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सर्वेजनाः सुखिनो भवन्तु

THE MISCELLANY

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

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INDIAN MEDICAL ASSOCIATION

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INDIAN MEDICAL ASSOCIATION

(CENTRAL OFFICE)

"HANGING BRIDGE"
DARYAGANJ, DELHI—7:
15TH NOVEMBER, 1951.

CIRCULAR NO. 6/ 51-52

HONORARY SECRETARIES, ALL PROVINCIAL BRANCHES

DEAR SIRS:

We have received an offer from the White Laboratories, Inc. Newark USA, through the World Medical Association, of a gift of approximately 7½ million tablets of DIENESTROL, for free distribution to needy poor who are unable to purchase the drug. I am approaching the Central Board of Revenue to waive the customs duty on the consignment.

My suggestion is that if and when we receive this consignment, we can divide it into three parts; one to reach Bombay port, one Madras port and one Calcutta port, and that on receipt of the consignment, the distribution can be effected through the medium of local branches, either direct to the patients, or through the members or through the authorized Hospitals or Institutions.

Will you please let me know, at an early date, your opinion regarding my suggestions and your requirements? You will realize that greatest possible care must be taken to ensure that this drug reaches the really needy patients and that the tablets are not sold or re-sold after distribution.

(True Copy)

Yours faithfully,
(Sd.) S. C. SEN,
Honorary General Secretary.

DECISION OF THE COUNCIL OF THE SOUTH INDIAN PROVINCIAL BRANCH:—

"It was suggested that the Secretary should write to the various branches to say that they can inform their members that whoever want this drug for the use of their poor patients, can get them from Dr. Sen, by writing to him."

(Sd.) A. G. LEELAKRISHNAN,
Honorary Provincial Secretary.

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such as mental diseases, asthma, migraine and epilepsy. About 39 of the 100 epileptics have history of head injury either at the intra—partum period or at delivery or after it. Rest of the patients give history of inflamatory affection, etc.

So this should dispel the fear in the mind of the general public as the hereditary factor is only 15% of the affected epileptics. On this statistics, it is clear that an epileptic can be taken into society or even into wed—lock, without any fear of the offsprings of the couple developing the disease, as they have the chance of only one in about 3000 married couple getting an epileptic off—spring. But through injuries, either intra—partum or during parturition or post—partum neglected, raise the frequencies to as high as about one in 500 births. So the responsibility is more on the acoucher or the physician in charge of the antenatal or post—natal care.

The human egg as it grows, needs nutrition for the development of the embryo. But if this is interfered with either by difficiency or by the toxins of the infectious diseases, passing through the plecental filter and entering the embryo, destroys sclectively and leaves behind a defect which acts as a focus for the onset of epilepsy.

The skull, blood vessals and also the brain are poorly developed in premature infants. Even the respiratory centre is not fully developed to do its function. The tentorium and vessal walls are friable. Under these circumstances, if the child is delivered, there are very great possibilities for intra—cranial haemorrhages to take place, during delivery, due to the initial factor that when the head presents, the external atmospheric pressure is much lower than that of the intra—uterine pressure; so the blood rushes into the cranium at the highest pressure, and the friable blood vessels give way. Even during moulding, the Falx and Tentorium which are friable give way and cause haemorrhages. These can be the initial factors for the onset of epilepsy, spastic paraplegia, congenital mental dullness, Etc. But it is rather difficult to recognise the damage already caused till the infant grows and exhibits symptoms. It is reported from one Hospital where all the prematurely born infants had been subjected to lumbar tap immediately after birth, over 50% of the infants presented blood in the Cerebro—spinal—fluid. Also if the respiration does not start early enough, the anaxia produced by this cause certain amount of cerebral damage.

Fully matured infants born under stress and strain of prolonged or instrumental labour, are also subjected to similar or greater hazards. Unlike in mammals, the human pelvic out—let is narrow and the cranial bones are not completely ossified to allow moulding and if this phenomenon is over done, there is always a possibility of intracranial injuries, which may ultimately lead on to some kind of mental difficiency, or epilepsy, Etc.

So it becomes very important to recognise these injuries through the symptoms presented by the new born as early as possible to rectify, as much as possible, the damage caused. The common symptoms will be (i) cynosis which may be immediate or developing later; (ii) It may persist or be intermittent and related to periods of apnea; (iii) Respiration is often difficult to initiate, the cry is feeble for serveral days or even weeks, the child may be weak, apathetic and disinclined to be nursed, (iv) Vomiting may be troublesome; (v) In some cases a state of stupor persist for a period; (vi) In some others there may be general rigidity, startled reactions, persistant twitchings in the local areas or convulsions; (vii) Fontanelle may be under increased pressure if the bleeding is above the tentorium; (viii) Blood may

be found in the Cerebro-spinal—fluid occationally.

Infectious diseases may cause many damages. In encephalitis the microscopic pathology indicates multiple thrombi in the cerebral blood vessals. The nerve cells of the brain cannot survive in any anaerobic condition. Though there is a certain amount of anastamosis between terminal arteries, and arteries and viens of the brain, they are not sufficient enough to take up the function immediately. So any embolic or thrombic factor is bound to cause death of certain nerve cells. This is mostly due to some infection. And in infants it takes place in the later half of the first year of life. Penfield is of opinion that these thrombic or embolic phenomena are causes for the production of pro—encephaly or undeveloped gyrus (microgyria) which subsequently become the epileptogenic focii. There are other causes as enlarged vascular channels or tubes, Etc.

Further more, the development of epilepsy depends on many factors other than brain injury. As hereditary tendency towards seizures, physiological disturbances, enviromental strains, with their effect on the child, all are invloved in determining whether or not a child with the cerebral damage sustained at birth will develop the disease.

Should an epileptic brain produce only tonic and clonic convulsions only? At times, (a) attacks of dizziness and/or moderate to severe headache (b) attacks of unreasonable anger, cruelty or assaultative behavior (c) abdominal discomforts with no somatic etiology have also been found to be due to an epileptic condition of the brain. More than half the children exhibiting behavior disorder have been found to be epileptics by Electroencephalograph.

The next question is, why if the brain is epileptic, such persons should develop the actual attacks in parexysms and not have those attacks continueously? The answer to this depends on many factors. Though the brain is constantly epileptic, there is a threshhold barier. Only when this barier is crossed it exhibits itself as a convulsive seizure. Experiments have proved that these bariers are crossed when the natural physiological factors are deranged.

Experimental observations show that during sleep there is a certain amount of paresis of the sympathetic system as also some dialatation of the cerebral blodd vessals. There is a certain amount of inter—cellular oedema which develops in the brain. This strangulates the blood vessels and impedes supply of oxygen to the nerve cells which precipitates the seizures in the early part of the night. It also increases the intra—cranial pressure. But if the seizure does not take place at that stage, the anoxia, produces depression and so no seizure is produced. At the time of waking, the reverse phenomena is produced and the possibility of precipitation of the seizure may present itself again. It has also been found that sleep produces a certain amount of hypoglycemia which is a favourable condition for the seizure to precipitate.

It has also been found that increase of Sodium and decrease of Potassium in the nerve cells makes the nerve—cells hyper-irritable. Low Calcium contents also favour irritability of the neurons. Ultimately it is the increased intra—cellular fluid in the brain which is responsible for the precipitation of the seizures.

Lennox and Gibbs describe epilepsy as generalised paroxysmal cerebral dysrhythmia. For this definition the use of an Electrical recorder, to record the electrical discharges of the neurons of the brain called ELECTRO ENCEPHALOGRAPH has been used. This possibility of the recording from the surface of the scalp was discovered and announced by Dr. Berger of Germany

in 1929 and since then this has take an important place in Neurology, Neuro—surgery and Neuro—psychiatry. Basset, Bagchi and Peets are of opinion that this technic has passed the stage of mere application for pure research and has become a dependable and an almost an indispensable adjunct, to the supportive and diagnostic armamentoria of the Neurologists, Neuro—surgeons and Neuro—psychiatrists. It has also been proved beyond doubt, from the progress this technic has made in these 15 years to 20 years, in the fields of technical application, processes of recognition of different forms and frequencies of the discharges recorded and their proper interpretation with reference to localisation, to give, by itself alone, a more correct diagnosis than a neurological examination alone or ventriculographic examination alone. According to statistics, about 90% to 95% of the epileptics do show pathological variations in their Electroencephalograms. If these are not easily reproduced, a technic of activated electroencephalogram brings out these discharges, to the surface in their Electroencephalographic recording. This progress in technic has helped in the recognition of epileptic discharges, in certain cases of unexplained rage in some adults and children also and in some schizophrenics, and these patients have been benefited with anti—epileptic treatment. This technic is also of help in the control of the medication needed and limitation of the period of treatment. It is generally accepted that a patient who initially produces abnormal electroencephalographic changes in his recording cannot be considered improved unless his subsequent recording after treatment has produced normal cerebral rhythm; If the abnormality is dormant, activated electroencephalography should be done to bring to the surface, the suppressed abnormality. Even if the treatment s stopped after proving both clinically and Electroencephalographically, the patient is free from epilepsy, a check on the electrical changes of the brain should be done, at frequent intervals to find out, if whether the electroencephalographic recording show any return of epileptic discharges.

Of course, this is the best and the most scientific approach. Considering our eccnomic status, this approach, probably, is not possible for some decades to come.

An epileptic is considered to be free from the disease if he exhibits no symptoms for at least 7 years from the start of the disease.

TREATMENT :—

Having understood the pathology and pathology of convulsions, prevention is the best. Even if the hereditary factor is present, it is possible to prevent the onset of convulsion. The first question that comes to our mind is whether infantile convulsion is epilepsy? Generally infantile convulsions are caused by some pyrexia, the most frequent causes being lung infection. The next in order of frequency, is gastro—intestinal upset. Other infections are only next. It is found that in Ascariasis infection, the eggs which generally circulate in the blood has been found in the cerebral capillaries which could produce the anoxia and cause convulsions. In all cases of infantile convulsions it is best to give Phenobarbital whenever the patient develops pyrexia. If the child had been getting convulsions frequently it is wise to do an Electroencephalography; even if it does not get any convulsions subsequently, it is advisable to do an Electroencephalography at the 6th year, to evaluate the cerebral damage and then only it is possible to decide whether it is an epileptic or not. After having decided with this technic, that it is an epileptic, medication becomes inevitable.

The oldest remedy used are bromides. This drug should not be forgotten because of the modern barbiturates hydantoin Etc. If the child has tonic

and clonic seizures, the bromides are efficacious. But how this drug acts on the system is not yet clear. This does not in any way impede the intelligence of the child. Potassium Bromide will be the drug of choice, in prefereance to the triple bromides, as the potassium ion might replace the sodium ion in the neurons and prevent the onset of convulsions. The adult dosage can go upto 60 grains a day (1 dram.).

The next important drugs are the barbiturates. A dosage upto 6 grains a day in adults has been found not to have impeded the mental alertness. This drug is the cheapest of all the anti-epileptic drugs. As the treatment has to be a prolonged one, the poorer families will be able to continue the medication till the actual cure is effected.

Putnam and Merrit carried out a number of experiments to find a real anti-convulsant. As a conclusion of their work, declared the Sodium Diphenyle Hydantoin as the least toxic but the most potent anti-convulsant drug. This acts by dialating the cerebral capillaries and also by increasing the acid radicle in the neurons. An adult dosage upto 0.6 grams have been given to control epilepsy. The efficacy of this drug has been found to be enhanced by the addition of a barbiturate to the treatment.

A later invention of Mesantoin promised a great advancement in the treatment of Psychomotor epilepsy. But subsequent workers have had no such complete satisfaction. Now the prevailing opinion is that it acts as adjunct to Sodium Diphenyle Hydantoin, in the place of the barbiturate.

Phenurone and other drugs have also been used but they are not available in this country and also they have not produced enough convincing results in the West to hunt after them.

The problem of petit-mal is very great. None of the above mentioned drugs seems to have any alleviating effect. The Tridione is the drug of choice. Paradione which is a later development is supposed to have a lesser toxicity. The adult dosage is 0.6 grams.

In spite of all these medications, patients have been developing convulsions at longer intervals. Since the cerebral oedema is one of the important factors in precipitating the seizures, it is advisable to advice the patients to reduce their fluid intake to about 1000 to 1000 c.c. Also, at times, administration of Theobromine Calcium Salicylate has reduced the oedema by producing diuresis in many patients. It is best used for nocturnal seizures.

A large number of other drugs have been used successfully to control major convulsions. Some of them are sedatives and some not. Most of them do not have wide application but work well in occasional patients. They are (1) Potassium Borotartarate (2) Benzedrine Sulphate (3) Sulphanilamide (4) Brilliant Vital Red. (5) Desoxcorticostrone and (6) in status epilepticus, Methylene Blue. Their mode of action is not clear.

Sudden stoppage of medication brings on severe convulsions. The idea that any disease is curable with a few bottles of medication persists in the mind of many patients. So it is necessary to convince them that such cannot be the case in this disease. Withdrawal must be gradual and also must be guided by the clinical improvment, corroborated by the electroencephalographic changes. It must also be understood that most of these drugs are eliminated in 12 to 24 hours.

Ketogenic diets which is also useful, is of high cost and apt to be of poor taste. As this will make the life of person very miserable, it is not advisable to follow this aspect of treatment.

It is very important to eschew alchohol in any form by epileptics.

There are many other extra cerebral cuases which precipitate an epileptic seizure. Temple Fay has indroduced physical developmental exercises and has trained may epileptics in the German Town, Pa under the æges of the Y. M. C. A. He has worked out a thesis to show that some epileptics have long necks, narrow carotid vessels and at times infantile heart. So to over-come this abnormality he has a school which encourages breathing exercises, gymanastics, playing football and other rough games. This is presumed to improve the heart and to enable it to pnmp blood into the cranium more effectively and reduce the incidence of epilepsy. But patients should be forewarned that at the start the seizures will be more frequent.

Kallinosky, in the course of his study in epileptics, has recommended Electro-Convulsive treatment in selected types of cases for two reasons. It has been found that one convulsion increases the threshold for another convulsion. In women who get menstural convulsion, it is justifiable to give Electro-Convulsive Treatment about 3 to 4 days before the expected period. By this he feels that the anti-social convulsion is thwarted by the controlled Electro-Convulsive Treatment.

A Russian novelist, Dostoevsky, who was an epileptic said, "Healthy persons . . . . . have no idea of the bliss we feel the momet before the seizure . . . . believe me, I would not exchange it for all the happiness life can give."

Epileptics who have had complete control of their seizures exhibit some psychotic manifestation. It is argued by some workers that it is due to the suppression of the seizure activity. In such cases also it it advised to give a few controlled Electro Convulsive Treatment which in many ways improves the psychic state of those patients. It is my experience in my practice also. I have patients who come and ask me to give them Electro-convulsive treatment, in spite of the fact they have not had a single seizure in two years of their treatment.

Drug, diet, dehydration and developmental exercises cannot alone produce permanent results. It is necessary to give an important place to psychological aspectt of working the personality.

The patient should be told convincingly that their seizures are at an end. Patients should not always apprehened the seizures. They should not be prevented from taking to any kind of activities within normal judgement, lest they should develop frustration in their minds. If a seizure should precipitate, the over solicitous sympathisers surrounding the victim, leave a trauma, which also should be avoided. Children should be brought up in a very normal way Over punishment and over solicitude will always tend to enhance the frequency of the attack. Advising the patients to be secretive about their disease will add to the mental strain and will ever make him fearful of the disease. Prohibiting children from schools and adults from following their normal profession, will make the victims of this affliction always see in others a certain amount of hostility which will also help in apprehending the disease. This will definitely help in precipitating even a hysterical seizure.

So to overcome all these defects, there should be intimacy developed between the doctor and the patient. There should be affection shown from all aspects and from all quarters. But it should not amount to over solicitude. He should be accepted into all schools, workshops and offices. He should be treated like any other citizen and his independence and judgement in all matters should be encouraged. But constructive suggestions should come from the attending physician. Whenever the patient is faced with conflicting problems, he should approach his physician in whom he has, the greatest trust and get them solved. In such cases a bit of psychotherapy will always help the patient.

If such procedure is adopted the results are encouraging, only about 5% to 10% of the patient being lost to any approach. I have not dealt the surgical aspect as for want of space.

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THE FIVE YEAR PLAN

Proceedings of the special committee meeting held on Sunday the 9th March '52 at 323—24 Thambu Chetty Street, George Town, Madras, to consider about the Five Year Plan of the Government of India.

Dr. P. A. S. Raghavan who was elected by the Working Committee of the I. M. A. on 14-2-1952 at Ahmedabad as Convener for the Southern Zone, to obtain from the representatives of the various Provincial branches and others, their views on the Five Year Plan of the Govt. of India, invited for a meeting at 3 P.M. on Sunday the 9th March '52 at 323—24 Thambu Chetty Street, George Town, Madras, the Presidents and Hony. Secretaries of the Travancore-Cochin, Mysore, Hyderabad, Andhra and South Indian Provincial Branches and a few others. The following doctors attended the meeting.

1.	Dr. P. A. S. Raghavan	Tiruchy	Covener and Member of the Working Committee, I. M. A. & special Standing Committee.
2.	Dr. U. Krishna Rau	Madras	President, S. I. P. Branch.
3.	Dr. M. Kothandaraman	Bangalore	Hony. Secretary, Mysore Provincial Branch.
4.	Dr. G. V. Hanumantha Rao	Guntur	President, Andhra Provincial Branch.
5.	Dr. T. S. Tirumurthy	Madras	President, I. M. A.
6.	Dr. D. V. Venkappa	Madras	Jt. Secretary, I. M. A.
7.	Dr. K. Narayanamurthi	Madras	President, I. M. A., Madras Branch
8.	Dr. N. S. Narasimhan	Madras	Retired Professor of Surgery,

Dr. P. A. S. Raghan explained the genesis for this meeting and said that their views should be handed over to the Hony. General Secretary, I. M. A. at Calcutta on the 20th March 1952. Dr. M. Kothandaraman, Bangalore gave an idea of the opinion of the Mysore Government on the Five Year Plan. Then there was a general discussion on the various chapters of the Report and the enclosed recommendation was unanimously approved. During the meeting Dr. U. Krishna Rau very kindly provided Tea for the members present. Dr. P. A. S. Raghavan in bringing the proceedings to an end, thanked all those

that had come from long distances and at considerable personal inconvenience and sacrifice for giving their views on the matter and also thanked Dr. U. Krishna Rau for the Tea and for placing his rooms for the purpose of this meeting. The meeting terminated at 6 P.M.

(Sd.) Dr. P. A. S. RAGHAVAN,
Convener.

1. The Committee endorses the view of the Planning Commission that health planning must have as its objective the creation and maintenance of those conditions of life for the individual and for the community which alone can make healthful living possible.

2. The Committee agrees that the improvement of the nutritional status of the people must be the first item in any planning and therefore agrees that more attention must be paid to agricultural practices, methods of food production and processing etc.

3. The Committee agrees that adulteration of foodstuffs must be put down at any cost.

4. The Committee entirely agrees that the introduction of protected water supply must be adopted as early as possible in every rural area. It is of the opinion that the provision of good roads and the introduction of protected water supply will go a long way in improving the health of the people of this state.

5. With regard to Chapter 15, paragraph 13, the Committee feels that the activities of the Anti Malaria Team under the direction of the W. H. O. must be intensified. It also feels that India must be made self sufficient in the matter of manufacture and production of D. D. T. and Quinine.

6. With regard to paragraph 14, regarding tuberculosis, the Committee is of opinion that the Government of India must give liberal grants-in-aid and health subsidies to hospitals and sanatoria organised by private bodies.

7. With regard to paragraph 15, regarding rural medical relief, this Committee is of opinion that more stress should be laid upon prevention and hence would suggest increasing the number of Health Inspectors by atleast 5 fold during the next five year period and the Committee suggests that these can also be given some training to carry on curative work such as treating minor cases for which there are specific remedies.

8. The Committee approves the views suggested in paragraph 16.

9. With regard to paragraph 17 regarding the training of midwives, the Committee is of opinion that even general practitioners and private hospitals doing maternity work must be allowed to train midwives and their practical work must be recognised for the purpose of granting them a certificate after examination.

10. With regard to paragraph 18 regarding the training of Dhais, the Committee feels that the general practitioners and private hospitals must give them short courses and their practical work must be recognised for the purpose of examination.

11. With regard to paragraph 19, the Committee agrees that the care of the health of the industrial worker must be very carefully looked after and supports the views contained in the report.

12. With regard to paragraphs 20 & 21, the Committee is of opinion hat graded courses in hygiene, physiology and first aid should be made

compulsory for all students in the primary, secondary, high school and college classes.

