

The Medical Practitioner

A Monthly Medical Journal

EDITED BY

Dr. M. S. Krishnamurthi Ayyar, M. B. & C. M.,
Retired Sanitary Commissioner, Travancore State.

AND

Dr. V. Rama Kamath,
Member, Madras Medical Council.

CONTENTS.

Editorial :

Reform of the Medical Councils

Original Articles :

On the Presence, Prevalence and Prevention of Tuberculosis in Childhood

By Dr. A. R. Parasuram Mudaliar, M.B.B.S., M.R.C.P. (Edin) T.D.D. ... 201

Enlarged Tonsils and their Surgical Treatment, By Dr. Ch. S. John, M.B.B.S. ... 205

Abstracts :

• THIRD ANDHRA MEDICAL CONFERENCE, GUNTUR

Address By Dr. Miss A. M. Beal, Chairman Reception Committee ... 208

do. Presidential Address, By Dr. D. S. Ramachandra Rao, M.A., M.D. ... 209

Notes on Treatment of Diseases 212

Notes on Therapeutics, Diagnosis, and other Medical Subjects 213

News and Comments 215

Correspondence, Reports, etc. 221

Reviews 224



PETROPHOS

EMULSION OF PETROLEUM

WITH

HYPOPHOSPHITES

OF

LIME AND SODA

✓ CHRONIC COLDS

✓ CHRONIC COUGHS

✓ CHRONIC BRONCHITIS



3L
Lm 211, N30 mp

N33

169712

ABLE AT

MA & Co., MADRAS.

POPULATION AND BIRTH CONTROL IN INDIA

BY DR. M. S. KRISHNAMURTHI AYYAR, M.B. & C.M.

Medical Advisor to the Madras Neo-Malthusian League and Editor of *The Madras Birth Control Bulletin*.

Dr. C. V. DRYSDALE writes in the *New Generation* :

"A splendid Indian book and one which every Indian adult who can read English should buy or borrow".

Price Rs 1-0-0

Can be had from the author

Charges Extra.

33, Chittrakulam East Ward St., Mylapore, Madras.

The Medical Practitioner's Service Bureau, VEPERY, MADRAS.

Offer their services:—

- (1) In purchasing and supplying for the members of the medical profession their requisites from the City of Madras.
- (2) In arranging for lodging and boarding (on previous notice) not only for the members but their dependents and patients who require special treatment and attention.
- (3) In answering all enquiries regarding professional matters.
- (4) In instructing and guiding the members in Medico-Legal matters including drafting of appeals and petitions.
- (5) In assisting doctors to obtain literature published by Manufacturers of Pharmaceuticals, Physicians' supplies, Surgical Instruments, etc.

Apply with stamp for reply to:—THE MANAGER.

RENOWNED PRODUCTS OF THE KUSHMOL PHARMACY

B-23, Victoria Park St., Benares City

(Dr. Khurshaid's)

KUSHMOL

A weapon of precision ;
98% accurate.

Effective from first dose ;
Superior to all the drugs yet
known to physicians.

ARM YOURSELF WITH KUSHMOL
and DEFY ASTHMA

Life-long chronic cases are
cured in days.

Price Rs. 3-4-0 ; postage extra.

Stockists:—

SRI KRISHNAN BROS., P. O. BOX NO. 166, G. T., MADRAS

DADHA & Co.,

P. O. BOX NO. 541, P. T., MADRAS

KAGTA SILVER PILLS (Female)

A genuine Uterine Tonic ; Cures
Leucorrhoea and Menorrhagia, radi-
cally, by internal use only.

No douchings or local applications
required. One bottle, 20 days' use,
enough for an average case. Removes
Sterility due to above diseases. Results
extremely pleasing to both the patient
and the physician.

Price Rs. 3.

1933]

THE MEDICAL PRACTITIONER

1

It is recognised by experienced
fitters and the Medical and
Surgical Professions that the
successful treatment of the
various abdominal ailments is
aided by the use of a suitable
and correctly fitted ABDOMI-
NAL SUPPORTER.

WE have given considerable
study to this department and
manufacture a variety of kinds
and styles intended for every
condition requiring ABDOMI-
NAL SUPPORT as obesity,
Pregnancy etc.

OUR aim is to Produce the
highest quality that the best
materials and expert workman-
ship can make it possible.



The International Surgical Co.,

SANDHURST ROAD, BOMBAY, 4.

TELEGRAMS: "SPLINTWORK"
BOMBAY.

Catalogue & Price lists sent free on request.

Support Indigenous Industries

"IRVO"

Irradiated Vegetable Oil Vitamin Tonic

Irvo surpasses time-honoured Cod
Liver Oil in many respects. It is
found very useful after acute illnesses
such as Smallpox and general Infec-
tious diseases.

It definitely prevents and cures
Rickets and Bone diseases generally
non-amenable to medicines.

Please ask for Literature from:

Amrut Pharmacy, Nagpur.

Depots for IRVO:

Amrut Pharmacy, Nagpur

AND

Amrut Pharmacy, Princess St.,

BOMBAY.

BEST QUALITY AMPOULES

For Hypodermic or Intramuscular Use.

Camphor in Ether
Box of 6 ampoules
(2 grs.) Rs. 0-12

Camphor in Oil
Box of 6 ampoules
(3 grs.) Rs. 0-12

Quinine Chlorhydrate
Box of 12 ampoules
(5 grs.) Rs. 1-8

Quinine Chlorhydrate
Box of 12 ampoules
(10 grs.) Rs. 2-4

Emetine
Box of 6 ampoules
($\frac{1}{2}$ cc. $\frac{1}{2}$ gr.) Rs. 1-12

Emetine
Box of 6 ampoules
(1 cc. 1 gr.) Rs. 2-12

Pituitary Extract
Box of 6 ampoules
(1 cc.) Rs. 2-12

Pituitary Extract
Box of 6 ampoules
($\frac{1}{2}$ cc.) Rs. 1-12

TRIAL ORDERS SOLICITED BEFORE
YOU ORDER FOR THEM ELSEWHERE.
Special cash discount for readers
of "The Medical Practitioner"

The Medical Practitioners'
Service Bureau,
VEPERY, MADRAS.

SURGICAL PLASTERS

Highest Grade Plaster containing Oxide of Zinc widely known for its healing drying antiseptic qualities. For cuts, wounds, ulcers, surgical cases, incisions, boils, etc. 'SR' plaster is unequalled. Also used to bind splints on fractured limbs and for holding large bandages in place. Made in America and used by several representative hospitals the world over. Backed by 50 years' manufacturing experience. Last long and last in any climate. Ready for immediate use. The cheapest and most economical.

Hospital and Physicians' Sizes "SR" Plaster Rolls.

PHYSICIAN'S OR HOUSEHOLD SIZE ROLLS. Put up on rolls one yard long, 7 inches wide, in convenient lithographed metal cans. Ideal for General Household or Dispensary use.

Rs. 1-8 per Roll.

"SR" Zinc Oxide Adhesive Plaster is also supplied on the new air-tight "CONTAINER" in 5 YARD SPOOLS, for packet or trunk use. In four different WIDTHS:

1 Inch wide ...
1½ Inch wide ...
2 Inch wide ...
3 Inch wide ...

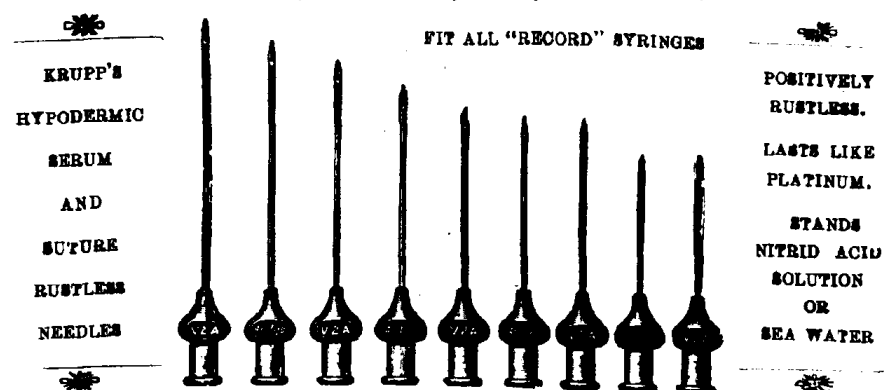
HOSPITAL SIZE ROLLS. Faced with Crinoline. This fine self-adhesive plaster is put up on roll 12 inches wide and 5 yards long. Indispensable in every Hospital, Factory or Workshop.

Rs. 5-8 per Roll.

Rs. 9-0 per doz.
Rs. 12-0 per doz.
Rs. 15-0 per doz.
Rs. 21-0 per doz.

