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सर्वजनाः सुखिनो भवन्तु

THE MISCELLANY

Managing Editor: Dr. P. A. S. RAGHAVAN

MONTHLY JOURNAL OF THE SOUTH INDIAN BRANCH
INDIAN MEDICAL ASSOCIATION

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Vol. XVII

MARCH 1951

No. 9

Souvenir of the 5th South Indian Medical Conference held in Mangalore on October, '50.

Unlike in the previous years, the Souvenir of the 5th South Indian Medical Conference was not handed over to the delegates at the time of the Conference but this lapse has been justified by subsequent events. Now, though three months later, not only the delegates who attended the Mangalore Conference, but all members of the South Indian Branches, numbering nearly 1500, have each received a hefty volume of the Souvenir. If it had been delivered at the time of the Conference only the delegates would have got them and there would not have been enough time to peruse the same at leisure and many might forget to carry them home. This has now been obviated.

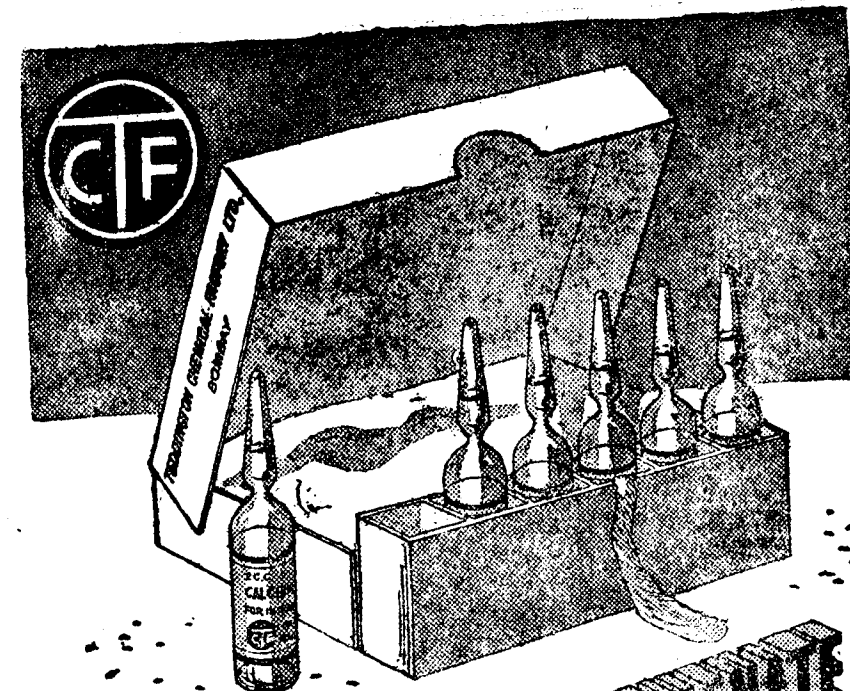
The Souvenir contains about 150 pages of reading matter with about 50 pages of advertisement and 15 art paper photographs of notables in the country, prominent figures in the Association and various views of the Conference sessions and places of interest in and around Mangalore. The Welcome address of the Chairman of the Reception Committee, Dr. U. P. Mallayya M.L.A., the Presidential address of Dr. U. Krishna Rao, the inaugural addresses of Dr. J. C. David, the Surgeon General with the Government of Madras, who opened the Conference and Dr. T. Lakshminarayan, the Director of Public Health who inaugurated the Scientific Sessions are all included. Special articles on various subjects and the papers read at the Conference also find a place therein.

The proceedings of the open Conference and meeting of the Provincial Council have been included.

The printing and get up are excellent, a foretaste of which was given in the invitation and programmes supplied well in advance of the Conference.

The Mangalore Branch of the Indian Medical Association should be congratulated on the thought and care bestowed for the success of the Conference and its culmination in the supply of the Souvenir.

MANAGING EDITOR,
Jan. 1951.



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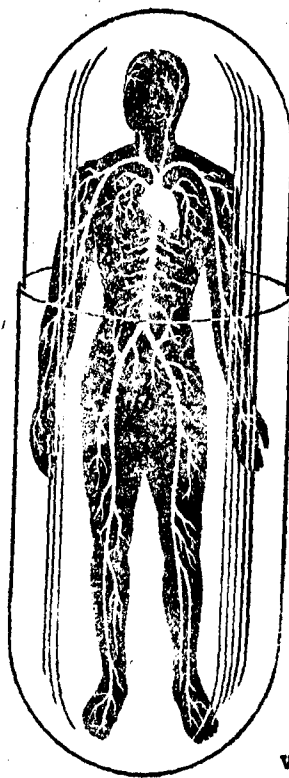
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THE MISCELLANY

MONTHLY JOURNAL OF THE SOUTH INDIAN BRANCH
THE INDIAN MEDICAL ASSOCIATION

VOL. XVII]

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[No. 9

EIGHTH TUBERCULOSIS WORKERS' CONFERENCE

HYDERABAD, 5TH. FEBRUARY, 1951.

Presidential Address

By Dr. K. VASUDEVA RAO, M.D., F.R.C.P., I.D.D.,

Dy. Surgeon-General with the Government of Madras.

Fellow Delegates and Friends,

I AM extremely grateful to the Tuberculosis Association of India and to you, the delegates of this Eighth Tuberculosis Workers' Conference, for having asked me to preside over this occasion. I feel that the burden should have fallen on better shoulders and on one who has devoted his whole life to Tuberculosis work than myself. Since it has been your command, I accept and discharge my duties to the best of my ability.

Before starting on a few musings in the garden of Tuberculosis over a period of a little over quarter of a century, I would like to place on record our deep sense of sorrow at the untimely death of Dr. K. S. Ray, who should have occupied this chair this day. His life was a monument of strenuous work and has demonstrated how institutions can spring around a person and the Tuberculosis Hospital at Jadupur, Calcutta is a standing monument of his work. We miss him very badly to-day and this Association sends its condolences to the members of the family.

Since the scientific and academic problems dealing with Tuberculosis are to be discussed later on in the Conference, I feel that my address is to be directed not so much to the specialists assembled in this hall, but to the general public and to the general practitioners outside. And therefore I intend surveying the recent ideas in the field of Tuberculosis.

The Tuberculosis Workers' Conference was started in 1934, and, but for a short period of break during the World War II, it has been meeting annually in New Delhi till 1946 and thereafter the Conference is being held in different cities of the Indian States with the sole purpose of giving opportunities to the delegates to see the different institutions and the work done in these institutions as well as acquaint themselves with the general problems of these parts of the States.

The problem of Tuberculosis is a vast one and strenuous efforts are now being made both in the Centre and in the States to bring this scourge under control; but unfortunately, only a fringe of the problem is touched. On an average, there are about one million people dying from Tuberculosis in India. Unfortunately a large majority of these deaths are between the ages of 18 and 35 when the persons are about to enter their lives after education and training. Such a colossal wastage of man-power means a much higher loss of revenue to the State and therefore it is essential that every possible step should be taken to decrease this immense loss of both man-power and revenues of the country. The recent mass radiography surveys in the United States of America have demonstrated that there are approximately 10 active cases for each death that occurs from Tuberculosis. With the conditions prevailing in India this proportion will be much higher. Commuted on this basis, there will be at least 10 million people suffering from active Tuberculosis out of which at least about 50 per cent or more will be in an infectious state. During the last 5 years, a survey has been made on the incidence of Tuberculosis among contacts in Madras and it has been found that the percentage of incidence among the contacts in the City of Madras was somewhere in the neighbourhood of 4.5 per cent whereas in the Western countries (in Wales) the percentage of the disease among the contacts is only 0.5 per cent.