13. With regard to paragraph 22, the Committee feels that physical education must receive proper attention. At the present moment most of the schools are not provided with proper play—grounds. The Committee is strongly of the opinion that physical education must be made compulsory for every child of the school going age and every boy and girl should daily undergo some exercise or other or take part in sports.

14. With regard to paragraph 23, the Committee reiterates the demand made often by the Indian Medical Association for the unification of the preventive and curative aspects of medicine atleast in the major villages.

15. With regard to paragraphs 24 & 25, the Committee agrees that at an early date India must be made self sufficient in the matter of producation of drugs and surgical instruments.

16. With regard to paragraph 26 the Committee suggests that the Expert Committee may be authorised to draft an Indian Allopathic Pharmacopia

17. With regard to paragraph 27 the Committee strongly feels that the implementation of the Spurious Drugs Act is the first necessity.

18. With regard to paragraph 28, the Committee approves the action the Planning Commission proposes to take in the matter of study and survey of medicinal plants in India.

19. With regard to paragraph 31 regarding Vital Statistics, the Committee is of opinion that a machinery for the improvement of Vital Statistics should be devised.

20. With regard to paragraph 32 on Family Planning, the Committee whole heartedly recommends the suggestions of the Planning Commission. The Committee feels that this is a vital step forward in economic and social planning.

21. HOUSING. In the matter of housing, the Committee is of opinion that (i) the question of housing the poor is most important and if possible the government should finance either individual agencies or local bodies and municipalities for the purpose of constructing tenements for the poor (ii) Industrial concerns may be asked and helped to construct houses for their workers, and (iii) For the low income groups assistance should be given financially and otherwise for helping them to construct their own houses. A good suggestion would be, in villages, to insist upon people to build their houses themselves with the assistance of Government. Free site and a subvension of about Rs. 300/- per house may be given free to these people. This money should be given to them in the form of materials like tiles, woodwork etc. The people on their part should be expected to furnish free labour. They should be asked to make their own bricks and build houses. This experiment should be tried.

The Committee realises that it will be difficult for the Government to implement all the recommendations with their present financial difficulties. While realising this, the Committee feels, that in the matter of public health, financial difficulties should not, as far as possible, be made an excuse for not carrying out the recommendations.

The Committee congratulates the members of the Planning Commission for their foresight and wisdom.

Indian Medical Association South Indian Provincial Branch

Post Bag No. 530

Oppannakara Street, COIMBATORE

CIRCULAR NO. 5

COIMBATORE,
19th March, 1952

To

ALL THE BRANCH SECRETARIES,

Enclosed herewith is a true copy of the Madras G. O. regarding exemption from sales tax on X-ray films. All the local branch secretaries are requested to give wide publicity to this G. O. especially to those members who are radiologists or who are having X-ray institutes.

(Sd.) A. G. LEELAKRISHNAN,
Honorary Provincial Secretary.

True Copy of the Madras Government order, Press No. 710 dated 11th March 1952.

ABSTRACT

Tax—Madras General Sales Tax 1939—Diagnostic X-ray photo—Exemption from sales tax—Notification—Publication—ordered.

REVENUE DEPARTMENT

G. O. Press No. 710, dated the 11th March 1952.

Read the following :—

G. O. 1773 Revenue dated 10-7-1951.

From the President, Indian Medical Association, Madras letter dated 9-8-1951.

From the President, Indian Medical Association, Madras letter dated 27-10-1951.

From the President, Indian Medical Association, Memorandum dated 18-2-1952.

ORDER :

In their order read above, the Government accepted the recommendation of the Board of Revenue that diagnostic X-ray photos might be assessed to sales tax. Representations have since been made to the Government that radiographs cannot be considered to be finished products, that the radiologists who are professional men cannot be considered to be dealers for the purpose of the Madras General Sales Tax and that they cannot be deemed to buy or sell radiographs. The Government have re-examined this question. They observe that in the West Bengal State skiagrams are not subject to sales tax, and that from a humanitarian point of view, X-ray photographs are vital in modern diagnosis. The Government accordingly direct in partial modification of the orders in the G. O. read above that diagnostic X-ray photos be exempted from sales tax.

2. The appended notification will be published in the Fort St. George Gazette.

(By order of His Excellency the Governor)

(Sd. H. J. STOCKS,
Deputy Secretary to Government.

APPENDIX

NOTIFICATION

In exercise of the powers conferred by section 6(1) of the Madas General Sales Tax Act, 1939 (Madras Act IX of 1939), His Excellency the Governor of Madras hereby exempts diagnostic X-ray photos from the tax leviable under Section 3, subsection (1) of the said Act.

(True Copy).

Insurance Scheme for Members of the I.M.A.

The South Indian Provincial Branch of the Indian Medical Association has approved of the Individual Schemes of Insurance by the United India Life Office, by which the members will be insured at concession rates provided the following conditions are fulfilled i.e.

1. Sum assured should be atleast Rs. 1,000/-.

2. There will be no medical examination for sums of Rs. 2,000/- and below, but for sums above Rs. 2,000/- a medical report shoud be obtained from a collegue without any payment by the company.

3. Payment of premiums in half yearly, quarterly and monthly instalments will be increased 1%, 2% and 3% respectively, proportionately than the annual rate. For sums above Rs. 10,000/- there will be a reduction in the premium rate by As. 8/- per Rs. 1000/- per annum and in case of sums above Rs. 25,000/- the reduction will be Re. 1/- per Rs. 1000/- per annum.

4. There will be no extra charges for lady members if they are single but when they are married there will be an extra premium of Rs. 2-8-0 per Rs. 1,000‖- per annum.

5. The sum assured is payable on death but the payment of premium ceases after the age of 55 and in case of With-Profit policies participation of profits continues throughout the life time of the policy holder even after the ceasation of period of premium after the age of 55.

6. The Company will require the X-ray of the chest or other medical tests in case of members who are employed in Tuberculosis or Leprosy institutions and these additional information should be furnished free to the company.

7. Risk of death is covered even while on active service in the Indian Union, but when going abroad for active service intimation must be given to the company and any extra premium that may be decided from time to time.

8. The premiums are payable at one of the various branches situated all over the country.

9. The premium rates of individual rates are given below :—

INDIVIDUAL RATES

	WITHOUT PROFITS			WITH PROFITS	
Age near birthday	Premium paying terms in years	Special Premium Rs. As.	Representing as a percentage reduction from our tabular premium	Special Premium Rs. As.	Representing as a percentage reduction from our tabular form
20	35	22 15	10·5	26 11	12·3
25	30	26 12	10·6	30 14	12·6
30	25	32 2	11·2	36 12	13·1
35	20	40 5	11·8	45 10	13·8
40	15	53 14	12·4	60 3	14·6
45	10	80 2	11·6	88 6	14·1

SOUTH INDIAN PROVINCIAL BRANCH

Minutes of the meeting of the Council of the South Indian Provincial Branch of the Indian Medical Association held at Madras on 27-1-1952.

MEMBERS PRESENT:—

1.	Dr. U. Krishna Rau	...	President, Madras.
2.	„ Y. P. Vasudevan	...	Vice-President, Coimbatore.
3.	„ A. G. Leelakrishnan	...	Secretary, Coimbatore.
4.	„ A. K. Rajagopalan	...	Treasurer, Madura.
5.	„ M. G. Nair	...	Coimbatore.
6.	„ T. V. Sivanandam	...	Coimbatore.
7.	„ P. B. Annangarachari	...	Madras.
8.	„ N. Chandrasekharan	...	„
9.	„ N. Gangadharan	...	„
10.	„ K. L. Narayana Rau	...	„
11.	„ G. Ramachandra Murthy	...	„
12.	„ B. Ramamurthy	...	„
13.	„ C. Rama Rao	...	„
14.	„ R. Sankaran	...	„
15.	Lt. Col. T. S. Shastry	...	„
16.	Dr. S. Sivaramakrishnan	...	Madras (co-opted).
17.	„ A. M. Sivaraman	...	„
18.	„ T. S. Tirumurthy	...	„
19.	„ D. V. Venkappa	...	„
20.	„ P. Krishna Menon	...	Madura.
21.	„ T. M. Kumaraswami	...	Vellore.
22.	„ C. Nathamuni Naidu	...	Vellore.
23.	„ T. S. Balasubramaniam	...	Trichinopoly.

1. As per rule 7-(b) of the South Indian Provincial Branch, the President co-opted Dr. S. Sivaramakrishnan of Madras for the meeting of the Provincial Council.

2. *Condolence Resolution:* "This meeting of the Provincial Council places on record its deep sense of sorrow at the death of Dr. P S. Varadarajan of Madras and Dr. D. Srinivasan of Trichy and authorises the President to convey this resolution to the members of the bereaved families".

This was passed unanimously all members standing for a minute.

3. *Message of inability to attend:* Dr. S. Subramaniam of Karaikudi sent a letter expressing his inability to attend the meeting—Recorded.

4. *Minutes of the previous Council Meeting:* This having been circulated, Dr. Annangarachari moved and Dr. Chandrasekharan seconded that this be passed. Carried unanimously.

5. (a) This meeting of the Provincial Council congratulates Dr. T. S. Tirumurthy on his being elected as President of the Indian Medical Association for the year.
Moved from the Chair—Passed unanimously.

(b) This Meeting of the Provincial Council congratulates Dr. U. Krishna Rau, President of the South Indian Provincial Branch of the Indian Medical Association on his election to the State Assembly. Moved by Dr. Annangarachari and seconded by Dr. Gangadharan. Carried unanimously.

(c) This meeting of the Provincial Council congratulates Dr. Soundaram Ramachandran, Madura, Dr. E. Paul Madhuram of Trichy and Dr. Ramachandran of Vellore, on their election to the State Assembly and to the House of the People.
Moved by Dr. Annangarachari and seconded by Dr. Sankaran. Carried unanimously.

6. *Business arising out of the previous Council meeting:*

(a) Insurance Scheme for members of the I.M.A.: The President said that Mr. Naidu of the United India has agreed to give the members benefit of his Insurance Scheme. The Scheme would be forwarded in due course to the Secretaries of the various branches for information of the members.

(b) Permanent Office for the Provincial Association: The subject was discussed, but adjourned pending receipt of the report of the Sub Committee.

(c) Increasing contribution to the Journal of the I.M.A.: The President explained that this subject is being taken up with the Central Office. Pending receipt of their reply, the matter was adjourned to the next meeting.

7. *Business arising out of the Conference:*

(a) Condolence resolutions: The President informed the House that these resolutions were forwarded to the members of the bereaved families.

(b) Joint Conference with Andhra Provincial Branch: The President informed the House that he had written about this to Dr. Hanumantha Rao, the President of the Andhra Provincial Branch and his reply was awaited.

(c) Proposals regarding increasing the membership of the Association: The Provincial Council authorised the President to write to various branch Presidents and Secretaries asking them for statistics as to the number of doctors in their respective areas who are not members of the I.M.A. and to request for the views of the President and the Secretary as to whether propaganda to increase the membership could be done by them or whether they think it desirable that somebody from the Centre should be sent to create interest.

(d) Inclusion of Licentiates in the Graduates' Constituency: As the Licentiates are already included in the graduates' constituency, the subject was recorded.

(e) Resolutions 5, 6, 8, 9, & 10: The Hon'ble the Minister for Public Health has been addressed and his reply is awaited.

8. *I.M.A. Circulars:*

(a) Circular No. 3 of the I.M.A.:—Viz, Offer of 2 posts of Residents in Tuberculosis from Canada:— 3 applications were received for this post and all the 3 applications have been forwarded to Central Office and the action was approved.

(b) Circular No. 6 from the I.M.A.: It was suggested that the Secretary should write to the various branches to say that they can inform their members that whoever want this drug for the use of their poor patients, can get them from Dr. Sen, by writing to him.

(c) Letter No. 862 from the Central Office: The President informed the house that letters have been written to His Excellency the Governor and the Minister for Public Health stressing the need for representation of I. M. A. in the upper chamber of the State Legislature.

(d) Letter No. 761 from the Central Office:—It was suggested that in the matter of selection to principles be adhered to, viz., every candidate should have completed one year's House Surgeoncy, and that the age limit be fixed at 30. After some discussion, both these resolutions were carried and the selections were then made and the following candidates were selected.

General Surgery	...	Dr. A. S. Manavalan of Madras.
		„ Venkatramanan of Vellore, N. A.
Pediatrics	...	„ R. Vijayaraghavan of Madras.
E. N. T.	...	„ M. D. Adappa of Mangalore.
Anæthesiology	...	„ C. Gopalan Nair of Madras.
Obstetrics and Gynaecology	...	„ C. Gopalan Nair of Madras.

(e) Letter No. 1160 from Central Office—Recorded.
Circular No. 11 from Central Office—Recorded.

(f) Circular No. 10 Re. Supply of B. M. J.: The Secretary was asked to circularise all local branches as to whether they would get the journal at cost price, in which case they will get one copy free for circulation among the members.

(g) Letter No. 681 from Central Office—Recorded.

9. *Provincial office:*

(a) Location: The Provincial Council thanks the Coimbatore Dt. Medical Association for their kindness in accommodating the Provincial Office in their own premises at Coimbatore.

(b) Secretary's clerk: The appointment of the clerk was confirmed and his pay was fixed as Rs. 100./- plus Rs. 5/- cycle allowance per month with effect from 1—1—1952.

(c) Appointment of part time peon on an allowance of Rs. 10/- a month with effect from 1—11—51 was confirmed.

(d) The Council approved the purchasing of an Underwood Standard Typewriter for the office at a cost of not exceeding Rs. 975/- plus sales tax. It was also resolved to repair the old typewriter and use it in the office.

10. *Treasurer's Office:*

(a) The suggestion of the Treasurer for hiring a typewriter was considered and the Provincial Council sanctioned the purchase of a rebuilt typewriter by the Treasurer and till such time the hiring was approved and a sum of Rs. 15/- p. m. was sanctioned.

(b) It was resolved that Mr. R. Seshan be appointed as auditor for the Association at a remuneration not exceeding Rs 50/- per year. It was also resolved to thank Messrs. Krishnaswamy and Jagannathan, the previous auditors for their services to the Association.

(c) It was resolved to transfer the account of the South Indian Provincial branch of the Indian Medical Association from the Tamilnad Central Bank, Tirchy to the District Co-operative Bank at Madura.

(d) Quarterly Statement of Accounts from October to December: Dr. Gangadharan moved and Dr. Chandrasekharan seconded that the statements may be passed subject to final audit.

11. *Letter from the Managing Editor, "Miscellany".* Secretary's action approved.

12. *Any other matter:*

(a) Venue of the next all India Medical Conference: The President explained that on instructions from the centre, he had made enquiries from Trichy as to whether they were willing to hold the Conference at Trichy in December 1952. Their reply was awaited.

(b) Next Provincial Council Meeting: It was resolved to hold the next Provincial Council meeting at Yercaud under the jurisdiction of the Salem branch in May and the Secretary was authorised to contact the Salem branch for this purpose. It was also suggested that the meeting of the Provincial Council may be held at Kodaikanal if Dr. Rajagopalan could arrange for it.

(c) Letter from the Chettinad branch: The Secretary was requested to write to the Director of Medical Services and find out if there is any order or G. O. at the present time permitting the Medical Officers attending Medical Association meetings as being considered on duty and to report to the next Provincial Council.

(d) Letter from South Kanara: Resolved to request Dr. Raghavan to send a copy of the Miscellany to all the branches of the South Indian Provincial branch.

(e) Deputation to meet the Health Minister: The President was authorised to select the personnel of the Deputation whenever the Hon'ble Minister wanted to meet him.

(f) Letter No. 1196 from Central Office vix., Commonwealth Medical Conference at Calcutta :—Recorded.

(g) The decision of the Working Committee regarding representation of the members on the Working Committee :— Recorded.

(h) *Resolution of Dr. Venkappa.*

The following resolutions were considered :

(i) In view of the fact that Licentiates are not included in the Indian Medical Register at the present moment, the South Indian Provincial Branch of the I.M.A. reiterates its resolution that if in the new register that is being brought into existence the Licentiates are not included, it is of opinion that such a register cannot be called an Indian Medical Register. It therefore is of opinion that in any Indian Register the Licentiates must be included. Otherwise it suggests the scrapping of the Indian Medical Council Act against whose existence there has been repeated protests from both the I.M.A. and the All India Medical Licentiates Association.

This resolution was passed and it was resolved to send this to the Working Committee of the I.M.A. at the Centre.

The second resolution on the Railway Medical Services was adjourned.

(i) Dr. Balasubramaniam on Trichy moved and Dr. Sankaran of Madras seconded the following resolution.

"This Provincial Council requests the Government of India through the Working Committee of the I.M.A. to utilise the whole amount contributed by New Zealand under the Colombo plan for the purpose of post graduate medical education only. This council feels that it would not be proper to spend even a portion of this amount for starting an under graduate medical college in Delhi as reported in the press, as in the opinion of the Provincial Council this may not benefit the whole of India".

It was passed.

13. *Vote of Thanks :*

The Madras branch invited the President and members of the South Indian Provincial Council to TEA at 'Woodlands'. The President of the Madras branch, Dr. K. Narayana Murthy, M. D., after Tea, welcomed the President and members of the Provincial Council and expressed appreciation of the work done by the Provincial Council. Dr. Tirumurthy also spoke on the occasion. Dr. U. Krishna Rau, on behalf of the Provincial Council thanked Dr. K. Narayana Murthy and other members of the Madras branch for their kind hospitality and assured them that the members would carry with them pleasant memories of that evening.

(Sd.) A. G. LEELAKRISHNAN,
Secretary.

(Sd.) U. KRISHNA RAU,
President

ASSOCIATION NOTES

CHETTINAD BRANCH

President : Dr. S. Subramaniam
Vice-President : „ D. O. Sendel
Secretary : „ M. Srinivasalu
Joint Secretary : „ V. Muthiah
Treasurer : „ A. Jabbar

The monthly meeting of the Chettinad branch of the I. M. A. was held on 19-1-'52 at the S. M. S. High School, Karaikudi at 5 P.M. Dr. Mrs. L. Sukumaran. M.B.B.S. was 'At Home' to the members and guests. Dr. S. Subramaniam, M.B.B.S. presided.

Dr. B. Jayaram, M.B.B S. L.R.C.P. & S. T.D.D. (Wales) Medical Superintendent, Rajaji Tuberculosis Sanatorium, Trichy gave a very interesting talk on 'Modern conception and treatment of Tuberculosis'. He dealt in detail about the incidence of Tuberculosis in our country and in particular about the Tubercular lesions in children and the salient clinical features in the diagnosis and treatment of Tuberculosis in general. He demonstrated several X-Ray films taken during the course of treatment of a few patients explaining at each stage how each one of them responded to treatment. There was a lively discussion in which several members took part. With a vote of thanks to Dr. Jayaram for the interesting talk and to Dr. Mrs. Sukumaran for the 'Tea' the meeting terminated.

ERODE BRANCH

President : Dr. R. S. K. Raman
Vice-President : Dr. E. S. Venkatraman
Secretary : Dr. M. N. Shenoy & Dr. N. C. Kuppuswami
Treasurer : Dr. M. M. Shenoy

At the Annual Gathering of Erode Medical Association held on 1st March, '52 at the Sengundar High School, Erode, the following were the members elected office-bearers :—

President : Dr. R. S. K. Raman
Vice-Presidents : „ E. S. Venkatraman
Secretaries : „ M. N. Shenoy & Dr. N. C. Kuppuswami (Both take charge as Joint Secretaries.)
Treasurer : „ M. N. Shenoy
Member to represent in the Central Committee : Dr. R. V. N. Naidu
Member to represent in the Provincial Committee : „ L. K. Muthuswami
The following are the Committee Members :
1. Dr. P. C. Oomen, 2. Dr. K. Balasubramaniam, 3. Dr. Bhaskaran.

The business meeting having come to a close the general meeting was started, in which after Prayer, the newly elected Joint Secretary, Dr. M. N. Shenoy, read the Annual report of the Association and also the annual accounts. The newly elected President took the Chair and Dr. M. D. Graham of the Christian College Hospital, Vellore, gave an interesting lecture on 'TRIALS AND DANGERS OF INFANCY & HOW TO AVOID THEM!'

She gave all the practical hints regarding difficulties met with by the General practitioners, and how to get over them.

The second lecture was by Dr. P. K. Kalyanaraman, Hon. Physician Govt. Hospital, Coimbatore on 'CORONARY SYNDROME'. He gave all practical points and vivid description of some cases, and the amount of care that is required to treat such cases. He dwealt at length on the latest drugs that are used now and their effect and drawbacks.