KRUPPS RUSTLESS NEEDLES

Absolutely the Best—Long Lasting and Sterilizable



STANDARD LENGTH AND GAUGES

No. 51400 Krupp Injection Needles, different lengths, Sizes 1, 2, 12, 14, 16 18 & 20 ... Rs. 3-12 per doz.
No. 1405 Krupp Serum Needles, two inches long Sizes 8, 10 & 12 ... Rs. 7-8 per doz.
No. 1075 Krupp Lumber Puncture Needles, special for anaesthesia, Fine or Medium ... Rs. 4-0 each.
No. 1052 Krupp Weintraud's Saline Needles ... Rs. 2-0 each.
No. 1408 Krupp Anaesthetic Needles, long, to fit Labat's Syringe ... Rs. 3-0 each.
No. 1007 Krupp Intestinal Needles, straight and full curved. 6 in pkt. ... Rs. 2-4 a pkt.
No. 1003 Krupp Suture Needles, Surgeon's quality, triangular pointed, straight full curved and half curved. Assorted sizes, 6 in a packet ... Rs. 2-4 a pkt.
No. 101 Krupp Hagedorn's Needles Assorted sizes 6 in a packet ... Rs. 2-4 a pkt.

BOMBAY SURGICAL CO.

INDIA'S FOREMOST SURGICAL SUPPLY HOUSE.

Tel. Add. "SURGICO." BOMBAY 4. [Telephone No. 41936.]
MANUFACTURERS OF HERNIA TRUSSES, ABDOMINAL BELTS AND ORTHOPEDIC APPLIANCES



THE Medical Practitioner

Annual Subscription { Inland Rs. 2.
Foreign Rs. 3.

Single Copy As. 4.

VOL. IV.]

MAY, 1933.

[NO. 8

REFORM OF THE MEDICAL COUNCILS.

No. III.

In the first Editorial of this series we dealt with the purpose and objects of Medical Registration and briefly described the functions of the Medical Councils. Last month we pointed out the defects in the existing medical councils and suggested reforms on democratic lines to meet the present conditions. This month we shall discuss about the reforms that should be brought about with regard to the appointment of Registrar and the necessity of having uniform methods of election of members to the medical councils and the need for the institution of Election Courts for dealing with irregularities of elections including election offences.

The Registrar of the Medical Council is an important and responsible officer and it is desirable that the Council should be given statutory direction regarding his appointment. There is absolutely no need that he should be a medical man. It will be most advantageous if he is one from the legal profession. The Council consists of all medical men and a Secretary with legal knowledge will be an acquisition to the Council to help them in legal matters especially in conducting cases of infamous conduct in a professional respect brought to the notice of the Council. At present the Council is very much handicapped for want of such help though there is permission in the existing Acts to obtain legal advice

whenever necessary and in some provinces, provision has been made for the temporary appointment of a judicial assessor on the lines of the British Act. For want of statutory direction to the Council right sort of persons are not appointed as Registrars with the result that usually a second rate Government pensioner or a retired Government medical subordinate occupies this position. It may be necessary to lay in the rules that the Registrar should always be one possessing legal qualifications. With the exception of Madras and the Punjab, the rest of the Medical Councils are not supreme in the appointment of the Registrar, there being necessary Government approval of the appointment made by the Council. During these days of devolution of power, it will be in keeping with the times if appointing authority of the Registrar is vested solely with the Medical Council itself.

In all democratic institutions, purity in election should be of the greatest importance. We have no personal knowledge of elections to the Medical Councils in other provinces, but we can say with authority that in Madras with regard to Medical Council elections there is much room for fraud, deception and may other offences usually committed in elections. The fact that the Returning Officer for the election in Madras is the Registrar and the Election Court is the Council makes matters still worse. In the United Provinces also the Registrar is the Returning Officer and the Medical Council is the election court. In Bombay though the Election Court is the Medical Council the Returning

Officer is the Surgeon-General or his nominee so also is the case in some other Provincial Councils but in all the provinces excepting Madras, United Provinces and Bombay, the Election Court is the local Government. Affairs of election seem to be more ideal in Bengal where the Returning Officer is quite independent of the Medical Council being the Registrar of the Calcutta University or his nominee and the Election Court is the local Government.

It is certainly against sound principles to have Surgeon-General or Inspector General of Civil Hospitals or their nominees as the Returning Officers as the former officers are the nominated presidents of the councils. To have the Registrar of the Medical Council as the Returning Officer is most objectionable. He is a subordinate of the Council and hence its creature and as such will not be able to exercise his own independent views. It is very likely he would dance to the tune of his masters who are the Presidents of the Council or a group of the members of the Council who are able to guide the destinies of the Council (though not possible in the present councils where the President is the sole monarch) and a particular candidate for election whose entry into the Council is considered not desirable by the President or even by the Registrar himself, is likely to suffer most. As mentioned above the medical councils in some provinces are the Election Courts themselves and hence there is no remedy for the aggrieved candidate to have justice at all. So it is desirable in the interest of justice and fairplay that the Returning Officer for conducting election should be a person independent of the council or the President of the Council. A person of the position of the Registrar of an University, as is the case in Bengal, will be most suitable for discharging the responsible duties of the Returning Officer.

It is preposterous that the framers of the Medical Acts in some Provinces should have thought it fit to empower the Medical Councils themselves to sit in judgment about election offences. It is stranger still that the Council could act both as a prosecutor as well as a judge. for, it is mentioned in the rules that the Council may on its own motion, declare any election to be void on account of corrupt practices or any other sufficient cause. The

fact that the decision of the council is final makes the situation most unbearing if not harsh and cruel. Such unreasonable and unjust authority vested in the council makes the Election Court a farce and not a reality. If a particular candidate is not wanted either by the Registrar of the Council or a group of councillors, his fate is doomed. So, it is highly desirable that the court which sits in judgment about election offences should be a body independent of the Council or any of its office bearers. Though in some Provincial Councils the election offences are heard by the local Government, this arrangement is not ideal and it can never satisfy the ends of justice. The Government deputes one of its officers in the Secretariat to go through the complaints made by the aggrieved parties and the proceedings conducted by a single officer will never approach a judicial enquiry conducted by a person or persons in the judicial department.

We suggest that the existing sections regarding elections in the Provincial Medical Acts should be amended so as to make provision for a judicial officer to try and investigate election disputes and to declare elections to be void in case the items of disputes have vitiated the results of the election. The judicial officer should not be below the rank of the chief judge of the Small Cause Court and in places where such courts do not exist election disputes should be tried by a judge of the High Court on the original side. Provision should also be made for an appeal to the High Court in case the trying judge is below the rank of the judge of the High Court.

If as suggested by us the medical councils are reformed to make them real democratic bodies with an elected President, other reforms which materially affect the growth and prosperity of the profession and the prestige of the councils such as uniform and equal facilities to exercise the rights and privileges conferred by virtue of registration, doing away with the several invidious distinctions now prevailing in the profession, reciprocity in the matter of registration and many such unhealthy distinctions now prevailing due to defective working of the councils, are bound to follow.

Original Articles.

ON THE PRESENCE, PREVALENCE AND PREVENTION OF TUBERCULOSIS IN CHILDHOOD.*

BY

Dr. A. R. PARASURAM MUDALIAR
M.B.B.S., M.R.C.P., (EDIN). T.D.D.,
SPECIALIST IN TUBERCULOSIS,
King George Hospital, Vizagapatam.

Although I feel diffident that I am not likely to place before this mighty congress of medical men of great fame and experience, anything new about Tuberculosis, I venture to speak about this important subject because the events which culminate in tubercularization are of deep human interest and tuberculosis in children is much more so.

For the most part the tuberculosis of adolescent and adult life is but the harvest of seed sown years ago during childhood. If this be so, it is manifest that the most hopeful line to be prosecuted in relation to prevention and eradication of tuberculosis is the detection of its earliest manifestations in childhood.

If we go back in the history of the race and the individual, a point is reached where tuberculosis as a morbid factor disappears. Savage man hardly knew it. Like cattle living and breeding in the open he was free from it.

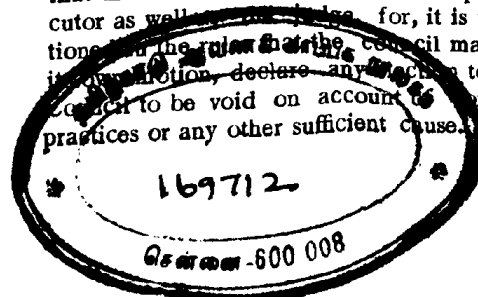
All evidence tends to show that child is not born with tuberculosis, or, at least, that this happens very rarely. The children of tuberculous parents are commonly healthy at birth—some times unusually fine products. The recent methods of diagnosis have proved the infrequency of tubercularization during the first six months of life. In children the gradual extension of tuberculous infection by way of lymphatics has escaped notice for the most part. Our attention is drawn to this only when disfigurement has occurred through gross enlargement of one or other gland or group of glands, or when suppuration has supervened. Take for example, the ordinary case when tuberculosis enters by way of the tonsils and adjacent glandular structures.

The subsequent passage of infection follows the line of the chain of lymphatic ducts and glands. The glands undergo a process of infiltration which involves individual glands successively from above downwards. Our attention has been little directed to the glandular involvement, save in those instances where grosser enlargement of one or more has taken place, associated with caseation or suppuration. Under ordinary conditions for the most part, the less evident but uniform spread of infection from gland to gland is missed. It is the accidental determination of suppuration at one point which generally arouses attention. Yet, in the former case, a subtler, although less obvious, form of infection is in progress.

