the food by spirochaetae which are found in the excreta and urine of infected rats. The disease is mostly found in temperate climates. There is high fever with shivering, haemorrhages from various parts of the body, herpes about the lips may also be present.

The diagnostic test consists in finding the spirochaetae in the blood which can be done by the injection of 3 c.c. of the blood intraperitoneally in the guinea pig in the first five days of the disease or a similar quantity of urine intraperitoneally in the later part of the disease.

Treatment consists in giving large doses of soda-bicarbonate, glucose by mouth in mild cases or intravenously in saline in severe cases; calcium gluconate 10 c.c. of 10 per cent solution intravenously is very useful.

Yellow fever is found in certain endemic areas in the Southern part of North America, Northern part of South America

and West Africa. It is due to a virus conveyed by a mosquito which becomes infective 12 days after feeding on the blood of a patient suffering from yellow fever during the first four days. The disease is characterised by rigor high fever, black vomit, albuminuria and by a peculiarity of the pulse and temperature ratio called Faget's sign. About the third day, the pulse which was high, begins to slow down to 60 or 70 per minute though the temperature remains high. Jaundice appears about the fifth day of the disease.

The patient should be protected by mosquito nets and should have complete rest in bed. Plenty of glucose, sodium bicarbonate and calcium lactate should be given. The diet should be liquid consisting of milk and fruit juice and should be increased slowly after the fourth day of convalescence.

In the poisoning by phosphorus the jaundice appears two or three days after the irritant effects of the phosphorus have subsided.

Arsenobenzol poisoning occurs after its intravenous administration. The jaundice may appear a few days after the injection or it may be weeks or months after it. Hence a careful history should always be taken whether an arsenical derivative has been given by injection.

Chloroform poisoning occurs after anaesthesia especially in children. The signs appear three or four days after the anaesthetic has been given. Before anaesthesia urine should be examined for acetone and if found, chloroform should not be given until it disappears. Plenty of sugar should always be given during the time that food is withheld before chloroform anaesthesia.

Injections of glucose and calcium form the best treatment for all the Liver poisons.

Acute Yellow Atrophy of the Liver occurs generally during pregnancy. There is fever, vomiting at first which are followed later on by drowsiness, headache,

restlessness, and delirium and twitching of the muscles. The urine contains albumin and on microscopical examination leucine and tyrosine.

The prognosis is very grave. The patient should be kept on fluid diet containing half pound of glucose per day dissolved in a pint of lemonade and fed at intervals of five to six hours. The bowels should be freely opened by

magnesium sulphate. If the patient cannot take anything by mouth, rectal route should be resorted to. Insulin injections 10 units twice a day should be given 15 minutes before the morning and evening feed to ensure better absorption of the glucose. If the patient cannot take food by mouth, saline should be given per rectum and 25 c.c. of 50 per cent solution of glucose given intravenously twice a day preceded by 10 units of insulin.

DYSENTERIES

By

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AMOEBIIC DYSENTERY.

(Continued from the last issue).

Treatment: The Medical Practitioner who is called upon to treat a case of acute or subacute case of Amoebic dysentery is at times in a most unfortunate position as the patient tries a number of supposed cures before he comes to him. Every day the literature is flooded with drugs such as Yatren, Dimal, Stovarsol, Rivanol and a host of others. If the claims made for some of these specifics could be substantiated it is not easy to understand why Amoebic dysentery should continue to afflict the human race to the extent it does now. After trying all drugs and after reading the reports of treatment of Amoebic dysentery with a host of proprietary drugs so far put into the market, I may say with a certain amount of confidence that nothing as yet has been found that can replace Emetine in the treatment of Amoebic dysentery. But it is desirable that the practitioner should know and study the mode of action and the cumulative toxic effects of this most useful preparation which if not administered with caution is likely to do permanent damage to the system, at times more harmful than Amoebic dysentery itself. The mode of action of Emetine on *E. histolytica* still remains a problem. Vedder in 1912 was the first person to discover that the action of Ipecacuanha in Amoebic dysentery was due to its alkaloid Emetine.

Rogers in 1913 was the first person to take up Vedder's suggestion and to introduce Emetine in the routine treatment of Amoebic dysentery. Vedder and Rogers believed that Emetine had a direct parasitocidal effect on the amoebiasis. Wenyon in 1926 pointed out that *E. histolytica* either in faeces or in liver abscess pus could not be killed in strong solutions of Emetine, and that the amoebae could remain as perfectly active as in the control preparation. Therefore he concluded that Emetine has no toxic action on the Amoebae at least to the extent believed by Vedder and Rogers.

Dobell investigated the action of Emetine on experimentally infected cats and came to the conclusion that its action on the amoebae was an indirect and not a direct one. Its primary action was apparently on the host in some way rendering the tissues unsuitable for the amoebae to grow. Mayer came to a similar conclusion. The latest study of the whole problem is found in the memoir written by Dobell and Laidlaw in 1926. These workers tested the action of Emetine and other alkaloids on *E. histolytica* and other Entamoebae. Their observations were more or less to the following effect:

1. There are four alkaloids of Ipecacuanha. Emetine, Emetamine, Cephaeline

and Psychotrine, whose exact composition is not yet known. Emetine and Cephaeline have been found to be specific poisons for *E. histolytica* under cultural conditions. Emetine is found to be 10 times as poisonous as Stovarsol and about 50 times as poisonous as Quinine under identical conditions.

2. *Entamoebae coli*, *Entamoebae gingivalis* and *Entamoebae nana* are not affected by Emetine in cultures. *E. coli* was found to withstand a constant ratio of the alkaloid 100 times that is found lethal to *E. histolytica*.

3. One per cent or more of Emetine is needed to kill this parasite instantaneously but in very weak solutions the amoebic can live for a very long time.

In view of these findings it may be concluded that Emetine has a direct lethal action on *E. histolytica*. One must also bear in mind that the patient's own powers of natural resistance can exterminate the disease without the drug. It is true that in all protozoal infections we have to attempt to exterminate the parasite in the tissues of the host by maintaining continuously for a long period the drug in sufficiently strong concentrations so that it might act as a parasiticide. But it should be also remembered that the bodily resistance and the natural powers of recuperation finally help to exterminate the residual infection. For instance it is common knowledge that a large number of patients of Kala-azar and Malaria are seen in perfect health after the conclusion of a course of treatment though a few parasites may be seen in their blood film or in the spleen punctures. Whether the action of Emetine is direct as a parasiticide or indirect acting through something in the host is still not settled. It is safe to keep an open mind remembering its double action. Chopra and Ghosh (1922) and others have shown that Emetine has a cumulative effect, it increases peristalsis, it is a depressant on the cardiac centre and also on the central nervous system, and the maximum quantity for a course that one is justified to give to an adult in relatively fair health should not exceed 10 to 12 grs. In the Calcutta School of

Tropical Medicine a case was seen which had received 23 grs. of Emetine during the course of 11 weeks, the drug having been administered thrice a week. Yet the dysentery was not cured. The frequent motions in this case were attributed to the overdose of Emetine which as referred to above has a tendency for increasing peristalsis and thereby cause diarrhoea. Acton and Knowles report in their book on the Dysenteries of India, about a military Medical Officer giving as many as 5 grs. of Emetine per day to his patients. "If the dysentery cleared up he presumed the case to have been of amoebic origin, if it did not or the patient died, diagnosis of B. dysentery was made. How many patients he killed we do not know, but one of the saddest of the numerous war cases which we know of personally, is that of a military medical officer whose cardiac mechanism has been permanently damaged by overdosage with Emetine, but who still suffers to-day from periodic relapses of amoebic dysentery and cannot take Emetine at all and has tried a large variety of the new treatments without success." In excessive doses more than 1 gr. a day to an adult Emetine produces toxic symptoms cardiac irregularity, mental depression, asthenia, emaciation and in rare cases myositis and even to neuritis which may affect a group of muscles producing paralysis. The paralysis might resemble chronic poliomyelitis. Desquamation of the skin and an atrophic condition of the nails are frequently found after Emetine administration.

Emetine given in the form of an enema (1:1000) does not give good results. It is extremely painful and may therefore be avoided.

Emetine injections have to be carefully given especially to debilitated persons. It may produce wide spread cellulitis leading to a localised abscess or the cellulitis might leave behind a patch of irritative eczema or an ulcer. It is to be borne in mind that this drug is extremely toxic to young children. On no account Emetine be given hypodermically to patients who are moving about and taking hard physical exercise as this leads to cardiac damage. The treat-

ment with a course of Emetine injections (Emetine hydrochloride 1 gr. in 1 cc. of distilled water) should be supplemented by the administration of Emetine Bismuth Iodide by mouth.

EMETINE-BISMUTH IODIDE generally known as E. B. I. was first introduced by Dale in 1916. It is an insoluble brick red powder containing 26 p.c. Emetine. When it comes in contact with the tissue juices Emetine is set free. Tablets made out of this substance pass through the intestinal tract unaffected. Therefore it is desirable to give it in Keratin or Stearin Capsules or the powder may be mixed up with gum or syrup before administering it. The maximum dose for an adult is 3 grs. per day which treatment is to be continued for not less than 10 to 12 consecutive days. For debilitated individuals and in women the dose is frequently started with 1 gr. till 3 grs. are reached. If treatment is commenced with smaller doses the patient gradually gets accustomed to the drug. Manson-Bahr is of opinion that the full dosage of 30 to 36 grains need not be given and that if a combined treatment with Emetine is carried on, 19 grs. of E.B.I. are quite enough for a complete course of treatment. There are certain difficulties and dangers which the practitioner should remember in administering this drug. The practitioner should give definite instructions to the patient while prescribing E. B. I. as there is always a tendency in the patients to abuse this drug. The patient should know the proper dose and the duration of the use of E. B. I. It should be given at bed time four hours after evening meal, and not even a glass of milk is allowed to be taken after. Patient should have absolute rest in bed and should endeavour to go to sleep. Any saliva coming from the mouth should be wiped off and should not be swallowed. Vomiting and diarrhoea are to be expected in the earlier part of the course roughly on or about the 6th or 7th day of treatment and this is to be taken as an indication that the drug is being absorbed. If there is no nausea it is justifiable to assume that the drug is not being dissolved and so not absorbed. Excessive vomiting and nausea may be prevented by giving tincture of opium 10 to 15 mms. or luminal 1 gr. half an hour

before the administration of the drug. The condition of the heart and pulse should be noted daily and the treatment need not be discontinued unless the depression is moderately severe. Alcohol should not be given in any form, the patient loses weight and there will be a drop in blood pressure, when the course is complete the patient may be permitted to move about in moderation; but care in diet is necessary. The combined treatment with Emetine injections and E. B. I. has much better results than either of the drugs given singly. Relapses are found to be few with this combined treatment. It is positively dangerous and also an unsound therapeutic procedure to give repeated courses of E. B. I. It is good to examine the faeces microscopically after six weeks of treatment. Possibly no cysts will be found if the treatment is carried out as outlined above.

A modification of E. B. I. is Emetine per Iodide which is found to be less toxic. Its dose is also three grains and it is given in capsules mixed with dried ox-bile 5 grs. The addition of ox-bile seems to facilitate the liberation of Emetine. Another drug known as Auremetine is a compound of Emetine and Auramin (a dye). It is given in 1 gr. doses in gelatine capsules four times daily on alternate days for seven days, and then daily till a total of 40 to 60 grs. are given. It is found that this drug has no advantage whatsoever over the E. B. I. or per iodide.

As referred to above there are a host of other preparations available in the market. Discussion on the treatment of Amoebic dysentery will not be complete unless the relative benefits of these preparations are dealt with.

YATREN. (Bayer.) The drug is sodium-idoxy-quinoline sulphonate is also known as Chiniofon (U. S. Pharmacopeia) Quinoxyl (B. W. & Co.). Other substances with similar chemical composition are known as Anayodin (U. S. A.) and Dysentulin (Germany).