The third one was by Dr. I. Pichai Roberts of Gnanabaranam Hospital, Coimbatore and he gave an impressive lecture on the diseases that are affected by the deficiency of Calcium and how to diagnose them in the EYES and how to treat them. Though it was a short lecture it was pregnant with facts that all those present appreciated it.

The final talk was that of the Secretary the pleasant job of thanksgiving. He thanked all the lecturers who had condescended to come here and enlightened our minds who were longing to hear such pleasant voices. He also thanked all the members who had come from various parts in and around Erode, and also from Coimbatore and other places, and made this function a grand success. Thanks were also given to the members of our Association who were very keen in taking active part with a determination to make this function a success.

MATHURAI BRANCH

President: Dr. M. N. Rajan
Vice-President: „ T. S. Renga Iyengar
Hony. Secretary: „ P. Krishna Menon
Hony. Treasurer: „ A. S. Annamalai.

The above meeting and conference were held on 1-3-'52 at the Victoria Edward Hall. The minutes of the previous monthly meeting were adopted. The Annual Report, Auditor's statement and accounts for 1951 were adopted. The names of the Office bearers declared elected for 1952, were announced. The budget for 1952 was read and approved. The following were unanimously elected to the Provincial council of the I. M. A. Dr. A. K. Rajagopalan, Dr. A. A. Naidu, Dr. N. Shama Rau, Dr. K. Gopal, Dr. A. A. Annamalai, and Dr. T. S. Renga Iyengar. The following were unanimously elected to the Central Council of the I. M. A. Dr. K. G. Ramabadran, Dr. N. Suryanarayanan, Dr. P. Krishnamenon, Mr. R. Seshan, G.D.A. F.C.A., was elected Auditor for 1952. The resolution brought forward by Dr. P. Krishnamenon was discussed and the following amendment to Rule 16 of the association effected under Para 3, clause 3, the following is to be substituted for the existing provisions—An annual subscription of Rs. Six only for being an "Associate member of the Madura Medical Association". The Business was followed by an interesting clinical meeting presided by Dr. Muhammad Ismail M.B.B.S., D.T.M. District Medical Officer, Madurai. A large number of cases were shown from the wards of the Erskine Hospital and W. F. P. M. Hospital. Dr. A. N. K. Menon, M.B.B.S., D.M.R., D.M.R.D., (Lond)., Head of Diagnostic Department, Barnard Institute of Radiology General Hospital, Madras addressed the scientific session on "Modern Trends on the Radio-Diagnosis of diseases of the chest" and Dr. R. E. S. Muthyya, M. S. D. O. (Oxon) on "The Role of the General Medical Practitioner in Opthalmology." The function terminated after a vote of thanks by the Secretary.

ABSTRACTS FROM THE CURRENT MEDICAL LITERATURE

ANALGESIA AND ANAESTHESIA IN MODERN OBSTETRICS—*The Clinical Journal—Feb. 1950.*

G. C. Steel[1] points out that although child-birth has not yet been made safely painless progress has been made.

Every analgesic drug used in midwifery should fulfil as many as possible of the following criteria: it should be effective, safe, easy to administer, cheap and transportable; it must have a minimal toxic effect on mother and child, and should not affect uterine contractility. The choice of drug will then be influenced by (*a*) the action of the drug; (*b*) the needs of the patient; (*c*) the rate of breakdown of the drug.

No two patients are alike in their needs, and in addition to considering that the mother may need reassurance, sedation, analgesia or anæsthesia, her sleepy requirements must also be considered.

During the first stage the mother is conscious of colicky contractions, increasing in intensity, and some form of mild drug therapy may be necessary. The lighter barbiturates are useful in this stage, pentothal sodium, pentothal acid and seconal all being used. The disadvantage of the barbiturate group is that the rate of breakdown varies and is difficult to assess. The medium and heavy groups of barbiturates should be used with caution—their place in midwifery being to give the patient who is just starting to have uncertain pains a good night's rest.

Morphia and scopolamine should no longer be used to produce "twilight sleep," although these drugs are still indicated in primary uterine inertia.

Pethidine now has an assured place in midwifery. It is both analgesic and antispasmodic, and is especially useful for combating the colicky pain of the first stage. A dose of 100 mgm. is usually sufficient, but some times 150 mgm. is given. Most workers believe that it has no adverse effect on the baby. More recently pethidine has been reinforced by scopolamine for its amnesic and antispasmodic effect.

The latter part of the first stage of labour is often the most painful, and the best time to start increasing the degree of analgesia is in the last half an hour of the first stage. It is at this time that inhalation agents should be introduced.

The degree of success obtained with gas and air depends on the amount of trouble taken by the attendant. The patient must be instructed in the use of the apparatus as early in labour as possible, or even in the antenatal period. She should be told that the gas will not send her asleep but will "blanket down" the pain, and that to get the full effect of the gas she must start to inhale the moment she gets the first warning of an approaching pain. Too much attention cannot be paid to the efficient fit of the facepiece and the stopping up of the safety hole.

Gas and oxygen is more effective than gas and air, as a higher concentration of nitrous oxide can be obtained without fear of sub-oxygenation. It is unfortunate that economic and other factors preclude the wider use of this method.

Trilene is a most helpful adjuvant to gas and air or gas and oxygen, and may be effective if the previous two methods prove inadequate. The question of allowing midwives to use trilene is being investigated. There is no evidence that trilene either slows labour or causes fœtal asphyxia, and various types of inhaler have been developed for its self-administration.

From the point of view of analgesia there is little to be feared in the second stage up to the point of the head dilating the vulva, provided that adequate steps have been taken to deal with the last part of the first stage. If gas and oxygen is being given, the patient should be given three breaths of pure gas the moment she suspects the pain is starting, followed by a mixture of 85 per cent. gas and 15 per cent. oxygen until the contraction is firmly established, then told to bear down. Trilene added to gas and oxygen, or given by itself, is very useful in the second stage. Not being excreted as rapidly as nitrous oxide there is some "hang-over" between

[1] *Post.-Grad. Med. Jour.*, 1949, 285, 319.

pains so that the patient is pleasantly muzzy. Sometimes gas and oxygen is not quite enough to cover the birth of the child; in this instance the anæsthetist is better advised to add a trace of trilene or ether rather than to lower the oxygen content, and so sub-oxygenate the child on the threshold of its independent existence. Cyclopropane is also suitable, but should not be given if trilene has been already used.

The position regarding caudal block is discussed, and it is pointed out that the pain impulses of uterine contractions are obliterated by injecting anæsthetic fluid into the sacral canal through the sacro-coccygeal ligament; with few exceptions labour is painless. The disadvantages include the dangers of infection and of a calamitous fall in blood pressure, though both possibilites are remote. The forceps rate is high, as the head comes down well to the perineal floor and stays there as the mother becomes unaware of uterine contractions and does no active pushing down. The method also causes lack of tonus in the muscles of the birth canal, and a high proportion of cases of occipito-posterior presentation fail to rotate. These drawracks will probably prevent the method from becoming universally applicable, although the effect of the block in causing belaxation of the cervix may cause the method to find a place in the treatment of appropriate cases.

In discussing the anæsthesia required for delivery by forceps, Steel points out that low forceps extraction is covered by gas and oxygen aided by a small amount of trilene or ether, but that the high forceps delivery may be a difficult problem, especially when complicated by fœtal distress. In that case he gives two safety rules; firstly, that, the patient must be kept sufficiently deep for the application of the forceps and the subsequent traction, and secondly, the patient should be given nothing but pure oxygen from the time the head is born until the cord is clamped.

It is a sobering thought that a recent survey, "Maternity in Great Britain," revealed that only about 5 per cent. of women delivered at home in the period reviewed were given gas and air analgesia. Such a figure should not call forth any degree of self-satisfaction, and a complete change of approach to this problem is clearly overdue.

Printed at St. Joseph's Industrial School Press, Trichinopoly—1952

South Indian Provincial Branch Indian Medical Association

POST BOX NO. 530

Oppanakkara Street, COIMBATORE

CIRCULAR NO. 6.

COIMBATORE,
24TH MARCH, 1952.

TO

ALL THE BRANCH SECRETARIES OF I.M.A. UNDER THE SOUTH INDIAN PROVINCIAL BRANCH

SUB :—INCREASING THE MEMBERSHIP STRENGTH OF ALL THE LOCAL BRANCHES OF I.M.A.

The Council of the South Indian Provincial branch at its meeting held at Madras on 27-1-1952 has authorised me to write to all the branch Secretaries to find out from them the statistics as to the number of Doctors in their respective areas who are not members of the I.M.A. and to call for their recommendations of all the local branches as to the best manner in which all these non-members could be induced to enrol themselves as members of the I.M.A. through the various local branches.

I would therefore request you to kindly let me know the total number of Doctors in your area who are not yet members of the I.M.A. I would also welcome your valuable suggestions as to how best you could influence most of them, if not all, to join the I.M.A.

An early reply would be welcome.

(Sd.)A. G. LEELAKRISHNAN,
Honorary Provincial Secretary.

Copy to:

(1) President, Madras.
(2) Vice Presidents.
(3) Joint Secretary, Madras.
(4) Treasurer, Mathurai.
(5) "Miscellany", Trichy.
(6) Doctor Tirumoorthy, Madras.
(7) Central Office, Delhi.

Registered No. M. 4839

ODDS & ENDS

A newly wed entered the chemist's shop and enquired of the man at the counter if the tonic would really build bonnie babies.

"It is guaranteed, Madam, otherwise the money will be refunded."

"Then give a bottle, but please tell me whether I should take it or my husband."

♡ △ ♡

At a party a commoner girl was asked to dance with a Prince. The girl was elated. When she was asked to dance a second time she was in extasy and asked the Prince what this meant.

The Prince replied, "My doctor has asked me to perspire a little but not inspire."

♡ △ ♡

My little daughter has swallowed a gold piece and has to be operated immediately. I wonder if Dr. Reskell could be trusted. "Surely, he is an honest man."

♡ △ ♡

What are the two characteristic differences of the anatomy of the infant and the adult?

The infant's anatomy is straight and narrow. The adult's is protruding and wider.

♡ △ ♡

A lovely little old lady contributed a pair of pyjamas to the Red Cross. "I made them myself," she said proudly. They were perfect in every. detail, except for the fact that there was no opening in the front of the pants. When the inspector explained the error that had been made, the old lady's face fell. Suddenly she brightened. "Couldn't you give them to a bachelor?" she suggested.

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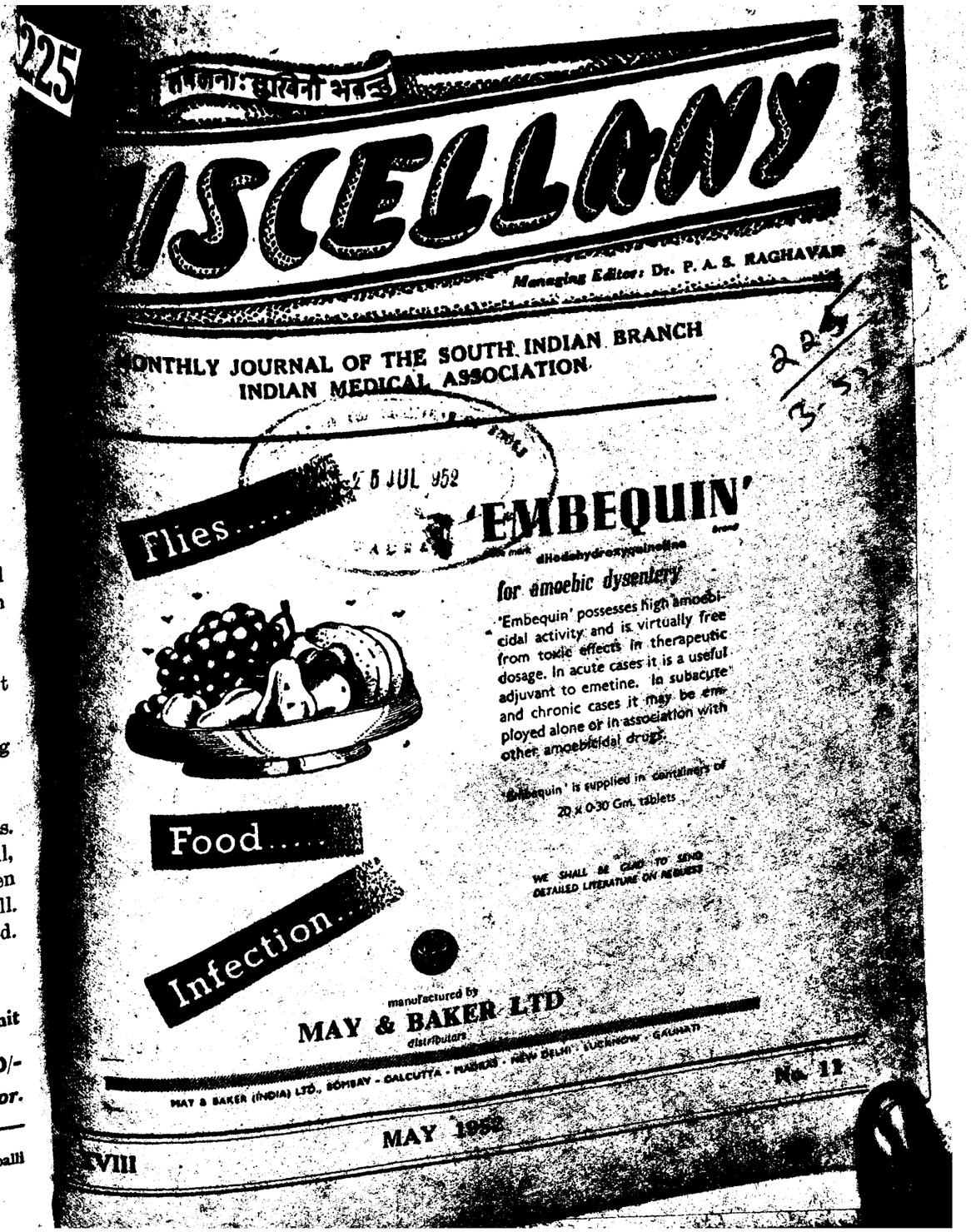

OBITUARY

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We regret to record the sudden and peaceful passing away of ***Dr. U. Rama Rau*** the former President of the I.M.A. in the early hours of 12th May 1952. He was not only the leading medical practitioner in Madras for a number of decades, but also trained many young people in First Aid and Home Nursing, besides publishing a number of books on the above subjects in the various South Indian languages. He was a member of the Madras Corporation for a number of years. In politics he was a nationalist to the core. He was a member of the old Madras Legislative Council and then of the Imperial Legislative Council and with the advent of Provincial Autonomy in 1935, he was elected to the Madras Legislative Council and became its first President. He lived in the ripe old age of 80 and had the satisfaction of seeing his worthy son Dr. U. Krishna Rau becoming a Minister and his renowned son Dr. U. Mohan Rau become one of the greatest surgeons of India. May his soul rest in peace.

Managing Editor.

(FOR CIRCULATION AMONGST MEMBERS ONLY)

THE MISCELLANY

MONTHLY JOURNAL OF THE SOUTH INDIAN BRANCH
THE INDIAN MEDICAL ASSOCIATION

VOL. XVIII] MAY 1952 [NO. 11

MEDICAL TREATMENT OF PULMONARY TUBERCULOSIS

BY DR. B. S. VISWANATHAN, L.M. & S., T.D.D., PERUNDURAI.
& DR. S. MUTHUSWAMY, M.B.B.S., T.D.D.

Pulmonary Tuberculosis is one of those chronic diseases for which a large number of medicines have been tried from time to time. Every new drug has been hailed as the most effective but sooner or later it has been discarded. We are still no nearer to finding a drug which will cure Tuberculosis. This is at once the apology for the title of the paper.

The sheet anchor of treatment in Tuberculosis has been, is still, and will ever be, rest, fresh air and nourishing diet. With the evolution of time and with increasing knowledge our ideas of rest, fresh air and diet have changed. This it is no longer necessary to go to ideal climates for treatment. Even the name "Sanatorium" is being given up nowadays. Any hospital or even the house should be a good enough place to treat cases of Tuberculosis. Time there was when this idea of nourishing diet meant only stuffing the patient with Cod Liver Oil, milk and eggs. Similarly our ideas of rest have also changed, all for the good. From mere physical rest of the patient, the idea has extended to local rest of the diseased tissues.

I will not touch upon the surgical treatment of Pulmonary Tuberculosis. My idea in choosing the subject, Medical Treatment, is that every one of us, including those practising in the most remote villages should be able to do something to arrest the disease in a large majority of patients. It has been estimated that there are about 2. 1/2 million active cases of Tuberculosis in India and the number of available beds to treat these is only about 12,000. This means that only one in about 200 patients can be admitted in Sanatoria and hospitals for treatment and 199 have to be treated in their homes or not treated at all. That is the position in our country today. The members of the medical profession and the members of the public should realise this and should not blame us if we are not in a position to admit every case that seeks admission.

The first essential in the treatment of Pulmonary Tuberculosis is to ensure bed rest. It is always possible (except perhaps in cities and large towns) to manage a portion of the house which is ventilated enough for our purpose and to arrange for a bed there. I know the difficulties of enforcing strict bed rest but no comprise is permissable in this respect as long as there is any fever. If this rest cannot be enforced no good will ever come out of the medicines or injections. Unless the patient is very ill, he may be permitted to sit up for food or to go to the bath room a short distance away. If the patient is very ill or with a high temperature, even this should not be allowed.

The next thing is to find out one of the inmates of the house who will understand instructions and carry them out faithfully. A covered receptacle for the sputum is essential. Instructions regarding the sputum disposal, cleanliness of the room and personal hygiene of the patient and attendants should be given, and repeated at every visit of the doctor. Six months in bed with or without ancillary treatment will achieve much.

If during this period evidences of cavitation are observed then the question of further local rest should be considered. Phrenic crush, Pneumoperitoneum and artificial Pneumothorax are some of the methods available to induce local rest.

Now coming to treatment with drugs I will mention first the various drugs which were in vogue at sometime or other but have now been mostly discarded. These are Calcium, Iodine, Gold and other heavy metals, Carbolic acid, Sulphonamides, Sulphones like Promine, Promizole Sulphatrone, Diazone.

More recently a Japanese drug Cepharanthin a plant alkaloid discovered by Prof. Hasegawa was extensively tried in the Yokohama Sanatoria. According to the Japanese workers, this drug has definitely reduced their mortality rates from 41. 4% to 21. 9% and has increased the healing rate from 9. 8% to 36%. The mode of action is said to be a direct action on the bacilli, inhibiting their growth and an indirect action, by stimulating the Reticulo endothelial system. The dosage is 0. 1 mgm. tablet orally daily for six days in a week, and on the 7th day 0. 1 mgm. by hypedermic injection. Twenty weeks treatment is recommended. Good results have been claimed in productive types lesions and tuberculosis of the larynx, eye and skin. We have tried in 15 cases at Perundurai but no appreciable effects were noticed either clinically or radiologically though in some cases there was a fall in the E.S.R. and improvement in the blood picture. We had no sputum conversions. Further work will have to be done to confirm the effect of this drug in Pulmonary Tuberculosis. If found effective this may be a great boon because it is much cheaper than the other drugs.

Another drug also from Japan which has been tried is Yataconin but this too has not fulfilled the expectations. Para Amino Salicylic Acid and its Sodium and Calcium salts are now largely used. P.A.S. was first synthesised in 1902 by Siedel and Bittner. But it was Prof. Lehman who investigated more than 50 derivaties of Benzoic Acid to find a substance with bacterio-static properties against the Tubercle Bacillus. In this way the highly specific compound Para Amino Salicylic acid was discovered. Pure P.A.S. is a white micro crystalline powder sparingly soluble in water, but its sodium salt is freely soluble. P.A.S. is readily absorbed from the gastro-intestinal tract.

Prof. Lehman first reported in 1946 its clinical application. P.A.S. like streptomycin, is effective in acute exudative cases, but in fibrous or caseous diseases, the effect is not so great. This is due to the fact that this distribution of P.A.S. in the lung is in the elastic tissue and when this is destroyed as in caseous lesions the quantity of P.A.S. laid down in the lung is very small.

P.A.S. is usually administered orally but it can also be used locally, as in empyema, intra-thecally and intravenously. P.A.S. has also been used as an aeresol.

Dosage of P.A.S. No final dosage schedule has been fixed. It appears that used alone, a dose of 10 to 14 gramms of P.A.S. daily in divided doses seems to be effective. Pot. citrate 15 grains daily helps to keep the urine alkaline.

The toxic effects are nausea anoresia malaise, vomitting diarrhoea, dermatitis and haematuria. If these are mild, there is no need to interfere with the treatment but if fairly pronounced a reduction in the dosage may be tried and if severe interruption in this treatment is necessary. The greatest advantage of P.A.S. is that it does not lead to a resistant type of bacilli as rapidly as in the case of streptomycin.