Whether inoculation has been effected in the tonsillar region, in the mucous membrane of intestine or at some other point of the mucous surface, the process of spread in the majority of cases is similar, namely, through the adjacent lymphatic system. Wherever it be, if the glandular change be relatively slight and correspondingly out of sight, the fact of inoculation is constantly overlooked until the advent of definite symptoms indicates that some organ of importance has been attacked. In this sense a significant analogy may be traced between the natural history of tuberculosis and of syphilis. In both diseases we have the infection, unknown in the one and known in the other, followed by generalized infection, succeeded in each case by a variable period of years of good health during which there is no evidence that anything is wrong or that any disease exists. In both cases the initial phenomena of inoculation and early spread through the lymphatic system are similar. In each case the fact of inoculation may be missed until its presence becomes evidenced by grosser visceral diseases.

Owing to this difficulty of finding out the date and site of infection of tuberculosis in children great watchfulness is needed. Whenever the child does not appear bright, whenever it shows disinclination to play with its comrades, when the child does not show progressive increase in weight, has frequent attacks of nasal cold and when it does not take nourishment properly, we should suspect that tuberculous infection has taken place and the child is trying to get over it.

* Paper read at the Third Andhra Medical Conference, Guntur and specially contributed to The Medical Practitioner.



8L
Lm 211, N 30MP
N 33

by its natural forces. Any enlargement of the cervical glands is a sure sign of the infection and the subcutaneous tuberculin test will in a large majority of cases give a positive reaction. I have watched them often times from the stage of minor involvement of a few glands in the neck or abdomen to that of disintegration of lungs or other visceral tissue. I think that if child-life were watched with sufficient care and with sufficient suspicion in respect of tuberculosis, we should be in a position to anticipate and prevent most of the doleful harvest. If it be true, as I have no doubt, that tuberculosis is much the commonest disease of child-life there seems greater need of a more general awakening of suspicion as to its presence amid the varying symptoms of diseases in childhood. And the need is no less for careful study, both clinical and pathological, of the course of tuberculosis in the child, so that mere suspicion may be changed into scientific diagnosis.

EVIDENCE AS TO PREVALENCE.

Regarding the wide prevalence of tuberculosis in childhood, there can be no reasonable ground for doubt. Statistics on the point based on careful observation—clinical, pathological, and experimental—have been forthcoming from many sides.

(A) CLINICAL EVIDENCE: The clinical evidence is strong. Where the parents are tuberculous or healthy, the occurrence of tuberculosis in the child during the first six months of life is relatively infrequent. From that date onwards the incidence of tuberculosis increases steadily. Since the introduction of the tuberculin cutaneous tests a considerable series of observations have been reported from various countries which all tend to the same conclusion, that tuberculosis exists, and can be determined individually in the majority of school children. The figures of Von Pirquet, Ganghofer, Hamburger, Calmette, Sir Rober Phillip, and Dr. Chendrasekhar of Madras go to show that in their respective cities most children among the Hospital-going population have been tuberculised by the time they reach the age of 15. Nor is the statement applicable only to the children of large cities. The observation of Franz included the examination of young soldiers—apparently healthy, who had

passed the ordinary physical fitness examination for the service—and among these he found that 61 per cent gave a positive reaction to the tuberculin test.

(B). PATHOLOGICAL EVIDENCE: The pathological evidence is still more clear. Naegeli of Zurich reported that he has found definite signs of tuberculosis in 97 per cent of all bodies examined consecutively by him post-mortem i.e. of persons dying from different kinds of disease and accident. But the true inwardness of the observation was discovered only when more careful attention was directed to the post-mortem examination of children. Hamburger has reported the results in two separate groups. The first series included 401 children, of whom 63 per cent of those between 7 and 10 years of age showed evidence of tuberculosis, and 70 per cent of those between 11 and 14. The second series included 848 children. Of those between 7 and 10 years of age 63 per cent were found to be tuberculous, and 70 per cent of those between 11 and 14. Deducting from the 848 those who had actually died from tuberculous disease, it was determined that of the remainder between 11 and 14 of age no fewer than 53 per cent had tuberculous lesions. Of special interest is the fact that in this series the frequency of tuberculosis steadily increased from 17 per cent in those of 2 years of age to 53 per cent in those between 11 and 14.

(C). EXPERIMENTAL EVIDENCE: Experimental research has shown that tuberculosis is of still more frequent occurrence than clinical and pathological observations have been able to determine. It was proved that various conditions in which it had not been possible to discover characteristic appearances either at the bedside or post-mortem table were nevertheless of tuberculous nature. This has been determined in the case of young children, in whom no definite tuberculous lesion could be discovered by the ordinary means in life or post-mortem, with the exception of multiple infiltration of cervical and other glands. From these glands—in the absence of microscopical appearances of tubercle—it has been found possible to prepare an extract which, when injected into guinea-pigs, has produced tuberculosis.

From all this it will be seen that we are confronted by the fact that tuberculosis is

vastly common in childhood. Most children take it one time or another. The child's mucous membranes are specially receptive and absorbent. Inoculation occurs readily at any point. The extent of spread depends chiefly on the child's vitality or the resistance offered to the invading organisms by its living cells. This, in turn, is influenced largely by the character of the child's compulsory environment. Other things being equal, the younger the child the more easy seems the dissemination of the virus throughout the lymphatic system. The frequency of infection increases in each successive age group. This is doubtless due to the continued, repeated opportunities for infection.

While with advancing childhood the frequency of infection increases, the morbid process progresses as a rule more slowly. Individual subjects differ much in this respect, but, other things being equal, the older the child, the greater is his resistance. With increasing years the frequency of apparently arrested tuberculosis, e.g. in the form of calcified glands and scars, becomes noteworthy. Whether such arrest contributes in any degree to immunity, is a difficult question. Some facts point in this direction. It is possible that some degree of immunisation is established thereby. If so, it is comparatively slight and fleeting. In presence of continuous exposure to, or a massive dose of infection, the immunity readily gives way and the progress of disease tends to be rapid.

SCIENTIFIC OUTLOOK.

In this brief presentation of the subject, I am concerned not merely with children whose infection is clinically easy of recognition, but likewise with those in whom the infection may be so slight as to have little more than potential significance. If we are to understand tuberculosis aright, if we are to form a true judgment on the practical issues of the tuberculosis problem, we require to know the facts with all the exactness of which scientific medicine is capable. We require to keep in view the unity of tuberculosis in its extraordinary varying manifestations. We must get rid of the artificial distinction between so-called medical and surgical tuberculosis. I would request every one present here on this occasion to remember that the most slender seedling of tuberculosis is potentially as

significant as the full grown tree. It is impossible to say with any certainty which tubercular seed will be cast off and which will mature. The natural history of the disease is readily followed in the child. The beginnings of the morbid life history call for minute observation, not only for the child's sake but, in the largest sense, for the sake of the nation and the race. For here, no less than in other ways, the child is the father of the man. It is the seed slightly sown in childhood that for the most part determines the occurrence and course of tuberculosis in the later life. For successful implantation of tuberculosis the soil must be in a suitable state and the live seed must be present in sufficient amount for a sufficient length of time. Fortunately the conditions which are most favourable to the healthy vigorous development of the species—indeed the conditions desirable, if life is to be more than existence—are conditions which are unfavourable to the tubercle bacillus.

THE PROBLEM OF PREVENTION.

Here I am not going to interest myself with the treatment of individual cases or different types of cases, nor I am concerned with the efficacy of Creosote, Cod Liver Oil, Calcium salts and different injections which come and go in the market. But I am very much concerned with the broader outlook for prevention and eradication of tuberculosis.

Why, then, this almost universal distribution of tuberculosis among the children of the race? The answer is very simple when we recall the present procedure in the rearing of children. The circumstances of the child call for special consideration, because the child's environment is not of his choosing or making. It is the compulsory environment of childhood—for the most part vicious—which affords the usual entrance for the tubercle bacillus. The interest of the race demands that this shall be corrected. If the child be trained from the first in the way he should go, when he is old he will not depart from it. The practical difficulty is not with the child, but with his guardian and teacher. In the vain endeavour to protect him from harm the child is removed from the beneficent effects of nature. The vital atmosphere is replaced by one which is of human provision. Sun light is obscured by shades of

every kind and degree. Nutrition is frequently mismanaged and natural movement and development impeded by all sorts of things. Thus the process of devitalization is maintained from week to week and month to month. The infant is prepared for all kinds of infections. Being continuously in the unwholesome environment, he falls a prey especially to the tubercle bacilli, by whatever channel it may be introduced. Unfortunately, the conditions which are inimical to the life of the child are essentially those favourable to the tubercle bacilli.

The child who has been thus tuberculised is doubly significant because of what he is and because of what he may become. The tuberculosis of a people begins in the nursery at the school room. It is to the nursery and school room that observation and effort should be directed if measures for eradication of tuberculosis are to be fundamentally sound and practically effective.

First and foremost, tuberculosis must be sought for. It is not enough to wait until the patient comes to consult. It is not enough to care for the tuberculosis patient when he presents himself. There must be a systematic search. The breeding-grounds of tuberculosis must be raided. The tubercle bacillus must be hunted down. The protean character of its manifestations must be kept well in view.