Yatren can be given by mouth or by enema. The maximum daily dose is 15 grs. in powder form, in capsules or in keratin coated pills which are given for 10 days; after an interval of one week the course should be repeated. Yatren in pill form

(4 grs. each) is given when the symptoms are controlled by Emetine. It may be also given in conjunction with Emetine. The maximum dose of these pills is 4 a day. To my knowledge the Yatren treatment has been rather disappointing. German and Dutch writers speak very highly of the value of this preparation but all the world over Emetine is the drug of choice and any other drug cannot act as a substitute for it. Manson-Bahr speaks of getting permanent results with Yatren when it is given by the rectum in the form of retention enema as well as by the mouth. The patient each morning gets an alkaline enema (2 percent Sodium Bicarbonate in a pint of water) and after this the patient has an enema of 8 ounces Yatren solution 2.5 per cent. The patient is encouraged to retain the solution for 8 to 10 hours. The solution is then excreted as a greenish liquid containing mucus and debris. The treatment is continued for 10 days and if necessary a second similar course of treatment may have to be given two or three weeks later. Strict dieting and rest in bed are absolutely necessary. In intractable cases 10 per cent solution of Yatren can be given as retention enema but it is liable to give rise to pain and discomfort. In the hands of Manson-Bahr the combined treatment of Yatren enema and E.B.I. given by mouth is found to be most successful. It is not necessary to give more than 19 grs. of E. B.I. in all and the maximum single dose need not exceed 2 grs. The treatment on the whole is very exhausting to the patient and in order to regain his strength the patient must be permitted 2 day's rest. A sense of weakness or stiffness is produced in the limbs after this treatment is complete. Yatren pills one or two at night are prescribed for the next 3 weeks. Larger doses of Yatren brings on diarrhoea.

STOVAR SOL. (MAY & BAKER). (ACE-TARSOL.—This arsenical preparation (3 acetylamin-4-hydroxy-phenyl-arsenic acid) has been advocated in France as an amoebicide. This drug is extensively used in combination with other drugs. Really this drug has feeble amoebicidal action but it possesses tonic or stimulating properties to counteract the depress-

ing effects of Emetine. Therefore it can be used specially after Amoebiasis is cured. It is sold in 4 grs. tablets. Stovarsol cannot be regarded as a substitute for Emetine but it is of special value as an after treatment. The dose usually required is 4 grs. tablet broken up in a half a tumbler full of water taken once or twice a day systematically for 10 days. Stovarsol has been found useful in some cases which resisted Emetine and E.B.I. The administration of the drug must be carefully watched as it may give rise to toxic symptoms such as erythema with fever closely resembling measles or it may even give rise to arsenical exfoliative dermatitis which may be fatal. A delayed papular toxic rash may appear three weeks after the administration of the drug. The arsenical poisoning may be combated with Sodium thiosulphate injections and the administration of glucose.

CARBARSONE (ELI, LILLY & CO.) (*P. Carbamino-phenyl arsonic acid contains 28.8 per cent of arsenic*).—It is used in India and in America in the same manner as Stovarsol. But it is more toxic than Stovarsol. Therefore it should not be given in cases with complications of liver.

KURCHI AND ITS DERIVATIVES. Kurchi bark contains an alkaloid known as conessine. Acton and Knowles tried this drug in acute cases of amoebic infection without any other subsidiary treatment. They administered 5 grs. of the bark made into a pill three times a day. The patient could easily tolerate a dose of 60 grains a day with no unpleasant symptoms. In experimental conditions the drug appears to be an active amoebicide. Kurchi is available in India on a large scale. It is used extensively by the Ayurvedic physicians. The alkaloid conessine could be manufactured at a price much below that of Emetine and this could be given in doses of $\frac{1}{2}$ -1 gr. by hypodermic injection on 3 successive days. After this, Kurchi bismuth iodide (Anabin) is given by mouth in 10 gr. doses twice daily for ten days without producing any deleterious effects. Acton and Chopra treated a number of cases and gave very encouraging reports. But unfortunately in the hands of several others the results are not satisfactory and even discouraging.

The liquid extract which is sold is not standardised and in effect the bark or its alkaloid is not as useful as Emetine.

RIVANOL. This is a derivative of acridine and is given as a retention enema 1: 200 dilution. It has an action somewhat similar to Yatren; 10 or more retention enemas may be necessary. Rivanol in addition to its effects as an antiseptic is also antispasmodic and it relieves pain and tenesmus. Some advocate its administration by mouth 3-5 grs. three times daily for nine days.

BISMUTH SUBNITRATE. Deeks and James strongly advocate its use in heroic doses of 180 grs. mechanically suspended in a tumblerful of milk or water every three hours night and day in severe cases. On account of impurities contained in Bismuth some toxic symptoms may at times be noticed, as cyanosis and forcible action of the heart. The patient is put on strict diet for 10 days and not allowed irritating food for 2 or 3 months.

After having said so much relating to the treatment of Amoebic dysentery it is necessary to know the criteria of cure. Dobell and Low say in their book:

"It is a general rule that patients undergoing treatment with Emetine become 'negative' i.e., no amoebae or cysts are discoverable in the stools—whether they are ultimately found to be rid of their infection or not. Negative examinations made during treatment are therefore of no value to prove that the disease is extinct. This 'negative phase' may continue for some time after the administration of this drug has ceased, though the effects of Emetine usually disappear within two or three weeks of the cessation of treatment. It is moreover frequently impossible to discover either free amoebae or cysts of *E. histolytica* in the stools of infected persons even when they have not been subjected to specific treatment, in other words the stools of untreated cases infected with the parasite are frequently negative. For such reasons, therefore it is necessary to make considerable number of examinations of the stools of any patient, and to make them at suitable times, if the negative findings are to have any decisive value as an index of non-infection."

"In dealing with a few cases only the stools may be examined microscopically every day after treatment, and if they remain consistently negative for three weeks the chances are that the patient is permanently free from infection. The parasites rarely reappear in the stools after such a period. The examinations have to be made daily and by a competent and careful protozoologist. In practice, examination of the stools every few days for a period of about a month after treatment is usually sufficient to establish

with considerable probability—if all examinations have been negative—that the patient has been cured. Six negative examinations made in three weeks should be regarded as the irreducible minimum required before one even ventures to speak of a cure having been effected."

In the course of treatment of Amoebic dysentery acute or chronic, hepatitis due to infection of the liver by the amoebae may be noticed attendant with rigors followed by high fever without the formation of pus. This condition yields to Emetine. Saline aperients, rest and low diet, fomentations or dry cupping and the injection of Emetine will avert the graver complication of a liver abscess. Manson-Bahr advocates aspiration of liver even at this stage with good results.

There may be peritonitis with or without perforation. The seat of perforation is usually the ileo-caecal region and the ascending colon.

Such a lesion in close proximity to the ileo-caecal area is many a time mistaken for appendicitis. Perforation is definitely more common in Amoebic dysentery than in Bacillary dysentery since the ulceration is deeper. It may occur at any stage of the infection acute or chronic and also during the relapse. In acute cases, the perforation frequently takes place at several sites simultaneously and nothing can be done for the patient. In chronic cases, where the perforation is single, immediate laparotomy may save life. Plastic peritonitis may at times set in and cure such a condition spontaneously. Sudden and severe intestinal haemorrhage may take place and it might be mistaken for one of duodenal ulcer.

Other symptoms are treated as they arise. Abdominal pain is relieved by the application of hot water bag and colic by a sedative mixture as the following which is the recipe of Manson-Bahr.

R/		
Tr.	Bellodonnae	mms. 8.
Pot.	Bromide	grs. 10.
Tr.	Chloroformi et.	
	Morphinae co.	mms. 10.
Syr.	Aurantii.	dr. 1.
Aqua	menth pip add	oz. $\frac{1}{2}$.
	oz. $\frac{1}{2}$ T. D. S.	

Diet is a very important element in the treatment of dysentery. Slight indiscre-

tion always brings on a relapse. In chronic cases diet is a most important factor to be taken notice of. The patient need not be starved but a judicious selection of diet should be borne in mind avoiding pungent things and spices. Milk is an ideal diet and also butter milk, lean meat and fish may be gradually added.

Prophylaxis is the same as mentioned in Bacillary dysentery. Raw vegetables, unboiled water and other foods likely to be contaminated by human faeces should be avoided and patients advised to live in good hygienic surroundings.

Treatment of mixed infection—Amoebic and Bacillary—will be dealt with while writing on other forms of dysentery. It is important to bear in mind that cases not properly treated have a tendency to relapse and pass on to the condition of a Sprue syndrome.

SUMMARY: Basing on the above discussion the following routine treatment may be adopted in cases of Amoebic dysentery.

1. The patient is kept in bed for 10 days and is advised to use a bed pan with the idea to give rest to the ulcerated gut.

2. Early morning a mild saline purgative is given to flush out the colon.

3. Two drachms of Bismuth Carbonate suspended in water or soda water is given every 4th hour during the day. Bismuth is very little absorbed into the system when given orally; and so there is no fear of poisoning. Bismuth converts the acidity of the contents of the colon to alkalinity which is desirable in the treatment of Amoebic desentery. (Deek's method)

4. 2½ hours after the first dose of Bismuth Carbonate 1 gr. of Emetine hydrochloride is given intramuscularly. Intravenous method however severe the case might be, need not be tried as no better results are produced than the intramuscular method. Subcutaneous injection of Emetine gives rise to ecchymosis; and this may alarm the patient. Intramuscular injection is painful but the patient cannot see the local capillary haemorrhage which follows. The drug is

well absorbed by this method. Cawston (1922) recommends dissolving the tablet of Emetine in one per cent carbolic acid. This renders the injection painless without interfering with its efficacy.

5. The time of the injection according to Acton is very important. Quinine and Emetine exert their maximal activity when the environment in which it acts is on the alkaline side. 2½ hours after the administration of Bismuth Carbonate there is a slight rise in the alkalinity of the portal blood. What one wishes to attack are not the amoebae that come out into lumen of the bowel, but the tissue invading forms of the amoebae. Hence the need of throwing Emetine into the circulating blood.

The above treatment is carried out for nine consecutive days. For three days afterwards Bismuth and Emetine are suspended and only a milder saline aperient is given. Again the same treatment is repeated for a further period of 3–6 days. In the above order the treatment is carried out for 15 days. Doubts may arise at this stage if the patient is cured. If six to eight examinations of stools after complete suspension of treatment proves negative, it may be declared that the patient is free from the infection. Constipation must be carefully avoided for at least three weeks after the cessation of treatment and a dose of liquid paraffin or ispaghulae seeds may be useful. Abdominal massage may be necessary if there is faecal stasis.

In spite of the above treatment though some cases may look clinically cured of the disease, yet the infection might have not been eradicated. In these cases cysts of *E. histolytica* and Charcot Leyden crystals will be found in the formed stools of the convalescent. Haemolytic streptococci may be isolated from the stools. These cases may be either treated with autovaccine, Bismuth Emetine Iodide, or with Stovarsol.

Osmo Kaolin is as useful in Amoebic dysentery as it is in Bacillary dysentery; and it may substituted for the Bismuth Carbonate in the above line of treatment. It may be given 1–2 drachms doses suspended in water every 4 hours.

Abstracts.

ACUTE HEAD INJURIES.

FRANK H. MAYFIELD, M. D. CINCINNATI, OHIO.

In the treatment of head trauma we have at our disposal certain principles whose fundamental objectives are of proven value. These objectives are the provision of competent nursing care to the unconscious patient, the prevention of infection in open wounds of the scalp and brain by adequate and timely operation, and the prompt recognition and removal of local space restricting lesions. There are other methods of questionable merit such as spinal drainage and dehydration which must be kept in mind for use occasionally. In this paper I will attempt to evaluate these principles of therapy with emphasis on the selection of cases for surgery.

When the patient is first seen, bleeding points should of course be immediately controlled; then while inquiring into the history, a careful systematic examination should be made with particular attention to the possibility of such associated injuries as a fractured spine, a crushed chest, or a ruptured viscus which in an unconscious patient might not be evident. Such associated injuries are of common occurrence and often require primary consideration. Shock as determined by the usual signs of that state is not common in head trauma except in the presence of such associated injuries, but, if it exists, it should receive first attention.