The use of P.A.S. and Streptomycin in combination is the one most favoured nowadays and used in this way the emergence of drug resistant strain of bacilli is considerably delayed. A P.A.S. salt of Streptomycin, strepto-pas has been developed but preliminary reports are not very encouraging. The best way to use Streptomycin and P.A.S. is to give 1 gram of streptomycin every third day with 10 to 12 gramms of P.A.S. daily.

Tibione-Contabene—T. B. I—Thio-Semi-Carbozome recent additions to the drug treatment of Tuberculosis. This was discussed by Domagk in 1946. It has been claimed that this drug is, very effective in exudative Pulmonary Tuberculosis, Adenitis, Laryngitis, Enteritis Tuberculous sinus and Genito urinary Tuberculosis.

Dosage: 2 mgms. per kilogram of body weight everyday. It is usual to begin in with one tablet of 25 mgms. a day, for the first week—50 mgms. a day for the second week—75 mgms. during the third week, till a maximum of 125 mgms. a day are reached. This is continued till a total of 12 to 14 gms. is reached. This takes an average of 6 months.

We have tried T.B. 1 in about 30 cases. My impression is that the toxic effects far out weigh its advantages. It is inferior to Streptomycin and P.A.S. in its effects and more toxic. The milder toxic manifestations are anorexia, nausea, headache, and malaries. The more serious ones are Liver and kidney damage haemolytic reactions, fatal Encephalopathy has been reported in literature after the use of this drug.

More research of clinical trial is needed before this drug can be recommended for final use.

Necacyl: Its chemical composition is Benzico, Thio carbamide. It is given intravenously in 5 c. c. It is said to be beneficial in pleurisy and to produce a synergistic effect with streptomycin. If given with streptomycin it is claimed that the drug resistance is delayed. I am unable to confirm the good effects claimed for this drug.

Streptomycin: I come to streptomycin. It is described as the wonder drug, discovered in 1944 by Waksman. This was isolated from a soil fungus, streptomyciz griseus. The first account of its clinical use in tuberculosis was given by Hanshaw and Feldman in 1945.

Streptomycin is available in three forms, the hydrochloride calcium chloride complex and the sulphate. The doses of all the three, therapeutic actions and toxic effects are all similar. The powder is readily soluble in water or normal saline. The dry powder is stable and need not be kept in a refrigerator.

The mode of action is still uncertain. While some authorities consider it only bacteriostatic in therapeutic concentrations. Others (Waksman) consider it is bacteriocidal and that the spread of its bacteriocidal action is proportionate to its concentration. Experience with its clinical use in tuberculosis increasingly favours the latter view—namely the bacteriocidal effect of streptomycin.

Absorption from the G. 1 tract is slow and not constant, most of the drug being excreted in the fæces. Intravenous injection results in an immediate peak blood level with a steady fall over the next two hours. The rise after intramuscular injection is slower, reaching the peak blood level in 1/2 to 2

the Late Prof. A. S. Kotibhaskar and Raj Mitra B. D. Amin, the last of whom alone survives and whose financial and business genius has brought the Company to its present position of supremacy. These three men who conceived the idea of establishing a Spirit and Pharmaceutical industry on scientific basis were inspired with the patriotic aim of establishing a basic Indian Industry which would provide Indian students, trained in chemistry and other sciences, with a scope for the utilisation and development of their skill and knowledge.

ENORMOUS GROWTH OF ALEMBIC

Today Alembic is a name to conjure with when we think of major industrial enterprises of India. They have done plenty of good to the chemical and pharmaceutical Industry in India. Today Alembic Chemical Works Co. Ltd., not merely manufactures rectified spirit but also produces pharmaceutical products of the finest quality such as B. P. preparations, Medicinal Specialities, Fine Chemicals, Injections, Ophthalmic Ointments, Ayurvedic Medicines, Carbonic Acid Gas, D. D. T. etc. etc.

Highly qualified scientists and technicians with wide Indian and Foreign education, training and experience are on the staff of Alembic to look after various departments. Uptodate machinery and latest equipments are installed by the Company for every operation from the moment the raw material is received until finished product is sent out. There are Research Laboratories, Control Laboratories and Analytical Laboratories of the most modern type. The works have got its own Power House, Water Works, Mechanical Workshop, Dispensary, School, Library, Residential Colony Etc.

Side by side with such advancement, their administrative and business organisations also have registered splendid development and reorientation. Their statistical and publicity departments are well-worth considering as models of modern business organisations.

ALEMBIC GROUP OF INDUSTRIES

A passing reference may be made here about the sister concerns that have started and grown in close connection and co-operation with Alembic, and which together with Alembic constitute the Alembic Groups of Industries. They are:—

(1) Alembic Glass Industries Ltd.:—Manufacturers of glass bottles, containers and ampoules on large scales by the first fully Automatic Plant in India.

(2) Jyoti Ltd.:—Manufacturers of Borehole Turbine Pumps, Centrifugal Pumps, Sewage Pumps, Force Pumps, Domestic Power Pumps, Paper Cutting Machines, Welded Tanks, Chemical Plants, Electric Motors, etc.

It is worthwhile mentioning that there is no capital labour problem in the Alembic factory. From the lowest worker to the highest officer, all get on palpably well with the management who spare no pains to keep up this happy and cordial relations. No other encomium speaks so well of this huge concern as that given by the University Inspection Committee who remarked that they "had not seen anything in India that illustrates better what Indian enterprise and scientific training are able to accomplish."

ASSOCIATION NOTES

COIMBATORE BRANCH

President: Dr. I. Pitchai Robert
Vice-President: Dr. N. Jagannathan
Hony. Secretary: Dr. S. Ganapathy
Associate Secretary: Dr. C. Arumugam
Hony. Treasurer: Dr. T. V. Sivanandam

The monthly clinical meeting of the Coimbatore District Medical Association was held at 5-30 P.M. on 26th April 1952 in the Association premises. Dr. I. Pichai Robert presided. Sixtynine members attended the meeting.

After Tea and light refreshments the new members were introduced. Then the minutes of the previous monthly meeting was read by the Associate Secretary Dr. C. Arumugham and adopted.

The following condolence resolution was moved by the Chair and was unanimously adopted all standing.

"This meeting of the Coimbatore District Medical Association places on record its deep sense of sorrow at the sad demise of Dr. K. N. Ramanathan, Pathologist, Coimbatore, a member of our Branch and Dr. P. Varadarajan, M.D., M.R.C.P. Cardiologist, Madras and conveys its heartfelt sympathy to the members of the bereaved family."

The following congratulatory resolutions were moved by the chair and were unanimously adopted:—

1. This meeting of the Coimbatore District Medical Association congratulates Dr. U. Krishna Rao, Madras, President, Provincial Branch, Indian Medical Association on his appointment as Minister with the Government of Madras, and authorises the Hony. Secretary to convey the felicitations of this Association to Dr. U. Krishna Rao.
2. This meeting of the Coimbatore District Medical Association congratulates the Hon. Sri A. B. Shetty on his assumption of Office as Minister for Public Health with the Government of Madras, and assures the Hon. Minister the cooperation of the members of this Association in improving the health of the people of this State and requests him to consult the branches of the Indian Medical Association in this State on all matters pertaining to the Medical profession and the public health of this State.
3. This meeting of the Coimbatore District Medical Association congratulates Dr. Y. P. Vasudevan, Coimbatore on his assumption of office as the President of the South Indian Provincial Branch of the Indian Medical Association, and hopes that under his able stewardship and guidance, the Provincial Association and all its constituent branches will increase their strength and prestige and their usefulness to the public and to the profession.

Then Dr. S. Balasubramaniam, District Medical Officer, spoke about the distressed conditions in the district and the role of the members of the Medical

profession could play in case of an emergency arising. He appealed to the members to volunteer their free services in the affected areas when a call comes.

Then the President introduced the speaker of the day, Dr. K. C. Nambiar, F.R.C.S. (Eng.), F.R.C.S. (Edin.), Hon. Professor of Surgery, Stanley Medical College, Madras, who gave a very interesting lecture on "Advances in Neuro-Surgery." He dealt in length the causes and treatment of Low Backache and operation in mental diseases and Hydrocephalus, supplementing with demonstration of skiagrams. There was a lively discussion on the subjects in which several members took part.

The President in his concluding remarks, thanked the speaker.

With a vote of thanks by the Associate Secretary to the speaker and the host of the evening Dr. M. G. Nair, the meeting terminated at 8-15 P.M.

I. PICHAI ROBERT
President.

C. ARUMUGHAM
Associate Secretary.

SOUTH KANARA BRANCH

President: Dr. A. F. Coelho, M.B.B.S.
Vice-President: „ M. V. Shetty, M.S.
Honorary Secretary & Treasurer: „ M. Umesha Rao, L.M.&S., T.D.D.(W.)
Joint Honorary Secretary: „ B. R. Hegde, L.M.P.

A Meeting of the South Kanara Branch of the Indian Medical Association was held on Saturday the 19th April 1952 at 5 P.M. at Father Muller's Hospital, Kankanady. Dr. A. F. Coelho, M.B.B.S., Medical Officer, St. Joseph's Leprosy Hospital, delivered a lecture on 'The Diagnosis and Treatment of Leprosy'. There was a good attendance of members.

The meeting began with an instructive demonstration of cases in the Leprosy Hospital showing different types of Leprosy. The technique of taking smears and of administering intradermal injections were also demonstrated. Some cases where surgery has proved useful were also shown.

The members were then taken to the meeting Hall where Tea was served. Dr. K. R. Kini, M.B.B.S. was proposed to the Chair and Dr. M. Umesha Rao, the Honorary Secretary then placed before the members circulars received from the Central office and the South Indian Provincial Branch and also the replies received from the Government on the representations of the District Branch.

Dr. Kini in requesting the Lecturer to deliver the lecture said that Dr. Coelho needed no introduction to the members being the President of the Association and one who had devoted his life to the cause of Leprosy in the district.

Dr. Coelho stated that Leprosy probably had its origin in Egypt and spread through trade channels to Europe, Asia Minor and later to India, China and other places. In Europe, particularly in England, strict measures of segregation succeeded in stamping out the disease. At present Africa, India and China are the hot beds of Leprosy. In South Kanara, Leprosy is prevalent to a fairly high degree though the exact statistics are not available at present.

The learned lecturer then detailed the etiology, epidimeology, pathology, signs and symptoms of the disease, laying special emphasis on the fact that the chief factors in the spread of the infection are age, closeness and length of contact with open cases, the younger the age, the greater the susceptibility to get the infection. Hence the urgent necessity of protecting the children.

Dr. Coelho also stressed the point that Leprosy is of two broad divisions —the benign neural and the more serious lepromatous in which bacilli are demonstrable and which therefore is more infectious to others.

He emphasised about the careful and detailed examination of cases before one is dubbed a Leper and outlined the methods of examination and also laid stress on differential diagnosis. From his own vast experience he gave illustrations of how skin diseases other than leprosy were mistaken for Leprosy much to the detriment of the poor sufferers.

Dr. Coelho then dwelt on the treatment which he said was rather disappointing till the other day. As a result of the Great World Wars, discovery was stimulated and Sir Leonard Rogers used the age-old India's Chalmoogra oil on a scientific basis and later chemo-therapy stepped in. The discovery of the sulphonamides resulted in the use of Sulphones which has now become the method of choice. Dr. Coelho after describing of the drug,

explained the dosage to be used, the mode of administering it and the period for which it has to be given with the necessary precautions to be taken. He said that the benefit of the treatment, if properly carried out is very great especially in old chronic cases. He said the treatment is being given in St. Joseph's Leprosy Hospital here and is found to be very efficacious and that it can be administered by all doctors, if reasonable care is taken. This will help a lot of poor sufferers and also check the spread of the disease.

On behalf of the Hind Kusht Nivarana Sangh of which he is the Honorary Secretary, Dr. Coelho announced that the Sangh is going to supply the drug free of cost to any Doctor in the district for use in poor patients and requested the cooperation from all the members of the Medical Profession.

In conclusion, he said, that we must all do our bit in eradicating this fell disease from our district and hoped that the W.H.O. would interest itself in this problem.

The Chairman Dr. Kini in his concluding remarks congratulated the learned lecturer on his masterly lecture and particularly on the clinical demonstrations which he said must be copied hereafter by all lecturers in future. He appealed to the members for their whole hearted cooperation in the fight aginst this dire disease for which a remedy has been found and which if used on a mass scale will stamp out the disease from our district.

With the usual vote of thanks to the learned lecturer, the Chairman and the authorities of the Father Muller's Hospital, the meeting terminated.

MADURA MEDICAL ASSOCIATION

Proceedings of the monthly meeting held on 19—4—1952.

The above meeting was held at 5-50 P.M. in the Government Erskine Hospital. Dr. M. N. Rajan occupied the chair. The minutes of the 24th Annual General meeting and conference were adopted. The secretary read out a letter received from Dr. U. Krishna Rao in reply to felicitations on behalf of the Association on his appointment as a Minister of the Madras Government. Dr. Rajan placed the accounts of the Building Fund of the Association and appealed for early remittance of contributions to the Fund. Dr. K. Umapathi, M.B.B.S., Resident Medical Officer, Government Erskine Hospital then delivered his lecture on "Some common acute abdominal emergencies." He explained the various aspects of the subject such as, study of the symptomatology, examination and arriving at a diagnosis in cases of "Acute Abdomen" and referred to statistical data from the wards of the Erskine Hospital. He concluded by alluding to the procedures adopted in treating such cases and showed a number of radiographs which were helpful in diagnosis.

The Honorary Secretary then explained circulars No. 5, 7, and 8 from the Provincial Office of the I.M.A. and appealed to members to support the new publication of the I.M.A. entitled 'Your Health', which is intended for the lay public and could be recommended by doctors to their patients and friends for useful reading.

The meeting terminated after a vote of thanks.

MADRAS BRANCH

President:	Dr.	K. Narayana Murthi, M.D.
Vice-President:	„	K. Vasudeva Rao, M.D., F.R.C.P.,
„	„	G. S. Katre, M.B., B.S. [T.D., D.
Hony. Treasurer:	„	R. Sankaran, L.M.P.
Hony. Secretary:	„	G. Ramachandramurthy, L.M.P.
„	„	K. L. Narayana Rau, M.B., B.S.

Tea Party

The Madras Branch of the Indian Medical Association got up a Tea Party on 14-12-'51 at 5-30 P.M. at the Madras Medical College to facilitate two of their distinguished members, Lt. Col. Sir A. Lakshmanaswamy Mudaliar, B.A., M.D., L.L.D., B.Sc., D.C.L., F.R.C.O.G., F.A.C.S., M.L.C., Member, Indian Medical Association, Vice Chancellor, Madras University who has been elected for the fourth term as the Vice Chancellor of the Madras University and who has distinguished himself in the political and medical sphere of activities both in India and abroad and also as the President of the Committee of the W. H. O. and Dr. P. Arunachalam, M.D., M.R.C.P. (Lond.), D.M.R. (Lond.), T.D.D. (Wales), Member, Indian Medical Association, Director of Medical Services, Govt. of Madras, who has been appointed as the Director of Medical Services, Govt. of Madras, the highest honour a member of the profession can aspire in service.

Dr. K. Narayanamurthy, President of the Madras Branch welcome the chief guests and congratulated them on their distinguished career. Dr. U. Krishna Rau, President of the South Indian Provincial Branch and Dr. T. S. Thirumurthy President elect of the Indian Medical Association (Central) falicitated both the members. Dr. G. Ramachandramurthy, Secretary, Madras branch proposed a vote of thanks.

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The Provincial Council of the South Indian Provincial branch of the Indian Medical Association held its meeting on Sunday the 27th January '52 at 323-24 Thambu Chetty Street, Madras. The Madras branch of the I. M. A. gave a Party in honour of the President and members of the Provincial Council at 'Woodlands,' at 5 P.M. The party was well attended and the members spent an enjoyable evening.

Dr. K. Narayanamurthy, President of the Madras Branch of the I. M. A. welcomed the Provincial Council members and the President of the Provincial branch. Dr. T. S. Thirumurthy congratulated Dr. U. Krishna Rau, (President of the South Indian Provincial Branch) on his phenomenal success in the recent elections to the State Assembly. Dr. U. Krishna Rau thanked the Madras branch on behalf of the Provincial Council for the party.

CHANGE OF ADDRESS

Dr. C. S. Sundaram	from	Golden Rock to Villupuram.
Major P. Govinda Rau	„	9, Sarojini Road, Thallakulam Post to 19, Azad Road, Gandhinagar, Thallakulam Post.

MALABAR BRANCH

President : Dr. C. K. Menon
Vice-Presidents : „ C. V. Narayana Iyer
„ A. Narayanaswami
Treasurer : „ M. K. Koya
Hon. Secretaries : „ C. R. Parasuraman
„ A. B. Das.

A meeting of the above Association was held at 5 P.M. on Saturday, the 26th April 1952 at the new Headquarters Hospital, Beach Road, Kozhikode, 1.

Dr. C. K. Menon presided.

About 40 members were present.

The meeting started after the members were entertained to tea by the branch. After the introductory remarks by the President and the minutes of the previous meeting held on 5-4-52 were read by the Secretary, Dr. C. R. Parasuraman, the following resolutions were passed :

RESOLUTION : I. This meeting congratulates Dr. U. Krishna Rao, the President of the South Indian Provincial Branch of the Indian Medical Association on his being appointed as a Minister in the Madras Cabinet and conveys its best wishes to him for his success.

RESOLUTION : II. (a) This association resolves to wind up the Executive Committee of the 6th South Indian Provincial Medical Conference.

(b) This association requests the office—bearers of the above committee to hand over the records and balance sheet to the Secretary of the Malabar Branch of the Indian Medical Association.

Resolution moved by Dr. C. V. Narayana Iyer.

RESOLUTION : III. This association places on record its high appreciation of the great services rendered by the Chairman, Secretaries, Treasurer and members of the Working Committee of the 6th South Indian Provincial Medical Conference for the grand success of the Conference.

Resolution moved by Dr. C. R. Parasuraman.

RESOLUTION : IV. Resolved to request the South Indian Provincial Branch to take early steps to send a deputation to the Hon'ble Minister for Public Health and the Hon'ble Dr. U. Krishna Rao, ex-President of the South Indian Provincial Branch of the Indian Medical Association concerning the enhancement of status and pay of local fund and municipal medical officers.

Resolution moved by Dr. K. C. Menon, Kuthuparamba seconded by Dr. A. B. Das.

After this, two, interesting clinical cases were demonstrated under the auspices of the District Medical Officer, Kozhikode. At this juncture there was a sudden outburst of thunder storm and very heavy down-pour of rain resulting in the failure of electricity. Even after patiently waiting for about 45 minutes the electricity was not restored. At this stage, the meeting was adjourned and the film show on Anaemia arranged by Messrs. Squibbs was cancelled.

TANJORE BRANCH

SIXTEENTH ANNUAL REPORT

1951 - 1952

MR. PRESIDENT, LADIES AND GENTLEMEN,

It gives me great pleasure and I consider it a greater honour to welcome you all for this, the 16th Annual Gathering of our District Branch of the Indian Medical Association. Fifteen years have passed and they have not passed without making a mark in the march of Events. Within that period, it is not exaggeration, if I say, that something has been achieved in the acquisition of up-to-date knowledge in Medical Science in order to render effective service to the ailing humanity.

By holding conferences of this nature as often as possible, we believe, that Man's fundamental 'wishes' namely the desire for recognition, the desire for security, the desire for newer experience and last but not the least, the desire for association with other fellow members of the profession are promoted. The necessity for closer co-operation among medical men has become more urgent after the attainment of our country's independence. Bearing this in mind, the Indian Medical Association is striving its very best to bring the deciples of Medicine under a single canopy to secure them better recognition, adequate security and more opportunities for gaining newer experiences.

In the march of our country's progress, the Indian Medical Association represents a wheel, its branches its cogs. The strength of a cog depends upon the material used, the material here being the co-operation that is given and the interest that is evinced by the members. Unity breeds solidarity which in turn begets strength. In the present transitional period of our country's history, a unified body of Medical Men would be a great contribution towards its progress and it would be construed as an act of patriotism by the public.

Ladies and Gentlemen, the Health of our Nation is in your hands, its Wealth in your action. As guardians of that sacred trust, Medical Men in our country, would I am sure not fall short of expectations, would readily come forward at the call for duty that is incumbent on us as citizens of the Bharat.