The problem of tuberculosis in childhood will not be solved by the erection of hospitals or homes for cripples and sick children. These have their immediate temporary significance, but they do not carry us far enough. The essential question is not how to tinker up diseased frames. The problem can only be solved effectively by the better understanding of the physiological needs of developing life and a corresponding renovation of the nurseries and school rooms of the nation.

It is a great folly to dream of transferring all cases of tuberculosis, whether in the child or the adult, to sanatoria and hospitals. The purpose is as unnecessary as it is impossible. In this respect the value of tuberculosis dispensaries scattered all over the country is of immense value because the tuberculosis dispensary is meant to go into the heart of the problem in the household and meets every requirement. The tuberculosis dispensary not only takes care of the

individual in whatever way he needs but also brings about sanitary reforms in the dwelling—however humble it may be. It makes the home of the poor man become the nursery of healthy children and cease to be the breeding ground of tubercle tainted weaklings. Each recreated home is an effective preventorium against tuberculosis. The tuberculosis dispensary acts like a collecting centre. Here every aspect of tubercularization will be dealt with and every line of detubercularization will be conceived and realized. This great collecting centre constitutes the seat of diagnosis and classification of the varying types of disease. The collecting centre comes in turn to be a "clearing house". Each case will receive appropriate guidance and direction. For example, patients for whom there still remains hope of recovery will be passed to the sanatorium with its great possibilities of treatment and education. Another group, in whom tuberculosis has already played havoc, so that hope of recovery has disappeared, will be transferred to the hospital.

Mankind was born into air and sunlight. These are his natural heritage. They are the irreducible needs of life. In proportion as these primary conditions are reduced, a penalty is exacted in the sense of disturbed function, diminished vitality, disease especially tuberculosis and death. Where it is possible to begin afresh the scheme of civilized life, where it is possible to undertake anew the creation of cities and the homes of our people, where it is possible to place within the recreated dwellings an intelligent race, possessed of determination to exclude tuberculosis, detubercularization may be quickly attained.

The tubercularization of the race is a grim chapter in human history. The universal distribution of tuberculosis throughout the civilized world is a fact of immense significance. Tuberculosis has accompanied civilization. Tuberculosis is not essential to civilization. It is a vicious by-product of an incomplete and ill-informed civilization.

If the baneful outcome of misguided civilization has been tubercularization, the role of an enlightened civilization must be detubercularization. What an ignorant civilization has introduced an educated civilization can remove.

ENLARGED TONSILS AND THEIR SURGICAL TREATMENT.

By

DR. CH. S. JOHN, M. B. B. S.,

SPECIALIST IN EAR, NOSE AND THROAT DISEASES, MISSION HOSPITAL, NIDDAVOLE.

I have chosen this subject, as I think Tonsillectomy is a simple procedure and that every general practitioner ought to practise it.

Chronic enlargement of the tonsils almost always associated with adenoids is a prevalent complaint of childhood specially between the ages of 5 and 10.

ÆTIOLOGY: No completely acceptable explanation of the cause of enlarged tonsils has yet been brought forward.

1. There is a type of child who manifests an overgrowth of lymphoid tissue throughout the body generally, the tonsil sharing in the enlargement. This tendency "The strumous diathesis" runs in families.

2. The affection may be the result of repeated colds or a sequela of measles or whooping cough.

3. The escape of sewer gas from open and defective drains is undoubtedly a potent cause and the infection may be carried by water or milk. This is what happens in town children where the incidence is great. In institutions where children sleep in ill-ventilated dormitories, it is the polluted atmosphere that predisposes to an attack of tonsillitis. General ill-health and overwork are amongst other causes of indisposition. The writer has been carrying on a systematic inspection of a few schools and hostels year after year and the following observations are worth noting.

In the primary and lower secondary departments the frequency of enlarged tonsils is a little above 33%. Here they are always almost associated with adenoid growth in the naso-pharynx. In the higher forms, the incidence falls to 10% or even less and hypertrophic palatine tonsils are frequently found alone.

The incidence is even greater among the children living in the dormitories and hostels than among the day pupils coming

from private schools. Among the children in the country areas the incidence is as low as 10%. On the Sappers hill near Dowleswaram ideal country conditions prevail but here out of 50 inmates in a hostel there were 16 with enlarged tonsils. Here the predisposing factor is the ill-ventilated dormitory. This is confirmed by the observation that the disease is sometimes infectious and not infrequently epidemic, chiefly in the foul atmosphere of the badly ventilated dormitories and hostels.

4. In the majority of cases the cause is doubtless of microbic nature. In the mouths of ordinary individuals numerous cocci and bacillus tuberculosis are present, but they do not get a footing in the tonsil. When the general health is reduced due to predisposing causes these germs act as exciting factors and cause enlargement of tonsils.

FUNCTION OF THE TONSILS: Its function has long been a subject of investigation. It is reasonable to regard the tonsils as organs for the defence of respiratory and digestive organs during the early years of childhood. "The ages in which they are most in evidence, their situation, their structure, the recognized emigration of lymphocytes through their epithelium, their frequent enlargement with an infective process, the frequency with which, when their resistance is overcome, they appear to be the starting points of infection, their lasting hypertrophy after prolonged or repeated infections, experimental observations which show that they serve as ports of entry for infection, and their normal involution at puberty confirm this view. As another writer says they form the second line of defence the nose and tongue forming the first line. That chronically enlarged tonsils or marked adenoids have lost their defensive powers and come to resemble a choked filter is shown by the greater frequency with which adenoid children contract diphtheria and scarletina, and the severity of throat and ear complications in such cases."

The tonsil consists of lymphoid tissue; it is arranged in nodules or follicles. The lymphocytes are less closely packed in the centre of each nodule, the germ centre as it is called, because multiplication of the corpuscles goes on in this situation.

* Paper read at the Third Andhra Medical Conference, Guntur and specially contributed to The Medical Practitioner.

Surrounding each follicle is a closed plexus of lymphatics, from which the lymphatics pass to the deep superior cervical glands. The tonsil therefore is a centre of great activity. Manufacture of lymph corpuscles in the germ centres and the destruction of bacteria in the 20 to 30 crypts go on simultaneously every minute. The bacterial flora found in removed tonsils is varied and rich consisting of *B. Tuberculosis*, *Streptococci*, *Pneumococci*, *B. Influenzi*, *Meningococcus*, *Diphtheroids*, *B. Coli*, *Micrococcus catarhalis* and *Staphylococci*.

The tonsils stand as two sentinels at the entrance to the throat tackling with criminals making short work of them after dragging them into their inner secret chambers, the crypts. This is the normal function of the tonsil. When the number of the criminals is great and their attacks repeated and formidable, the lymphoid tissue rises to the occasion and manufactures greater quantities of corpuscles so much so the small hidden gland appears prominently beyond its two pillar boundaries. In the end unable to cope with the enemy, a compromise is effected and the enemy allowed a solid footing in the gland. Thereafter the normal functions of the gland cease while the conquerors spread fire and destruction throughout the body.

ANATOMY OF THE TONSIL: The tonsil lies in the lower part of the triangular depression the tonsillar sinus and the lateral wall of the pharynx. This sinus is bounded in front and behind by the palatine arches (Pillars of the fauces) which meet above on the posterior border of the soft palate. The deep or the lateral surface is only separated from the pharyngeal aponeurosis, which lines the superior constrictor muscle, by loosely arranged areolar tissue. On this account the tonsil can readily be dragged medially from its fossa in the operation of enucleation. The medial surface is free.

BLOOD SUPPLY OF THE TONSIL: It is from the facial through its ascending palatine and tonsillar branches, from the external carotid through the ascending pharyngeal artery and from the lingual through its dorsalis linguae branches. The superior constrictor muscle intervenes between the tonsil and external maxillary artery with its tonsillar and ascending palatine branches.

Severe haemorrhage some times occurs after enucleation, and it has been attributed to injury of the external maxillary artery. This vessel, however, can only be injured when the muscular wall of the pharynx has been wounded. The internal carotid artery lies about 2.5 c.m. behind and lateral to the tonsil and it is impossible to injure it in the ordinary enucleation.

EXAMINATION OF THE TONSILS: This should present no difficulty at all. Sometimes they are so large as to be touching the middle line, almost filling the throat. The mouths of the crypts are seen to be covered with dirty cheesy matter which can be extruded by pressing against the root of the tonsil with the spatula. The tonsils are not so prominent in the chronic follicular variety where they are "Embedded" and adherent to the plica-triangularis. Here the bulging anteriorly of the plica triangularis is very characteristic.

EXAMINATION FOR ADENOIDS: Press the right corner of the mouth between the upper and lower jaws, insert your forefinger behind the soft palate, and feel for the adenoid masses at the roof of the pharynx. The child being afraid of biting its own cheek keeps still.