The value of x-ray examination of the skull in head trauma is not to be questioned. Such examinations immediately upon admission, however, are rarely necessary and it is usually wiser to wait until the patient's cooperation can be obtained or his general condition is satisfactory before subjecting him to the manipulations necessary in obtaining satisfactory films of the skull. In the great majority of cases, x-ray findings are of no immediate importance in outlining the treatment. It is of course necessary to know whether or not the

patient has a depressed fracture of the skull or pneumocephalus. But these do not as a rule require surgery during shock. The one instance in which an immediate x-ray examination may be useful, is the unconscious patient in whom we suspect an extradural hematoma. A fracture line crossing the groove of the middle meningeal artery is helpful evidence.

In the study of patients with brain injury, careful and frequent consideration of the state of consciousness, the temperature, pulse, B. P., respiration, the condition of the pupils, motor paralyses, the reflexes and convulsions all give information of value. But experience has shown that the state of consciousness takes precedent over all others in importance, and the interpretation of these other signs must be made in reference to the state of consciousness. We would not be greatly concerned about one who showed a paralysis of one side of his body or a dilated pupil, if he were conscious and alert. Nor would we be inclined to operate upon a stuporous patient who showed these signs if he seemed to be waking up. If, however, these signs were present and stupor was deepening or stationary, immediate operation would be advised. Repeated observations at intervals of 15 to 30 minutes for changes in these phenomena supplemented by diagnostic spinal puncture studies, enable us to select those cases that should be operated upon.

Nursing Care—Competent nursing includes familiarity with the signs of progressive brain involvement. Changes in the pupils, the nature of convulsions, the development of restlessness of involuntary urination may be the first sign of impending coma and should be promptly reported. The nurse should also be able to take systolic and diastolic blood pressure readings.

The orthodox position in bed for patients with cranio-cerebral trauma is with the head elevated. But as Coleman has pointed out, many stuporous or unconscious patients, whether the coma be from brain injury or other causes, develop large amounts of mucous secretion in the respiratory tract. This fluid so embarrasses respiratory exchange that cyanosis and anoxemia of the brain result. I have seen many patients arouse from deep coma immediately after the evacuation of large amounts of bronchial fluid by placing them in a position for postural drainage. The benefit obtained therefrom by evacuation of the fluid more than offsets that which may be derived by reduction of intracranial pressure from the head-up position. A suction apparatus greatly facilitates the removal of these secretions.

Food and fluids are best administered to the unconscious or semiconscious patient by a small rubber tube passed through the nose into the stomach which may be left in place for 24 to 48 hours without being removed. Certainly no attempt should be made to give food or fluid by mouth until the patient is able to take them without coughing or strangling.

Indications for Surgery in Head Trauma—The indications for operations in head trauma are: (1) Prevention of infection, (2) The removal of compressing local intracranial lesions, (3) The control of increased intracranial pressure from cerebral edema, and (4) The prevention of late Sequellæ, particularly epilepsy.

Prevention of Infection—Lacerations of the scalp are usually regarded as simple wounds and are not serious if promptly and adequately treated. But, when supuration develops, osteomyelitis of the skull, meningitis or brain abscess frequently follows. If the scalp is shaved widely, the wound cleansed mechanically, its margins debrided, and snugly approximated with non-absorbable sutures, infection will rarely occur.

Operations for open wounds of the skull and brain are carried out as soon as the patient's general condition will permit. The anesthetic of choice here, as in all

neuro-surgical procedures is novocaine, though avertine or rectal ether may be added if the patient is restless. The depressed fragments of bone are elevated and removed, unless they are extremely large and attached to the pericranium. In children, the defect created by removal of the fragments will usually close, and in adults they produce no harmful effects. When the dura and brain are lacerated, the devitalized brain tissue should be removed to prevent excess scarring which would predispose to epilepsy. The dura should be closed tightly in all cases using a temporal fascia or fascia lata graft if necessary. No packing or draining material is used within the dura. A septic cerebritis with a cerebral fungus, nearly always follow their use. If infection develops within the dura, it is much more apt to wall off and remain local if the dura is closed.

Simple depressed fractures are elevated as soon as the patient's general condition permits. These fragments are saved if possible.

Linear fractures of the vault when compounded occasionally show hair and debris in the fracture line. This should be looked for and of course removed. Other than this, they require no specific treatment.

Fractures of the base may be complicated by cerebrospinal fluid, leaks through the nose and ears or by air within the skull. Fortunately the leaks usually seal spontaneously. But if they continue, meningitis always follows. Fistulas through the frontal fossa with cerebrospinal fluid rhinorrhea can often be closed by surgical repair of the torn dura and this should be done if the drainage persists without evidence of abatement for more than four or five days. Attempts to close leaks through the ear are usually unsuccessful. Spinal punctures are contraindicated until at least 48 hours after the fistula closes.

The Diagnosis and Control of Increased Intracranial Pressure—The general signs of intracranial hypertension are headache, if the patient is awake, stupor, restlessness, alteration in the pulse or respiratory rate, focal paralyses, convulsive seizures,

a rise of temperature and often vomiting. Choked discs are seldom seen in acute head injuries. Any combination of these signs is suggestive but not pathognomonic of this state, as identical changes follow direct injury to the brain.

The general interpretation of these signs as an indication of pressure on the brain and the widespread belief that all patients with head trauma suffer with increased intracranial pressure, has led to the institution of measures directed at its control as a routine in many clinics. It is around this question that the greatest controversy is being waged today.

A well done spinal puncture with manometric record is the only accurate procedure for determining the degree of intracranial pressure. A reading of 100 to 200 mm. of spinal fluid is generally regarded as normal. Some consider a lower figure to be the upper limit of normal, but my experience indicates that variations within these limits are of no serious concern.

Once having proven by clinical study and spinal puncture that intracranial pressure of dangerous degree exists we must then proceed to determine its nature. In connection with this we must remember that local compressing lesions are our first consideration.

An extradural clot of dangerous size nearly always has its origin from the middle meningeal artery which is torn where a fracture line crosses it, though it may occur without a demonstrable fracture. Since the hemorrhage begins in the temporal region, its first signs and symptoms are referable to this area. It rapidly expands however, and may fill almost one-half the cranial cavity. The bleeding continues in somewhat of a vicious cycle, the dura being progressively stripped away from the skull, opening new bleeding points which add to the hematoma. Head trauma with a brief period of unconsciousness followed by a lucid interval and a return to coma is almost pathognomonic of this lesion. Dilatation of the pupil on the affected side, and a progressive hemiplegia, with perhaps Jacksonian

convulsions in the opposite side usually appear.

Subdural Hemorrhage—A subdural hematoma may attain sufficient size to produce symptoms within the first few hours but in the majority of cases this is not true. When it does occur, the bleeding is from a large vessel, either arterial or venous, and is seen only after severe head injuries. They resemble extradural clots clinically.

By chronic subdural hematoma, we mean an encysted collection of blood in the subdural space. Its origin is usually from the veins that bridge from the cerebral cortex to the sagittal sinus. The amount of bleeding is not sufficient to cause dangerous cerebral compression at first, but a mesothelial membrane which is thrown out by the dura and arachnoid envelopes the clot. This membrane is semipermeable and as the blood breaks down, the osmotic tension within is increased and fluid dialyses from the surrounding tissues, thereby increasing the size of the mass. This accounts for the late onset, (sometimes weeks or months), and the gradual progression of symptoms of local compression. These lesions are frequently confused with brain tumors.

Subdural Hydromas—The subdural space is only a potential cavity and normally contains very little or no fluid. Occasionally, however, after trauma, large amount of subdural fluid are found. The source of this fluid is not definitely known, but it is believed to result from a "ball-valve" rent in the arachnoid membrane. With each pulsation of the brain, fluid is forced through the opening into the subdural space. Since there is no absorptive mechanism in the subdural space, the mass increases. This lesion cannot be differentiated clinically from subdural hematoma.

The treatment of extradural hematomas is a conventional subtemporal decompression incision with removal of sufficient bone to evacuate the clot and seal the bleeding point. In this connection it is well to remember that adequate bony

exposure should be obtained before attaching the hematoma, as profuse bleeding often follows the dislocation of the clot, and fatal hemorrhage may ensue if one is not immediately able to occlude the bleeding vessel.

Subdural hematomas and subdural hydromas usually cover almost the entire superior surface of one or both cerebral hemispheres, and are thickest in the superior temporal region. Therefore this area is elected to make a single burr opening. It may be necessary to enlarge this opening slightly to evacuate a clot. Evacuation of the liquid content is usually sufficient, though if recovery is not rapid and complete, it may be necessary to reflect a bone flap to remove the membrane of the hematoma. The hydromas never require this, though they may refill and have to be aspirated once or twice. Some surgeons prefer to make openings in both the frontal and post-parietal areas. I am convinced that the lesion will be missed more frequently by this procedure than by one centrally placed opening. Occasionally at autopsy, subdural clots may be found in other locations, but they cannot be diagnosed clinically and attempts to remove them are usually unsuccessful.

Local space restricting lesion may attain tremendous size without producing localizing signs or may produce ipsilateral signs. Contusion and laceration of the brain may render a patient so profoundly unconscious that a local lesion would escape recognition clinically. Therefore it becomes necessary at times, to make exploratory openings in the skull. A single opening over each hemisphere is sufficient. If no clot or hydroma is found, but the brain is tense from edema, a subtemporal decompression may then be carried out.

A normal or diminished spinal fluid pressure does not preclude the possibility of a surgical lesion and it is wise to explore patients who show paralysis, Jacksonian convulsions, a rising temperature, or progressive stupor even though the spinal fluid pressure is not increased. This practice will of course result in many negative explorations, but the operation

is justified since it incurs little risk.

Contusion, Laceration, and Edema.—Statistics indicate that less than 10 per cent of head injuries suffer with dangerous intracranial hypertension from edema secondary to laceration and contusion of the brain. Recommended for control of this pressure are:

1. The subtemporal decompression operation.
2. Spinal drainage.
3. Dehydration by restriction of fluid intake and the intravenous administration of hypertonic solutions.

Of these methods I prefer the subtemporal decompression with the supplementary use of spinal drainage and hypertonic solutions. The effect of a decompression operation is not well understood for many times the mean spinal fluid pressure after operation is only slightly reduced. Excursion with cardiac pulse however, is much wider. Frequently we note that when the dura is first opened there is no visible pulsation, only to observe the quick development of wide pulsation. It appears therefore, that converting the rigid vault into an expansile chamber, permits better circulation to the cerebrum. This operation is required in less than 10 per cent of the cases.

Hypertonic Solutions.—The use of hypertonic solutions is routine in many clinics. The use of these solutions in my hands has not indicated any appreciable effect on the mortality rate. Glucose (50 per cent) intravenously will reduce the intracranial pressure, but within a short while after its administration, it is followed by a secondary rise to a stage higher than the original level which is sufficient to contraindicate its use. Sucrose (50 per cent) in larger amounts will affect an equal lowering of pressure and is not followed by the secondary rise. It is a useful supplement to more permanent steps such as decompression.

Restriction of Fluid.—Some men routinely limit a patient's fluid intake to from 500 to 1,000 cc. of fluid in 24 hours. It has been my experience that when fluid is withheld in sufficient degree to appreciably lower intracranial pressure, the patient grows worse rather than better. A rising temperature and deepening stupor are frequent results of such treatment. The fluid requirement of these cases is the same as that of any seriously ill patient.

Spinal Puncture.—There is wide disagreement as to the use of therapeutic spinal punctures in head injuries. Withdrawal of fluid from the spinal canal will lower intracranial pressure but the relief is very transient for the fluid secreting mechanism rapidly replaces that removed by the spinal puncture. In severe injuries the period of relief grows progressively shorter with each successive puncture, and it is doubtful that the temporary benefit obtained, justifies the procedure. Dandy's dogmatic statement that spinal puncture in head trauma is always harmful, is not substantiated, but I have never been impressed with any notable beneficial results by its use in severely injured patients.