Coming now to the annual report, the year began with the inaugural meeting held in the gaily decorated hall of the Medical School Buildings, R.M. Hospital, Tanjore on the 25th of March 1951, when Doctor K. Vasudeva Rao, M.D., F.R.C.P., T.D.D., then Deputy Surgeon General with the Govt. of Madras delivered the inaugural address. He revealed that the Government was contemplating the opening of some Medical Colleges, one at Madura and the other at Andradesa. He appealed to the doctors both inside and outside the Hospital to conduct periodical clinical conferences in order to discuss interesting and tough cases thus deriving benefit both for themselves and for the patients.

Following the Presidential address, there was a lecture on 'Congenital Heart Diseases' with X-ray illustrations by Dr. R. Subramaniam, B.Sc., M.D., M.R.C.P., Physician, Stanley Hospital, Madras. The lecturer stressed that the detection of these cases is possible provided one bears in mind the symptoms of this congenital malady in the out-patient department.

Dr. D. S. Iyer, M. S., F. R. C. S., (Eng). Professor of Operative Surgery, Medical College, Madras spoke on 'Abdominal Pain, its diagnosis and treatment', stressing upon the significance of pain, in the front and back aspect of the abdomen and their relations to the abdominal viscera.

The members were entertained in the evening to a film show on 'Vitamin-Riboflavin' by Messrs. Eli Lilly & Co., of India (Incorporated) and on 'Parpanit' by Messrs. Geigy.

The office-bearers were elected for the ensuing year.

The day ended with a dinner by the Hony. Secretary, Dr. N. R. Subramanyan.

Membership. There are at present on rolls only 66 members in our Branch which is indeed a poor representation for a big District such as this, where there are about 200 doctors and it is a regrettable fact to state that only a small percentage, as mentioned above, have taken interest in the activities of our Association. I wish to emphasise here that it must be the ideal of all medical men in this District to be members of this Association. So I would appeal to all medical men, as I did last year, to enrol themselves as members of this branch of the Indian Medical Association which is the only representative body of medical men in the Republic of India.

Activities. There were eight monthly meetings during the year under review. The average attendance was about 40. Prominent members of the profession have addressed us during the year. (Vide Appendices for details).

Committee Meeting. There was one committee meeting to carry out the routine business of the Association.

Habitation. As usual, we have been enjoying the hospitality of the Government through the District Medical Officer by the use of the Medical School Buildings to hold our monthly meetings. I understand that the Government have already sanctioned extra accommodation of beds in this hospital and that the present venue of our gathering would be utilised for that purpose. Hence, a situation has developed when our Association should seek a permanent residence, with no resort to nomadic life, to hold our monthly meetings, to house a good Library, and to accommodate the visiting Doctors. With the meagre funds available at the disposal of our Association, it is not possible to achieve the above object, unless an effort is made to raise liberal donations both from the doctors and from the public. Hence, I feel, that it would not be out of place if I request the members present here to extend their helping hand in the matter.

Finance. It is gladdening to note that there is a slight improvement in the financial position of our Branch as compared with the previous year. We would have been richer still had there been more members in our Association. Thanks to the various hosts who took the major share of our expenses, there was not much depletion in our Finance.

General. It is now realised than an effective 'Health Education' to the common people of our country is essential for maintaining 'positive health.' Preventive medicine has been accepted as an urgent need in every civilized

country. The medical profession is being accused, not perhaps unjustifiably, of false ideas of professional etiquette. In countries like the United States of America, eminent Medical Scientists are discarding some of the traditional ideas and trying to educate the people about their health. Attention towards this important aspect has already been paid by the Indian Medical Association. As evidence of this, they have recently started the publication of 'Your Health' for educating the public.

The public too, in turn, have begun to realise the value of health. They have now come out with liberal donations for starting Health Centres in various places. To wit, in our own district, we are proud to possess a well equipped, spacious mammoth building, dedicated to the father of the Nation, 'The Mahatma Gandhi Memorial Tuberculosis Sanatorium' at Sengipatty, financed mostly by public donations.

Charitable institutions and Service Clubs like the Rotary Club of Tanjore have already started constructing an additional Maternity Block in the premises of the Headquarters Hospital for extra accommodation and treatment.

Hence, Ladies and Gentlemen, you will now realise that the role that the Medical Man has to play is dual in character. His is not only to treat but also to impart some rudimentary knowledge about health.

Blood Bank. Reference was made about the Blood Bank in my last year's report and as I said then that the existing Blood Bank in the District Head-quarters Hospital needed more propaganda to the medical profession and the lay public in order to popularise the valuable service for emergencies both for acquiring donors and giving blood transfusions.

A Laboratory In Every District. I am happy to announce to the audience assembled here, that my suggestion for the need of a Laboratory, a miniature King Institute, in every District to facilitate medical practitioners to diagnose cases scientifically, has been accepted by the Government and the latter has taken up necessary steps to equip every District Head-quarters Hospital with uptodate instruments for Laboratory Diagnosis, and to appoint trained doctors for this work.

Our Thanks. Before concluding this report, let me take this opportunity of thanking the various lecturers of this evening who have responded to our invitation and have given us the benefit of their rich knowledge and experience. Our thanks are also due to various Doctors who have addressed us during the year and thus kept the spirit of our association alive and energetic. Last but not the least, we are grateful for the various Pharmaceutical Manufacturers for playing hosts to our dinners and teas during the year,

Thanking you,

For the Managing Committee,

(Sd.) N. R. SUBRAMANYAN,

Hony. Secretary and Treasurer.

LIST OF LECTURES HELD DURING THE YEAR

No.	Date	President	Lecturer	Subject	Host	Attendance.
1	25—3—51	Dr. K. Vasudeva Rao M.D., F.R.C.P., T.D.D., Deputy Surgeon General with the Govt. of Madras.	Dr. K. Vasudeva Rao M.D., F.R.CP., T.D.D., Deputy Surgeon General with the Govt. of Madras.	Presidential Address.	Lunch: By courtesy of M/s. Albert David Ltd., 15, Chittaranjan Avenue, Calcutta 13.	150
			Dr. R. Subramaniam, B. Sc., M.D., M.R.C.P. (Lond) Physicion Stanley Hospital, Madras.	Congenital Heart diseases.	Tea: By Courtesy of M/s. Fine Pharmaceuticals, Motilal St., Kumbakonam.	
			Dr. D. S. Iyer, M.S., F.R.C.S. (Eng.) Professor of Operative Surgery, Medical College, Madras.	"Abdominal pain, its diagnosis and management."	Cool Drink; By Courtesy of M/s. Indian Health institute & Laboratory Ltd., Madras.	
				Film Show; "Riboflavin"	Film Show: By courtesy of M/s. Eli Lilly & Co. of India (Incorporated)	
				"Parpanit Film"	By Messrs. Geigy. Dinner :-By Dr. N.R. Subramaniam M.B.B.S. Tanjore.	
2	29—4—51	Dr. E. K. Menon, M.R.C.S., (Eng.) Hony. Surgeon, R.M. Hospital, Tanjore.	Dr. M. S. Narayanan, L.M. & S. Trichinopoly.	"Anæmias, Hæmatology and Therapeutics."	Tea by: Dr. T. M. Pillai, L.M.P., Tiruvadi.	45
3	24—6—51	Do	Dr. K. I. Thommi, B.A., M. B. B. S., Civil Asst. Surgeon, R.M. Hospital, Tanjore.	Medical Emergencies.	Tea By:- Association.	30
4	29—7—51	Do	Dr. N. R. Subramaniam M. B. B. S., Hony. Physician R. M. Hospital, Tanjore.	Recent advances in therapeutics.	Tea By:- Dr. S. Viswanathan, L.M.P., Koradacheri.	41
5	25—8—51	Do	Dr. E. K. Menon, M.R.C.S., (Eng.) Hony. Surgeon, R. M. Hospital, Tanjore.	"Infections of the hand"	Tea By:- Dr. R. Narasimhachari, M.B.B.S., Kumbakonam.	25
6	23—9—51	Do	Dr. T. Shetty, M.D. Chettinad.	"Certain Ear Nose and Throat conditions met with in general practice."	Tea By:-Dr. P. A. K. Nair, D.M & S. T.D.D. Tanjore.	30
7	24—11—51	Do	Dr. G. A. Sundaram, B.A., M.B.B.S., Civil Asst. Surgeon, Govt. Hospital, Mayavaram.	"Tetanus"	Tea By:- Dr. Mrs. K. A Selvanayagam, L.M. & S., Tanjore.	30
8	27—1—52	Do	Dr. A. N. Subbaraman, M.B.B.S., Dist. Medical Officer, Thiruchirapalli.	'Anatomy of the Inguinal Hernia with reference to its treatment	Tea By:- Association.	

ABSTRACTS FROM THE CURRENT MEDICAL LITERATURE

THE FACILITIES AVAILABLE FOR THE CARE OF THE ELDERLY IN THE HOME—*Marjory W. Warren, M. R. C.S., L.R.C.P.—The Medical Prac.—Aug. 1950.*

The whole subject of the elderly person in the home whether healthy, infirm or sick, is a complex one and each case merits personal attention. Fortunately in the majority of cases the healthy and infirm elderly remain independent or receive all the assistance which they need from relatives or friends. With the others, there is in almost every instance a social, a psychological or a medical aspect, and each must be considered in its right perspective. There is the question of loyalty to the individual, to the family and to the community to be carefully analysed and advised upon. Should an elderly invalid be recommended a bed in hospital when this is not really necessary on medical grounds, in order to satisfy relatives or friends, or should due care be exercised to reserve such accommodation for those patients who need investigation or treatment which connot be undertaken at home and must be given in a hospital? Should an elderly person be encouraged to take a vacancy in a Welfare Home when there is sufficient domiciliary help available for him to remain in his own home?

Before studying the various domiciliary services available for elderly persons, it is well to consider certain general principles:

First, elderly persons should, whenever possible, be encouraged and assisted to remain living in their own home, as it is in these familiar surroundings that they are best and happiest. In all cases therefore where it can be arranged, aid should be taken to the home rather than taking an elderly person away from the home.

Secondly, the elderly, when sick, can and should be nursed and treated at home for many ailments, and this should be arranged whenever possible. Under such conditions and surrounded by those who know them best, they are more likely to get better quickly, than when moved to strange surroundings in the care of strangers and submitted to an unfamiliar regimen. Many become mentally confused and irrational when submitted to such strains.

Thirdly, it must be agreed that when help of any kind is needed for an elderly person the relatives and/or friends are the first who should be called upon to give such service.

At the present time both hospitals and welfare homes for the elderly find that the numbers seeking admission far exceed the vacancies. This is in part brought about by a failure on the part of all concerned to receive back again an elderly person after hospital treatment has been completed, and a tendency at times, on the part of irresponsible relatives, to plead for hospital accomodation or to seek a permanent welfare home or hostel vacancy when such is not really necessary. This tendency must be watched very carefully if the right people are not to be denied a vacancy when it is really needed for medical or social reasons.

Domiciliary Services

With the foregoing facts in mind, and if these principles are to be respected, then it is obvious that in many cases considerable domiciliary service will be needed, for social and/or medical reasons, and in the prevention of both social and medical ills. Such domiciliary services, if properly assessed and administered, will greatly raise the general standard of health of all sections of the community, as the health of any one section always reacts upon other sections, and will add a considerable measure of happiness and feeling of security to the elderly themselves.

Such services as are at present available can be drawn from five sources:—

(1) Relatives and friends.

(2) Consultant services, from members of hospitals.

(3) National Assistance Board.

(4) Local Authorities.

(5) Voluntary Organizations.

Apart from the National Assistance Board, where only a minimum of variation will be experienced in different parts, the services available under all these headings vary considerably in different cases and

in different areas, de-pending upon financial circumstances and personnel available.

Relatives and friends.—It is obvious that when accepting an elderly patient on to his panel or when called out to see an elderly sick person, it is wise for a general practitioner to learn as much as possible concerning the family history, and especially what relatives are available if help is needed. It is also of considerable help to know what is possible of the normal mode of life and especially the patient's contacts with relatives and friends.

If the medical condition merits treatment at home, relatives or friends should be advised of what additional help can be obtained and told why admission to hospital is less good and less reasonable. Success in making such arrangements will depend partly upon the patient and his relationship with relatives and friends, partly upon the ability and willingness of relatives to help, and partly upon the practitioner in explaining the general principles underlying his decision to treat at home, and on his ability to recruit the help which may be needed.

Consultant services from the hospital.—Under the new National Health Service Act, it is now possible to call out in consultation specialists from the hospital to see patients in their own homes without incurring additional expense for the patient. Such services may be called upon when a general practitioner feels that he wants a consultant opinion, and also to reinforce his own decision to treat at home if he deems this advisable. Alternatively, he may send his patient, to see a consultant as an out-patient, when advice will be given in a similar way. Such consultations should be freely used, as closer contact between the specialist and general practitioner is much needed.

In addition to such consultation services, a specialist must be called upon when a medical appliance is needed, as under the National Health Service Act only a medical certificate of recommendation from a specialist is accepted. Such certificates are required for all appliances, e.g. belts, trusses, wigs, orthopædic appliances including limbs, wheel-chairs, and so on. Exceptions are for dentures, and at the present time glasses, when a general practitioner considers that a simple refraction is all that is needed. In the former case a general practitioner should send a letter of recommendation to a dental surgeon, and in the latter case a form O.S.C.I. should be completed by him for the optician.

In passing it should be noted that in his own interests every patient should be accepted by a dental surgeon before an emergency makes it imperative to seek urgent treatment.

The National Assistance Board.—The National Assistance Board deals only with monetary grants in connexion with maintenance for food, clothing and shelter. Personnel in the service of the National Assistance Board will always visit, if asked, such cases of need as are reported to them. The address of the local branch can be obtained from the Post office.

The Local Authority, including Borough and County Council.—The powers of the Local Authority have been very considerably augmented as regards domiciliary services since the National Health Service Act came into force in July 1948, and these services all operate through the Medical Officer of Health. Under broad headings, these services include:—

(a) Health visitors.
(b) District nurses.
(c) Home helps.
(d) Welfare of the Blind, often operated through a voluntary organization.
(e) Supply of medical aids.
(f) Welfare Service.

It is therefore well for a general practitioner to make contact with his local Medical Officer of Health or County Medical Officer, and also to seek an introduction to the Superintendent of Health Visitors, the Superintendent of the District Nursing Service, the Organizer of the Home Helps, any local organization working especially for the welfare of the blind, and the office through which the medical aids can be obtained.

Health Visitors

Health Visitors are employed by the local authority and are highly qualified nursing personnel. They are mainly concerned with nursing advice and education on health matters in the home, and do not undertake practical nursing. Hitherto the health visitors have worked almost exclusively with maternity cases and children under school age, but their duties are now extending to embrace the whole family, and much work is being done with the elderly in the home.

The District Nursing Service

Until the National Health Act began to operate in Jnly 1948, this service was a voluntary organization, but it is now officially under the local authority. In many cases, however, the local authority has asked the voluntary body to continue its own administration, while itself providing a large proportion of the money required to operate the service.

District nurses are too well known to require any introduction here and are available as practical nurses (men and women) in the home. The majority of district nurses are S.R.N., but in some districts S.E.A.N. are also being employed for certain work. In the case of the elderly, and especially those who have no relatives or friends nearby, it is often necessary to ask a district nurse to call weekly to give a bath, either in the tub or a blanket bath, and to give a hair wash. At such times toe nails can be clipped and feet supervised. Any nurse called upon to give such a regular bath service should be asked to note the conditions of the feet and report, if necessary, as uncomfortable feet from any cause is one of the most common ailments amongst the elderly which results in confinement to bed, or at least renders the person house-bound with all the attendant disadvantages, physical and mental.

District nurses are also available for all dressings, under medical supervision, attention to suprapubic and colostomy apparatus, and for injections of all kinds in the treatment of patients at home. A district nurse may be asked to attend weekly, daily, or more or less often, as required.

Home Helps

This is a comparatively new service and works under the local authority. In many localities there is now an organizer of home helps who is responsible for recruiting and running the service, and introduction to her is most helpful from the point of view of discussing general principles, details of her particular service and individual cases. For example, whenever possible, home helps who like and understand the elderly should be employed in work for them; and few changes to individual persons should be made, as the elderly are conservative and do not tolerate changes well.

Home helps are not nursing personnel and should not be asked or expected to undertake any nursing duties. The majority of home helps are women, but there are some men in the service and their function is to do, as nearly as possible, what would be undertaken by a relative or a good friend or neighbour. Duties include domestic work of all kinds (and the personal needs of individual elderly persons vary considerably), washing, cooking, shopping, mending and sometimes even letter writing. A home help may be asked to give one or several hours daily or two or three hours once or twice a week, or occasionally in special cases a home help may go into a home for much longer hours daily for a short period of time—but all these points are matters for discussion.

Local authorities vary considerably in the size of their home help organization, depending upon their budget, the need for the service and local recruitment. So far in most districts there is no real difficulty in recruitment, but it is obvious that as the service becomes better known and more extensively used there may well be a shortage.

The advantage of this valuable service in connexion with the elderly cannot be overestimated. In addition to the actual work done by the home help, her visit is of great benefit, especially to one who lives alone, as it is a regular contact with the outside world and one which can give much satifaction and can be relied upon. The service is a paid service and the local authorities fix rates of pay. In any case of difficulty in this connexion the organizer of the home helps should be consulted.

Welfare of the Blind

The welfare and care of the blind are now the responsibility of the County Council, but as there are in existence many well-organized and active voluntary associations concerned with this work, it is

not uncommon to find the county authorities operating through such a service. In fact, where there is a voluntary organization, it is more usual for the County Council to ask them to undertake the care of patients in their area.

First, in the case of a blind person it is important that he should be registered as such, as he is then entitled to a small additional monetary grant, which is dispensed by the National Assistance Board. Such registration can be undertaken only by an ophthalmic surgeon approved for this particular type of work. In addition to the monetary grant, there are numerous other services available. These include provision of a white stick, which easily marks a blind person and assures him extra consideration from the public; opportunities for instruction in the use of Braille type; libraries for the blind, and visiting. It is obvious that in many cases without such services a blind person may be in serious need of help and very lonely indeed.

Like all voluntary services, those working for the blind are not uniformly distributed throughout the country and therefore local knowledge is essential, and an introduction to the local organization most beneficial. When it is considered that even with all the domiciliary services available to the blind, an individual cannot be properly or safely cared for at home, then a request should be made for a vacancy in a Home for the Blind, and such request should be made to the County Council. It should be noted, however, that such homes only admit persons who are blind, but otherwise independent, and that at the present time vacancies are in short supply.

Supply of Medical Aids

The local authority is empowered to provide a number of aids of an impersonal nature for the use of patients in their own homes. Such articles include mackintoshes, air-rings, bedpans, commodes, bed rests, bed cradles, and the like. Medical appliances do not come under this heading, and when in doubt the local authority should be consulted. The provision of these articles is on loan and the local authority is entitled to ask for a deposit and/or charge a regular rate for use.

In most areas this service is operated through a voluntary organization, e.g., the Red Cross.

Welfare Service

The County Council Welfare Department operates through its local area welfare officers and includes the provision of places in County Council Homes, care of cases of eviction and of other homeless persons. The County Councils also deal with persons considered to be of unsound mind, through the duly authorized officer. In an emergency the name and address of the local area officer and the duly authorized officer can be obtained from the police, and at other times through the Town Hall or County Medical Officer of Health.

Voluntary Organizations

From the very nature of their origin and the work which voluntary bodies undertake, it is obvious that their services cannot be uniform throughout the country, and what pertains in one district may not be available in another. A general practitioner is therefore advised when going into practice to acquaint himself with 'the local strength'. Generally the local authority will give this information. In some districts, it may be the Red Cross, National Old People's Welfare or Women's Voluntary Service, whilst in others it may be the Quakers or one or other of the religious denominations. But in all cases, personal contacts and inquiry will be the only satisfactory means of learning what amenities are available through the various channels. At the present time, it may fairly be said that the voluntary bodies do largely help to fill the gaps and, as already indicated, some of the work of the local authority is operated through the voluntary societies. It would be impossible to cover all the services rendered by the voluntary bodies, but the following notes may be of help:—

Provision of medical aids.—A number of voluntary bodies, particularly the Red Cross, issue on loan, medical aids such as have been enumerated under the heading of Local Authorities.

Provision of wireless sets.—It is now possible on an application by a medical officer or a social worker to obtain a wireless set for a bedridden or house-bound patient, and such an amenity for those who are interested has obviously great advantages. The society through which this operates is: 'The Greater London Society for Wireless for the Bedridden', 32 Ellerton Road, London, S.W. 18. Another body which may sometimes help with this service is the local rotary club.

Library service.—Some voluntary organizations, notably again the Red Cross, provide travelling libraries for those who are unable to make use of the ordinary library facilities. They take a selection of books for the patients' choice and make regular visits.