SYMPTOMATOLOGY: The effects of the enlarged tonsils are so well known that a repetition is unnecessary. One or two points require special mention. Enlarged tonsils in a few cases exhibit a rise of temperature similar to that of *Tuberculosis* of lungs. The writer had the experience of two such cases in his practice. Both these were treated for T. B. for a long time without success and it was only after the removal of the enlarged tonsils the temperature came down. Another case was treated as a mild typhoid. For months a low temperature persisted and the removal of tonsil was followed by its disappearance.

INDICATIONS FOR OPERATION: It will be sufficient to point out that the severity of the symptoms rather than the extent of the enlargement that should guide the surgeon for recommending an operation. A word of warning is given against the indiscriminate removal of tonsils. This is especially the case where the operation is suggested on account of the possibility of the tonsils being the cause of some systemic infection or the source of some toxic absorption

giving rise to some distant lesion as a chronic arthritis. In such cases other sources of infection such as the teeth, appendix etc., should be examined and excluded.

Briefly the chief indications are the following:

1. When the adenoids are present and the tonsils are enlarged.
2. Recurrent attacks of acute tonsillitis.
3. When deafness or otitis media is due to an enlarged tonsil.
4. When it causes the mouth breathing and obstruction of the fauces.
5. When it is the cause of the enlargement of the cervical glands.
6. When it is the cause of the systemic infection.

CHOICE OF ANAESTHETIC: At least in India chloroform can be safely administered. The writer has performed more than 1500 cases with chloroform and there has not been a single mishap. Open method with Schimmelbusch's mask is used. In adults Novocaine is used. The secret of a successful operation is to put the child completely under. It is disgusting to see the child coming out as soon as the gag is put in when the tonsil is partly dissected or after removal of one of the tonsils. It makes the field of operation bloody, less visible, leads to unnecessary shock by prolonging the period of anaesthesia and adds to the confusion to the operator.

In people above 14 years of age, I first cocaineize the soft palate, uvula, base of the tongue, tonsils and posterior tongue with 5% in men and 3% in women of Ephraim's solution. This is one part of 5% cocaine solution with 2 parts of Adrenalin of 1 in 1000 solution. In hyper-irritable patients I use a stronger solution. After the parts are anaesthetized one percent cocaine is injected with a curved needle.

1. Inject the posterior pillars both superior and inferior poles with $\frac{1}{2}$ cc. each.
2. The anterior pillar at three places.
Superior $\frac{1}{2}$ cc.
Middle $\frac{1}{2}$ cc.
Triangular ligament 1 cc.

3. Inject the hilus of the tonsil now. Push the needle horizontally between the tonsil and the anterior pillar and turn it round so that the needle points posteriorly. Here you inject 2 c. c.

PRECAUTION: During the cocaineization of the throat the patient is asked to bend the head forward and spit out every bit of saliva and not to swallow anything.

TIME OF OPERATION: Operation for the removal of tonsils should never be performed soon after an attack of acute tonsillitis. The tonsillar arteries are so much enlarged that they may give rise to haemorrhage so profuse as to suggest injury to some large vessel.

THE OPERATION: Complete removal is now the routine operation. The chief objections for partial removal of the tonsil are the following:—

1. It is an incomplete removal of a diseased gland.
2. Partial removal throws the crypts of the gland open and absorption of the deleterious material is favoured.
3. Although tonsillectomy gives relief in some cases there are others to which it is inapplicable viz., those where the tonsils are too small submerged and adherent to enter the ring of gillotine. A good number of cases suffer even more both locally and generally after the partial removal and often present themselves to have the operation repeated.

4. Haemorrhage is greater. So it is now agreed that if a tonsil is sufficiently diseased to call for any interference it should be removed in toto i.e., with its capsule. There are two methods of complete removal:—
1. Slenders with gillotine and 2. Removal, enucleation by dissection using a snare. Of course the method is a matter of individual choice. The snare method is the favourite method with the writer, and its description is given below.

The patient is seated in a chair and chloroform is administered. When the patient is under the mouth is kept open with a self retaining Whiteheads mouth gag. Precaution: See that the lips are not caught between the jaws and the blades of the gag, if so they should be disengaged at once.

Next step : A volcella forceps is passed through the snare and after the tongue is depressed with a depresser the tonsil is caught in the volcella forceps. Next the tongue depressor is removed the volcella forceps taking its place.

Next, The tonsil is drawn forwards from its bed and a longitudinal cut is made with a blunt dissector at the junction of the anterior pillar with the mucous membrane of the tonsil. At once the smooth lateral surface of the tonsil comes into view.

Next the superior pole and the posterior surface are dissected free and the tonsil now only hangs by its pedicle which is cut with the snare. The same process is repeated on the other side.

AFTER TREATMENT : The patient is put to bed the face is sponged with a wet towel all over. He is kept on his side to allow the blood to flow out freely. When the spitting is clear containing no blood he is sent home. For the next three days cold liquids are given and frequent gargling with a weak solution of permanganate is made. On the third day a castor oil purge is given and soft solids are given. At the end of a week the patient returns to his ordinary diet.

COMPLICATIONS AND SEQUELAE : 1. Haemorrhage. With the use of blunt instruments this should never happen except in hemophilics. If the haemorrhage is arterial, patient is taken back to the theatre the spurting vessel is ligatured and if this is not possible, a fine artery forceps is left clamped to the vessel till 12 hours. In case of hemophilics blood oozes out from the whole raw area. In such cases, the usual remedies such as hemoplastine, cal. chloride 10% solution are tried. In my experience calcium gluconate has given better results. In rare cases however all these remedies are of no use. Take the patient into the theatre give him a whiff of chloroform, and suture pillars over a roll of gauze. Remove the sutures and the gauze at the end of 24 hours, and give gargles of Hydrog. peroxide.

2. Ear trouble. In a few cases pain in the ear is complained of, probably due to the entrance of blood into the tympanum through the eustachian tube. If deafness was present before the operation and is not improved 10 days after, Politzerisation will be indicated.

Abstracts

THIRD ANDHRA MEDICAL CONFERENCE, GUNTUR.

Address

by

DR. MISS A. M. BEAL, M.D.,
Chairman, Reception Committee.

Members of the Third Andhra Medical Conference :—

On behalf of the Guntur Medical Association I want to welcome you to Guntur—to the city of Guntur. I want to welcome you to our hospitals here in Guntur. We are glad to have you come. We count it a privilege to have the Medical Conference meet in our city. We want you to enjoy your visit with us. We want you to be comfortable. And most of all we want you to feel that the Third Andhra Medical Conference has been worth your while coming to Guntur.

We want you to share with us what you have learnt in your practice elsewhere and we want to share with you. It is only as we both give and take that we get the most of the benefits from such a gathering.

We have come together some of us from private practice in cities, towns and rural places, some of us from Government hospitals, some from Mission hospitals and some from private hospitals. We are of all faiths and creeds; we have specialised in various subjects. But we are bound together by one common tie—all doctors serving humanity serving the people of India.

I notice one omission on the programme. What is one of the greatest ways we can serve an Indian home or at least make them happiest? Is it not to bring them a boy? Our programme promises to give us some most interesting papers by most eminent men—and yet there is no paper dealing with Gynaecology nor Obstetrics. Therefore I want you to read this poem.—

"It's a Boy".

The doctor leads a busy life, he wages war with death;
Long hour she spends to help the one who's fighting hard for breath;
He cannot call his time his own, nor share in others' fun,

His duties claim him through the night when others' work is done.

And yet the doctor seems to be God's messenger of joy,

Appointed to announce this news of gladness :

"It is a boy!"

In many ways unpleasant is the doctor's round of cares,

I should not like to have to bear the burdens that he bears;

His eyes must look on horrors grim, unmoved he must remain;

Emotion he must master if he hopes to conquer pain;

Yet to his lot this duty falls, his voice he must employ

To speak to man the happiest phrase that's sounded :

"It's a boy!"

Whoever through the hours of night has stood outside her door,

And wondered if she'd smile again; whoever has paced the floor,

And lived those years of fearful thoughts, and then been swept from woe

Up to the topmost height of bliss that's given man to know,

Will tell you there's no phrase so sweet, so charged with human joy

As that the doctor brings from God—that message: "It's a boy!"

I said we are bound together by that one tie—doctors serving humanity. And so as we open this conference may we forget all other differences and share with each other from our experience those things we have learnt and which have helped us to serve humanity better. You have chosen the noblest work in the world. In the name of the Guntur Medical Association I again welcome you and wish you success, success in this conference and success as you go back to your own work. May this conference help you to be better doctors. I have the honor now to ask the President of our Conference, Dr. Ramachandra Rao to take the chair.

Presidential Address.

by

DR. D. S. RAMACHANDRA RAO, M.A.M.D.

LADIES AND GENTLEMEN,

I feel grateful to the members of this conference for having elected me as the president on this occasion. I am touched by the signal honour done to me; at the same time I am not unmindful of the great responsibility you have put on my shoulders thereby. With your goodwill and co-operation I shall endeavour not to bungle through the onerous duties that lie before us. In spite of the great heat that prevails at present, let us keep up a cheerful face and warm heart and go forward to our task with a smile on our lips. We are thankful to the Reception Committee and to Dr. Beal for the wonderful reception they have given us here. Guntur has great traditions, and the hospitality and generosity of its people are known all over the Andhra Desa.