To accommodate and look after these 10 million people who are suffering from active tuberculosis, facilities that are available in our country are meagre. Till the end of the year 1949, there were 7,295 beds in the whole Union of our country and during 1950, 520 beds have been added, thus making a total of 7,815 to serve a death rate of one million per year. This works up to one bed for every 128 deaths, whereas in countries like Denmark and New Zealand, there are about 2 beds for every death that takes place and in the United States of America it is being planned to have 10 beds for every death that takes place from Tuberculosis. The value of segregation in the control of Tuberculosis should never be forgotten and every attempt should be made to isolate the infected persons so that they may not serve as centres of infection to others. From 1942 to 1949 only 700 beds have been added in the whole of India and during 1949-'50, 525 beds have been added, whereas the mortality has been increasing in practically all parts of India. To isolate all these open cases of Tuberculosis, we should have at least 10 million beds and it will take a very long time to get this accommodation, probably some centuries, and we cannot wait for centuries to bring down mortality from Tuberculosis. And therefore, some other methods of control have to be adopted if any tangible reduction in the mortality from Tuberculosis is to be obtained and thus decrease the loss of man-power and revenue of the State.

This aspect of the question will be dealt with in two groups:—

The Preventive Aspect.

The Curative Aspect.

PREVENTIVE ASPECT

Provision for accommodating one million beds in the country will cost, on an average of about 800 crores of rupees, the cost being about Rs. 8,000 per bed. This does not include the running expenditure of the different institutions. No State can afford to spend such a large amount on this one disease alone. Even in advanced countries, the expenditure on Tuberculosis is

not completely borne by the State. In Switzerland the Government pays 15 per cent of the expenditure on Tuberculosis; in Greece 20.25 per cent of the expenditure on Tuberculosis and in the United States of America, a large amount is spent which is at least 50 times more per head on Tuberculosis than what it is in India. The oft quoted saying that 'Prevention is better than cure' must apply with equal force to this problem as well and therefore the methods must be found to prevent this disease and I would impress upon the public the value of improvement in the socio-economic condition of the people, the housing condition, the living conditions as well as the public health of the country, without which it is practically impossible to obtain the maximum benefit from any measures that may be adopted to eradicate this disease. These problems do take a long time to be solved in any satisfactory manner and would also involve large amounts of money to be spent. In addition to the improvements of the socio-economic conditions, it is also necessary to adopt measures that may be available for increasing or creating specific resistance to tubercle in addition to the natural resistance that is given by the improvement of the above factors. In this aspect, I would unhesitatingly recommend the nationwide vaccination with B.C.G. I know that the progress of vaccination of B.C.G. has been very satisfactory in most parts of India; but in the South it has not been as popular as one would expect it to be. A lot of unnecessary anti-B.C.G. propaganda has been carried on and imaginary evils have been attributed to it, with the result that the public has not yet made up its mind as to the efficacy of this line of defence. In any new venture, we are bound to have certain opponents and if by experience and by careful study, the good effect of the B.C.G. vaccination are demonstrated and at the same time the so called evils or complications or drawbacks are proved to be unfounded as shown by the follow-up of the cases, the public would realise that it has not been well informed and the criticism that has been levelled against it, has not been justified and therefore the response to this vaccination would be much greater than what it is to-day. This method of approach is being done in Madras and I expect that in the course of a few months there will be a rush for this B.C.G. vaccination and very soon it will come up to the standard that is being obtained in other parts of India. One team of vaccinators can vaccinate about 100,000 persons a year and at this rate we want at least 200 such teams to vaccinate all the tuberculin negative persons in the country during the next 5 years. A large majority of these people are below 20 years of age and therefore every non-reactor should be vaccinated and the successive children that are to be born should also be protected by this inoculation. Each team costs about Rs. 15,000/- a year and for 200 such teams cost Rs. 30,00,000/- (thirty lakhs) and roughly we want Rs. 6 crores for B.C.G. programme in the first year and Rs. 3 crores the succeeding years and this is much less than what it would cost if we are going to spend money on accommodation. Roughly we want at least 800 crores of rupees for the next 15 years to undertake the Anti-Tuberculosis scheme including the housing and nutrition. By this vaccination with B.C.G. coupled with the programme of improving the standard of living and the public health, it is possible that in the course of next 15 or 20 years, the number of deaths from Tuberculosis would naturally go down by at least 4/5ths and the number of institutions needed would be at least reduced by 75 to 80 per cent and it would be a very great gain to the State.

The preventive aspect of Tuberculosis deserves greater amount of propaganda than what it is done to-day. Very many educated people are

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[The Miscellaneous]

absolutely in the dark as to the incidence of this disease, its mode of entry, mode of infection and other aspects of the disease. Ordinary methods of hygienic living and the value of open air are not appreciated and therefore very intensive propaganda should be undertaken in the regional languages taking advantage of all exhibitions, cinemas, festivals and other occasions where large number of people congregate.

Mass Radiography.—Mass Radiography is very useful in finding out the symptomless cases of Tuberculosis. By this method, it is possible to X-ray about 150 to 200 persons per hour and thus give a correct idea of the incidence of Tuberculosis. The working cost is very much smaller and on an average it costs about two annas per miniature film.

I would like to sound a note of warning here that there is bound to be a certain amount of popular clamour and criticism as a result of this type of investigation. By the introduction of mass radiography a large number of cases of Tuberculosis would be detected and as it is, at present it may not be possible to accommodate the whole lot of them in institutions and the public would raise a hue and cry and say that adequate treatment has not been provided even though they have been diagnosed to be suffering from Tuberculosis. In the City of Madras, a mass radiography set has just begun to function and it is proposed to X-ray the whole of the population beginning with contacts. To house the cases that may be detected during this work, the Government of Madras have very kindly set apart two wards in the Tambaram Sanatorium to accommodate them. It has also to be realised that a large number of these cases would be in the initial stages when adequate treatment in the clinic or more rest at home would be enough to overcome the disease.

CURATIVE ASPECT

There is no denying the fact that segregation of the infected is still the pivot around which the control of tuberculosis revolves and every attempt should be made to isolate the infected person. As previously mentioned, the space available for isolation is meagre when compared to the demand and therefore some method must be evolved by means of which full use could be made of the few beds available for the institutional treatment of this disease.

Tuberculosis Clinic.—Tuberculosis Clinics are the most important institutions in any campaign against Tuberculosis. They serve a much better purpose though the popular clamour is for more beds in institutions. There has been a definite change in the outlook of Tuberculosis Clinics to what it was 2 or 3 years back.

In western countries there is one clinic for every population of 50,000, in India we want 4000 clinics for the whole country. Taking the City of Madras alone, with a population of 15 lakhs, we have six clinics, whereas we should have thirty clinics to cater to the needs of 15 lakhs of people.

Formerly, Tuberculosis Clinics were looked upon more as centres of preventive work rather than centres of treatment; but to-day the idea appears to be that these clinics should serve a far greater need from the point of view of treatment than what they have been doing before. As portrayed by Mr. J. B. McDougall of the W.H.O., it is the aim of the W.H.O. that these clinics should be centres of treatment including surgery excepting major surgery like Thoracoplasty. Formerly, it was thought that the Tuberculosis Clinic

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should confine itself to diagnosis, sorting of cases, examination of contacts, treatment of early cases, propaganda and medical education. Preventive aspect was more insisted upon than the curative one, with the result that most of these Tuberculosis Clinics or Dispensaries were not equipped for any surgical work. To-day every modern Tuberculosis Clinic is being equipped for surgical work and excepting major surgery like Thoracoplasty and Lobectomy, other operations like Thorocostomy and Phrenic Paralysis are being done in the clinics. This would, to a large extent, diminish the rush of patients to the already overfull sanatoria. Such institutions are greatly in demand and every place with a population of 50,000 must have one such clinic.