Meals on wheels.—A number of voluntary bodies, notably the Women's Voluntary Service, provide a domiciliary meal service on request from a general practitioner or social worker. Details of the service vary in different parts according to the facilities available, e.g., the number of voluntry helpers, and treatment. In some districts the work started by a voluntry organization is being taken over by the local authority. The service is not free, but the charges for meals are modest.

Visiting.—This is perhaps one of the most valuable services given by the voluntary bodies. It provides not only a personal contact, conversation and perhaps small personal services such as letter writing, telephoning, reading, mending or shopping, but also provides an opportunity of real friendly care of an elderly person. Such visits are very welcome and should be encouraged.

Clubs.—Many voluntary bodies have formed clubs for elderly persons commonly known as 'Darby and Joan Clubs', 'Over Sixties', and so on, and these provide a meeting place for many lonely folk and again afford an opportunity for hearing of needs. These clubs vary considerably in nature, amenities, frequency of meetings and activities. The large and regular attendances leave no doubt as to the need for such places of recreation and diversion.

Occupational and diversional therapy.—Some voluntary organizations provide occupational or diversional therapy for the house-bound when this seems advisable, and a good deal of diversional therapy is arranged for by the clubs.

Services for the blind, the deaf and dumb.—The former have already been mentioned. Corresponding services for the deaf and dumb, and clubs for them are provided in certain areas.

Sitters-in and sitters-up—These services are special amenities provided in only a small number of districts and depend largely upon the need and the recruitment of voluntary helpers available. It is obvious that voluntary help to sit-in with an elderly invalid who would otherwise be alone all day while workers are out, or to relieve so that a young married couple can go out together, or again to sit-up with an elderly person who needs little night attention in order to relieve a worker of such night duties, is extremely valuable, but must only be sought if there are no relatives or friends who could be called upon. This service is at present very limited.

Homes.—The voluntary bodies of all kinds have done a major work in the provision of Homes of all kinds, which are an example of what variations and intelligent experiments can provide. Homes may be for permanent or short stay cases, and may be mixed or not.

Other Services

Apart from those services already described under the appropriate headings, three other services should be mentioned for the various reasons given below.

Physiotherapy in the home.—This is a service which should be used in a very limited way only, for two reasons:—(1) Trained physiotherapists are in short supply and it is obvious that a widespread demand for domiciliary treatment would reduce the working hours available for their professional work. (2) It is infinitely better for an elderly person who needs physiotherapy to have this with others where a healthy rivalry and spirit of competition accelerate progress. It is therefore preferable, whenever possible, to provide such treatment in the out-patient department of the nearest hospital, obtaining transport when required. If these points are kept in view, this service will be restricted, as it should be, to a very few carefully chosen cases.

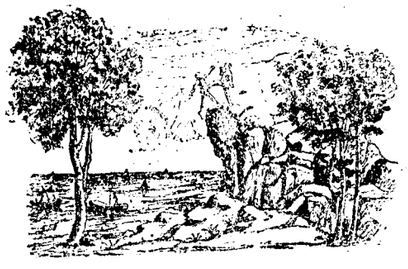
Domiciliary laundry service.—This is a service which is much needed and is already under discussion at high level between local authorities and Regional Hospital Boards. There are, however, a few districts in which a limited service is already in operation. General practitioners who have suitable patients for this service should therefore apply to the local authority and, failing this approach, to any voluntary body in the area.

Chiropody service.—This service is also much needed as the care of the feet among the elderly is one of the most valuable preventive measures against ill-health. The need is recognized by all and there is evidence that the service may be started on a big scale in the future. At the present time, in some districts the local authority has already made a start, and in others the voluntary bodies are giving some service. General practitioners are therefore advised to make known all cases which need such service, as the demand will probably act as an incentive to create the service where this does not already exist.

Conclusion

If any general practitioner has difficulty in finding out what voluntary services are available in the area of his practice by the means suggested, he should either get into touch with an almoner at the nearest general hospital or write to the General Secretary of the National Old People's Welfare Committee, 26 Bedford Square, London, W.C.1.

Finally, in using domiciliary services for the elderly, two golden rules must be applied—first, to put the patient into touch with the correct service or services, and secondly, to use the services carefully and providently, both in the interests of the patient and of the community.



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ODDS & ENDS

Specialist: "I'm sorry, but I cannot do anything for you as your complaint is hereditary. My fee is ten dollars."

Caller: "Thanks, send the bill to my ancestors."

♡ ♤ ♡

Nurse: "There is a man outside who wants to know if any of the patients has escaped lately from the mental hospital."

Doctor: "Why does he ask?"

Nurse: "He says somebody has run off with his wife."

♡ ♤ ♡

After the wedding breakfast, a London groom happened to notice that one of the guests, a young doctor, wore a gloomy expression clearly indicating that he was not having a good time. So the newly-made husband approached the youth with the idea of cheering him a bit.

"Have you kissed the bride?" he asked.

Whereupon to his great chagrin the gloomy doctor replied: "Not lately."

♡ ♤ ♡

Shopman: "This vacuum flask will keep things hot for you indefinitely. I can very highly recommend it."

The Man: "No thanks, I married something like that."

♡ ♤ ♡

Dr. Maurice Ernest, President-Founder of the London Centenarian Club designed to help people to reach the 100 years span, has a favourite story about a man who wanted to be a centenarian and was advised by his doctor to give up drinking, smoking and women.

"Will I live to be 100 then?" asked the patient.

"No", said the doctor, "but it will seem like it."

Edited and Published by Dr. P. A. S. Raghavan, Z. M. R. E. (Vienna,) Teppakulam, Tiruchirapalli and Printed by Rev. Fr. K. A. Lourdes, Superintendent, St. Joseph's Industrial School Press, Tiruchira.

सर्वेजनाः सुखिनो भवन्तु

THE MISCELLANY

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

MONTHLY JOURNAL OF THE SOUTH INDIAN BRANCH INDIAN MEDICAL ASSOCIATION

XVIII JUNE 1952 No. 12

The Third Annual All India Pediatric Conference, Madras.

1952

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THE THIRD ALL INDIA PEDIATRIC CONFERENCE
will be held at the Medical College, MADRAS,
on the 24th, 25th and 26th August, 1952.

The Conference will be inaugurated by his Excellency
the Governor of Madras.
You are cordially invited to attend.

PROGRAMME

24th August, '52	Forenoon—Inauguration of the Conference, Welcome addresses etc.
	Afternoon—Scientific Session
25th August, '52	Forenoon — Scientific Session
	Afternoon—Scientific Session
26th August, '52	Forenoon — Scientific Session
	Afternoon—Scientific Session and General Body Meeting.

Subjects Proposed for Discussion

1. Administrative Problems of Child Health.
2. Childhood Tuberculosis.
3. Nutritive Problems in Infancy and Childhood in India.
4. Congenital Heart Disease—Medical and Surgical Aspects ;
5. Meningitides and Encephalitides.
6. Papers on other Pediatric Topics.

(FOR CIRCULATION AMONGST MEMBERS ONLY)

THE MISCELLANY

MONTHLY JOURNAL OF THE SOUTH INDIAN BRANCH
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RECENT ADVANCES IN THERAPEUTICS

BY

T. V. VENKATESAN, M.B.B.S.F.D.S. (LOND).
Hony. Physician, Erskine Hospital, Madurai.

Recent discoveries of new drugs and advances in our knowledge of their actions and uses have been so numerous and widespread that even a specialist has great difficulty in keeping abreast with the latest. The purpose of this paper is to give a resume of some of the modern developments.

First, we shall deal with anti cholinesterase drugs. The work of Dale and Loewi has established the importance of chemical agents as transmitters of activity of the autonomic nervous system at the junction of the motor nerve and skeletal muscle. The pre ganglionic nerve endings and post ganglionic nerve endings of the para sympathetic nervous system liberate acetylcholine. This acetylcholine is inactived by an enzime called choline esterase from the end plates. Myasthenia gravis is a disease charecterised by a gradually developing weakness of the muscles of the body. In this disease it is probable that the choline esterase is responsible for neutralising the acetyl choline and preventing it from producing muscular contraction.

Many substances have been described as antagonist of cholinestrese (as shewn by in vitro studies) but it is proposed here to deal only with the really powerful cholinestrase inhibitors. The important members of the group are

(1) Physostigmine, an alkaloid obtained from Physostigma venenosum (Calabar bean)

(2) Neo stigmine (Prostigmine)

(3) Diiso propyl fluoro phosphonate (DFP)

(4) Hexa ethyl tetra phosphate (HETP)

(5) Tetra ethyl pyro phosphate (TEPP)

Of these drugs Neostigmine has been one of choice. It is expensive but useful. Forms ef Neostimine available are (1) Neostigmine 15 mgm tablets (2) Neostigmine methylsulphate 0.5 mgm and 0.25 mgm for S.C. or I.M. or I.V. injections. The average dose is 10 to 12 tablets daily. Do not give it in single dose. Space the drug at intervals for best effect. If symptoms of cramps, excessive salivation, pressure behind the eyes, diarrhoea and twitching of the muscles of the shoulder girdle and the tongue occur instruct the patients to reduce the dosage or in some cases to take 5 to 8 drops of Tr. of Belledonna. The patient should report regularly for every six weeks.

Comroe gave DFP to 7 patients with myasthenia gravis by I.M. injection of 2 to 3 mg. 3 of the patients showed improvement. 2 little or no benefit and in 2 no variations were noted. Harvey administered DFP in daily dose of 0.5 to 2 mgm.

Westerburg and Luros gave HETP up to 0.86 mgm per kilo of body weight at 3 to 4 day interval with some beneficial result.

Burgen gave TEPP in 3 patients and found the effect to be only 1/3 of neostigmine.

Two new drugs deserve mention at this stage. One is Banthine which is a true anti cholinergic drug. This drug blocks the para sympathetic nerves. Banthine Bromide is the neurogenic approach to peptic ulcer therapy. Through its inhibitory action on the nervous mechanism Banthine reduces the vagotonia charecteristic of peptic ulcer patients—the result is a consistent decrease in hypermotility and in most instances hyperacidity. Suggested dosage:

One or two tables (50 or 100 mg.) every six hours.

Stigmonene Bromide is a parasympathomimetic or Cholinergic drug. By means of gentle stimulation of the gastrointestinal tract, stigmonene bromide a new and comparatively non-toxic synthetic parasympathomimetic drug, was found effective in both preventing and eliminating abdominal distention due to (postoperative) intestinal atony in the majority of 100 major surgical cases. The minimum number of intramuscular injections in any case was that which is recommended, i.e. six injections of 1 cc. of the 1: 2000 solution (0.5 mg.) However one patient received 49 consecutive intramuscular injections (1 cc. of the 1: 2000 solution at four hour intervals) without ill effects. In no instance did stigmonene have to be discontinued because of side effects or toxic symptoms.

Curare: McIntyre in the year 1947 has given an excellent review of the history of Curare as an arrow poison, in South America. The action of Curare is Neuro Muscular blocking. It does not allow acetylcholine to act. Hence the drug has been found to produce muscular relaxation. Curare is available as

(1) Intocostrin—each cc. contains 20 units. The dose is about 40 to 60 units.

(2) d-Tubo curarine chloride solution. Squibb High Potency—15 mgms d-Tubo curarine chloride pentahydrate, equivalent to 100 units of Intocostrin, per cc.

The synthetic curarising agents available are:—

(1) Decamothonium Iodide. 3 mgms of Decamethonium Iodide is equivalent to 10 to 20 mgms of d-tubocurarine.

(2) R. P. 3697 (Flaxedil) 80 mgm of this drug is equivalent to 15 mgm of d-tubo curarine.

Clinical uses of Curare:

(1) Curare is used in Tetanus as observed by Cole as early as 1935.

(2) West described the clinical use of curarine preparations in spastic disorders of different origin. In Parkinsonism curare has better effect than Hyoseine.

(3) Curare is useful to control the violent convulsions produced by drugs as leptazol.

(4) Curare is useful in surgical anaesthesia, in producing muscular relaxation.

Mephenesin (Myanesin): Pharmacological interest in this compound relates to its profound muscle relaxing properties and offers a new approach in treatment of spastic disorders. The ability of this drug to act on the abnormal neuro-muscular mechanisms responsible for muscle spasm, spasticity, rigidity, tremors, has been demonstrated by Schlezinger, Gammon, Churchill, Burgar and Schwartz. Clinical uses of this drug are:

(1) Anaesthesia—Mallinson (1948) At a meeting of the Anaesthetics section of the Royal Society of Medicine has reported on some 10,000 administrations

of mephenesin chiefly in abdominal surgery and stated that there were no deaths attributable to this drug. Other anaesthetists at this meeting criticized the use of mephenesin on two main grounds.

(i) It is less effective than tubocurare in procuring abdominal muscular relaxation.

(ii) It is liable to produce venous thrombosis at the site of injection and hæmolysis which may lead to haemoglobinuria and renal damage.

(2) Hyperkinetic States:

Hunter and Waterfall (1948) noted some resemblances between the actions of mephenesin and the barbiturates. They were thereby led to test mephenesin in patients with epileptiform fits, and observed that intravenous injection of 0.5 G abolished fits in three patients within 30 sec. They noted too a temporary inhibition of Parkinsonian tremor in one patient after injection of 1 G of mephenesin. Berger and Schwartz (1948) and Gammon and Churchill (1949) also observed abolition of Parkinsonian tremor and marked improvement in choreoathetosis, after mephenesin. In addition, Gammons and Churchill described abolition of petit mal discharge by doses of mephensein which did not affect the normal electroencephalogram. These findings, taken with the experimental work of Stephen and Chandy (1947) suggest that mephenesin acts on various parts of the brain as well as on the spinal cord.

(3) Spastic Disorders:

Berger and Schwartz (1948) have administered mephenesin to patients with various spastic and nyperkinetic disorders. They gave the drug dissolved in propylene glycol by mouth in daily doses of 3-5 G. and in many cases recorded electromyographic evidence of improvement. Exaggerated reflexes and rigidity were reduced to normal and voluntary power was retained, the action appearing within 20 minutes of administration. Schlesinger has also reported on the beneficial effects of mephenesin in these conditions, but he regards the effects of oral administration as too brief and unpredictable to be of value, and he recommends intramuscular injection of 2 per cent mephenesin in saline.

(4) **Tetanus:** Beneficial effects in patients with tetanus have been recorded after mephenesin by Belfrage (1947) Torren et al (1948) Davison et al (1949) and by Gammon and Churchill (49) OTHER ACTIONS OF MEPHENESIN ON THE NERVOUS SYSTEM:

(i) Analgesia. Gammon and Churchill (1949) observed that mephenesin relieved tabetic and causalgic pain.

(ii) Action in Psychoses. Gammon and Churchill (1949) have reported that mephenesin produced temporary beneficial effects in patients with psychoses. They argued that since improvement in such cases results from severance of the connections between thalamus and cortex a drug which depresses the thalamic region, like mephenesin, might act similarly to produce what one could perhaps describe as a 'pharmacological leucotomy.' Schlan and Unna (1949) have studied the effects or oral mephenesin in psychiatric patients and found it effective in chronic alcoholism and anxiety states.

The Antihistamines

To know the effects of antihistamines one should know the action of histamine. The actions of histamines were first described and analysed by Dale and Laidlaw. The effects of histamines on the blood vessels of the human skin has been described as the Triple response. They are:

(1) Capillary dilatation which produces the local redness.

(2) Arteriolor dilatation which underlies the spreading flare and

(3) Increased capillary permeability—producing a wheal.

The anaphylactic and allergic responses have been found to be similar to the pharmacological effects of histamine. It is possible that by the inter action of antigen with antibody the H substance is liberated. This substance may produce a response either with cells which release it or in remote parts of the body. Dale speaks of the former as intrinsic and the latter as extrinsic histamine action. As an example of intrinsic histamine action the anaphylactic reponses of smooth muscles as uterus, gut or bronchioles may be cited. The vascular response in the skin and the nasal mucosa are examples of extrinsic histamine action, Since the latter is released from the epidermis or naso pharyngeal epithelium and diffuses to the adjacent vascular plexus. Antihistamines act more readily against extrinsic than intrinsic in the same way as atropine suppresses the action of injected acetylcholine than those resulting from its release at cholinergic nerve endings. Hence antihistamines are more useful in URTICARIA and VASOMOTOR RHINITIS than in spasmodic asthma.

Clinical uses of Anti Histamine Drugs:

It is impossible to review the whole of extensive literature in this field but some general aspects may be considered. It has been the general experience that above 80% of the patients with urticaria and angioneurotic œdema obtain good relief with anti histamines. In atopic dermatitis, anti histamines have very good effect.

In allergic rhinitis the most striking effect is the relief of itching and sneezing. It is now generally accepted that anti-histamines are of little or no benefit in Asthma, except perhaps in the chronic mild asthmatic state.

It is now well recognised that antihistamines exert definite effects on the C. N. S. and reference has already been made to soporific and analgesic actions of these drugs. In Parkinsonism beneficial effects have been reported especially when used in conjunction with pacitane. Best results were obtained at the Neurological clinic of Erskine Hospital with combined pacitane-thephorin administration.

A most interesting and useful application of an antihistamine drug is described by Dr. Gaz and Carliner. They gave dramamine to a pregnant woman with urticaria and found that it prevented carsickness to which she was predisposed. Subsequently the drug was used in case of sea sickness with dramatic results. Strickland has found it useful in air sickness also. The anti-histamines are administered either orally in tablets, capsules or liquid form or given by subscutaneous, intramuscular or slow intra venus injections. It has also been used locally. The drugs are fairly absorbed from the alimentary tract and peak action occurs after 1½ to 4 hours. It usually persists for 6 hours and in certain antihistamines, like promethazine (Phenergen) this action is prolonged. The following are some examples:—

Promethazine	19½ hours
Mepyramine	5 hrs. 10 minutes
Antistin	3½ hrs.
Pyribenzamine	3¼ hrs.

Toxic affects of Antihistamines.

The commonest symptoms are drowsiness and lassitude which are more frequently seen with Benadryl and least with thephorin. Amphepamine may be given to overcome the soporifica action of Benadryl. Pyridoxine is another drug used for the same effect. Other undersirable actions are headache dryness of mouth and nose, nausea vomiting and diarrhœa. These can be avoided by taking the drugs in the middle or after meals. Promethazine produces lightheadedness, aching limbs and ataxia. The dosage varied from 50 mgms in cases of Benadryl and Pyribenzamine and 100 mgms in the cases of anthisan and antistin. This is for single dose. Maximum daily dose of Benadryl is 400 mgm. Pyribenzamine 600 mgms. Antistin and Anthisan 800 mgms. But I have not used these drugs more than three-fourths of the total dosage in the case of my patients. But the results have been good. The future of the anti-histamines may lie in making better use of the available drugs rather than in the discovery of new drugs. Large numbers of antihistamines have been produced in recent years particularly in the U. S. A. but very few are likely to prove of practical importance. It would of course be desirable to find compounds with reduced toxicity and greater duration of action and an interesting substance for which these properties have recently been claimed is 'Histantin' (N-methyl N-4 chlorobenzhydryl—piperazine dihydrochloride) (Jaros et al., 1949; Castillo et al 1949). It is less toxic than pyribenzamine and appears to be almost as long acting as promethazine.

Cortisone and A. C. T. H.

Both Adrenocorticotropic Hormone and Cortisone have been found useful in a number of conditions. Cortisone is one of a series of crystalline hormone substances, isolated from extracts of the adrenal cortex in 1936 and first synthesized from a bile acid in 1946. It is one of the crystalline hormone substances which was found by Dr. E. C. Kendall of the Mayo Foundation. This substance originally named Compound E was isolated from beef adrenal glands and described by Mason Myers and Kendall. It was also described by Reichstein's Fa/6 and Wintersteiner's F. The work was initiated at the Mayo Clinic by Hench. He was struck by the fact that rheumatoid arthritis is not infrequently relieved by pregnancy, or by the development of hepatitis with jaundice. Many measures were tried to reproduce similar biochemical conditions in patients suffering from rheumatoid arthritis, e.g. transmission of blood from jaundiced and pregnant donors, or the artifical production of jaundice by the injection of icterogenic serum. Hench concluded that the antirheumatic agent might be an adrenal hormone, since temporary remissions were found in cases where stimulation of the adrenal cortex was done by general anæsthesia and surgical operation.

It was only in September 1948 cortisone became available for clinical trials. Cortisone is administered in 100 mgm doses per day by I. M. injection. With the acetate which is absorbed rather more slowly the initial dose is 300 mgm and this is followed by 100 mgm doses per day.