Lumbar punctures are useful for diagnostic purposes and to remove bloody fluid in those patients who, though not often in serious danger show retarded convalescence and complain of headache.

Subarachnoid hemorrhage, which is demonstrable in the spinal fluid, nearly always comes from either the basal cisternae or the ventricles; rarely if ever from over the cerebrum. If the bleeding is so profuse that life is threatened from pressure, little can be done about it. If

it is not so profuse the opposing pressure of the brain is probably helpful to control bleeding and spinal drainage at this stage seems contraindicated.

When the blood cells begin to break down and the fluid becomes xanthochromic the patient often shows signs of severe meningeal irritation. Daily spinal puncture at this time relieves symptoms and appears to speed recovery. It is unlikely, however, that it is ever a life-saving measure. Repeated spinal punctures early, do not remove sufficient blood to prevent this.

Summary.—The great majority of patients with head injuries recover with general nursing care. The mortality rate in those patients with damage to basal structures and extensive lacerations and contusion of the brain is and probably will remain high.

Prompt and adequate treatment of open wounds of the scalp and brain and the prompt recognition and removal of local space restricting lesions is essential, but, harassing physical and x-ray examination, and extensive surgical procedures should be avoided during shock. Bilateral exploratory openings in the skull are justified in doubtful cases.

Subtemporal decompression is the most effective measure for controlling dangerous cerebral edema. Spinal drainage and hypertonic solutions cannot be advantageously substituted, but may be used as a supplement. Marked restriction of fluid is harmful.

Withdrawal of bloody or xanthochromic spinal fluid relieve symptoms in patients with meningeal irritation.

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Notes on Therapeutics, Diagnosis and other Medical Subjects.

SOME GENERAL CONSIDERATIONS ON THE PROBLEM OF LEPROSY.

By Dr. R. G. COCHRANE, M. D. (Glas),
M.R.C.P. (Lond.), D. T. M. & H (Eng.)

It is impossible in a short paper even to attempt to give an account of the disease and its control and therefore I shall confine my remarks to some general considerations. Leprosy in many parts of the Madras Presidency is an endemic disease of major importance and therefore it behoves medical men to take the time to become better acquainted with the disease. Training Courses for Post Graduates are held at the Lady Willingdon Leper Settlement twice a year. The course is for 14 days duration. While in that time it is impossible to attain an adequate knowledge of the disease, yet it is hoped that those who come will achieve two things, (1) a better appreciation of the disease, (2) a better knowledge of the main lines of treatment and prevention.

The study of leprosy is handicapped by the universal fear of the disease and until medical men lead the way in the approach towards this disease little can be accomplished, all words such as 'leper' and 'clean' should be expunged from our vocabulary, for such words indicate an outlook which is more akin to the middle ages than to modern medicine. The first essential then in the approach to this problem is to remember that those afflicted with leprosy are ordinary human beings with a soul and mind susceptible to friendship, and resentful and embittered by approaches which indicate fear or distrust on the part of the physician. If a medical man is to treat leprosy successfully he must make a friend of the patient, and not so much by word or action indicate that he is afraid of the disease. This does not mean reasonable precautions should not be taken, but there are those who try and give injections without touching the patient, or give dressings without handling

the ulcers; these things are mentioned for all. Too frequently the results of such actions are seen in the Lady Willingdon Leper Settlement when patients come for admission. It may be well to indicate a few points of importance.

1. Leprosy is not a highly contagious disease and not every type is contagious.

2. Leprosy is dangerous in childhood and there is evidence to show that the younger the child and the closer contact with an infective case the more likely is leprosy to develop.

3. All forms of leprosy are not equally serious, certain types are comparatively innocuous and tend to become spontaneously arrested.

4. The only known method of control is the prevention of contact of healthy persons especially children with cases in the infective stage of the disease.

5. The pauper leprosy beggar, while objectionable, does not constitute the major danger to society; it is the infective case in the home unisolated and mixing freely with children which constitute the gravest danger.

6. Frequently the less obvious cases are more infectious many of the more obvious cases belong to the comparatively benign neural type of leprosy and are not contagious.

Investigations are being pursued which will we hope result in devising a system whereby the infectious cases will be isolated in the home, village or institution and thus be prevented from coming into close contact with healthy persons especially children. In so far as leprosy is not infrequently present in families of good social standing, it would contribute materially towards its control if the following elementary precautions were observed:

(1) Separate room, bedding, eating, washing utensils, separate chair.

(2) Avoidance of close contact with individuals in the household especially children.

(3) Disinfection of all clothing before it is sent to the dhobie.

A word with regard to treatment. It must be remembered that all types of leprosy do not need treatment, the first duty of the patient is to consult a competent physician and ascertain whether he requires treatment for his disease and whether it is infectious or not. If treatment is required the following points should be remembered:

(1) Avoid all medicines which are advertised to 'cure' leprosy.

(2) Remember the latest vaunted remedy is seldom the best.

(3) Hydnocarpus Oil (Chaulmoogra) or one of its derivatives such as the esters still remain the basis of treatment.

(4) Generally speaking the best methods of administration are the subcutaneous and intradermal routes.

Persons who are unfortunate enough to suffer from leprosy must not imagine that there is a royal or quick route to the healing of their malady: patience, perseverance and co-operation are the key notes to success. Specious promises of rapid relief and cure are unreliable, and only bring discredit to the treatment and disappointment to the patient. It may however be said that while the treatment of leprosy is still far from satisfactory, yet given intensive and intelligent treatment, there is a reasonable chance of healing, and it would be a bold man who said any case was hopeless.

TETANUS AND DIPHTHERIA.

(CASE-NOTES REPORT.)

(The following is a brief report of a lecture delivered by Dr. G. Dorairaj, M.B.B.S., of Koilpatti on 13-8-1938 at The Independent Medical Practitioners' Association, Tinnevely.)

An adult employed in the Koilpatti Mills who had sustained a machine accident in his thumb developed Tetanus 15 days after the injury. The wound was being attended to by Dr. G. Dorai Raj from the very day of the accident. Soon after Tetanus started, the patient had a

course of injections of Anti-Tetanus Serum and for ten days had 17,900 units intravenously. In addition he had Luminol tablets three times a day. At the end of this period the convulsion stopped and the patient became convalescent.

The second case of Tetanus was in a boy aged 12 years who got his toe injured as the result of the fall of a heavy stone. He developed Tetanus nearly 10 days after the accident and he came for treatment 5 days later. He was under treatment for 17 days and had during this period 442,000 units of A. T. Serum (Bayer) intravenously with Luminol and Morphia injections, Chloral and Bromide mixture and Chloroform inhalations occasionally. He was also given Mag. Sulph. Solution subcutaneously at a time when A. T. Serum was not available with no effect on the convulsions. During the course of the treatment his toe was also amputated. Both the cases were fed on liquid diet during the convulsive stage and solid diet was resumed afterwards.

Dr. Dorairaj then discussed the details of treatment to be followed in cases of Tetanus. He said every case of injury however trivial it may be, must be given a prophylactic injection of A. T. Serum irrespective of cost and that earlier the Serum treatment is started the better the prognosis. He discussed the different routes by which the Serum was best administered—subcutaneous, intramuscular, intravenous intrathecal and into the cisterna magna. In his opinion one route is as good as another though he prefers intravenous route since it is the least painful method considering the frequency and bulk of the Serum to be administered. Regarding the dosage of the Serum in his opinion age is no consideration but only the severity of the disease, 20,000 units both morning and evening till there was definite improvement was an adequate dose. The brand of the Serum he said he had been using was only Bayer's and he found it quite good. Regarding the question of amputation of the part he said amputation might be done with advantage if no physical disability or deformity was produced as a result of

operation. Relating to sedatives he mentioned Chloroform, Bromide, Chloral, Luminol, Chlorotone, Morphia and Avertin. In his experience he had found Luminol in 2 grs. doses both morning and evening very effective. In very severe cases injection of Morphia and Chloroform inhalation to check fits were necessary but one must be cautious regarding the use of Morphia so as not to produce the Morphia habit. Regarding injections of Mag. Sulph. Solution he had not found it effective in his practice and the intrathecal route is fraught with danger of respiratory paralysis and subcutaneous route was useless. Even the free use of sedatives sometimes led to Broncho-pneumonia.

Diet he said should be nutritious, fluid and not stimulating. Plenty of water should be given orally and if found difficult saline be given per rectum. Nasal feeding under anaesthesia was also advised but it was fraught with dangers. Solid food might be given after the fits had ceased.

Next he read detailed notes of a case of Diphtheria which he had treated in a child aged three years for which he gave anti-Diphtheritic Serum three injections each 5,000 units on alternate days and had recourse to tracheotomy. As a result of the operation a fistula between the oesophagus and the trachea developed and this closed itself in course of time. After reading the case notes he discussed about the frequency of the disease in the Tinnevely District and said that sore throat in a child of less than 5 years of age accompanied by moderate fever should be looked upon with suspicion and that a routine examination of swabs taken from the throat of such cases must be made.

Regarding the treatment he said the antitoxin must be given as early as possible and in suitably large doses, the dosage depending on the severity of the disease not on the age of the patient. Absolute rest should be enforced for the fear of heart failure. Salines with expectorants and Nucis Vomica might be administered orally. Diet should be

easily digestible and highly nutritious. If necessary Tracheotomy must be done sufficiently early before complete obstruction sets in. Then he gave details of Tracheotomy operation and the after treatment for the same.

1. ACUTE EPIDEMIC PHRENIC NEURALGIA

J. TORGERSEN (*Nord. med. Tidskr.*, April 9, 1938, p. 572) gives an account of a small epidemic of phrenic neuralgia in a rural area of Norway with a population of about 4,000. Between August 9 and October 27, 1937 he observed eight cases with such a uniform clinical picture that they could be regarded as the units of one and the same epidemic, although the patients lived far apart and had had nothing to do with each other. Their ages ranged from 12 to 48, and the sexes were equally represented. The onset of the symptoms was sudden, with fever and pain in one or other of the shoulders. After a short interval violent pain set in, being referred to the lower part of the chest and the whole of the abdomen down to the iliac fossae. The symptoms were alarming and simulated those of cholecystitis, pneumonia, pleurisy, a perforated ulcer, or appendicitis. Indeed in one of the patients, a man aged 26, laparotomy was performed; it revealed nothing amiss in the peritoneal cavity. In several cases relapses were observed either on the same or on the opposite side. Discussing the aetiology, the author draws attention to the likeness of this epidemic to those of epidemic myalgia or Bornholm disease. What was remarkable was the invariable limitation of the symptoms to the areas supplied by the phrenic nerve.

2. ACTIVE DIPHTHERIA IMMUNIZATION

W. REINHARDT (*Dtsch. med. Wschr.*, April 8, 1938, p. 535) reports from a children's hospital in Lubeck certain observations indicative of the inability of active immunization to protect against diphtheria in many cases. In a convalescent home, housing on an average 110 children, as many as sixteen cases of

diphtheria occurred, although the children had been actively immunized at a time when there was no epidemic of diphtheria. All the children had been examined for diphtheria bacilli in the nose and throat before being admitted to this home, and the bacteriological reports had been consistently negative. The children had, in fact, been artificially immunized against diphtheria under the best conditions. The shortest interval between immunization and the outbreak of the disease was one of seventeen days, and in four cases this interval was longer than three months. The behaviour of the diphtheria in these sixteen cases was what might be expected in children not immunized; the disease ran a light course in four cases, a moderately severe course in ten cases, and a severe course in two. In a footnote to his article the author states that twelve further cases of diphtheria have recently broken out in the same convalescent home among children who had been artificially immunized; the interval between immunization and the outbreak of the disease had ranged from one to three months in most cases, but had twice been less than twenty days and had once been almost nine months. The author contrasts these observations with the claims made on behalf of active diphtheria immunization that the immunity it confers begins in four to five weeks and lasts several years. The principle of such immunization is not challenged by him, but he does insist that there is evidently room for improvement in the technique.