Sanatoria.—There is still a large amount of misconception among the public with regard to the location of sanatorium. They are under the impression that climate and altitude play a very important part in the treatment of Tuberculosis. These two have absolutely no effect in the treatment of acute cases of Tuberculosis. In salubrious climates, convalescence may be more rapid, but it is always best to treat people in their own home surroundings so that they may not suffer from change of surroundings. Tuberculosis Sanatoria and Hospitals can be located in any place irrespective of the climate, provided it is possible to get all the amenities that are necessary like water supply, drainage, lighting and food. It is not necessary that they should be on the slopes of hills. The sanatoria should be located as near the cities as possible so that they may be easily accessible both to the patients and relations and at the same time removed from the bustle and noise. It would be ideal to have one sanatorium for every 100,000 of the population. As it is, it is rather difficult to obtain this and therefore, it is suggested that 2 or 3 districts may join together and have one sanatorium to serve the purpose. It may be that it may not be possible to equip all the sanatoria for up-to-date surgical work and therefore it would be in the interest of the people of the districts concerned if a group of 3 or 4 sanatoria has one as a centre for surgical work so that patients requiring major surgical interference could be transferred to this selected centre for operations. This would materially decrease the cost of equipment necessary, as well as the recurring cost of the smaller institutions.

Self Dieting.—A large amount of the recurring expenditure of the hospitals and sanatoria goes towards the dieting of patients. It is suggested that this expenditure could be very greatly minimised if a larger number of patients are put on self diet and this could be done only if the institutions are very near the cities or towns.

At present most of these sanatoria are intended only for Pulmonary Tuberculosis. It is high time we think of Tuberculosis of other organs as well. I would suggest that every sanatorium should have at least one-fourth of its beds set apart for Tuberculosis of bones and joints and a separate section opened for Tuberculosis in children so that each Tuberculosis Sanatorium with its attached clinic would be a complete unit and serves as a centre for training in Tuberculosis.

Home for Chronic Cases.—Experience of over a quarter of a century has shown that in spite of attempts made, a few cases still are infectious in spite of their being in fairly good general health. There are also a large number of advanced cases who are not fit for any active treatment. These two

classes of people are still a source of danger to public health and therefore attempts have to be made to isolate these individuals. It may be possible to take the able-bodied people into some sort of vocation even though they are still infectious and their services utilised in such trades as carpentry, basket-making etc., yet the problem of the advanced cases is not so easily solved. At present a large number of beds in practically all the sanatoria are taken up by these advanced cases, thus denying the benefit of institutional treatment to early cases. These advanced cases cannot be sent out into the streets as they would be a source of infection to others and therefore it is essential that homes for chronic and advanced cases of Tuberculosis should be started in practically every part of the country and I would suggest that a group of sanatoria should have at least one such home so that all advanced cases from the sanatoria may be sent over to this Chronic Home to be kept there and attempts made to keep them as happy as possible till something happens to them. This question of providing accommodation for these chronic cases must be taken up almost immediately especially when we have very few beds available for the treatment of Tuberculosis in the various institutions in the country.

In the City of Madras, an attempt is being made to have such a hospital in the outskirts of the city, the hospital being built completely out of donations from the public. The local Tuberculosis Association has launched a scheme of selling one bed for Rs. 5,000/- to industrial and other concerns and 80 beds have been set apart for being sold. With 80 beds sold, it is expected to realise 4 lakhs of rupees, out of which a hospital to accommodate 200 beds for chronic cases will be constructed in the outskirts of the city. The Government may take over the day-to-day running of this institution.

The outlook in the Tuberculosis Hospitals and Sanatoria should materially change, because the modern conception appears to be to take the family of the patient as a unit and not the patient as the unit and consequently from the time the patient gets into a sanatorium, a sort of rehabilitation must be started for each individual case and the rehabilitation being of various grades. For this purpose, a large number of social workers are necessary.

During the early part of the patient's stay in the institution great amount of care must be bestowed to overcome certain difficulties such as initial shock of the diagnosis, fear of treatment, doubts and lowering of self-esteem, strain placed on personal relationship by separation and fear of infection. These can to a large extent be overcome by the Welfare Liason Officer or Social Worker undertaking this work. The Officer can help to lessen the initial dismay by engaging the interest of the patient in plans for treatment, thus removing to some extent the fear and assist him to face the situation. At the same time a useful discussion of the possibilities of employment and of the future could be of considerable help. Occasionally solving certain problems such as claims, pensions, correspondence etc., eases the mental condition of the patient.

There is an atmosphere of hopefulness engendered by the constant progression from hospital to sanatorium and on to settlement. The families of the patients have to get themselves to reorient their lives, often making certain sacrifices if necessary. Material assistance is necessary for the families and this mainly depends on the Liason Officer or Social Worker.

With all efforts made to give the best attention to the patients admitted in institutions, yet the end results are not as encouraging as they ought to be

because of the want of patient's co-operation. It is very easy to understand this want of co-operation on the part of the patients especially the poorer classes. Unfortunately the treatment of Tuberculosis is a long-drawn one and on an average a patient has to stay for at least 4 to 6 months before any appreciable improvement is effected and a poor patient whose existence is practically hand to mouth, cannot afford to stay in a hospital for this period. Many of these patients may not have laid by any amount for the rainy days with the result that starvation faces them. The patient who is the bread winner would naturally be upset by the hardships and difficulties that the family is experiencing and therefore would think of getting out of the hospital at the earliest moment so that he could earn something to feed the hungry mouths of his family. The result is that large number of these patients of the poorer classes go out of the sanatoria long before they have completely stabilised their improvement and therefore relapses occur more frequently among them than among others and this also to a large extent taxes the accommodation of the sanatoria. Such relapses can be prevented to a large extent and at the same time the mental condition of the patients could be eased and thus make them more willing to undergo the necessary treatment provided some measure of relief is given to the relations of the bread winner of the family when he is in a hospital or sanatorium by giving monetary help, at least Rs. 30 to Rs. 35 per month per family and this can only be undertaken by After-care Committees.

To be of maximum benefit, these committees must have influential social workers who command respect in the locality concerned.

TREATMENT.—With the advent of Streptomycin and other chemotherapeutic agents a revolution has taken place in the treatment of Tuberculosis and it looks as though this is a drug which has come to stay as a very useful weapon in the armamentarium of a Tuberculosis Specialist. By the use of Streptomycin the following benefits have been obtained.

- (1) The early exudative cases respond well to the treatment.
- (2) Many cases where surgery was contra-indicated are now made fit for surgery.
- (3) In a few cases where surgery was thought of previously, have now been completely arrested by this drug.
- (4) Complications, both post-operative and pre-operative, have been greatly controlled by this drug.
- (5) It has proved useful also in other forms of Tuberculosis like Miliary and Meningial Tuberculosis which were previously thought to be practically incurable.

Unfortunately this drug has got its own drawbacks and when used injudiciously, it produces certain complications. In certain types of Tuberculosis, the organism appears to have a tendency to grow more luxuriantly in the presence of Streptomycin and so the patient gets worse. In certain other forms the tubercle bacilli become resistant to Streptomycin and so Streptomycin has absolutely no effect on that particular individual. This second complication is a very great danger from the public health point of view because every Streptomycin resistant individual who transmits the disease among his contacts also are Streptomycin resistant with the result that the number of people who are resistant to Streptomycin would gradually increase and would be a positive danger to society and thus nullify the good effects of this drug. Therefore it

is absolutely essential that a very strict control should be maintained over the use of this drug and it should be administered only by persons who are capable of watching the patient carefully without producing this menace. If injudiciously used, it does more harm than good and therefore would be a positive danger of public health.

The efficacy of Streptomycin having been demonstrated, a large amount of this drug is being used in this country and a large sum of money is spent in the purchase of this drug though the price has come down from Rs. 25/- a gramme to Rs. 5/- a gramme. I would suggest that the Union Government should start a factory for the manufacture of this drug in India.