Therapy with Cortisone in Rheumatoid Arthritis:—Cortisone administered orally or i.m. in adequate doses results in prompt diminution of stiffness, then reduction of articular tenderness and pain on movement followed by decrease in swelling.

Many patients experience complete relief so long as therapy is maintained. Others obtain only a partial remission but display improved muscle strength, appetite, increase in weight and mental attitude.

Relapses which may occur following withdrawal of cortisone are often promptly controlled by reinstituting therapy with this hormone.

Therapy with Cortisone in Acute Rheumatic fever: Cortisone has been observed to cause rapid disappearance of polyarthritis fever and tachycardia, and to correct elevation of the E. S. R., abnormalities in the ECG and anæmia. Evaluation of the ability of cortisone to protect the heart against the damaging defects of carditis will require long term study.

Therapy with cortisone in Acute Disseminated Lupus Erythematosus:—

In this disease the response to therapy with cortisone varies from case to case.

In many patients partial to complete remissions have occurred. Disappearance of fever, arthralagia and skin rashes has been observed and normal A/G ratios have been restored. Prevailing evidence suggests that suppression rather than cure of the disease follows cortisone therapy.

Therapy with cortisone in Psoriatic Arthritis: Patient 48 years: psoriasis over a period of 21 years. Arthritis for past 6 years. Condition markedly improved with total dosage of 11·75 gm cortisone. When dosage was reduced to 100 mg/week (in one dose) erythema and exfoliation returned. With maintenance dose of 100 mg/day and occasional rest periods condition was held under control.

Therapy with cortisone in Dermatologic conditions: Pemphigus vulgaris:— Patient first developed superficial buccal and gingival erosions, then large bullæ and crusts on trunk and extremities. Slow but steady improvement followed administration of cortisone. The patient regained weight and general good health and is now able to carry on normal activities:

Generalized dermatitis with exfoliation and ulceration: Skin over entire body surface was erythematous, edematous and covered with scales and crusts. Skin condition improved markedly with cortisone therapy but patient died of a cardiac condition complicated by bronchopneumonia.

Exfoliative Dermatitis: Erythema, exudation crusting and exfoliation involved entire body surface. Hemorrhagic crusts were present. Daily oral dosage of 200 mg. cortisone produced marked improvement of the skin by the 4th day; itching and exfoliation stopped; erythema considerably diminished. Maintenance therapy (100 mg/day) was necessary to prevent relapse.

Atopic Dermatitis: Patient had edema of one ankle; erythema of legs thighs, back and arms with fissuring crusting and scaling. A total of 1,300 mgm cortisone administered orally over a period of 9 days resulted in definite improvement. No recurrence had been observed 2 months after discontinuation of cortisone.

Contact Dermatitis: Severe dermatitis of hand resulted from contact with detergent while washing an automobile. Cortisone applied locally in an ointment brought relief within a few days.

Therapy with cortisone in BURSITIS: In a case of Bursitis restricting the mobility of right arm the use of cortisone 100 mgm/8 hrs. on the first day and 100 mgm every 12 hrs. on the second day will produce dramatic results in alleviating pain and allowing full mobility, in 96 hours after starting cortisone therapy.

Cortisone in Nephretic Syndrome. In the treatment of the nephretic syndrome the use of cortisone has produced diuresis together with a reversion of blood chemistry findings toward normal. Cortisone has also been used in a number of eye diseases viz: (1) acute iritis with secondary glaucoma, dosage— 1100 mgm over 5 day period given I. M. (2) superficial keratitis: cortisone saline suspension diluted 1:4 with isotonic saline and applied topically. (3) allergic conjunctivitis—cortisone may be applied topically as ointment containing 25 mgm per gm. of vaseline. (4) Iridocyclitis: cortisone may be administered parenterally and topically. (5) Uveitis: Cortisone administered topically. (6) Unilateral exophtholmos (idiopatic) 2000 mgms of cortisone administered over a 14 day period.

Undesirable effects of cortisone:— Prolonged administration of large doses of cortisone or A. C. T. H. may induce certain exaggerated but reversible hormonal effects-they are-(1) rounding of the face "Moon Facies," (2) Hirsutism, (3) Cutaneous striæ similar to those of pregnancy (4) Pre tibial edema (5) Buffaloe hump and (6) Acneiform

lesions. Since cortisone produces profound muscular weakness due to electrolyte imbalance, due to the excretion of the potassium, potassium administration is helpful during cortisone therapy.

During cortisone or A. C. T. H. administration due to electrolyte imbalance producing retention of sodium, oedema, may occur. Hence salt restriction diet is advised. It is of great importance that physical therapy should be continued during the administration of cortisone or A. C. T. H. for it enables the maximum advantage to be taken of the increased mobility of the joints.

Contra indications: These may be summarised as follows:

Myocardial insufficiency
Diabetes mellitus
Cushing's syndrome
Patients with marked 'tensionstates'
Tuberculosis
Severe renal disease

Anti Thyroid Substances

Thiouracil produces its effect by inhibiting the synthesis of thyroxine; hence this drug has been used in hyper thyroidism. The disease can be controlled with this drug. The metobolic rate falls usually to normal, the body weight increases. Tachycardia disappears slowly but there is usually little effect on the exopthalmos. The auricular fibrillation in thyrotoxicosis can frequently be converted to normal sinusrhythm by administration of thiouracil compounds.

Dosage: The dose has to be carefully considered. At first large doses of thiouracil i.e. 1.0 gram per day or more were used and toxic effects were common. It was soon found however that beyond a certain point increase in dose does not increase the effectiveness of the drug and nowadays the treatment is usually started with smaller dozes eg. 200 mg. of methyl thiouracil per day, and this is decreased to a daily maintenance dose of 25, 50 or at most 100 mgm. per day.

Toxic effects: The treatment has to be continued for a long time, several months or more, and even then relapses are frequent and occur at various periods after the end of treatment. The patient has to be watched carefully as toxic reactions, many of them allergic in type, may occur sometimes very suddenly. Mild toxic effects such as fever urticaria conjunctivitis nausea etc. are controlled when the drug is withdrawn or the dosage reduced. Serious reactions involve the blood forming organs and may include agranulocytosis in 2 percent; 25 percent of these cases are fatal, i.e. 0.5% of the total. Neutropenia does not necessarily lead to arganulocytosis which may however occur without any warning. Every patient should be aware of these possibilities and on the appearance of fever or of a sore throat, thiouracil therapy should be stopped, the doctor should be informed and the blood examined. If granulocytes are few or absent large doses of penicillin should be given. RADIO IODINE: The use of this drug in the treatment of hyper thyrodism and cancer of thyroid has shown some favourable results.

Anti Biotics

There are 5 anti biotic drugs in common use to-day viz:

Penicillin
Streptomycin
Aureomycin
Chloromycetin
Terramycin

Penicillin, aureomycin, chloromycetin and terramycin are given by mouth for treatment of systematic infections. They are all absorbed from the gastro intestinal tract. Streptomycin is also given by mouth for its local effect in reducing the bacterial population of the intestine. It is not absorbed. Auereomycin and Terramycin can

be given I. V. also. Penicillin and Streptomycin are given generally I.M. The reason why penicillin has not been used more widely for oral medication is that a good amount of it is destroyed by acid juice in the stomach and during the period of scarcity of penicillin it was found uneconomical and wasteful to give by mouth. The use of penicillin is known to all medical profession well. The recent trend of penicillin therapy is the introduction of slowly absorbed Procaine penicillin G. This is available in 3 forms

(1) Procaine penicillin G in aqueous suspension of 300,000 units.

(2) 300,000 Procaine Penicillin G fortified with 100,000 units of crystalline potassium penicillin.

(3) 300,000 Procaine Penicillin G with aluminium monostrate 2%.

Effective therapeutic levels are maintained with the No. 1 type of drug i.e. P.P.G. Every 12 or 24 hours. Regarding the 2nd type this is relatively unstable once dilution is made and it is more expensive than the previous one and the higher concentration is in no way advantageous.

Regarding the P.A.M. the penicillin may be detected in the blood for as long as 4 days after injection of the drug; hence this drug has been found to be very useful in the treatment of Syphilis.

The use of P.A.M. has been described by Scott in the treatment of Syphilis. 600000 units are given twice weekly for 10 weeks and the author concludes that "the ambulant treatment of syphilis appears to be more successful than with arsenical bismuth regimens of comparable duration." It seems possible that the search for a therapia magna sterilans initiated by Ehrlich and so long sought for in this disease is being achieved by the use of this penicillin preparations.

Streptomycin is a drug par excellence in the treatment of Tuberculosis. It was found that the drug was neuro toxic frequently producing after weeks of treatment impairment of vestibular functions of the 8th cranial nerve and occasionally causing deafness. Dihydro streptomycin produced by the catalytic hydrogenation of streptomycin was recently introduced, the main advantage being that the drug was less neurotoxic. The general accepted dosage is ½ gm I.M. b.d. given as long as 90 days in cases of tubercular infections. Larger doses have however been given without undue toxic effects. For tubercular meningitis intra thecal administration is given along with systemic therapy. Recent recommendations are the daily dose of atleast 0.02 gm pound of body weight given I.M. with 0.05 gm daily by intra thecal injection for cases of tubercular meningitis. Streptomycin is also used in non tubercular conditions, as urinary infections due to B.coli; penicillin resistant gonorrhoea, in respiratory infections due to mixed bacteria, in Klebsiella and meningitis due to h.influenza. Lt. Col. Karamchandani used streptomycin in the treatment of plague with good results. The course of treatment in non tubercular condition is 1 to 3 gms daily for about 3 to 10 days. Streptomycin is given by mouth for its local effects in infantile gastro enteritis.

In this connection mention may be made of the other anti tubercular agents. (1) P.A. S. There are a number of clinical reports on the use of PAS. Acute miliary and meninigial tuberculosis are not affected but the drug is of value in exudative forms, of P. T. and by the local instillation upto 10% strength in tuberculous empyemata and in tuberculous fistulæ. The drug is given orally in doses of 12 to 20 grms. The toxic effects are gastro intestinal disturbances.

(2) Sulphones–Promin has recently been used in the treatment of Tuberculosis.

Dr. T. S. S. Rajan, Ex-Minister for Public Health and a Life Member of the association, who was present at the meeting was requested to say a few words. Dr. Rajan said he was glad that the association, in the founding of which he had a hand, had developed into a mighty organisation and was doing such useful work. He was glad that young men were taking such keen interest in the clinical activity of the association. He wished more success for the association and promised to attend the meetings whenever possible.

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A monthly meeting of the association was held on Sunday the 1st June 1952 in the premises of the Dist. Health Association, Puthur Tiruchy under the presidency of Dr. R. Kalamegham. About 40 members were present. After Tea kindly provided by Dr. T. R. Rajagopalan the President read the following circulars and letters.

1. Letter from the Provincial Office for the nominations of one President and two Vice-Presidents for the South Indian Provincial Branch for the year 1952 – 1953. Proposed from the Chair the following names were nominated and approved unanimously. President: Dr. Y. P. Vasudevan, Coimbatore and two Vice-Presidents: Dr. P. Vadamalayan of Madura and Dr. K. C. Nambiyar of Madras.

2. Letter from the Secretary, Tirunelveli Branch to hold a Joint Conference at Courtallam during the middle of July. It was approved unanimously to hold a conference at Courtallam.

3. Circular from the British Council, Madras regarding Medical Conferences during June - August 1952.

Then the President informed the members that the Salem Branch is also willing to hold a joint conference at Namakkal and wants the co-operation of Tiruchy Branch also for the same. It was approved unanimously to hold the conference at Namakkal, with the co-operation of the Salem Branch.

The President introduced the lecturer Major N. Chandrasekaran, Madras to the members and requested him to give his talk on Local Anaesthesia. The lecturer gave a very interesting talk after which a discussion was held in which many members took part. Then the Joint Secretary proposed a vote of thanks to the lecturer, the host of the evening and the Secretary, Dist. Health Association for allowing the premises for the meeting, the meeting terminated at 8 p.m.

TIRUNELVELI BRANCH

President: Dr. K. Rama Ayyar
Vice-President: Dr. P. R. Acharya
Secretary & Treasurer: Dr. R. Gopalan

Meeting held at Tuticorin on 29—3—1952

The monthly meeting of the Tirunelveli Branch of the Indian Medical Association was held at Tuticorin on 29—3—1952 at S. A. V. High School when about 50 members and guests were present. The Tuticorin Medical Association was the host for the evening.

After Tea, the meeting began with the reading of the minutes of the previous meeting by the Secretary. Then the President introduced Dr. K. Ramachandran, M. S. of Madurai to the members and called upon him to give his lecture on "Some Emergencies in Pædiatrics". Dealing with the surgical

emergencies in children, the lecturer divided the period into three arbitrary periods—neonatal period (birth to 4 weeks), from the 5th week to 6 months and then from the 6th month to the 3rd year.

In the neonatal period, congenital defects like the imperforate anus. exempholos and birth injuries were discussed. In the second age period, congenital pyloric stenosis was discussed. In the last age group, such varied conditions as acute intussusception, strangulated hernia, laryngeal obstruction, foreign bodies in the gastro-intestinal tract were dealt with.

After some discussion, the meeting came to an end and the members adjourned for variety enterainment where Miss Bangaroo played on the violin and Miss Augustine gave a dance recital, which were much appreciated.

The Secretary in proposing the vote of thanks, thanked the lecturer of the day and the Tuticorin Medical Association for the excellent arrangements and the young artists for their talented entertainment.

There was a sumptuous dinner which marked the end of the evening's delightful function.

TANJORE BRANCH

President: Dr. N. R. Subramanyan
Vice-President: „ T. M. Pillai
Hony. Secy. & Treasurer: „ S. Narayanan.

The sixteenth annual conference of the Indian Medical Association, Tanjore District Branch was held in the Medical School Buildings, R. M. Hospital, Tanjore on 30—3—52. Dr. E. K. Menon, M.R.C.S., (Eng) the president was in the chair and about 100 members attended.

Proceedings commenced at 10-30 A.M. with prayer after which the president welcomed the gathering. The Secretary then read messages of fraternal greetings from the sister associations at Trichy, Chettinad, and South Kanara. He then presented the annual report and stressed the importance of medical men in the district coming together often. He pleaded for funds to get a building to house the association.

Dr. G. Samuel M.B.B.S. F.A. Sc, F.C.P.S. Medical Superintendant of the Tuberculosis Sanatorium at Sengipatty then delivered a lecture on Phrenic nerve avulsions. This was followed by a discussion in which several members took part.

The business meeting commenced at 3-30. P.M. after lunch supplied by the kind courtesy of The South Indian Manufacturing Co., Madhurai.

The following were elected office bearers:—

President: Dr. N. R. Subramanian M.B.B.S.
Vice-President: „ T. M. Pillay L.M.P.
Hon'ry. Secretary & Treasurer: „ S. Narayanan L.MP..

Committee Members.

Dr. Ganesa Mudaliar L.M.P.
„ T. R. Ramachandra Rao L.M.P.
„ K. Rama Rao. L.M.P.
Dr. P. Narayana Rao L.M.S.
„ Miss P. Rohini M.B.B.S.
„ L. C. Appadorai L.M.S.

Resolutions were passed requesting the president to contact all doctors, with a view to making them members of the Association and each member was requested to try and enlist one or two members for the Association.

After tea provided by Messers. Albert David & Co, Calcutta, Major P. Govinda Rao M.B.B.S, F.R.C.S. of Madhurai delivered a lecture on Stricture of the Urethra. This was followed by a talk on recent advances in therapeutics by Dr. T. V. Venkatesan M.B.B.S. F.D.S. of Madhurai.

The meeting then terminated with a hearty vote of thanks to the lecturers, the hosts for the day and the assembled guests.

ABSTRACTS FROM THE CURRENT MEDICAL LITERATURE

THE PROBLEM OF THE INFECTED ABORTION—*A. Melvin Ramsay, M.A., M.D.,—The Clinical Journal—Feb. 1950.*

The Social upheaval which is an inevitable inheritance of war and its aftermath brings with it no greater problem than that of criminal abortion. The cause is fundamentally social and economic and the solution must ultimately be sought in that field. It is perhaps not generally realized, for instance, that it is largely the multiparous woman, to whom the thought of an addition to the family is intolerable, who seeks to terminate, her pregnancy, and not the unmarried girl.

It is quite impossible to obtain figures which would give any indication of the number of abortions carried out, or of the proportion of these which have morbid sequelae. Experience in a Unit for puerperal cases shows, however, that the problem of post-abortum infection has increased as post-partum infection has declined.

Aetiology

Predisposing factors: A spontaneous abortion rarely becomes infected unless placental remains are left *in utero* for some length of time, when the necrotic material serves as an excellent pabulum for the proliferation of organisms, particularly those of the anaerobic variety. It is the abortion which has been induced by the patient herself or an unskilled person which is liable to become infected.

The method adopted to procure abortion may have considerable bearing on the question of infection. Information obtained from patients is, on the whole, vague and uncertain. A few will readily volunteer information when they themselves are responsible; very few, however, are willing to do so when it is likely to incriminate another person. Their sense of responsibility toward the one who, however illegally and inadvisedly, has attempted to help them is paramount. The method which seems to be in most common use is that of the soap and water douche; alternatively, Dettol is frequently used. The introduction into the uterus of slippery elm bark, a method which had a wide vogue before the war, is now apparently less popular. A general impression formed from such histories as one can rely upon suggests that the use of abortifacient drugs is also less common to-day. The plain soap and water douche, oft repeated, has probably been found to be more effective and should certainly prove safer since the soap may, in part, act as an antiseptic. Infection, however, is not dependent wholly on the introduction of pathogenic bacteria, since *Bacilluscoli* and *Clostridium welchii* are frequently present in the vagina as harmless saprophytes, but rather on the presence of suitable conditions for their growth. These conditions are provided in two main ways:

(i) By necrotic material lying *in utero* for any length of time.

(ii) By laceration and consequent devitalization of muscle.

Excessive and rapid blood loss, if uncorrected, will also predispose to infection by lowering resistance. If there is extensive trauma, the resultant hypoproteinaemia may be an additional factor of lowered resistance.

Of the two main predisposing factors the second is the more serious, and fatal cases in which a post-mortem examination has been performed frequently show evidence of muscle damage from instrumentation or extensive sloughing of the uterine and vaginal mucosae from the use of scalding fluid; only in extreme desperation is a woman likely to inflict upon herself an injury such as perforation of the uterus or vaginal vault. It is the illegal abortionist who is generally responsible for such injuries and for practically all the fatal cases.

Bacteriology

The organisms responsible for puerperal infections may be classified as follows, according to their source:

1. Exogenous: Haemolytic streptococci.
2. Exogenous or Endogenous: *Staphylococcus pyogenes.*
3. Endogenous: Aerobic—*Bacillus coli*, nonhaemolytic streptococcus. Anaerobic: (sporing) *Cl welchii*; (non-sporing) anaerobic streptococcus—*Bacillus pseudo-necrophorus*

While these organisms are common to all types of puerperal infection, a clear distinction must be drawn between the bacteriology of post-partum and post-abortum sepsis. This is well illustrated by the following table showing the incidence of the principal infecting organisms isolated on cervical culture from cases of sepsis admitted to the Puerperal Sepsis Unit, North Western Hospital, Hampstead, between 1937 and 1946.

Infecting organism	Post-abortum infection Cases	%	Post-partum infection Cases	%
Hæmolytic streptococcus	134	13·9	519	34·3
Staphylococcus pyogenes	110	11·4	56	3·7
Bact. coli	239	24·8	140	9·3
Other aerobes	119	12 3	190	12·6
Cl. Welchii	190	19·7	23	1·5
Anærobic streptococci } *Bact. pseudo-necrophorum* }	125	12·9	176	11·6
Negative cultures	48	5	409	27
Total cases	965	100	1513	100

1. 60 strains (45 per cent.) belonged to Group A.
2. 394 strains (76·8 per cent.) belong to Group A.

Certain outstanding features emerge.

(1) The haemolytic streptococcus, still the chief pathogen in post-partum sepsis, is not a common cause of infection in post-abortum cases. The reasons for this are probably to be found in:

(*a*) The barrier presented by the unabraided epithelial surface and highly acid reaction of the vaginal secretion against infection by Group A streptococci.

(*b*) The infrequency of attendance by doctor or midwife on such cases with a lessened risk of infection from an outside source.

It should be noted also that, of the haemolytic streptococci responsible for post-abortum sepsis, only 45 per cent. belong to Lancefield Group A; some 37 per cent. belong to Group B, C, D and G. Organisms of Groups B and D can resist the highly acid secretion of the vaginal secretion (pH 4 to 4·4). They are found in the normal vaginal flora, and do not generally give rise to infection in the puerperium unless suitable conditions for their proliferation are present.