3. X-RAY THERAPY OF PROSTATIC HYPERTROPHY

J. KNEIP (*Dtsch. med. Wschr.*, March 11, 1938, p. 377) reports from a surgical hospital in Worms his experiences with the x-ray treatment of hypertrophy of the prostate. Since 1930 the candidates for x-ray treatment have been those patients who for some reason or other had been considered as unsuitable for operation. In spite of this selection the author can claim a high proportion of cures and improvements in his series of thirty-seven cases. In sixteen the results were so good that they could be classed as recoveries; in twelve other cases some improvement

could be claimed. Two patients had subsequently died of unknown causes, and four of sequelae to the hypertrophy of the prostate. In three cases prostatectomy was performed after x-ray treatment had failed. In no case did the treatment do harm, and the author concludes that, provided the new growth in the prostate is benign, vasectomy followed by x-ray therapy is to be recommended, particularly for those cases for which an operation is undesirable.

4. RADIUM THERAPY OF BENIGN SKIN CONDITIONS

A. MUSGER (*Wien. klin. Wschr.*, March 4, 1938, p. 274) points out that radium is of value in the treatment of certain benign skin conditions. The soft alpha rays may be used in the treatment of herpes zoster neurodermatitis, forms of dermatitis due to salvarsan, and in pruritus the rheumatoid dermatoses, and psoriasis. The hard beta and gamma rays should never be used when there is evidence of former damage by irradiation to the skin—for example, telangiectases, atrophy, and pigmentary changes. Treatment should be discontinued when evidence of increased sensitivity to irradiation is present. Radium therapy is the method of choice in the treatment of cavernous haemangiomas, spontaneous keloids and hypertrophy of scar tissue, syccosis, and plastic induration of the penis. Certain conditions react better to radium than to other forms of treatment. They include plantar warts, anal eczema, chronic inflammations of the nail fold and behind the ear, circumscribed pruritus, and various forms of tuberculosis of the skin and mucous membrane.

5. NOVOCAIN INFILTRATION OF THE PELVIC SYMPATHETIC

J. HENRIET (*Rev. franc. Gynec.*, March, 1938, p. 139) alludes to recent modifications of current views concerning the anatomy and physiology of the pelvic autonomic nerves in the human subject; and to the evidence—from Leriche's lumbar sympathectomy in Little's disease, Cottes's pelvic sympathectomy for vaginismus, and Reeb's finding of relaxation of the levator ani during labour in a

woman in whom the presacral nerve had been resected—that striated as well as smooth muscles are susceptible to autonomic nerve control. He records eighty-five obstetrical cases in which he has anaesthetized the pelvic peritoneal plexus, lying laterally to the upper third of the vagina and to the cervix. In reaching the plexus access through the lateral fornices is rejected (as carrying, from practical difficulties in asepsis, the danger of infecting the broad ligament) in favour of insertion of the long needle of the syringe in front of the posterior commissure, external to the labium majus. The transit of the needle is controlled by two fingers in the vagina; the injection is made with 20 ccm of 1 per cent. novocain, without adrenaline. The object of the technique has in fifty-six cases concerned the perineum, in twenty-nine the cervix. In the first group it was sought to diminish perineal resistance and prevent tears in four primiparae aged 38 to 43, thirty-one primiparae with vulval constriction, eleven multiparae who had previously had bad tears, and ten cases of abnormal presentation. It was found that pain was diminished, passage of the head over the perineum accelerated and facilitated by the muscular relaxation, and the number of obstetrical interventions greatly reduced. The second group comprised all cases of protracted first stage of labour from cervical rigidity, oedema, or scarring; full dilatation speedily followed. Antispasmodics were given at the same time, or small doses of pituitary extract, according to the state of the uterine contractions. Obstetrical interventions were unnecessary in the series of twenty-nine cases.

6. AGE AND FERTILITY

O. KOLB (*Munch. med. Wschr.*, April 8, 1938, p. 502) has reviewed 59,117 gynaecological and obstetrical cases from the point of view of fertility and age. The fertile period stretched between the ages of 12 and 49, with an optimum at 23. The fertility of the group between the ages of 12 and 15 was only slight, but it rapidly increased from the age of 16. The gradual decrease of fertility after the age

of 23, apart from natural causes, seemed to be due to diseases resulting from previous childbearing; acquired sterility as a result of criminal abortion; the increase of venereal diseases; the increased use of contraceptives; and the decrease in sexual intercourse with increasing age. Since the war the difference between the habits of the urban and rural population has been levelled out. The rural population, too, have become acquainted with contraceptives and criminal abortion. Conditions have probably changed in those countries where a premium is put on fertility. On the whole the survey showed that fertility in a civilized country is influenced by a variety of factors, not the least of which are economic. A true picture of the relationship between age and fertility could only be obtained in a primitive community, uninfluenced by modern civilization and free of material cares.

(Above 1, 2, 3, 4, 5 & 6 are extracts from *B. M. J.*, June, 25, 1938.)

1. PREVENTION OF GONORRHEAL OPHTHALMIA IN THE NEW-BORN. A. J. SKEEL.

J. A. M. A. 111: 143 (July 9), 1938.

In the present communication Skeel presents the experience at St. Luke's Hospital (Cleveland), the technic of which was developed by him and his associates, and the results of this technic in over 10,000 successive deliveries. Their routine procedure is:

1. At the time of delivery of the head, the eyes are carefully cleansed with dry sterile sponges. No boric acid solution is used.

2. When the cord has been cut, 3 or 4 drops of 0.5 per cent solution of silver nitrate are instilled and the lids are gently manipulated to distribute the solution to every part of the conjunctival sac. After forty-five seconds the sac is freely flushed with a 20 per cent solution of mild silver protein. This irrigation is repeated on three successive days as a routine part of the nursery technic. The substance

must be completely dissolved. The solution is prepared twice weekly.

We think that the repeated conjunctival flushing with a bland silver preparation is vital to the success of the method. Our rationale of this technic is as follows:

1. Irrigation with a boric acid solution is not used; this solution is not a gonococcicide, and its use serves merely to introduce the organisms into the conjunctival sac.

2. We believe that the occasional late infection which was observed before the use of repeated irrigations with bland silver solution occurred as the result of the presence of a few organisms of reduced virulence, which are destroyed by the successive treatments.

We realize our relative freedom from cases of virulent gonorrheal vaginitis. The technic is presented in the hope that more extensive trial may be made of the procedure and its value determined.

2. THE BASE OF THE SKULL, WITH PARTICULAR REFERENCE TO FRACTURES. WILLIAM J. MELLINGER.

Ann. Otol., Rhin. and Laryng. 47:291 (June), 1938.

1. The base of the skull with its many foramina, their direction and the structures which pass through them, as well as the tightly adherent dura, must be carefully considered in fractures.

2. Fractures involving bones containing air cells may bring serious complications, particularly when this pneumatization is extreme. It may extend to the limits of any bone in any or all directions and the process may extend into adjoining bones.

3. The floor of the anterior fossa may consist entirely of pneumatized bone, the floor of the middle fossa almost entirely and the floor of the posterior fossa always consists partially of bone containing air cells. A basal fracture then must usu-

ally be considered compound unless proven to be otherwise.

4. The sphenoid is the "key-stone" of the skull, situated in the middle of the base and is in line of practically all basal fractures.

5. The temporal bone occupies a wide area in the base of the skull, and is unique in its connection with other bones. The arrangement is usually such that a certain amount of movement from below upward is possible.

6. Transverse fractures of the petrous pyramid usually extend through the labyrinth and seldom heal by bony union because the endochondral layer is not endowed with regenerative power. Thus in such cases there is constant danger of intracranial involvement in the event of upper respiratory infection.

7. The abducens nerve is placed in a very vulnerable position on account of its intimate relation with venous spaces throughout most of its long course, also on account of its relations with the basilar sphenoid and the petrous apex. It is very frequently involved in fractures through the middle fossa.

3. X-RAY TREATMENT OF DEAFNESS

In the first place the term "deafness" is vague, since it does not specifically designate the type of hearing defect. No treatment can be discussed for a condition which is not clearly defined diagnostically.

The X-ray treatment of certain forms of hearing impairment has been seriously considered for a long time. Unfortunately, in some instances, the treatment has been employed unscientifically by inexperienced workers who were unfamiliar with the numerous problems of diagnosis and pathology. Under such circumstances the irrationality of X-ray therapy was apparent. Results were imaginary and psychic rather than positive. In some selected situations, there is use for X-ray procedure, but such use must first be established on the basis of the existing pathology or associated pathology. The

problem is a large one and cannot be discussed here in detail. Numerous articles have been published dealing with the subject, the consensus of opinion being against the value of roentgenotherapy in the large majority of instances. Hayes (Laryngoscope 48:176 (March), 1938), in an attempt to give the facts concerning X-ray treatment of deafness, concludes:

"1. X-ray treatment of deafness should only be attempted in selected cases.

"2. In the majority of cases of deafness this type of treatment is useless.

"3. In those cases in which there is a definite pathology in the nasopharynx (as determined by a minute examination with the nasopharyngoscope) and in the eustachian tubes, proper X-ray irradiation may in itself improve the hearing or may clear up the pathology sufficiently to allow of suitable local treatment."

(Above 1, 2 & 3 are extracts from *The Eye, Ear, Nose, and Throat Monthly*, August '38.)

NOTICE.

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PUBLIC SERVICE AND PRIVATE PRACTICE.

In the issue for August 1938 commenting on an ineffectual G. O. we referred to an item of news published by a local Daily stating that Government contemplate forbidding private practice to all medical officers of the Provincial Medical Service. We shall explain here how as stated in that comment this order, if it materialises, will bring the Department into line with the Congress spirit and Congress policy. It may even be said that the reform in question is in consonance with the original intention of Government in organising the Department.

For a proper appreciation of the situation we should visualise the state of things as it must have existed at the time of the inception of the department. The Allopathic system was then non-existent here and the Government looked upon the indigenous systems, Ayurveda and Unani, as little short of quackery. In the interests therefore of their own officers, civil and military especially the European element it was necessary to introduce a system which was looked upon as scientific and up-to-date. In course of time the department was developed so that the benefits of the system were extended to the general public but it was all along treated as a Service Department, one that existed for the service of the people and not a commercial Department which existed for bringing in revenue either for Government or for the service. In fact the Medical Department is an exception to the general rule which treats Government servants as whole-time officers and prohibits them

from accepting any remuneration for services rendered. This exception was conceived not in the interests of the medical officers but in the interests of the ailing public who, the Government evidently thought, must have sound scientific treatment which in their view was Allopathy and which was then restricted to the medical officers of the Department.

A perusal of paras 279 to 281 and 285 of the Civil Medical Code shows that Government were not unmindful of the necessity to maintain the integrity and independence of the profession while they extended to it the concession of private practice. It is also clear from the safeguard provided in section XII-B relating to private practice that service and not the accumulation of fees for the medical officers was the motive behind the grant of this concession. In other words the medical officer was meant for the people and not *vice versa*. For example, it is stated in para 282 (4) of the Civil Medical Code that a medical officer visiting a patient beyond the limits of his jurisdiction may be given by the Local Board or Municipal Council concerned his travelling allowance if he is unable to recover the fees due to him from the patient. This rule evidently visualises free service to a poor patient. The disciplinary action contemplated in para 285 (5) is also a sufficient indication of the intention of Government.