I am glad that the medical profession in the Andhra Desa has realised the need for an organisation like this. This is an age of specialisation. The modern wonderful scientific progress have been the result of concentration and specialisation. Our professional training and practice tend to make us narrow and short-sighted. We are apt to think "We are Gods". But the association with other professional men and women would stimulate our thoughts, broaden our vision and humble us in our own estimation. Unlike the lawyer who moves and has his being in the wide world, we are apt to move in narrow, nay vicious circles. We need at times to get out of ourselves and breathe in the spirit of freedom untrammelled by routine and professional tradition. Let us try to come out of our narrow grooves whenever we can and get the courage to assert that we have a right to live, live well, live complete and harmonious life.

All scientific work is laborious and long. It is built on the foundation of truth. Occasionally the discovery of truth, often the very attempt to find it, is its own reward.

I am not so sure that the conditions in Andhra Desa are very different from that obtained in other parts of the country.

Anyway as the scientific spirit is slowly permeating our land let us endeavour to build the edifice of our profession on the solid rock of truth. Let us have the courage to face it, to own it, seek after it and be prepared to pay the cost of the search and rest not till we find it in our own measure. And what is truth? We have every one to answer the question according to our lights. A few aspects of the question have impressed me, and you may take them for what they are worth.

(1) Man is not merely a bundle of physiological organs but he has a mind and a spirit. Therefore the treatment, to be effective, should deal not only with the diseased tissue or the incapacitated organ, but should be directed to grip the mind and touch the soul of the patient. The equipment of the doctor should be of the highest order, and it should tend in the direction of mental development and moral aspiration. The physician should have a trained intellectual outlook on life and also sterling moral character. Not only the skill but also the personality of the doctor should make an appeal to the patient. He should not be content to be a mere scavenger, removing the accumulations of filth and disease, but be a teacher of the art of right conduct. He should be able to say "Follow me and get well and keep well the rest of your days." In this connection may I draw your attention to the importance of studying psychology and of getting interested in psycho-therapeutics? In our land, the home of philosophy, we cannot afford to ignore the mental factor in disease.

(2) Economic factor is not the guiding principle of the medical profession. No doubt the medical man or woman, like all other labourers, is worthy of his or her hire. I admit that the profession cannot develop on the principle that only millionaires have the right to enter it. We should, of course, be assured of a living wage, a wage that would ensure a high degree of efficiency. A doctor who starves his profession is no good either to himself or to his community. But we must realise that efficiency is maintained by keeping one's hand constantly in the work. We should strive to cure whether we are sufficiently paid for it or not. There is no profession like ours where undue haste

to get rich is fraught with grave consequence. The honour of the profession is kept up by those men and women whom no sordid pecuniary consideration could ever tempt to serve from the path of strict professional conduct. Our temptations are no doubt great, particularly as we try to climb the lower rungs of the ladder, but we should create and develop a code of professional honour which even the new recruits to the profession should disdain to break. Neither silver and gold nor cheap popularity should be able to seduce a doctor to behave in an unprofessional way towards his patients or fellow practitioners. We ought to be able to build up a code of professional decorum apart from pecuniary considerations in this country also.

(3) Remember that we are not the repositories of all knowledge and that we are not always infallible. Ours is a conservative profession and is apt to exaggerate our own importance. But science never knows finality. While it holds to the truth it has, it keeps its eyes and ears open for the new light that may come in pouring through a thousand channels. It is unscientific to be cocksure of anything. As scientists we should be prepared to accept truth from whatever source it may come and in whatever garb.

The allopathic system should not assume the air of superiority towards the other systems that are in vogue in the country and treat them with scant courtesy. We should remember that the vast bulk of the people of this country patronise the Ayurvedic and Unani systems. As rational men and women we are in honour bound to study those systems and cull out whatever truths we may find in them so that we may help to cure disease when it baffles our ordinary methods of treatment. We cannot afford to lose sight of the rich, nay priceless treasures which our ancestors have accumulated for us in the course of their experience and research. Of course we should aim to modernise them and adapt them to our present day needs. The little experience that I have had in that line convinced me that we have a very serviceable, dependable and pretty exhaustive pharmacology, and some very original and effective methods of treatment. I am only a novice and I take this opportunity of commending those

systems to the scientific and sympathetic study and investigation of the younger members of our profession in particular.

(4) Fortunate are we and our patients when we become aware of our limitations. When we are fresh from the college and youthful blood bounds in our veins there seems to be no limit set to our capacity and capability; we are the conquerors of all we survey. But later in life we cannot help realising our limitations. To know something of everything does not carry us very far. Since we are human we cannot possibly know everything of everything. But surely if we make up our mind we could make an honest and determined attempt to know everything of something. In other words we must try to specialise. I am aware of the danger of extreme specialisation. We are beginning to learn that organs in the human body are wonderfully interdependent and that disease in any one of them cannot be properly understood without making a thorough study of the conditions in the other organs. The body responds as a whole and the specialist cannot possibly live in a water-tight compartment. Specialised proficiency demands a high order of general professional knowledge. But from the general we have to turn to the special if we desire to make adequate progress. We can every one of us try to specialise in any one subject that really interest us. The specialisation may not go very far, but after some time we may feel with justification that we may know that particular subject much better than others. We owe a debt of gratitude to others, for their work and sacrifice in the quest for scientific truth, and the only way we can pay back our gratitude is by following their footsteps and try to contribute our mite to the sum of human knowledge.

It is necessary for every medical man and woman to escape from their sphere of work at times and visit places to see how work is

done by others. It is never too late to learn anything new and useful. Life is a mystery. We know not how it comes and how it goes. We cannot with our limitations increase the span of human life. We have to content ourselves with the task of soothing the pillow of pain. It may seem a small task to some of us. But let us do the small thing in a big way. Let us put our whole being into it. Let us be prepared to make the sacrifice of time, comfort and money to make the pillow of pain as comfortable as possible. There should be a constant stream of young people of our country as in other countries determined to do some research work either in the laboratories or hospitals quite content with the wage of a labourer. The tree of medical knowledge has all along been watered with the blood of martyrs in its cause. The choicest reward for the best of us could be the consciousness that we have tried to walk in the footsteps of the benefactors of the human race. We should spare no pains to learn as well as teach. The art of healing has long been shrouded in mystery and kept as a secret treasure. It was guarded on all sides. But now it has become a science. We should therefore pursue it in scientific spirit—with all the dogged determination and the abandonment of the true scientist. It is only when science soothes the pillow of pain that medicine and surgery could have a future. As comrades in the same field let us do our best, remembering that unity is strength.

Let us cement friendships here and feel that when we go back to our own spheres of work that we have the goodwill and the co-operation of all those who have come here.

Thank you friends for your indulgent hearing. I wish you and the session every success. Let us be the best of friends whatever may happen in the future.

TRIED REMEDIES

ZAMA for Eczema, Scabies and allied Skin Diseases.
KOO-KOUMIN for Whooping Cough and other lung affections attendant with spasmodic cough.

Available at all Chemists or

THE ORIENTAL RESEARCH LABORATORY, Vepery, Madras.

Notes on Treatment of Diseases.

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

Hypertension—in men—Thyro-Pancreas Co. with spermin and in women with ovary (E.S.). Aconite is good as it is an excellent Vaso-dilator. From 5 to 15 drops of the strength of 35 per cent tincture may be given three times a day for weeks followed by Iodotropin tablet daily for a month. (P.M.)

Hepatic extract with Histamin (J.A.M.A.)

Digitalis sometimes does good. Sodium sulpho cyanide 1-5 grains three times a day especially in cases where renal or other organic changes are not well established (P.M.). Bromides are effective in relieving mental strain or anxiety. Mannitol nitrate or Erythol tetranitrate is good. Benzoal Benzoate and Extract of liver may be given. Liver extract relieves the most prominent symptoms such as headache intermittent claudication, nocturnal urination, palpitation, anginoid pain and vertigo. The symptoms of paresthesia, insomnia and angina pectoris are relieved by Theobromine. Pot. Sulpho cyanide gr. 1½ in solution three times a day (J.A.M.A.)

When due to arterio-sclerosis Theominol is good.

Pot. Iodide or Thyroid ½ to 1 gr. ammonium hippurate 3 to 7 gr. doses three times a day. Salt to be avoided in food and cold bath; milk diet and warm bath are good.

Watermelon seed extract is said to be good (J.A.M.A.)

Pot. Theocyanate 5 per cent solution a teaspoonful 3 times a day (J.A.M.A.)

Pancreas is also recommended (Osburn).

Muscle extract by injection.

In simple Hyperpiesis fluid extract of Dioscoria (wildyam) in 15 mms. doses is beneficial (C.M.S.)

Elixir Sodium Sulpho cyanate is also being tried.

In Hyperpiesis there are no pathological changes while hypertension is followed by pathological changes.

Aceoline (A.F.D.)—Is a powerful Physiologic Arterial Dilator, which acts on the parasympathetic nervous system. Has been found very useful in relieving Arterial Spasms.

Hypertension-Essential :— Calcium Diuretin and Theocol are useful.