Medical personnel.—With the introduction of postgraduate education in Tuberculosis, a large number of medical men are taking up this speciality. But this number is still inadequate. The training of specialists in the various branches of medical science is now being discussed in the many States of India and it appears to me that it will be in the best interests of the public and the society that these specialists must have a sound basic knowledge of the general subjects e.g. a specialist in E.N.T. or in Orthopaedics must have a good basic knowledge of general surgery and therefore no person should be allowed to specialise himself unless he has M.D. or M. S. as a basic qualification because in all these specialities general medicine and general surgery play an important part and I fully believe that in future years the standard of specialists would be much higher if this principle is adopted. At least the Universities would do well to take this suggestion. As far as Tuberculosis is concerned, one cannot be a high grade specialist unless he has sound knowledge of general medicine and I personally believe that the M.B., B.S. standard is not enough. He must be an M.D. before he thinks of taking up specialisation in Tuberculosis. The same principle, I am told, is being applied to other branches of specialities like Bacteriology, Pathology and others.

Teaching of Tuberculosis in Schools and Colleges.—There has been no uniform standard adopted for teaching of Tuberculosis both for under-graduates and post-graduates. It would be advantageous if the Tuberculosis Association of India could draw up a syllabus for those two courses and recommend it to the Medical Colleges and Universities for inclusion in their curriculum.

Refresher Course.—The co-operation of the general practitioner is absolutely essential in any campaign against Tuberculosis especially so when the accommodation for institutional treatment that is available is so meagre and some sort of home treatment must be given to a large number of patients. It is practically next to impossibility to ask the clinic doctor to go to the homes of these patients. The general practitioner must be educated in the ordinary lines of treatment of Tuberculosis. For this purpose it is necessary that a Refresher Course in Tuberculosis must be held in different parts of the State more frequently than what is done now. It should be realised that the course is intended for busy private practitioners and therefore must be arranged in such a way that it does not interfere with the ordinary daily work. I would suggest that this course may be held in the cities in the attached Medical Colleges and in the Headquarters Hospitals to which place the Specialists could take the materials necessary, including patient for demonstration. The lectures and demonstrations may be held in the afternoons or in the evenings so that the practitioners might finish their work and attend the lectures and demonstrations. This would not cost any extra money and would facilitate a

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large number of private practitioners taking advantage of this course. If the practitioners are made to leave their stations for even one month, it would very greatly interfere with their work and therefore a large number of busy practitioners would not take advantage of this facility.

Research.—At present we are absolutely in the back ground as far as research in Tuberculosis is concerned. Very few researches either in the field or in the laboratory have been conducted in India. It is necessary that a research section should be opened on an all India basis either separately or in combination with other types of researches at a central place. The research workers must be paid well so that they may be above want.

At present many of the sanatoria and hospitals are not provided with even ordinary laboratories for routine examination and therefore no bacteriological investigation could adequately be taken up on these laboratories. A questionnaire was issued to the different tuberculosis institutions during 1948 and 1949 and the answers received were most disappointing. In any research it is essential that we should have the co-operation of other branches like Bacteriology, Biochemistry, Pharmacology etc., and therefore any research centres that are to be opened, should be in close association with Medical Colleges and other institutions where such investigations are undertaken.

Legislation.—I am convinced that effective measures for the control of the disease cannot be taken unless appropriate legislation is passed, declaring Tuberculosis is an infectious disease and therefore should be notified the moment it is detected and strict control should be maintained over the employment of tubercular individuals in schools and other institutions.

A Public Health Act on the same lines as the one at Madras of 1938 with stricter measures for enforcement should be adopted. Earlier this is done, the better.

Seals Campaign

For the first time in the history of Tuberculosis in India an attempt has been made to raise money for financing Tuberculosis schemes by the sale of Seals. As far as South India is concerned I am inclined to believe that this has not been a grand success. Possibly it is due to the fact that there has not been enough propaganda and the general public has not yet realised that by this method even the poor man can contribute his mite. Spontaneous outplay of enthusiasm, which is so marked in the western countries is conspicuously absent. I appeal to the well-to-do and to the poor alike to come forward with liberal purchase of these seals.

Urgency of the Problem

Isolated attempts made by individuals or private bodies such as starting a sanatorium here and there, will not solve the problem. A comprehensive scheme should be drawn up for each State laying down definitely the line on which this comprehensive scheme should be worked out on a three-year period, the ultimate goal being reached in the course of five to ten such periods. While drawing up the scheme it is essential to keep in mind the peculiar conditions prevailing in India. It will be best to have a separate Committee for each State which should work in close co-operation with the Government, the Local Bodies and the public.

ASSOCIATION NOTES

COIMBATORE BRANCH

President: Dr. M. G. Nair
Vice-President: Dr. I. Pitchai Robert
Hony. Secretary: Dr. K. V. Subramanian (Path.)
Associate Secretary: Dr. S. Balakrishnan
Treasurer: Dr. T. V. Sivanandam.

The 26th Annual meeting of the Coimbatore District Medical Association was held on Saturday, the 27th January 1950 at Bhavanisagar as a joint meeting with the Nilgris District Medical Association. About 150 members, including 30 members from the Nilgris District Medical Association attended the meeting.

Members and guests were treated with soft drinks on their arrival at Bhavanisagar by Messers N. Dasai Gounder & Co. of Coimbatore. Mr. A. Srinivasan, the Executive Engineer of the Lower Bhavani Project Head Works took the visitors round the dam site and clearly explained the details of the work in progress.

After a sumptuous lunch, the Annual General Body Meeting of the Coimbatore District Medical Association commenced with a prayer by Dr. R. Sundararajan. Major N. Krishnaswamy, the President presided. Dr. A. G. Leelakrishnan, the Secretary presented the 26th Annual Report of the Coimbatore District Medical Association for the year 1950. The Annual Report and the auditors statement of accounts and report which were appended to the Annual Report were adopted. Then the following Office-bearers of the Association for the year 1951 were elected:

President: Dr. M. G. Nair.
Vice President: Dr. I. Pitchai Robert.
Hon. Secretary:
 Dr. K. V. Subramanian (Path.)
Associate Secretary:
 Dr. S. Balakrishnan.

Hon. Treasurer: Dr. T. V. Sivanandam.
 Managing Committee Members:

1. Dr. Ananda Rao, K. Satyaman-galam.
2. „ Mrs. Anna Vareed.
3. „ S. V. Appaji.
4. „ S. Dorairaj, Hardypet.
5. „ N. Jagannathan.
6. „ P. K. Kalyanaraman.
7. Maj. N. Krishnaswamy.
8. Dr. A. G. Leelakrishnan.
9. „ M. N. Menon.
10. „ C. Nanjappa.
11. „ C. N. Santhanam.
12. Capt. C. T. Simon.
13. Dr. Y. P. Vasudevan.
14. „ A. K. Vasudeva Rao, Tiruppur.
15. Dr. G. K. Venkataraman, Gopichettipalayam.

The following members were elected to the Council of the South Indian Provincial Branch of the I.M.A.:

1. Dr. S. Ganapathy.
2. „ A. G. Leelakrishnan.
3. „ L. Munuswamy.
4. „ M. G. Nair.
5. „ Mrs. R. Saradhambal.
6. „ T. V. Sivanandam.
7. „ Miss S. V. Swarnambal.
8. „ B. S. Viswanathan, Perundurai.
9. „ K. V. Subramanian, Path.—
Ex-officio.

The following members were elected to the Central Council of the I.M.A.:

1. Dr. Mrs. Anna Vareed.
2. „ S. V. Appaji.
3. „ N. K. Sampath.

The retiring President, Maj. N. Krishnaswamy then thanked all the members for their cooperation and help

during his term of office and requested the new President, Dr. M. G. Nair to occupy the chair.

The clinical meeting began with an address by Lt. Col. J. C. Bharucha, I.M.S. (Rtd.) Ootacamund, on 'Modern Concept of Peptic Ulcer'. Dr. G. F. Scudder, Medical Superintendent, Scudder Memorial Hospital, Ranipet read an interesting paper on 'Intestinal Obstruction.'