As we have already indicated, much water has passed under the bridge since the Medical Department was first organised; there has been a constant outflow of qualified medical men from the colleges and schools established by Government. A large number of Indians

have also qualified themselves in foreign Universities. As a result an independent medical profession has come into being which can hold its own against the Government officers. This is especially so if the artificial advantage secured for them by their official position is eliminated. The main reason that influenced Government to allow medical officers to engage in private practice *viz.*, absence of private practitioners who had scientific training does not now exist. Medical practitioners, dispensaries and private nursing homes and hospitals are on the increase in spite of the handicaps unintentionally imposed on them by Government. These consist among other things of the glamour that still attaches to Government office in the eyes of the common people, the artificial advantage that the charge of a Government hospital confers on the medical officer as against the private practitioner and the influence that the former can wield by virtue of his position to attract practice. We are aware that the rules and orders of Government seek in effect to put the two *viz.*, the medical officer and the medical practitioner on a level with each other. The medical officers is for instance, prohibited from treating his private patient in the hospital. (Vide para 284 C. M. C.). He has to pay for the use of hospital instruments for private practice. It is however evident that the medical officer is continually put in temptation's way and that the rules can only minimise the evil. Again by means of study leave and other privileges Government virtually gives its subordinates higher and better qualifications which many of them could not obtain but for those facilities. The knowledge and experience thus gathered at people's expense do not serve the people at large so much as the possessors thereof because the latter are thereby enabled to claim higher fees which is beyond the means of the common people. We wish to draw the pointed attention of Government to this phase of the question so that this grievance may be redressed early. It may be argued that a medical officer must be given a right to lay down his own terms no less than any other man. As

against this it must be stated that laws often work in pairs and that a principle which works against the public good must give way for such good. Besides this, it must not be forgotten that special qualifications were acquired at the expense of the people who have therefore a moral claim to contend that services of persons so qualified must not be placed beyond their reach.

In a word, circumstances have now changed so far that there is now no more justification for allowing private practice to Government medical officers—at least to the future entrants than there is for allowing private trade to Land Revenue or Excise officers; for, those now in service can contend that they joined the department when private practice was allowed and that their claims must be saved when conditions of service are altered to their prejudice. There is point in the argument though similar cases must have arisen ere now in other departments and Government should be able to meet the situation to the satisfaction of everybody concerned. This must however form a subject for discussion in a future issue.

The Medical Officer more than any other subordinate of Government should be imbued with a spirit of service, of service dedicated to the people. In this connection we are reminded of an observation made by the late Sir V. Bhashyam Ayyangar in the course of a convocation address. Referring to the graduates of the year he remarked that some of them would enter Government service. Those young men, he went on to say, should bear in mind that as the term indicated with sufficient clearness, they would be public servants, servants of the people whose salt they ate and whose interests they must serve. In fact we see that both in the East and in the West a missionary spirit, a spirit of selfless service untainted by consideration of remuneration, was the ideal of the medical men and women. Coming lower down in the ladder the nurses were graded into "mothers" and "sisters" working for the love of God. We have heard that medical men in India once believed that their

drugs would lose their virtue if they accepted remuneration. Instances are not rare of persons giving away their property to a missionary institution devoted to the care of the sick and themselves serving therein as medical men or in any other capacity for a bare living. It is appropriate to quote here the concluding words in the Hon'ble Dr. Rajan's address delivered at the annual prize distribution ceremony of the Madras Medical College held on the 3rd September 1938. Addressing the graduates of the year the minister said :

"They should not start and go through life counting rupees, annas and pies, though these were not unimportant at all in life. They should remember that if these alone should be their goal and motive force, they could not progress far. Let them therefore aspire for something more real and fundamental than material success. This result could be achieved only through real service disinterestedly and sincerely given. The medical man lived in the midst of death. It should not kill the humanity in him. Death was as certain as life and, in between, it was the duty of all to make their days on earth as full of service to fellowmen as they could. The condition of India to-day called for a spirit of optimism, idealism, service and courage, far more than was necessary in any other country and medical men, who had a sacred duty to perform by their fellowmen, would, Dr. Rajan hoped, rise up to the traditions of the profession, and ideals of service which the country expected of them."

One familiar argument advanced in favour of private practice seems to be that a man of means will be deprived of the services of competent medical officers if these were forbidden to engage in private practice. As for this we should remember that the whole is greater than the part and the interests of the nation as a whole should outweigh those of a portion however vocal it may be. The purity of service is also a paramount consideration for but for this consideration there is no reason why a distinguished lawyer should not be allowed consultation practice when he is raised to the bench even after proper limits are prescribed and proper safeguards are provided for such practice.

Besides, this state of things is bound to be only transitory if the department is

so reorganised that men who are moved by love of humanity to serve the people unfettered by rules as well as those who conscious of their ability want to make money by selling their services in the dearest market will stay out while the third class *viz.*, those who are content to serve for the salary they get without claim to private practice will join the service. As it is, the privileges and perquisites attached to the service are disproportionate to the return that Government gets and have given rise to a variety of abuses which it is not necessary to specify here. If these emoluments are severely pruned, the department will be purified, funds will be found for better purposes and a potent cause of mutual rivalries and jealousies among brother officers engendered by competition for private practice will be removed. On the other side a powerful profession will be organised which will mean an occasion of strength to the nation. For an analogy we may cite instances of lawyers and barristers who instead of entering Government service joined the bar and formed the core of the Congress organisation and backbone of the nation. Men like Messrs. Tilak, Gokale, Nehru and Bose if they had joined Government service would have added to the strength of the bureaucracy and weakened the popular movement, the net result being a double disadvantage.

There is another reason why the present Government should strengthen the profession. The Congress has accepted office with the avowed object of serving the people at large and will remain in office only so long as it is possible to do so. The relief of human suffering is *par excellence* a service of the people. Here as elsewhere the richer classes can take care of themselves. It is the poor whom the Congress Government should befriend if it is to justify its claim. The specialists and the general medical officers in Government employ can however reach but a microscopic fraction of the huge mass of humanity that makes the people. It should therefore be the concern of the Government to see how best to strengthen the profession. At present the best

men are lured to Government service by the pay, prospects, perquisites and privileges attached to the position. A reduction of these emoluments to the limits which the people can bear will achieve a double object. It will set free some revenue and will redress the balance now weighted against the profession. One instance we mentioned in our last issue of a Government officer subjecting a private practitioner to needless insult and injury. The latter gave a medical certificate to a patient of his which he, the patient, used in support of his application for leave. The Government officer who was to grant the leave instead of accepting the certificate sent the subordinate to a medical officer of the same qualifications as the private practitioner so that he might examine and grant a fresh medical certificate. This was plainly an insult to the practitioner who granted the certificate. It did an injury as well inasmuch as no Government servant would care to go to a private practitioner if the certificate he granted is to count for nothing and the patient is to be sent to a medical officer who, for aught one can know may be his rival and whose professional jealousy may be excited by the opportunity for its satisfaction.

The time is ripe for the reform. A popular Government imbued with the Congress spirit and with the portfolio in charge of one who was himself a successful medical man is a rare combination and provides a unique opportunity to introduce a measure of this kind. Those who have undergone suffering of every description and made all kinds of sacrifices for their country and are giving of their best for a living wage have proper credentials and an inherent right to call upon their subordinates to give up a luxury, for such is private practice to a medical officer in receipt of decent salary in the interests of the nation at large. We earnestly hope that all rightminded persons will strengthen the hands of the Minister and his regime will be made memorable by a reform which, as we have explained, is of far reaching importance.

News and Comments

Troubles and Difficulties: On 30—8—1938 the Hon'ble Mr. C. Rajagopalachariar, the Madras Prime Minister addressed the students of the Government School of Medicine, Madras. The occasion was the inaugural meeting of the "Students' Association". We have quoted major portion from his speech as reported in one of the Madras Dailies so as to enable our readers to know the cherished views of the Head of the Madras Government regarding the 'Eastern' and 'Western' systems of medicine.

"The Premier thanked the students and staff of the College for the warmth of their welcome and said that while he appreciated greatly the honour they had done him in asking him to address them, he felt handicapped in not having any knowledge of medicine.

It was also pleasant to have something to do which did not involve some administrative trouble. He realised, however, that even on occasions like the present, it was difficult to talk as one would wish to, because anything that might be said, even what was said in a light vein, was taken all too seriously and discussed at length in the columns of newspapers. For example, the Premier said, the other day he spoke at some lawyers' meeting and the jokes he made and the dreams he dreamt were discussed so seriously that he got quite frightened about it all. (Laughter.) So much so, he thought he had better give up accepting invitations to such gatherings. But when the representative of the pupils of the school came to him with a request to address them, he forgot all about his previous decision and agreed to address them. Perhaps he might be causing offence to some medical men and even medical students in what he might say on the occasion but he would venture it.

Most of them, the Premier said, were perhaps under the impression that they were learning a particular school of medicine.

A few voices: No.

He was glad of that negative answer, but he would like to tell them that it was not right to imagine that medicine could be divided into Western or Eastern or even as Hindu, Unani and so on. While art, fashions, dress, customs and manners might differ from country to country, truth could not differ and therefore science could not differ. There could be no nationalism in science as there could be in art. What he said of science was true also of medicine. Drugs acted on the human body irrespec-

tive of the person's political views or religion. These opinions, the Premier said, he was gathering courage to speak out just then, though he had held them for a fairly long period. It was impossible to divide medicine into Eastern and Western.

The Ayurvedic system was really the father of what was now known as the Allopathic system (cheers). The statement was certainly pleasant and was equally true. The two were essentially the same and there could be no opposition between them. There was, in his opinion, no difference between the modern development of medicine known as Allopathy and the ancient Indian system known as Ayurveda. Pharmacopoeia should not be confused for the system of medicine.

It was the duty of students to discover the unity of these systems and seek the truth in the practice of their professions. That should be the aim of the medical student in India.

Let them all pursue truth and let there be no "caste" among medical men. The one common goal of all of them should be to get at the best, the most advanced and the most effective methods of treating disease and to this end they should take in all the material available.

The Government School of Indian Medicine, the Premier continued, had a great future. It had "a proper mixed curriculum" and in that way was superior to other institutions. Their confidence in their ancients should give them strength to pursue truth.

But do not quarrel with me for not giving you this or that much. Do not create troubles and difficulties. We are trying to serve a very poor country which has long been waiting for relief and for happiness and prosperity. Let all of us contribute each his or her bit to this end and achieve the goal that is before our country." (cheers.)

What all the Premier said has the effect of a brilliant speech from the mouth of the leader opposing the Government for their policy in wasting public funds in running two sets of medical institutions the 'Eastern' and the 'Western' when 'the two systems were essentially the same' to quote the Premier's opinion.

The Premier said by way of intro-

duction that at the gatherings of the type he addressed that day he at times talked in 'a light vein'. We wish it were so even at the Government Indian Medical School which the Premier declared as 'superior to the other institutions' for in his opinion it 'had a proper mixed curriculum'. As anticipated by him this statement of his 'must be causing offence' not to 'some medical men and even medical students' but to a considerably large section of medical men and students belonging to the Eastern system as well. For the Premier must know that Ayurvedic Physicians not belonging to the Government School of Indian Medicine have been protesting that the methods of teaching Ayurveda at the Government School far from regenerating the Eastern system is definitely detrimental to the very system. When the Premier referred to the 'proper mixed curriculum' in the Government School of Medicine he must have meant that both the Eastern and Western Systems of medicine were taught in the School. The course of studies in the Government School of Indian Medicine extends only for four years which period is now universally considered to be inadequate to teach the Western System of Medicine in Schools pertaining to this system. We wonder if the Premier during his extensive tours in the Province had seen that as a matter of fact the students that passed out from the Government School of Indian Medicine actually practised the Western System at least a large majority of them. We might say that we gathered this information not only in the very Government School of Indian Medicine in Madras but also from a large number of students that passed out from the School. The state of affairs do not seem to be different in other provinces. The Hon'ble Health Minister of Bombay endorsed the view expressed by us after his personal inspections of many of the institutions of Eastern medicine in that Province. The 'mixed curriculum' has been distinctly harmful to both the systems and enable the votaries of the 'mixed curriculum' to create a feeling of false safety in their patients.

Though the Premier has a predilection for the Eastern system, he seems to have no bias for the Western. It is too much for the Premier to expect students to be synthesists especially so when the Government are running two Medical Departments under a Diarchical System. Synthesis can only be brought about by the Government. The opposition is likely to ask the Premier if the Government were justified to spend nearly a crore of rupees on Western System of Medicine and not even a lakh and a half for the Eastern System when it was the considered opinion of the Premier that the latter system is superior to the former. The Premier has really '*created troubles and difficulties*' which he wished to avoid from the students of the Government School of Indian Medicine. He had put forcible arguments into the mouths of others '*to create troubles and difficulties*' which his trusted colleague, the Health Minister will have to meet.