(2) The organisms responsible for post-abortum infections are mainly endogenous, that is, derived from the patient herself, and are to be found in (*a*) the bowel, (*b*) the vagina, (*c*) the skin and (*d*) the air passages.

Bacillus coli, enterococci and *Cl. Welchii* are bowel derived. Anaerobic streptococci and haemolytic streptococci of Lancefield Groups B and D are found in the vagina. *Staphylococcus pyogenes* may originate from the skin or air passages and is conveyed to the genital track via the hands.

(3) Post-abortum infections are generally mixed, and it may be impossible to say which of the organisms is the pathogen unless the blood stream is invaded. The most common finding is *Bacillus coli* together with one or both forms of anaerobe. The presence of any of these three on cervical culture does not in itself denote infection. The occurrence of coagulase-positive *Staphylococcus pyogenes*, on the other hand, usually denotes an active infection.

Clinical Aspects of Post-Abortum Sepsis

Clinically-infected cases fall into two main the groups:

(*a*) Those in which infection is limited to genital tract.

(*b*) Those in which there is invasive spread or other complicating factors.

Pyrexia as a Criterion of Infection.

Ideally, all cases of supposedly infected abortion should be dealt with in special units. As this is at present impracticable, some attempt must be made to segregate the un-infected from the infected case. In the Public Health Act, 1926, the term "puerperal pyrexia" was introduced as a notifiable state. Moreover, it is the only notifiable condition which has been accorded a precise definition. This definition extends the connotation of the term "puerperal" to include infections following both childbirth and miscarriage, and fixes an arbitrary level of pyrexia, 100·4° F., upon the attainment and maintenance of which notification depends. From the aspect of the clinician, extension of the meaning of the term "puerperal" has a great deal to commend it, but a fixed level of pyrexia as a criterion of infection and notification serve only to confuse the issue. In the first place an inevitable abortion is practically always pyrexial, and experience shows

that this pyrexia is seldom the result of infection of the genital tract. No bacteriological or clinical evidence of infection is found, and as soon as the uterus is empty, recovery is uneventful, no chemotherapy being required. The pyrexia is presumably the result of toxic absorption from degeneration of the products of conception. Secondly, many of the severer grades of post-abortum sepsis are accompanied by only low-grade pyrexia which does not attain the degree required for notification. The question can only finally be decided by observation of the patient's general condition—based on pyrexia, pulse rate and state of tongue—together with local signs. It must be admitted that hospital observation is desirable in the large majority of cases, and the problem is therefore an administrative one and only capable of solution on that level.

Uncomplicated Genital Tract Infection.

This type is associated for the most part with infected retained products. Contusions and lacerations are seldom encountered, for these usually predispose to an invasive form of infection. There may be considerable toxic absorption with pyrexia, raised pulse rate and furred tongue; the lochia is as a rule offensive but this depends on the infecting flora. If the uterus empties itself spontaneously, pyrexia quickly abates; if placental remains are retained, pyrexia and offensive lochia will probably persist. As with all incomplete abortions, there is the constant risk of haemorrhage, and secondary anaemia resulting from blood loss is a common feature of these cases. If at all severe it should be corrected by blood replacement; milder forms may be treated with iron, adequate mixed dietary and vitamin supplements. While the uterus may be tender it is seldom brawny and thickened as is common in post-partum infections. Such a condition is practically pathognomonic of haemolytic streptococcal infection which causes metritis in addition to endometritis.

Invasive Forms of Sepsis.

Spread of infection to the pelvic adnexa, general peritoneum, blood stream, pelvic veins and other viscera may complicate genital tract sepsis.

The most common complication in post-abortum sepsis is peritonitis. This may be:

(*a*) Localized.

(*b*) Localized initially but later spreading to involve the general peritoneum.

(*c*) Generalized from onset.

The usual form is localized. In this condition the lower abdomen is tender; there is guarding and the release sign is positive. The pulse rate is more rapid than in localized uterine sepsis; the tongue is dry and furred and the patient is restless and anxious. Bimanual examination reveals tenderness on one or both sides of the pelvis; there may be no palpable mass until localization is complete, and then it is frequently felt (*per abdomen*) as a hard ridge, rising out of the pelvis. Spread of a localized infection is usually heralded by intractable diarrhoea and a rising pulse-rate. Peritonitis generalized from the onset is more rarely encountered. The picture does not resemble that of the peritonitis resulting from perforation of a viscus; there is no boardlike rigidity but a characteristic "doughiness" due to matting of omentum and intestine. The condition is practically always the result of a mixed infection with *Bacillus coli*, *Clostridium welchii* and anaerobic streptococci, and is on the whole, less fulminating than that associated with the haemolytic streptococcus which was once common in post-partum cases. Nevertheless, it is a serious condition and, if associated with muscle trauma, liable to prove fatal. One of the most striking features of these cases is the absence of any marked degree of fever; indeed, few of these patients are notifiable according to the strict interpretation of the definition of "puerperal pyrexia." This may be explained by the action of *Clostridium welchii* toxin on the peripheral circulation, and is analogous to the similar phenomenon characteristic of severe diphtheria and other organisms which produce a powerful exotoxin. In the absence of pyrexia as a reliable criterion of progress, the pulse rate becomes all important.

All forms of peritonitis tend to be complicated by reflex paralytic ileus. This may be prevented by the administration of 0·5 mg. Prostigmine given intravenously as soon as distension occurs and repeated four-or six-hourly until bowel function is restored. It is of no avail once the ileus is complete, and should never be given if

there is any suspicion of mechanical obstruction. A fully-established ileus must be treated with continuous gastric suction and maintenance of electrolyte balance by intravenous fluid therapy, and continued until the bowel shows signs of recovering function.

After subsidence of the acute phase of the infection, matting may remain and can be felt as a well-defined thickening; the uterus is usually implicated in these masses and is fixed; after some weeks all sign of the mass may have disappeared, but in some cases the involuting uterus draws with it a loop of adherent intestine and subacute obstruction results.

Some cases of localized peritonitis form a collection of pus in the pouch of Douglas; this is particularly liable to occur if *Bacillus coli* is the sole pathogen. The abscess is detectable as a boggy thickening in the posterior fornix. Drainage by a posterior colpotomy is required.

Bacillus coli is the usual pathogen responsible for tubal infections which, for no very obvious reason, are much commoner in post-abortum than post-partum sepsis. Penicillin is of no avail if coli is the sole pathogen, and sulphonamides must be relied upon to control the infection. In acute infections streptomycin may be tried but, as the organism is likely to rapidly become resistant, it should be given in heavy dosage for a short time, say 3 gm. daily for 5 days. Surgical intervention should be avoided if possible until the acute phase has completely subsided; later the affected tube may have to be removed. Many of them become adherent to the large bowel or to the back of the uterus and, forming fistulae, discharge *per rectum* or *per vagina* for a considerable period; such fistulae generally heal uneventfully.

Blood Stream Infection.

As a result of routine blood culture carried out in all cases in the unit for the past thirteen years it has been found that positive cultures are obtained in fully 16 per cent. of cases of post-abortum sepsis. Considerably more than half of these, however, show no clinical evidence of septicaemia, pyrexia subsiding uneventfully. This condition of transient *bacteriaemia* is not uncommon in any incomplete abortion and is nearly always present at the time of surgical removal of retained products. This is analogous to the bacteriaemia accompanying tonsillectomy or dental extraction (Okell and Elliott, 1935; Elliott, 1939.) Intermittent bacteriaemia may also occur if there is a local focus of infection from which organisms are discharged into the blood stream.

A diagnosis of septicæmia should only be made when the clinical state confirms the bacteriological finding; that is to say, if there is persistance of pyrexia, raised pulse rate and evidence of generalized toxæmia. In postabortum infections four main types of septicæmia are encountered.

1. Hæmolytic Streptococcal Septicæmia.

As might be expected from the rarity of hæmolytic streptococcal infection in post-abortum sepsis, this is the least important of the four. Moreover, such cases as do occur are very readily controlled by penicillin, but it should be emphasized that infections with organisms of Lancefield Group B and G are characterized by the development of acute endocarditis; in the pre-penicillin era such cases usually proved fatal (Fry, 1938; Macdonald, 1939; Hill and Butler, 1940; Ramsay and Gillespie, 1941.) With penicillin cure is assured but, if treatment is too long delayed, it may be at the expense of an already damaged heart.

2. Staphylococcus pyogenes Septicæmia.

Blood stream infection with this organism is much commoner in post-abortum than in post-partum sepsis. In necrotic retained products the organism finds an ideal medium for growth, and some 37 per cent. of known cases of post-abortum genital tract sepsis for which it is responsible have developed septicæmia. No other organism in the field of puerperal sepsis exhibits such invasive power.

Spread of infection is of an embolic nature with rapid dissemination into skin, muscle and viscera. The lungs, heart valves and joint cavities are favourite sites of infection. The tendency of staphylococci to clump and acquire a protective coating of fibrin renders such foci difficult of access; they may very readily persist after elimination of the main infection. This feature together with the well-known tendency to the development of resistant

strains (Luria, 1946; Barber, 1947) has rendered treatment with penicillin no easy matter. Early experience showed that, while the organism could be very easily eliminated from the blood stream by ordinary dosage, the disease proceeded unchecked. After failure to control the infection with sulphonamides, a short course of penicillin sterilized the blood and controlled the septicæmia. Cessation of therapy before all foci were eliminated allowed of two subsequent flares of infection. When the septicæmia was finally checked the heart was already damaged and the patient was in hospital for a further four months. It became clear that massive dosage of penicillin was necessary from the onset of infection. In the case shown in Fig. 4, 500,000 units of penicillin were given three-hourly for nine days. Even then, with too rapid reduction of the dose of penicillin, a flare of infection occurred; the patient developed arthritis of the sternoclavicular joint and penicillin had to be administered for a further 19 days before all infection was eliminated. We are in complete agreement, therefore, with the opinion expressed by Harris and Shook (1949), who state that they are "opposed to the practice of reducing the dose of penicillin when the acute phase of an infectious process has apparently been overcome."

3. Clostridium welchii Septicæmia.

Clostridium welchii provides one of the best possible examples of an organism capable of wide variation in toxigenic power (Butler, 1943). For the most part a harmless saprophyte, or responsible for mild forms of sepsis, it can, on the other hand, give rise to rapid and overwhelming septicæmia. Very rarely it causes acute gas gangrene of the uterus, death taking place after a matter of hours.

Over a period of 10 years, *Cl. welchii* was isolated on blood culture from 28 cases of post-abortum sepsis. Yet in 17 of these, the patients were not ill, pyrexia subsided rapidly and recovery was uneventful without need of chemotherapy. True *Cl. welchii* septicæmia, on the other hand, is rapid in onset with severe general toxæmia, peripheral circulatory failure, acute hæmolysis and anuria due to renal failure on account of pigment nephrosis. These cases can be diagnosed without waiting for bacteriological confirmation. No other form of puerperal septicæmia gives rise to such rapidly deepening jaundice associated with low systolic pressures of 60-90. A confirmatory feature is high leucocytosis; counts of 40,000 to 50,000 are the rule, but much higher counts have been recorded (Ramsay, 1949). There is frequently combined peritonitis and septicæmia. Early diagnosis and prompt institution of therapy is essential if life is to be saved. Fortunately, the organism is sensitive to both sulphonamide and penicillin, but massive dosage of the latter is the sheet anchor of therapy. Hypotension is a common sequela of such cases; it responds well to treatment with Eucortone.

4. Anærobic Streptococcal Septocæmia.

Blood-stream infection with non-sporing anærobes forms a complete contrast to that of the sporing anærobe, *Cl. welchii*. The onset of the illness is insidious and there is no evidence of toxicity in the early stages. The condition generally runs a long course of some 5 to 6 weeks, characterized by intermittent and remittent pyrexia with irregularly recurring rigor. The underlying pathology explains the clinical course. At post-mortem examination the pelvic veins are found to be full of septic clot and the lungs are studded with abscesses. The irregular pyrexia and rigors are clearly the result of separation of septic emboli from clot in the pelvic veins and their lodgement in the lungs to produce infarcted areas which subsequently break down to form abscesses. Before penicillin the mortality from these infections was over 80 per cent., sulphonamide being quite ineffective. In the case of the anærobic streptococcus, penicillin therapy, started early in the course of the disease, is uniformly successful. The other non-sporing anærobe, *Bacillus pseudo-necro-phorus* (identical with *Bacillus funduliformis*, which Lemierre (1936) described in connection with post-tonsillectomy septicæmia), frequently proves penicillin resistant and streptomycin must then be tried. Nevertheless, massive dosage of penicillin in the early stages is again the best line of therapy.

Other Complicating Factors in Post-abortum Sepsis.

Mastitis and urinary tract infection, common in post-partum cases, are rarely met with in post-abortum sepsis. Infection of the urinary tract may of course be present, but is not so liable to acute exacerbation as is the case after full-term delivery. Apart from the special form of pelvic vein thrombosis which forms the basis of the pathology of anærobic streptococcal septicæmia, venous thrombosis is also not common in post-abortum sepsis and femoral vein thrombosis occurs but rarely. Cerebral venous thrombosis does occasionally occur in connection with an abortion, but this, too, is more common in post-partum states. A cerebral abscess may result from cerebral venous thrombosis. It also occurs as a feature of generalized staphylococcal infections.

A complication of post-abortum sepsis which requires special emphasis is anuria. As has already been shown, this occurs characteristically in connection with *Cl. welchii* septicæmia in which it has always been attributed to pigment nephrosis. But it may also occur in connection with relatively mild infections. Bratton (1941) published a series of nine cases of which eight were connected with pregnancy or septic abortion. Bull, Jœkes, Lowe and Evans (1949) have successfully treated cases of anuric uræmia by limiting the fluid intake, reducing both exogenous and endogenous nitrogen metabolism to a minimum and preserving electrolyte balance by returning all vomit. Such treatment can only be carried out in hospital. It is important to realize, however, that urinary output should be observed in all abortion cases, even if mildly infected. If oliguria occurs, over-hydration must be avoided at all costs, and the patient referred to a special unit for early treatment.

The Principles of Treatment

Until hospital beds are available for all cases, the uninfected abortion in which there is no excessive hæmorrhage can be observed at home. Severe hæmorrhage is, of course, the prime indication for hospital treatment. Pyrexia, on the other hand, is not necessarily an indication for removal to hospital if the fœtus is still *in utero*. The incomplete abortion or one in which pyrexia persists after expulsion of the fœtus should be treated in hospital. Such case should be regarded as infected irrespective of the degree of pyrexia and particularly if the pulse rate is rapid.

With the exception of very rare instances of rapid, overwhelming infection, chemotherapy should be withheld until investigation has been carried out. That does not mean that one should await the result of bacteriological investigation before commencing treatment. It does mean, however, that it is always better to know the pathogen and estimate its sensitivity to penicillin and streptomycin (or other antibiotics as they become available) before giving any drug. Very few cases are so urgent that there is no time to take cervical swabs and a catheter specimen of urine. Add to this a blood culture and a full blood-count, and the essential investigation is complete. It is necessary, however, to add this note of warning: Anaerobic culture of both cervical swabs and blood is an absolute essential in post-abortum infection. It must be remembered that one is not looking only for the haemolytic streptococcocus, and a bacteriological report "negative haem. strept." is valueless in such cases.

The surgical treatment of the uninfected incomplete abortion presents no problem; in skilled hands, removal of placental remains is a safe procedure. If the patient is already infected, however, it is wise to institute control of infection with chemotherapy for 48 hours before attempting removal, since intra-uterine manipulation in such cases may readily convert a localized uterine infection into a blood-stream infection. It is hardly necessary to add that severe haemorrhage resulting in an exsanguinated patient is an indication for surgical intervention whatever the degree of infection, but blood replacement should always be commenced before the patient is taken to the theatre; if it is possible to delay operation until a pint of blood has run in, so much the better.

If treatment of a case of infected-abortion is essayed in domiciliary practice the same principles hold good; bacteriological investigation should precede therapy. Combined sulphonamide and penicillin may then be given, and the treatment adjusted when the bacteriological results are known. That is to say, if the infecting organism is *Bacillus coli*, penicillin can be discontinued; if it is an anaerobic streptococcus, *Staphylococcus aureus* or haemolytic streptococci of Lancefield Groups other than A, there is no point in continuing with

sulphonamide. In mixed infections, however, it is always wiser to continue with combined therapy throughout.

Chemotherapy.

Sulphonamide.—Sulphatriad—a mixture of sulphathiazole, sulphadiazine and sulphamerazine—is probably the drug of choice in domiciliary practice, since the chance of crystalluria is thereby diminished and the patient who is not under constant supervision may omit to take sufficient fluids.

In cases of severe infection a loading dose of 4 gm. is followed by 1½ gm. four-hourly for 48 hours; the dose may then be reduced to 1½ gm. and later to 1 gm. six-hourly until a total of 40 to 50 grammes has been given.

For the case of moderate severity a loading dose of 3 gm. is followed by 1½ gm. six-hourly until a total of 25 to 30 grammes has been given.

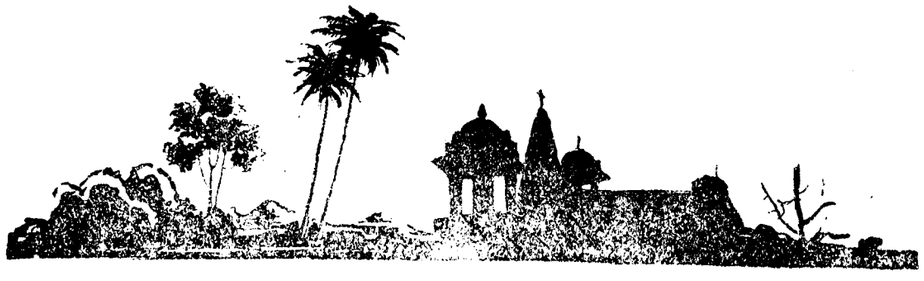
Similar dosage may be given mild infections. but a total of 20 to 25 gm. is ample.

Penicillin.

In severe cases with evidence of peritonitis and/or septicaemia, penicillin should be given in doses of 500,000 units three-hourly. Fulminating infections may require even larger dosage. After pyrexia has subsided the time interval may be lengthened to six hours, but the same amount of penicillin is given. When all clinical evidence of infection has disappeared, the patient may be given 1 c.c. procaine penicillin twice daily for a further 5 days before therapy in finally discontinued.

Infections limited to the uterus and genital tract require not more than 250,000 units of penicillin every six hours. Haemolytic streptococcal infections may respond to smaller dosage. With staphylococcal infections it is better to saturate the tissues with heavy dosage from the onset rather than allow inaccessible foci of infection to proceed unchecked.

Procaine penicillin is most suitable for use in the acute phase of an infection; the painless nature of the injection and the much longer interval of administration renders it a very welcome relief to the patient who has endured a long spell of three-and six-hourly injections of the ordinary penitillin.



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NOTICE

A young man aged about 30, of good appearance and build, wearing green coloured spectacles and calling himself "Dr. K. N. Gopalakrishnan" of Kalpathy Village, Palghat, and Clinical Lecturer in Sawai Man Singh Medical College, Jaipur, is visiting a number of doctors. He is well posted with a lot of medical information, and has a good knowledge of medical practitioners not only in the Madras City and State but also in other parts of India. He is probably a morphia addict. His *modus operandi* is usually to approach a doctor as a "doctor-patient" giving a good imitation of renal colic, and requesting a morphia injection. After that, a bed, shelter, food, money etc. are demanded according to circumstances. He has a cogent "hard luck story" about being "stranded" "by accident" etc. As he may approach medical practitioners this notice is inserted, to caution them.

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ODDS & ENDS

A "Common Cold Foundation" has been formed in Illinois, U.S.A. as a non profit, free enterprise, for research and investigation so that the common cold and its complications may be more adequately controlled, minimized or eliminated.

♡ ♤ ♡

The audience was being addressed by a doctor in a voice resembling summer thunder. A baby in the hall began to cry and the mother was taking her out.

"Don't trouble yourself, madam" shouted the speaker. "The child is not disturbing me."

"But you are disturbing her" snapped the another and left the hall.

♡ ♤ ♡

"Shall I find out the cause of your trouble", shouted a doctor to a feeble looking man entering his consulting room.

"Not so loud, doctor" cautioned the patient, "my wife is sitting just outside."

♡ ♤ ♡

A foreign expert was out investigating into the health conditions in a village. "How often people die here?" he asked the not very intelligent local official.

"Only once, Sir", was the honest reply.

♡ ♤ ♡

"I washed the shirt of my boy. It has shrunk and become too small for him. What shall I do?" wailed the mother.

"Wash the boy and see" was the consoling reply.

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