Dr. S. Balakrishnan, the new Associate Secretary then proposed a vote of thanks to the members of the Nilgris District Medical Association for so kindly accepting their invitation for the joint meeting and to have attended the meeting in large numbers, to Lt. Col. J. C. Bharucha for his illuminating

address on 'Peptic Ulcer' to Dr. G. F. Scudder for his interesting paper on 'Intestinal Obstruction,' to Mr. A. Srinivasan, the Executive Engineer and the other Assistant Engineers for all the help they rendered in holding the meeting at Bhavanisagar, to Messers N. Dasai Gounder and Co. for their drinks, and to the members from Gopichettipalayam, Satyamangalam, Bhavanisagar and Thoockanaickenpalayam, who as the hosts for the lunch and tea, had made nice arrangements.

After tea, there was an interesting magic performance by Professor Chinna and it was very much appreciated by all the members and visitors. The pleasant function came to a close at 7 p.m.

MALABAR BRANCH

President: Dr. N. Achuthan, M.B.B.S.
Vice-President: Dr. R. Hermon, L.M.P.
Hony. Secretaries: Dr. C. V. Narayana Iyer, L.M.P.
 Dr. A. B. Das, L.M.P.
Treasurer: Dr. K. Seetharaman, M.B.B.S.

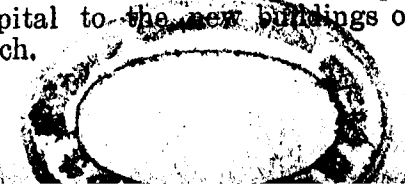
A meeting of the Malabar Branch of the Indian Medical Association was held on Saturday 27-1-1951 at 5 p.m. at the West Coast X-Ray Institute, Calicut with Dr. N. Achuthan in the Chair.

Condolence resolutions at the demise of Dr. W. F. Joseph, M.B.B.S. who was for a long time Superintendent of the Chevayur Leprosy Hospital and Srimathi Rasi Ammal (daughter of Dr. C. V. Narayana Iyer), her husband, Sri A. N. Sivaramakrishnan and their two children under tragic circumstance at the Boat accident at Alleppy on 19-12-1951, were passed all standing.

Dr. T. Balakrishnan, M.B.B.S. read an interesting paper on "Partial Gastrectomy." Dr. N. Achuthan, M.B.B.S. read an interesting paper to the members. Dr. A. B. Dass, L.M.P. read the minute of the previous meeting. The resolution of Dr. M. K. Koya, L.M.P. regarding holding meetings on Sundays instead of Saturdays as at present was put to vote and lost.

With a vote of thanks by the Secretary the meeting ended.

To meet Dr. J. C. David the Surgeon General with the Govt. of Madras, the Malabar Branch of the Indian Medical Association arranged a reception and Dinner on Thursday the 22nd February, '51 at 6-30 p.m. at the Calicut Cosmopolitan Club. The guest on arrival was received by the President and the Secretaries and introduced to the members. Dr. N. Achuthan the President welcomed the distinguished guest in a short speech. Dr. David in his reply thanked the Association for the honour done to him and appealed to medical men for their co-operation with the Government in the successful working of the Prohibition Act. Dr. C. V. Narayana Iyer proposed the vote of thanks and requested the Surgeon-General to hasten the shifting of the hospital to the new buildings on the beach.



MADURA BRANCH

President: Dr. P. Vadamalayan
 Vice-President: „ T. S. Renga Iyengar
 Secretary: „ K. G. Ramabhadran
 Asst. Secretary: „ A. S. Annamalai

The monthly meeting of the Association was held at 5 P.M. on Saturday the 27th January 1951 in the Erskine Hospital, Madurai. About 60 doctors attended. After tea the meeting commenced with Dr. P. Vadamalayan in the Chair.

The minutes of the monthly meeting held on 16-12-1950 were read by the Hony. Secretary and adopted. The Hony. Secretary then read out Circular No. 14/50-51 of the Central I.M.A. He then gave a short *resume* of the All India Medical Conference held at Sholapur which he had attended and spoke about some of the salient features, such as reception arrangements for the delegates, open session, Central Council meeting, catering arrangements, transport, exhibition and scientific sessions etc. etc. He said that the reception committee had to be congratulated on the success of the Conference.

The President then called upon Dr. (Mrs.) T. S. Soundaram Ramachandran to give her talk on village Medical Service. Dr. Soundaram explained in detail the insanitary conditions obtaining in the villages and the extreme poverty of the villagers. From her personal experience in the villages during the past few years she was of the opinion that prohibition was a real boon to the poor villager especially the womenfolk and pleaded with the members of the medical profession for a change in their outlook in this matter. She explained that most of the ills suffered by the villagers were due to poor and insufficient diet and the consequent anaemic condition of the people. She stressed the need for training midwives in such simple procedures as suturing a ruptured perineum, manual removal of the placenta and in the measures to arrest post-partum hæmorrhage. She said that there was

need for a trained village worker in every village or every group of villages with a population of 2,000, to educate the public on the spot about proper sanitation and maintenance of personal and community health and to give proper advice to the villager in case of sickness etc. She said that it would be sufficient if one doctor is available to help and advise 10 or 15 such village workers and that, in her opinion, would give a fairly adequate rural medical service. She finally appealed to the doctors in the urban area to look upon the illiterate village folk with sympathy and understanding and help them whenever possible. She requested each one of the urban doctors to select a village in the vicinity and visit the same regularly for a short period for what she termed as preventive work.

In reply to a question she said that it was quite necessary to advocate family planning in the villages but for the present, she felt that there was no easy or sure method of contraception that could be practised effectively by the villagers.

Dr. N. Suryanarayanan also took part in the discussion. Dr. Kannan presented three cases of Pseudo Hypertrophic Muscular Dystrophy affecting the male children of the same family. Their ages were 11, 8 and 3 and they were the first, second and fourth children in the family; the third child was not affected and was healthy. He demonstrated the progressive stages of the disease, the earlier stage in the child of three, intermediate stage in the child of 8 and the advanced stage in the boy aged 11.

With the concluding remarks by the President and the vote of thanks by the secretary the meeting ended at 7-15 P.M.

The 23rd Annual General meeting was held on 17-2-51 at the Victoria Edward Hall, Madurai. The Proceedings began at 11-40 A.M. After prayer, at the outset the Secretary moved a condolence resolution which was passed, all members standing for one minute.

“The 23rd Annual Conference of the Madura Medical Association places on record its deep sense of sorrow at the passing away of Major M. G. Naidu, an ex-President of the Indian Medical Association and a veteran of the profession.”

“Resolved further that the Hony. Secretary be authorised to communicate the resolution to the members of the bereaved family.”

Dr. P. Vadamalayan then welcomed the members and the lecturers of the day. The minutes of the last meeting were passed with one amendment by Dr. K. Ramachandran that record should be made of the fact that Dr. Soundaram Ramachandran's lecture was in Tamil. The Accounts and Audit Report were passed unanimously. The Budget for the year 1951 was then read out and approved by the House. Dr. K. S. Krishnan moved a vote of appreciation of the service rendered by Dr. K. G. Ramabhadran and Dr. P. Vadamalayan which was carried amidst applause. Then Dr. P. Vadamalayan, the outgoing President, dealt in brief with some aspects of the work of the Association and said that it was significant that election of the Office-bearers of the Association had been accomplished without holding any election at the time of the Annual Conference, but prior to the Conference itself; this obviates any inconvenience to the proceedings on the Conference day. He expressed great appreciation of the wisdom and zeal for work of the outgoing Secretary and said that the affairs of the Association had been put on a sound footing. He then introduced Dr. M. N. Rajan as “an ornament to the profession in Madurai” and said he was a model practitioner. He requested Dr. Rajan to take the Chair. Next the following were elected to represent the Association in the Provincial and Central Councils of the I.M.A.