Glyceryl trinitrate and erythol tetranitrate or Pot. Theocyanate 1½ gr. three times a day (J.A.M.A.)

Hypertonia : Is a state in children in which there are irregular attacks of vomiting with visible peristalsis and cough later of the spastic type insomnia and Atropine is the specific for this condition.

Hypoadrenia : Functional in children. Thyroid gland gr. 1, adrenal gland gr. 2, Bland pill gr. 1, to be given in capsule 3 times a day for a child 10 to 12 years of age. If the heart is weak Digitalis and strychnine in small doses to be added to the above (Sajous).

Heartburn : For habitual heartburn guaiacol carbonate mixed with milk sugar in equal parts. A coffee spoonful of this to be given ½ hour before meals.

Heatstroke : As the heat centres are paralysed or functionally abnormal, antipyretics are of no use in the treatment; only cold application is useful (Clark).

Hydrophobia: Quinine urea gr. 10 is given intravenously at intervals of two hours (I.M.G.)

Incontinence of urine: may be due to tuberculosis of the bladder or acidity or alkalinity of urine. If due to acidity Pot Citras gr. 15, Soda Bicarb grs. 10, Tinct. Hyoscyami mms 20, Infusum Buchu add 1 ounce; If alkaline Benzoic Acid grs 10, three times a day. In some cases Ol. Santal flava mms 10 is good. A soothing mixture of Tinct. Scilla Tinct. Hyoscyami and Infusum Buchu does good (M.T.T.)

In adults incontinence coming on laughing and sudden movements due to the atony of the sphincter, Tinct Cantharidis mms. 3 to 5 is good and the reaction of the urine to be corrected. If alkaline acid should be given and if acid atropine to be given (Hare).

CLINICAL NOTES

AND

PRACTICAL SUGGESTIONS

The treatment of Soft Chancre and its complications.

Whereas there has been great improvement and gradual development and elaboration in the treatment of Gonorrhoea and Syphilis during recent years no such evolution has taken place in the treatment of the third venereal affection viz. Ulcus Molle. The treatment in principle has remained almost the same from time immemorial. This affection is so common that not only is it found daily in the clinics of venereal specialists but the general practitioner also has to deal with it almost every day. Ulcus Molle is a local infection due to the bacillus Ducrey or occasionally to a diphtheroid organism. The incubation period is from four to six days. Two varieties of this sore are met with, one is small and multiple and is more common while the other is a deeper ulcer, very indolent and refractory to treatment. The inguinal group of lymphatic glands are usually inflamed and tend to suppurate. A soft chancre is locally infectious while a hard chancre after about a fortnight from its appearance is not so. It is quite essential to diagnose as soon as possible whether the ulcer is syphilitic or not. Other conditions that must be distinguished from soft chancre are Herpes preputialis, Scabies and infection of Tyson's glands. Herpes preputialis is recurrent, the history of which can be elicited from the patient. In the beginning they appear as small vesicles, which when they burst, become ulcers. They are numerous and dotted over the glans and the corona. Scabies can be detected by its typical appearance, the presence of itching etc. The infection of the Tyson's glands is almost typical and is seen as two minute points on either side of the fraenum. There are different methods of treatment of this disease, the more important of which are given below.

CAUTERIZATION: This is done by touching the ulcer with a pointed match-stick dipped in carbolic acid, silver nitrate solu-

tion (concentrated) or copper sulphate. This treatment is often painful and it is always better to anaesthetise the part by means of Neocaine ampoules before performing cauterization. After this the ulcer should be dressed with Dermatol or better still should be packed with gauze soaked in undiluted Pharmasol Iodine and the whole is then dressed. This treatment should be repeated daily and within a week the cure can be easily effected. The disadvantage of cauterization is that the tissue is destroyed and a larger area of ulceration than before results. The organisms thrive on this wide field. Unless these organisms are destroyed it is not possible for the ulcer to heal. Hence sometimes it is preferable to avoid cauterization and simply dress the wound with Pharmasol Iodine.

Another method of treatment which brings rapid relief and cure is the application of Bacte-Pyo-Phage. Every day the ulcer is bathed with clean warm or tepid water and packed with gauze well wetted with the contents of an ampoule of Bacte-Pyo-Phage. The wound is then dressed in the usual way.

In addition to this local treatment of disinfection Venereologists at present recommend Ionization with Hydrag. Perchlor. Iodides etc. which give rapid results. Exposure to Quartz Mercury lamps, Roentgen rays are considered by some to be very effective. In ordinary general practice this line of treatment is not possible as it requires a very complicated electric installation.

Another line of treatment which hastens cure and prevents complications is Pharmasol Trimine. This product has particular use in this form of venereal affection because it effectively copes with all forms of cocco-genic infections. It is a great help to local treatment of chancroids which it rapidly cures and reduces the number of relapsing ones to a minimum. Secondly it reduces the incidence of further complications which even if they occur can be effectively dealt with by means of this Pharmasol.

If the Ulcus Molle remains untreated or if it does not receive adequate treatment or if it is deep and of virulent type, certain complications such as Phagoedenic ulcers,

For any information adverted to in the columns of this journal apply to: The Medical Practitioners' Service Bureau, Vepery, Madras, with stamps for reply.

Buboes, Phymosis and Paraphymosis ensue, which require energetic treatment.

PHAGODENIC ULCERS: These cause deep destruction of the tissues. In these cases it is not at all advisable to employ strong antiseptics, as they reduce the vitality of the tissues and bring about mere damage. Removal of the necrotic tissues and cleaning the whole part with warm water should be done. The wound should be then dressed with Bacte-Pyo-Phage, the contents of one ampoule on a lint. This procedure if carried on for a week is sure to bring about rapid healing.

Chlorine Ionisation once a day has been recommended as it cuts short the infection and effects a cure.

BUBOES: Some believe that these can be aborted by Ionisation. If they come out, rest in bed with local application of warmth is absolutely essential. Some advise compresses of either Resorcin (2%) or Alcohol (40 to 60%). If suppuration ensues the pus should be aspirated by means of a syringe, Pharmasol Iodine should be injected in the cavity and the puncture should then be sealed with Collodion. If the bubo does not subside or if it is not possible to evacuate all the pus surgical treatment is necessary. This should not however be undertaken too early. A liberal incision under local Ethyl Chloride spray-anaesthesia or Neocaine injections should be made, pus taken out and the wound dressed with either Pharmasol Iodine or Bacte-Pyo-Phage. This after-treatment will have to be carried on from 8 to 10 days before a cure is expected.

PHYMOSIS: If one comes across this complication which is probably due to the inflammation caused by the sores the foreskin should at once be slit up. The Ulcus Molle and the wound should then be cleaned up and dressed according to the methods mentioned before. If this is neglected a phagodenic sore results and later the foreskin may become perforated and glans penis destroyed. On no account should circumcision be undertaken at this stage as then a large area is exposed to the infection. It should only be performed when the sore and the foreskin have healed so that the deformity of the prepuce will be avoided.

PARAPHYMOSIS: The retracted preputial skin should be first reduced. If this is not

possible due to the swelling of the foreskin, the latter should be punctured in several places with an aseptic needle and then an attempt should be made to reduce it. Even after doing this reduction is impossible an incision in the longitudinal axis of the penis should be made sufficiently deep to free all adhesions etc. The wound is then dressed in the usual way with Bacte-Pyo-Phage so that it soon becomes aseptic and heals by first intention.

Iodine therapy.

Iodine treatment, one of the oldest in the history of medicine, has successfully stood the test of time. Although at present its application is much modified and more clearly understood the fact remains that its therapeutic activity is not open to doubts or scepticism. To-day it is common knowledge that there are some by-effects of Iodine or its salts known as Iodism which are a great handicap in the vigorous pursuit of this treatment. In the endeavour to do away with these by-effects as far as possible compounds have been made which however liberate free Iodine slowly. In addition to this Iodine in them is bound up so firmly that they are practically of no therapeutic value. In order to obviate these difficulties and to get the maximum therapeutic effect Pharmasol Iodine was recently introduced, which is Iodine in colloidal combination. It is a product which can be considered as occupying the position of Golden Mean between the vigorous and violent action of Potassium Iodide and other preparations whose action is slow and weak. It is a colloidal product which possesses a well-defined and unvarying composition. Pharmasol Iodine is vastly richer in organic Iodine which is more active than that contained in any of the mineral salts. The result is that smaller doses than those of other preparations are required to produce the desired effect. Therefore whenever Iodine treatment is desired to be carried out Pharmasol Iodine should be preferred, as the results afforded by it are strikingly efficacious.

Pharmasol Iodine due to its colloidal combination brings about an action which as regards rapidity and intensity is superior to any other similar product. Small doses of this Pharmasol produce comparatively large therapeutic results without any secondary by-effects—a distinct advantage

where it is desired to carry on a prolonged treatment. The chief qualities that distinguish this product are its freedom from any depressant effect and its even absorption and excretion and effective therapeutic action. The general pharmacological action of Iodine which is to increase metabolism has been done effectively by this Pharmasol. It has been demonstrated by practical experiments that Pharmasol Iodine when introduced into the human organism has a tendency to accumulate in the vicinity of the diseased tissues, which is due to physical causes. The acid reaction of the pathological tissues facilitates the absorption of this Pharmasol. We can thus see how Pharmasol Iodine is successful when applied in certain diseases. This can be explained in further details when we will consider therapeutic indications.