Toll of Diseases in India:—The Public Health Commissioner with the Government of India in his report for the year 1936 mentions that there were nearly 6,400,000 deaths in India of which approximately 160,000 were due to Cholera; 13,000 to Plague; 3,600,000 from Fevers of all description; 280,000 from Dysentery and Diarrhoea; 490,000 from respiratory diseases, 1,730,000 from all other causes. It is not known how far the special Health Staff in charge of Public Health has been responsible for decreasing the death rate in individual Provinces where independent Public Health Departments have come into existence in recent years. We do not for a moment underrate the work turned out by the Public Health Department in the Provinces but we cannot resist the temptation of expressing the general impression even amongst medical circles that the bulk of work turned out by the Preventive Department is not felt. This may be due to many causes including the one put forward by the Public Health Commissioner that the Preventive Staff is inadequate to meet the demand. While referring to the heavy figures of death, the Public Health Commissioner pointedly mentions about the urgent need for the

extension of rural medical relief on a large scale. The Public Health Officers will be able to do substantial good work in rural areas with the help of the Subsidized Rural Practitioners. Amongst the eleven provinces in India Rural Medical Relief Scheme seems to be more extensive in the Madras Presidency than anywhere else. Bombay has just begun the experiment. In the Punjab the scheme is reported to be not popular, in Bihar it has not made a mark so far. In the rest of the provinces nothing is heard. Excepting in the Punjab which is a non-Congress Province, in the rest of the Provinces where the scheme exists on a meagre scale, it is likely to be extended on a larger scale but the tendency seems to subsidize practitioners of all the existing four systems, the Allopathic, the Ayurvedic, the Unani and the Siddha. Homoeopathy may also have a share in all other Provinces excepting in the Madras Presidency where the Public Health Minister openly disfavoured the idea of encouraging this system which he did on the floor of the Legislative Assembly during the last budget session. The question naturally arises if Public Health work could be entrusted to the practitioners of indigenous systems. The Madras Health Minister usually does not mince matters and there was a recent announcement in the newspapers that the Madras Government intended to give a special course in Public Health Work to the Subsidized Practitioners belonging to the Scientific System of Medicine. As the pendulum of Public Health measures have to depend upon political winding we are afraid even with the extension of Rural Medical Relief Scheme whether, it will ever be possible to decrease the toll of preventable diseases in this country which has the notoriety of being a reservoir of epidemic diseases especially Cholera. The fate of India depends upon the Working Committee of the Congress and unless there are persons in that Committee having requisite knowledge of Public Health Work to the extent the Public Health Commissioner is expected to possess it is likely India will continue to live up to the evil reputation of being a hot bed of diseases known and unknown.

Rural Practitioners to Wake Up:

There cannot be any doubt that the Rural Medical Practitioners will have to play very important part in the reconstruction work in the villages though in the village uplift schemes so far formulated either by the Government or other public bodies in this province or elsewhere very little is mentioned about them. The Public Health Commissioner expects that with the extension of Rural Medical Relief Scheme the toll of death is likely to decrease in India and it augurs well in the Madras Presidency that the Public Minister who has introduced the Public Health Bill in the Assembly is preparing the Subsidized Practitioners to meet the responsibilities expected of them to be the Rural Sanitary Officers, in addition to their being the Rural Medical Officers. We hope that Madras Health Minister who is likely to lead his comrades in other provinces in the way he did in regard to the introduction of uniform standard of medical education, will soon realise the necessity of bringing the Subsidized Rural Medical Relief directly under the Government control and confer on the Subsidized Practitioners freedom of action in matters concerning their profession so that they might feel their independence and co-operate with the Government heart and soul keeping in view the ideals of service consistent with those of the National Congress. Servitude under which the Subsidized Practitioners are at present groaning has been a great hindrance for the evolution of Rural Medical Relief which has a great future not only to evolve the growth of independent medical profession but also to solve the question of Medical Relief in Rural areas. We would advise the Subsidized Practitioners of the Madras Presidency to wake up and shake off the inferiority complex now surrounding them. It is true that this complex is not of their own making. The more so it is easier for them to get rid of it. They should make their Association as their mouth piece to assert their rights and privileges and steer clear of the party factions minding only their noble and legitimate work of making the villages a healthy place to live in.

Government proposes; District Board disposes: We refer the readers especially the Subsidized Rural Medical Practitioners of the Madras Presidency to an order of the Government of Madras on the question of termination of the services of a Subsidized Practitioner in one dispensary with a view to appoint him in another dispensary published in the Correspondence Columns. The question arose on account of indiscriminate transfers made in one or two districts by the presidents, District Board. When a reference was made to one such President of the District Board by the President, Madras Provincial Subsidized Rural Medical Practitioners' Association that Subsidized practitioners could not be transferred as per terms of the agreement executed by them, the Vice-President of the District Board informed the President of P. S. R. M. Ps' Association that he did transfer the practitioners with the previous sanction of the Surgeon-General. Then the Surgeon-General was addressed on the subject and as his reply was not satisfactory the matter was placed before the Government. The G. O. referred to above is a reply on this subject.

Clause 10 of the form of agreement referred to in the G. O. runs thus:

"The practitioner shall not be liable to transfer from one dispensary to another. If after obtaining the opinion of the District Medical Officer or the Principal, Government School of Indian Medicine as the case may be the Board considers that the dispensary is not working satisfactorily it may close the dispensary after giving three months notice in writing to the practitioner."

The provision that the Subsidized Practitioner should not be transferred is mandatory. Yet the District Board Presidents did transfer the practitioners and the practitioners meekly submitted fearing that in case they disobeyed the orders of the District Board Presidents their services might be terminated making disobedience of orders a plea. Appealing to the Government tantamounts to the practitioners not having any work till the date of disposal of the appeal which means actual starvation in a village. So the practitioners preferred submitting to unjust

orders rather than starve. To avoid repetition of such hardships the Government was requested to issue instructions to the Presidents of District Boards not to transfer rural medical practitioners. The Government would not have lost anything at all but the suffering Subsidized Practitioners would have gained much if the Government were pleased to inform the concerned District Boards that what was against the conditions of the Agreement to which the District Board is a party.

A few months ago Subsidized Rural Practitioner in Tinnevely District was served with a notice terminating his services assigning no cause at all but merely mentioning that the period of one year mentioned in the Agreement was over. On 25th January the representatives of the Provincial Subsidized Rural Medical Practitioners' Association waited on the Hon'ble Dr. T. S. S. Rajan, the Minister for Public Health to discuss some of the clauses in the Agreement form with a view to modify them consistent with the spirit and the principles of the scheme and the very first request from the deputationist was that the period of service should not be mentioned in the agreement and if mentioned it should be a period not less than five years. It was even pointed to the Minister that some of the subsidized practitioners were harassed by the Presidents of the District Boards on this score. The Minister informed the deputationists that it was not necessary to mention the above condition in the Agreement but the Government would issue instructions to the District Boards to keep up to the principles of the Scheme and not to terminate the services after the period of one year though mentioned

in the agreement. When the Presidents, District Board do not respect the principles of subsidized rural medical service, the Subsidized Practitioners naturally despair.

When the Government is drafting a new agreement embodying the decisions arrived at by the Public Health Minister, when the representatives of P. S. R. M. Ps' Association waited on him on 25-1-38, some of the District Boards are agitating to nullify even the existing conditions such as the transference of practitioners. The East Godavari and the Malabar District Boards have passed resolutions to this effect. We advise the Subsidized Practitioners not to lose heart on account of passing events. They should organise themselves and keep on the agitation for progressive reforms in Rural Medical Relief Scheme. Their agitation should be in the direction of getting for the villages the maximum benefit on account of their work and of establishing freedom of action in welfare work without being affected by political currents or party factions.

An Announcement :—We are requested to announce that the next Post Graduate Course in Leprosy at the Lady Willingdon Leper Settlement, Tirumani, Chingleput District will commence on 22nd November and end on 6th December 1938. Applications for the course must reach the office of the Medical Officer by the first week in November.

A Correction :—The President of the Saidapet Health Association whose work was commented upon in these columns last month is Mrs. Buck and not Mr. Buck.

Correspondence, Reports, Etc.

THE MADRAS PROVINCIAL SUBSIDIZED RURAL MEDICAL PRACTITIONERS' ASSOCIATION.

Memorandum submitted to the Government of Madras by the President, The Madras Provincial Subsidized Rural Medical Practitioners' Association relating to some of the Resolutions passed at the Annual gathering of the Association which met at Manachanalloor, Trichinopoly District on 26-6-1938.

The Government may be aware that the Subsidized Practitioners belonging to the Allopathic System of Medicine met in Conference at Manachanalloor on 26-6-1938 and the Hon'ble Dr. T. S. S. Rajan, the Minister for Public Health was pleased to honour and encourage the Association by his presence at the Conference which he was kind enough to open. At the annual meeting of the Association 21 Resolutions were passed which were published in the June issue of The Medical Practitioner, a copy of which was sent as usual to the Secretary to the Government, Education and Public Health.

Resolution No. 6 conveyed to the Hon'ble Dr. T. S. S. Rajan the heart-felt gratitude of the Association for his having announced at the Conference that the tentative conclusions arrived at during the interview which the representatives of the Association had with him on 25-1-1938 would be incorporated in the form of Agreement to be executed by the Rural Medical practitioners and that a Government Order containing these conclusions and a consolidated form of Agreement would issue early.

The Association realises that the publication of the G. O. relating to the above subject may take some more time as the new Agreement form may have to undergo legal scrutiny and other formalities. As some of the District Board presidents are pressing the Subsidized Practitioners to execute the Agreement as

per the old form, the Association prays that the Government may be pleased to advise the District Boards to postpone the execution of the Agreements till the new form of Agreement is approved.

Resolution No. 7 which is self explanatory runs as follows:—

"The Conference views with satisfaction the recent G. O. relating to the transfer of control of Subsidized Midwives entirely to the District Medical Officers and for the same reasons mentioned by the Government in the G. O. relating to the subject, suggests respectfully to the Government that the entire control of the Subsidized Rural Medical Relief Scheme be vested in the Surgeon-General with the Government of Madras as the Government is aware of the persecutions and victimisations of Subsidized Practitioners by the Local Bodies, and such a transfer of control will, in the opinion of the Conference, enable the Subsidized Rural Medical practitioners to evolve into a self-reliant Scheme of Medical Service as envisaged by the Hon'ble Dr. T. S. S. Rajan this day in his address to the Conference."

The association wishes to inform the Government that in the Bombay Presidency where the Government and District Board share the expenditure of running Subsidized Medical Service in certain proportion as is the case in this province, the appointment of the Subsidized Practitioner is made jointly by the Civil Surgeon and the President, District Board, subject to the final approval of the Surgeon-General. The Bond executed by the practitioner is in the custody of Civil Surgeon. The Bill for the subsidy or for any allowance is to be submitted to the Civil Surgeon who countersigns the same and payment is made directly from the District Head Quarter Treasury or the nearest Taluk Treasury. It is most appropriate that a Subsidized Practitioner should be directly under the control of the Head of the Medical Department. The District Board Presidents in the Bombay Presidency have only the right of inspecting the Dispensaries. The Association therefore prays that the above resolution may be given effect to as it makes for efficiency and prevents a great deal of discontent that now prevails among the practitioners.

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Regarding Resolution No 8, which is a prayerful suggestion to the Government that the Rural areas should be the first concern of the Government regarding the expenditure for Medical Relief, the Association does not feel it necessary to say anything more than what this resolution conveys.

The 9th Resolution is a reiteration of the Resolutions No. 9 and 10 passed by the Association at Bezwada where it met on 24—4—1935. They run as follows:

Resolution No. 9 (1935): "This Conference brings to the notice of the Government that some Subsidized Practitioners have not yet been equipped with the most necessary Surgical, Dental and Midwifery instruments in spite of G. O. No. 761 P. H. dated 7th April 1925, reiterates resolution VII of the II Conference and requests the Government to direct the District Boards to make such supply as one of the conditions of the Agreement, the allotment for such supply and equipment to be separate from that of drugs.