Central Council:

1. Dr. K. G. Ramabhadran, L.M.P., Pechiamman Road.
2. „ S. Gopalaswamy, L.M. & S., Pookara St.
3. „ A. K. Rajagopalan, Hony. Provl. Secretary.

Provincial Council:

1. Dr. K. Gopal, M.B.B.S., T.D.D.
2. „ S. Kanthimathinathan.
3. „ M. V. Natesan.
4. „ T. S. Renga Iyengar.
5. „ G. A. Naidu.
6. „ A. K. Rajagopalan.

Dr. K. Ramachandran was elected as Collaborator to the Journal of the I.M.A. Dr. M. N. Rajan then delivered his presidential address. He expressed the hope that the Building Committee would complete its task and enable them to hold the next Annual Conference in the new home. He emphasised the need to set up a good reference library and pleaded for a more practical approach in the clinical meetings and discussions. Dr. Rajan dealt in brief about the relationship between the General Practitioner and the large hospitals and said that the General Practitioner should follow the cases that he refers to the hospitals which he hoped the administration would permit. He suggested a complete reorganization of hospital administration, and hoped that it would be possible to run even large state hospitals with an advisory committee and a registrar while the hospital itself will be staffed with voluntary or honorary doctors. This would enable the paid medical officers to be released for work in rural areas. The country will have to look to the independent medical men for its economical running of these useful institutions. Dr. Rajan said that the County system of administration as in Great Britain if introduced in our country would mean assumption of financial responsibility to cater to the medical needs of the people by the County Councils, who, in turn, would look forward to organised bodies like medical associations to help it by advice and voluntary co-operation.

Dr. K. G. Ramabadrnan then read some of the messages received. Dr. M. N. Rajan then called upon Dr. P. Ratnasamy to address the meeting on "Changing concepts in Modern Medicine". Dr. Ratnasamy began by saying that the medicine of to-day had gone through three major epochs during its period of steady progress. Medicine was a queer admixture of two sciences, the Biological science and the other Social science. These two sciences have undergone gradual changes and advancement during the three epochs as he named them: the pre-scientific, the scientific and the social eras. Dr. Ratnasamy clearly analysed how from the pre-scientific times, due to the work of various pioneers in various fields of fundamental research, the basic sciences such as chemistry, physiology and bacteriology were almost perfected and the study of man into various systems taken to such a degree of perfection that a compartmentalised and unduly specialised concept was brought into being. This, the speaker referred to, as the age of the Economic Man. The third phase began quite recently, after the war years when many people were left with so many crippling disabilities which had to be attended to and proper rehabilitation work undertaken to ultimately enable them to return back to society as useful members economically. Dr. Ratnasamy then dealt with the programme of training and organising a Hospital Social Service. The need to take very carefully planned measures to train the social worker was stressed. In England a trainee is given 2½-3 years training in physiology, psychology, economics etc. The candidates are selected after a personal interview, and get an additional training for 6-8 months in a hospital under a well qualified senior member of the staff. Dr. Ratnasamy referred to the fact that social workers were intimately connected with the diagnosis, treatment and after care of the patients.

After lunch, Dr. Rajan introduced Dr. B. Jayaram, Superintendent of the Rajaji Tuberculosis Sanatorium, Trichy and referred to his long and intimate association with T. B Work in Mysore. Dr. Jayaram gave a very lucid exposition of the treatment of Tuberculosis which he said at the outset, was

ultimately a Social problem. The aim is to render every patient non-infectious and remove the danger of infection to the society at large. Streptomycin according to the lecturer, still remained the mainstay of drug-therapy against tuberculosis. It is pre-eminently the drug of choice to combat tuberculous toxæmia, the dosage being solely decided by the response of each patient. Dr. Jayaram said he had consistently been giving not more than 5 to 1 gm. per day preferably in one injection. If the sputum becomes free of bacilli no more streptomycin need be given. The drug is to be discontinued if the more streptomycin increase in number thereby indicating the development of new resistant strains. Streptomycin acts remarkably well in certain types of pathological lesions 1. the exudative type 2. submucous tuberculosis e.g. laryngeal 3. tension cavities formed as a result of stenosis of the bronchioles, 4. new allergic processes leading to fresh lesions. The lecturer referred to newer drugs such as T. B. L. and promine. As regards Artificial Pneumothorax, the lecturer said that only about 3% of all cases of so called "successful A.Ps." show good selective collapse. So the idea is to attempt A. P. treatment only in cases where a selective collapse can be obtained. The technique of phrenic crush with special toothed forceps employing one single pressure on the nerve was the one recommended. A phrenic crush is not done in any patient who is likely to have to undergo thoracoplasty at a later stage. The speaker referred to the advantages of pneumoperitoneum, and advocated thoracoplasty in all cases where there was definite indication. The operation is easy and nowadays carried less than 1% mortality. The lecturer then answered a number of questions.

Dr. P. Ratnasamy gave a very useful survey of current therapeutics, emphasising the newer advances, useful in day to day practice. He referred to the treatment of Leprosy and said that oral sulphone-therapy was easy for the busy practitioner. He encountered severe lepra reactions in two cases treated with Diasone. Use of Cortisone and A.C.T.H. in rheumatoid arthritis, penicillin and the newer antibiotics on venereal disease, Hetrazon in filarial fever, were referred to. He said that PAS does not produce resistant strains of Tubercle Bacillii. Dr. Ratnasamy quoted good results with Parpanit for spastic hemiparesis, Myanesine in tetanus and Aureomycine in liver abscesses refractory to emetine treatment. The experience of the lecturer with chloromycetine in enteric fever was that relapses were rare with the full 14 day therapy, haemorrhage and perforation have occurred in some cases put on the drug. He gives a full diet for these cases including minced meat, fried eggs, bread and butter etc. In his opinion distension was not due to diet entirely. He had not come across any peripheral vascular collapse during therapy with chloromycetin, but wanted a clear distinction to be made between mere fall of temperature and real peripheral collapse.

Dr. T. V. Venkatesan suggested that large number of bacillii are killed by the drug and the liberated endotoxin could be held responsible for the collapse phenomena observed by many cases. Dr. K. Ramachandran drew attention to the possibility that chloromycetic might perhaps be a factor in precipitating a vaso motor collapse which is a usual complication about the second week of enteric fever and a well recognised cause of death during this period.

Dr. Ratnasamy replied that even the literature supplied with the drug does not claim any bactericidal action for chloromycetine; he suggested that

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ASSOCIATION NOTES

[The Miscellany

Dr. N. S. Parameswaran, Resident Medical Officer, R. M. Hospital, Tanjore and requested him to give his talk on "Surgical Emergencies."

Surgical Emergencies of the various parts of the body were dealt by the lecturer in a concise way touching all the emergency conditions.

There was a short discussion after the end of the lecture by a few members.

The President in his concluding remarks thanked the lecturer for the valuable information provided and stressed on the necessity of adequate knowledge in tackling the surgical emergency conditions.

A vote of thanks was proposed by the Secretary to the lecturer for the valuable lecture and to Dr. Seshadri for the tea provided.



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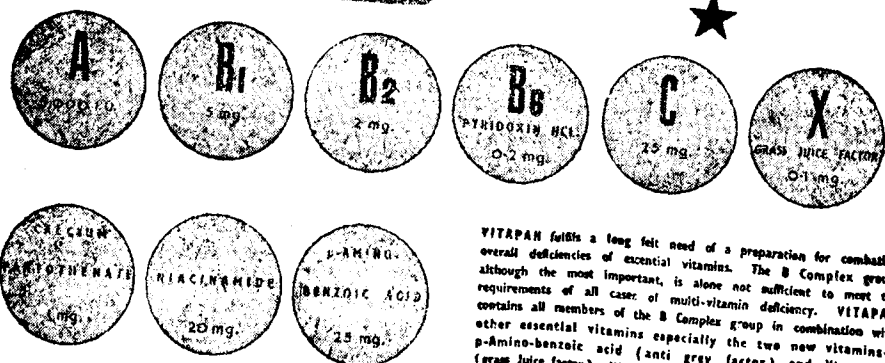
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March, 1951]

ABSTRACTS FROM THE CURRENT MEDICAL LITERATURE

ORGANIC ACIDS AND THEIR SALTS IN THE TREATMENT OF SEVERE RICKETS—M. B. Khokhanova,

Paediatrics—June 48—Twenty children of the ages from 16 months to 4 years, with very severe rickets were divided into a control group of 8 and a combined treatment group of 12. The control group received 25,000 international units of Vit. D. daily for a month, while the others received in addition 30 cc. of 21 per cent citric acid solution and 15 cc. of a 26% solution of sodium citrate daily. Radiographs of the wrist region were taken at intervals. The healing of bone took place more rapidly in the combined treatment cases than in the controls. A difference in the rates of deposition of calcium was also obvious in the radiographs after 2 weeks.

—T.N.S.R.

THE OCCURRENCE OF GASTRIC NEOPLASM IN YOUTH—M. Block, et al

Am. Jour. of Med. Sci.—Apr. 1948—An analysis of 1913 cases of gastric neoplasm seen in the University of Michigan Hospital during twenty years ending Decr. 1945, revealed several interesting and instructive statistics of 73 patients below the age of 31, fifty had benign ulcer, and 20 carcinoma. The youngest patient was 16 years old.

They conclude that gastric lesions are rare below the age of 31, but that when one is found, there is a 3 to 10 chance that it is malignant. This is an important observation and it would be really interesting to institute a similar inquiry in bigger general hospitals turning a ten year period or less.

—T.N.S.R.

ISOTOPES IN MEDICINE—(Symposium on their use by 19 contributors—University of Wisconsin Press—811 State St., U.S.A.—

An authoritative and valuable survey of this new and important field of investigation is found in this excellent symposium. The two sections on therapy relate respectively to radio-iodine treatment of thyrotoxicosis and cases of thyroid carcinoma amenable to this treatment and to the radiophosphorus treatment (at the Mayo Clinic) of the leuka-

mias and allied conditions and the results in polycythaemia vera. The potential value of suspensions (colloidal) of radioactive isotopes in therapeutics, and the clinical applications of radio sodium and radio phosphorus are discussed at length by eminent authors.

—T.N.S.R.

THE CHOICE OF AN OPIUM DERIVATIVE—R. S. Stacey, M. D.—The Practitioner—Feb. 1950.

The therapeutically useful constituents of opium and the substances formed by them fall into two groups of alkaloids differing fundamentally in their chemical constitution, their pharmacological actions and their uses in medicine; namely, a group containing morphine and codeine, in which a phenantherene ring and an isoquinoline ring are intertwined, and a group of benzyl isoquinoline derivatives represented by papaverine. These two groups must be considered separately, the second cursorily, as no member of it is of great importance in medicine.

THE MORPHINE GROUP—Of the group to which morphine belongs, morphine itself occupies such an outstanding place that the other members may best be viewed against a background of its advantages and disadvantages. In medicine, the most valuable properties of the morphine alkaloids are their capacity to relieve pain, anxiety, dyspnoea and cough. All these powers, morphine has in full, and it is to find a substance lacking its disadvantages that the search for morphine substitutes has been made. The most serious disadvantage, and the one which interferes most with its use, is its capacity to lead to addiction; and so far a morphine derivative without this capacity and yet capable of replacing morphine has not been found. Other disadvantages are the establishment of tolerance necessitating progressively larger doses, and its effects on the respiratory and vomiting centres and on the alimentary canal.

For an understanding of the action of morphine on the central nervous system it is necessary to realize that it produces a mixture of stimulation and depression. In

man the general effect on the higher centres is one of depression leading to quiescence; but in some animals and occasionally in man, excitement may result, possibly explicable by diminished restraint; and for patients with this idiosyncrasy an alternative drug is required. Depression of the respiratory centre, by diminishing the respiratory volume, may lead to inadequate oxygenation; and nausea and vomiting are common and unpleasant side-effect. The changes in the bowel are produced locally and are complex, but principally consist of an increase in muscle tone and a decrease in peristalsis. This leads to a delay in the emptying of the stomach and a slowing in the movement of the contents of the small and large intestine. More fluid is absorbed and the faeces tend to become harder. All medicinal morphine derivatives have this effect, although some, e.g. codeine and dilaudid, to a less extent. Morphine also causes an increase in tone in the plain muscle of the biliary and urinary tracts, leading to a rise in biliary and ureteric pressure. Thus relief from biliary and ureteric colic achieved by the central action of morphine must, to some extent, be offset by this rise in pressure.

Because of the risk of the development of addiction, morphine should be used only in those cases in which (1) no non-habit-forming drug is adequate; (2) the period over which administration will be required is brief; or (3) a fatal outcome in the near future is inevitable. Opium alkaloids should not be used to promote sleep unless this is disturbed by severe pain. For insomnia the barbiturates are more effective, and when pain is moderate, physeptone or pethidine are preferable, although both can cause addiction.

Many morphine derivatives have been prepared and tested and the properties of a few of the clinically more valuable ones will now be reviewed briefly.

Diamorphine hydrochloride (heroin) has been much used as an alternative to morphine for the relief of pain and cough because it has less effect on the intestinal tract. Addiction develops with it more rapidly than with any other drug and leads to a greater degree of moral degeneration. In 1931 the League of Nations Expert Committee decided that its usefulness did

not compensate for its dangers, and since then it has been banned in 26 countries. Experience has shown that it is not indispensable, and there is little doubt that its use in all countries should be discontinued.

Dihydromorphinone hydrochloride (dilaudid) differs from morphine in that it causes less somnolence and less nausea, vomiting and constipation, whilst analgesic action is roughly ten times greater. The shorter duration of its action necessitates more frequent administration, and this increases the risk of addiction. With analgesic doses, respiratory depression is as marked as with morphine for the relief of pain or cough in those individuals who have an idiosyncrasy to morphine or when it is nauseating. The average analgesic dose by mouth or hypodermically is 2 mg. A prolonged effect can be obtained by the use of rectal suppositories.

Codeine phosphate is weaker than morphine in all its depressant powers, and although addiction occurs this is much less common, as only with large doses parenterally is marked euphoria produced. Codeine is particularly valuable for depressing the cough reflex and may be adequate to relieve moderate pain, although for this purpose the non-opiate analgesics referred to above are usually preferable. Its stimulant action is more marked than that of morphine and doses in excess of 65 mg. tend to cause restlessness.

Ethyl morphine hydrochloride (dionine), chemically closely related to codeine, resembles it in its central actions and has no advantages over it. It has been used as a local application to the conjunctiva to produce hyperaemia and oedema in the treatment of conjunctivitis, corneal ulcers and inflammatory conditions of the uveal tract.

Dihydrocodeinone bitartrate (dicodid) is a useful cough depressant with a prolonged action. It is more potent than codeine but also more addictive, occupying a place between codeine and morphine: dose by mouth, 5 mg.

Methyldihydromorphinone (metopon) and *dihydrodesoxymorphine* (desomorphine) are not yet available in this country. Both have roughly ten times the analgesic power of morphine and correspondingly greater

toxicity. They disturb the alimentary canal less than morphine but are equally drugs of addiction.

THE BENZYL ISOQUINOLINE GROUP—

Of the benzyl isoquinoline group, *papaverine* is the only member which need be discussed. It is only feebly narcotic and analgesic but, unlike morphine, decreases the tone of plain muscle. As a vasodilator it has been employed in the treatment of coronary thrombosis, angina pectoris and hypertension, and as a spasmolytic in intestinal and biliary colic. It is not habit-forming, and in medicinal doses is harmless but of very doubtful value. Like quinidine it decreases the conductivity and excitability and prolongs the refractory period of heart muscle, and can be used in the treatment of paroxysmal tachycardia and to diminish the frequency of extrasystoles: dose: 2 to 4 grains (0.13 to 0.25 g.) by mouth; $\frac{1}{2}$ to $1\frac{1}{2}$ grains (0.032 to 0.1 g.) by intravenous injection.