(b) This Conference requests also that every Subsidized Practitioner shall be allowed every year a sum not exceeding Rs. 40 in addition to the cost of drugs for the repair or renewal of old and worn out instruments or for the purchase of new ones.

(c) Also in view of the heavy discount excise, packing and transit charges, this Conference requests that every practitioner should be supplied with drugs to the actual value of Rs. 360 a year and that the other such incidental charges should be borne separately by the District Boards.

Resolution No. 10 (1935): As it is the experience of many practitioners that the drugs supplied to them at District Boards' cost are not even sufficient to meet the requirements of the ordinary poor that seek relief at the practitioners' residence and as those practitioners with midwives attached find it a great handicap to be obliged to supply from such stock the midwives' requirements for their use outside the dispensary, this Conference earnestly requests the Government to direct that all the requirements of the midwives shall be separately budgeted for and supplied on separate indents by the District Boards.

In the best interests of efficient medical relief in the villages where the practitioner cannot even get a loan of instruments in any emergency, the Subsidized Dispensary should be made self-sufficient as far as possible. The fact that some of the District Boards have been negligent in spite

of a specific G.O. on the subject dated 7th April 1925 should convince the Government of the necessity to make specific mention in the agreement about the supply of such instruments that are considered indispensable. If, for any reasons the Government find that there is no need to mention this in the Agreement a definite order may be passed by the Government that such of the Dispensaries as have not been supplied with the specific instruments should be so supplied without further delay.

The request that a reasonable allowance should be given to the practitioner for the repairs of instruments or for buying new ones on old one being condemned by the D. M. O. is modest and reasonable having special regard to the financial condition of the Rural Practitioners. The Government may be pleased to consider this request favourably.

Equally reasonable is the request that the Practitioner should be supplied drugs free of packing and conveyance charges etc. The freight will depend upon the distance and other incidental causes. So there will not be any uniformity. The dispensary which is most distant from the Government Medical Stores will necessarily suffer most regarding the drug supply as a large amount will be adjusted towards freight. Moreover it is clear from the wording of the Agreement that the practitioner should be supplied drugs actually worth Rs. 360. It is natural that the same should be the intention of the framers of the Agreement originally. It need hardly be submitted that a practitioner would feel crippled by the want of drugs and instruments and full use cannot be made of the money spent on the Scheme.

Regarding Resolution 10 of 1935 it may be said that when the Subsidized Rural Relief Scheme was first started, midwifery practice was not so much in demand as it is now. A special allowance may be given for drugs relating to Midwifery work proportionate to the work turned out at the dispensaries.

Resolution No. 10, (1938) runs as follows:—

"The Conference brings to the notice of the Government the inordinate delay at times even for a period of two months regarding the passing of the Subsidy Bills consequent to the delay of the District Boards not communicating the sanction of leave availed of by the Subsidized Practitioners which delay prevents the District Medical Officers from passing the Subsidy Bills with the result that the Practitioners are put to great hardship in not realising the Subsidy earned by them in time. The Conference therefore requests the Government to vest the power in the District Medical Officer of granting permission to Subsidized Practitioners to avail of holidays whenever required by them."

In the Bombay Presidency the Civil Surgeon is the sole authority to grant leave. If the same rule is followed in Madras it will not in any way be detrimental to the interests of the Rural Medical Relief Scheme. The District Board cannot possibly object if the D. M. O. is made the authority to grant leave. As the natural and proper head of the medical staff it is inevitable that he must be entrusted with the duty of granting leave and making arrangements for the work during the period of leave.

The 11th Resolution is as follows:—

"The Conference points out to the Government that District Boards have generally failed to give effect to the G. O. No. 9156 P. H. dated 7—8—1937 and amendments thereon which now form clause No. 12 of the Agreement executed by the Subsidized Practitioners in either not appointed Subsidized Practitioners to the vacancies in preference to others or not appointing the Subsidized Practitioners in charge of a Subsidized Dispensary which dispensary the Government sanctioned to be converted into a L.F. Dispensary consequent on the increasing demand of medical relief in localities where the Subsidized Dispensary existed; the Conference therefore respectfully requests the Government to keep in view the G. O. referred to in the resolution when Local Bodies approach the Government to accord sanction to the appointment of medical Officers in L. F. Dispensary or for the purpose of converting Subsidized Dispensary into L.F. Dispensary. The Conference further requests the Government that the District Boards should be advised to the effect that whenever the temporary or permanent vacancies in the cadre of Medical officers in L. F. Dispensaries in a District arise the seniormost Subsidized Practitioner of approved merit should be selected to fill in the vacancy."

The Association as a whole does not favour the idea of the conversion of Subsidized Dispensaries into full fledged L.F. Dispensaries nor does a large section of the Subsidized Practitioners wish to enter regular L. F. Service. As far as I could judge a majority of the practitioners desire that they should not be disturbed from the field of their work. On 25th January 1938 the representatives of the Association told the Hon'ble Minister that if the demands of medical relief in a locality called for the establishment of a dispensary with the staff and equipment of a regular L. F. Dispensary, the practitioners are willing to work as honorary medical officers in charge of such dispensaries and forgo the subsidy. It is also against the spirit of Subsidized Rural Medical Relief Scheme to convert Subsidized Dispensaries into L. F. institutions. The Association passed this resolution having in mind the pressure brought to bear on the Government by some of the District Boards to convert Subsidized Dispensaries into L. F. Dispensaries. In case it becomes the settled policy of the Government to convert Subsidized Dispensaries into L. F. Dispensaries which the Association very much doubts, the Association respectfully presses the claim of Subsidized practitioners to regular L. F. Service seniority and merit be taken into consideration for selection. It is submitted that the hard work of the Rural Practitioners raises the status of the Subsidized Dispensaries and makes it popular. It is only just therefore that they should reap the benefit of this work.

Resolution No. 13:—

"The Conference views with great concern a tendency in some of the District Boards for converting Subsidized Dispensaries of Allopathic Medicine into Subsidized Dispensary of Ayurvedic medicine on some excuse or other even against the advice of the District Medical Officers who certify to the popularity and usefulness of Subsidized Dispensary of Allopathic System of Medicine and therefore requests the Government not to accord sanction to such conversion (especially against the advice of the District Medical Officers) as such conversions violate the principles and the spirit of Subsidized Rural Medical Relief Scheme and make the Scheme very unpopular. The Conference further wishes to bring to the kind notice of the

Government that termination of the services of a Subsidized Practitioner for the purpose of converting an Allopathic Dispensary into an Ayurvedic Dispensary is not contemplated in the Agreement and therefore is *ultra vires* if not illegal."

The Association respectfully wishes to point out to the Government what happened in the case of the Subsidized Dispensary, Kilayur. The District Board, East Tanjore District first served a notice on the practitioner who had been in charge of the dispensary ever since the Subsidized Rural Medical Relief Scheme came into operation to the effect that this dispensary would be converted into an Ayurvedic Dispensary in response to the wishes of the Panchayat Board of the village. The District Medical Officer, it is stated, did not agree with the Board to terminate the services of the practitioner on this ground and the practitioner also protested. Later the District Board brought forward another excuse to terminate the services of the practitioner and said that the dispensary at Kilayur was superfluous. This suggestion also was disapproved by the District Medical Officer. The records of the Kilayur Dispensary show that this is one of the most popular subsidized dispensaries and that *'the practitioner is conscientious and hard working and is popular with the local population.'* The Association also learns that the Panchayat Board of Kilayur and one or two Panchayat Boards in the neighbouring villages and also the villagers residing in Kilayur and adjacent villages have memorialised to the Government to retain the Subsidized Dispensary at Kilayur. Under the circumstances the Association views with grave concern the recent G. O. on this subject which while not approving the action of the District Board, East Tanjore instructs the Board to terminate the services of the unfortunate Subsidized Practitioner giving him six months' notice. Though the Association notes with relief that the G. O. instructing the District Board to terminate the services of the existing Subsidized Practitioner contains a condition that an Ayurvedic Dispensary should not be opened at Kilayur in case the practitioner continues to practise in the same village, the Association

feels very much humiliated that the affairs connected with this episode were such as not to justify the termination of the services of the practitioner as per the conditions of the Agreement. It will be little short of a tragedy if a medical institution were to be made the sport of local politics and the voice of the D. M. O. should be drowned by the noise of the factions.

Resolution No. 14 :—

"As it is the experience of some of the Subsidized Practitioners that the District Boards delay in sending their indents to the Government Medical Stores the Conference requests the Government to advise the District Boards not to commit such delays and as it is not possible for the Government to know which District Boards commit these delays, the Subsidized Practitioners are requested to bring these delays to the notice of the General Secretary through the Joint-Secretary of the respective territory."

The delay in getting supply of medicine will not arise if the District Medical Officer is entrusted with this work as in Bombay, the District Board being asked to remit the amount to the Government Treasury in advance. It is likely that the people will lose faith and attendance fall off if the medical practitioner is present in the Dispensary and not the drugs he is to dispense.

Resolution No. 15 :—

"The Conference requests the Government to advance loans to the Subsidized Practitioners for the construction of suitable buildings for their residence, the amount of loan to be returned in easy instalments to be deducted from the subsidy."

As in Bombay Scheme of Subsidized Rural Medical Practice it is desirable that the Local Bodies provide the building for the location of Subsidized Dispensaries. If this is not possible the next best thing would be to advance loans on proper security. It is desirable that a Rural Practitioner should have a permanent habitation of his own for himself and his dispensary and not be at the mercy of local landholders and leaders of factions.

Resolution No. 16 :—

"The Conference requests the Government that till the Subsidized Rural Medical Relief Scheme is made self-reliant so as to secure free medical relief to the necessitous poor in the Rural areas the existing Subsidized Dispensaries should not be closed even if there were to be qualified practitioners in a village where a Subsidized Dispensary exists."

The Association are not in favour of opening Subsidized Dispensaries in villages where qualified practitioners have settled but does not approve the idea of transferring or closing an existing Subsidized Dispensary in villages where Subsidized Dispensaries already existed as the indigent villagers who get free medical service will be deprived of the same.

In conclusion the Association begs to be excused if it reiterates its prayer to the Government which it does most respectfully that the Subsidized Rural Medical Relief Scheme will work more satisfactorily if the Government are pleased to transfer the control to the Surgeon-General, the District Board having the power of supervision. This has been possible in a sister province.

The Rural Practitioner has to contend against a good deal of ignorance, apathy and prejudice in the villages where even now quacks of all descriptions hold the field. The Association only prays through these resolutions that the hands of the practitioners may be strengthened by a sympathetic Government so that the rural dispensary may be helped to reach a widening circle of patients and that rural medical relief be made effective in the villages which make India.

V. RAMA KAMATH,
MADRAS, } *President,*
30th August, 1938. } P. S. R. M. PS'
Association.

Education and Public Health Department.
G. O. No. MS. 1810 P. H., dated 17th May 1938.

ABSTRACT.

Medical Institutions—Rural (subsidized) Termination of services of a medical practitioner in one dispensary with a view to appoint him in another dispensary—provision in the form of agreement—considered unnecessary.

Read the following :—

From Dr. V. Rama Kamath, No. R. M. P. S. 7/177, dated 23rd February 1938.

From the Surgeon-General, In. R. No. 3486 Hospls., dated 24th March 1938.

ORDER :—

The Government consider that there is no need to provide for the termination of services of a rural medical practitioner in one dispensary with a view to appoint him in another rural dispensary even in exceptional cases. They do not consider it necessary to issue any instructions to the Presidents of District Boards not to transfer rural medical practitioners, as the provision in clause 10 of the form of agreement to be executed by medical practitioners in charge of rural dispensaries is clear on the point.

(By Order of His Excellency the Governor.)

C. H. MASTERMAN,
Secretary to Govt.

To the Surgeon-General,
To Dr. V. Rama Kamath, Vepery, Madras.

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