The analgesic action of *opium* corresponds to its morphine content (10 per cent), but it is slightly more constipating and there is insufficient *papaverine* in it to modify appreciably the action of the morphine. There is thus no advantage in the use of preparations of opium over those of morphine, except for the action on the bowel. Nor is there convincing evidence that preparations such as *Papaveratum B.P.C.* (omnupon, pantopon), containing mixed opium alkaloids, are preferable to morphine.

CONCLUSION—In spite of the great volume of work on synthesizing and testing morphine derivatives, morphine and codeine retain their place. In special cases in which side effect with morphine are marked, *dihydromorphinone* may be preferable as an analgesic and *dihydrocodeinone* for the suppression of cough, but the most promising recent development in the relief of pain has been in the production of non-opiate analgesics, such as pethidine and physeptone.

TREATMENT OF INCONTINENCE IN THE ELDERLY—Trevor H. Howell, M.R.

C.P. E. D.—*The Practitioner*—May 1950.—Incontinence of urine is one of the great problems among the elderly and chronic sick, occurring in 18.6 per cent. of 701 such

patients examined by McEwan and Lavery at Bradford (1949). In some cases, this symptom is preceded by a period during which there is increased frequency or precipitancy of micturition. Its mechanism can best be understood by a study of normal bladder function.

MECHANISM OF MICTURITION—Physiologically, the bladder is a distensible reservoir under the control of the central nervous system. There is a reflex area in the 2nd, 3rd, and 4th sacral segments of the spinal cord, governed by inhibitory impulses from the cerebral cortex. As urine accumulates in the bladder, impulses pass to the spinal "centre" but these are inhibited by the brain, so that the bladder gradually accommodates itself to the volume of fluid. At a certain level (about 300 to 400 ml. of urine), however, the sensation of increased tension reaches consciousness and further inhibition must be performed voluntarily, accompanied by contraction of the perineal muscles. When micturition occurs, the inhibition is removed, efferent impulses pass to the bladder, contract the wall of the organ and relax the sphincters.

The investigations of Wilson (1948) have shown a disturbance of this mechanism in patients with incontinence. Using cystometric methods, he found that old people with increased frequency and precipitancy had an over-irritable reflex area, combined with diminished bladder sensation for tension. Hence there was a tendency for the organ to contract before there was any conscious desire for micturition. When the escape from cortical control became complete, incontinence occurred. This was, in effect, a return to the infantile state in which a certain amount of urine in the bladder automatically caused reflex contraction and voiding. Any condition which might give rise to increased irritability of the local reflex, or which might sever the link between cerebral cortex and local centre, therefore favoured the onset of incontinence.

FACTORS INCREASING REFLEX IRRITABILITY OF BLADDER.

- Infections of the urinary tract
- Congestion of the bladder
- Presence of residual urine
- Senile vaginitis

ABSTRACTS

[The Miscellany, March, 1951]

Factors diminishing cortical control of bladder

Structural lesions of brain or spinal cord (e.g. cerebral thrombosis, disseminated sclerosis).

Psychological states

MANAGEMENT OF INCONTINENT PATIENTS—The first essential is to investigate the various factors mentioned above and to treat them when possible. When there is some urinary infection, sulphonamide drugs will help to eradicate or diminish one of the factors. Stilboestrol, or other oestrogens, in cases in which the vaginal wall has shown senile vaginitis, seems to diminish irritability of the bladder reflex to a certain degree. The presence of residual urine associated with an enlarged prostate or cystocele will raise the question of treatment for the primary condition.

The second line of attack is to give the patient a chance to empty the bladder at two to three-hourly intervals. Wilson has shown that incontinent patients do not empty their bladder completely during micturition, but leave a small amount of residual urine behind. Hence it may be said that the bladder of an incontinent patient is never really full, nor yet really empty. Since the organ contracts and voids itself at the stage when it only contains about 100 ml. of fluid, the need for frequent bedpan or bottle becomes obvious.

If the patient is in hospital, distension of the bladder with fluid can be employed as a form of treatment. The results of this method are variable, however, and are most successful when the patient is intelligent and cooperative. For a description of the technique the reader is referred to Wilson's original article in the *Lancet* (1948). There is a certain class of old person who is incontinent while in bed,

but not when up and about. When these folk are taken to the lavatory at regular intervals there is no trouble with them. Another group show incontinence under mental stress or strain. Since the immediate cause of incontinence is often the lack of sense of bladder tension, coupled with uninhibited contractions of the organ, this is understandable.

Most incontinent patients sooner or later develop reddening of the skin over pressure points, which sometimes goes on to actual bedsores. It has been suggested by Cooke that this process is due to the action of *Bacillus ammoniagenes*, and that when this has been inhibited, there is much less chance of excoriation. At the New York Medical College, the drug "diaperene" (a quaternary ammonium compound) has been used for this purpose with promising results (Nagamatsu *et al.* 1949). Diaperene may be employed as a 1:5000 solution for wet dressings on an infected or ulcerated surface; as a powder to impregnate dry dressings; as an ointment; or it can be made into tablets. In the series mentioned 23 cases which were either incontinent or else leaking urine from operation wounds of fistulae, there was improvement in the skin condition in all, some healing completely. This new approach to the problems of the bedsores deserves an extensive trial. "Diaperene" is made by Rohm and Hass of Washington Square, Philadelphia, U.S.A.

Patients suffering from senile dementia or cerebral lesions may become incontinent of faeces. In these cases the basis of treatment should be simple enema, given twice a week. When there is involuntary action of the bowel between these events, it is sometimes advisable to administer small doses of chalk and opium in order to keep the patients constipated between enemas. If the patient is at home, the problem of soiled linen will otherwise become impossible to solve.



ODDS & ENDS

The Working Committee of the I. M. A. will be held in Delhi on 24th and 25th March 1951.

The All-India Ophthalmological Society held its 12th Session in Calcutta on 1, 2, 3 March. Dr. C. N. Shroff of Bombay presided. Members of the S.I.P. Branch, I. M. A. who attended are Doctors T. S. Duraiswamy, A. Jabbar, G. Joseph Gnanadickam, M. A. Nair, T. S. Shetty, E. C. Srinivasan and J. Zachariah. Dr. B. N. Bhaduri is the President-elect for next year.

News item:—"Mrs. Fahlman has entirely recovered from her broken collar bone, but her knee is still in the hands of the doctor."

A midnight call: "What is your fee doctor?"
"Rs. Five if I come in my car."
"Come immediately doctor."

After reaching the place, the man handed over a five rupee note and said "Sorry to trouble you doctor, you see I had no conveyance to come back."

Doctor to Lawyer: A bird was telling me what you are.

Lawyer: What did it say?

Doctor: Cheep. Cheep.

Lawyer: Another bird in your garden is telling others what you are, quack, quack.

An epitaph:

Here lies the body of Mary Ann Lowder,
Who died while drinking a Seidlitz powder,
Called from earth to her heavenly rest,
She should have waited till it effervesced.

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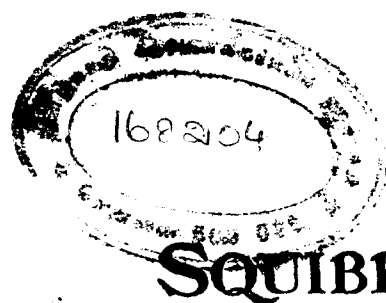
- aqueous* • easily suspended . . . stable for 21 days under refrigeration, or a week at room temperature, with no significant loss of potency. In powder form—stable for a year.
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