Pharmasol Iodine effectively replaces the ordinary inorganic form of Iodine in its local action. It is absorbed to the extent of 40 per cent. It does not cause irritation to the skin or the mucous membrane, nor does it discolour the skin or stain the linen. In addition to this the Pharmasol remains longer in the system than Iodine and its alkaline salt and hence it has a lasting action. If Pharmasol Iodine is used undiluted on lint in serous cavities, sinuses or wounds it first causes exudation of the serum. This is followed by inflammation which after absorption of the fluid leads to adhesions of the walls and filling up of cavities and healing of wounds. It is thus that exudates in the cavities disappear and glandular swellings are reduced. Further on account of its disinfectant action Pharmasol Iodine can be used for many purposes where disinfectant action without obvious disadvantages of Tincture Iodine is desired. This action is enhanced by its rapid absorption and deep penetration.

The range of therapeutic indications of Pharmasol Iodine is really vast. Iodine is regarded as a specific for lymphoid tissue and hence Pharmasol Iodine; which can be considered as a more elaborate and effective colloidal compound of Iodine, can be employed with success in Lymphatism, Scrofula and Tuberculosis. It renders great service in the case of weak, marasmic and lymphatic children who are subject to chro-

nic sore throats or who have enlarged glands in the neck or who have adenoids and who are predisposed to Tuberculosis. It cannot however be assumed that Pharmasol Iodine influences the cause of the disease. Still it cannot be gainsaid that a good antiseptic action and efficient absorption of the exudates is ensured by this therapy.

Very few can deny the value of Pharmasol Iodine in secondary and tertiary stages of Syphilis. The bony enlargements, gummata and other affections of these stages rapidly reduce and are absorbed under its influence. In gummatous infiltrations, exostoses and ulcerative lesions this Pharmasol renders marked service in their improvement, attenuation and disappearance. In these conditions continuous administration is essential and Pharmasol Iodine is the apt preparation for this purpose for it produces lasting effects without any toxic symptoms supervening. Again it can be tolerated well even when it is taken for a long time.

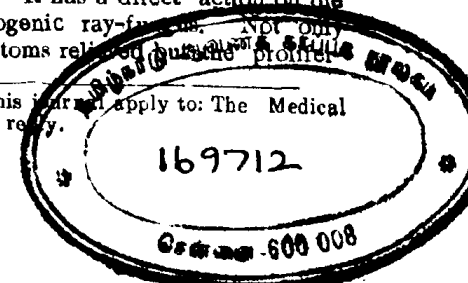
Due to the fact that Iodine acts as a factor in relieving the heart and facilitating its work by progressively diminishing the peripheral resistance Pharmasol Iodine can be usefully indicated in poor circulation. In such cases there is usually a tendency to varicosity, breathlessness on slight efforts. All these can be benefitted by the administration of this Pharmasol.

In Arteriosclerosis this is the preparation of choice. Some believe that it acts on the viscosity of the blood while others assume that it has a vaso-dilator effect.

Consequent upon its modifying action on the cardio-vascular system Pharmasol Iodine influences the respiratory functions also. It accelerates the pulmonary circulation and ensures perfect blood-formation and adequate gaseous exchanges. Venous stasis is cleared up and lung-congestions begin to resolve. Glandular secretion is stimulated by the hyperaemia thus effected which gives rise to active bronchial secretion. Expectoration thus becomes easier and bronchi are cleared. On account of all these qualities its usefulness is universally admitted in such affections as Pneumonia, Catarrhal Bronchitis, Asthma etc.

In Actinomycosis, Pharmasol Iodine acts as a specific. It has a direct action on the causal pathogenic ray-fungus. Not only are the symptoms relieved but the prompt

For any information adverted to in the columns of this journal apply to: The Medical Practitioners Service Bureau, Vepery, Madras, with stamps for reply.



ating tissue is also removed. In addition to the injections of Pharmasol if the disease is so situated that it is possible to adopt the local treatment of application of the same preparation, we can guarantee a cent per cent cure. Several surgeons have reported favourable results with the local and general treatment of Pharmasol Iodine in this disease.

Due to the colloidal combination of Iodine in this preparation it markedly stimulates the process of dissimilation, which means that when Iodine in it comes in contact with the albumen of the tissues it freely and rapidly disintegrates the molecules of the latter. Because of this characteristic effect on nutrition Pharmasol Iodine can be beneficially applied in Gout, Obesity, Rheumatoid Arthritis and other diseases of faulty metabolism. Clinical experience has not been wanting so far as the efficacy of this product in these disturbances is concerned. Specially in certain severe cases of Obesity reductions in weight were observed as also increase in metabolism to the extent of 50%.

On account of its effective and easily absorbable state and because of its well-known anti-inflammatory, antiseptic and resolvent properties Pharmasol Iodine is an ideal preparation for external application in ear, nose and throat affections and for packing of sinuses and wounds. In fact all the essential clinical requirements would be met by this product whenever and wherever Iodine is needed in a form suitable for the treatment of inflammatory disorders and for dressing of wounds.

Pharmasol Iodine presents a number of advantages over ordinary Iodine and its salts. It contains Iodine in a form which is fifty times more active than the mineral salt. It is free from any toxic effects and there are no distressing or dangerous symptoms of Iodism even after its protracted use. Clinical experience has proved beyond doubt that it acts with effective uniformity. Other advantages that it possesses are its freedom from any burning sensation even when applied to raw surfaces, and staining of clothes and the skin. Further, this Pharmasol is exceedingly well borne by the gastro-intestinal tract and hence it is particularly suitable in cases where a long-continued use of Iodine is necessary.

In conclusion we can say that Pharmasol Iodine possesses all the advantages over similar preparation and fulfills all the obligations without exposing the patient to any of the unpleasant risks that follow the administration of Iodine and its salts.

Treatment of Haemoptysis.

It is the aim of this article not so much to consider how to relieve temporarily the attacks of Haemoptysis, but what the regular line of treatment would be which would prevent recurrence of this affection. It does not however mean that the former point would not be touched at all but greater emphasis will be laid on the latter.

Unlike other cases of bleeding of vessels, in Haemoptysis we cannot deal with them surgically either by applying ligature or by local compression, as it is physically impossible to do so. There is of course nature's way of stopping this haemorrhage and duty consists in helping nature in a natural way. We are aware that as soon as bleeding takes place, fibrin is deposited at the opening of the vessel and this helps to form the clot which stops the lumen which checks haemorrhage. The clot later organises and is then transformed into fibrous tissue which becomes one with the tissues of the walls of the blood-vessel. In the lung-tissues however, this clot before organising irritates the bronchi and this causes violent coughing on account of which clots of blood together with the clots that are recently organised are expectorated. That is the reason why recurrence of Haemoptysis takes place after few hours or at times after few days. Furthermore, bleeding from the lungs not only takes place from the healthy tissues but also from the diseased areas which prevents the natural process of Haemoptysis.

The aim of the treatment therefore should be, apart from immediate arrest of bleeding, to improve the coagulating power of the blood as also its alkalinity so that any further recurrence may be prevented.

Now as regards the immediate treatment of Haemoptysis the first measure that should be adopted is that the patient should have absolute and complete rest. He should even avoid talking as far as possible. Too early administration of sedatives should be avoided as they suppress coughing which is rather incessant in the beginning. The

stopping of cough prevents bleeding being arrested. As a consequence blood accumulates in the bronchi and the clots thus formed may cause suffocation or produce septic pneumonia. We should therefore wait for sometime before we resort to sedatives. Either Codeine or Morphine may be injected.

The first has the advantage over Morphine in that it does not depress the heart and does not cause constipation. Morphine cannot however be rejected entirely as in certain cases it is very useful specially when the patient is in a state of nervous excitement or when he is much frightened.

Locally, the first step is to place an ice-bag containing small pieces of ice on the chest. This application of cold is one of the best means available for combating Haemoptysis as it produces contraction of the pulmonary vessels either by direct or reflex action. The ice-bag should be kept for at least two to three hours with slight intermissions so that the return of haemorrhage may not take place. Another means of application of cold consists in swallowing small pieces of ice. This procedure reduces haemoptysis because of its stimulation of the motor reflex of the pulmonary vessels. A small piece of ice should be kept in the mouth every 15 minutes and should not be swallowed until it is very small. Cold drinks are advisable but hot drinks should be forbidden lest they cause opposite reflex on the pulmonary vessels. As regards drugs several vaso-constrictors and haemostatics should be given but once the bleeding is stopped drugs which increase the coagulability of the blood should be given so that they not only stop the haemorrhage but prevent future recurrence.

In order to ensure adequate coagulability of the blood, Pharmasol Collo Calcium should be injected either subcutaneously, intramuscularly or intravenously. The injection treatment may be beneficially supplemented by the oral administration. Through this method, not only are the possibilities of Haemoptysis reduced, but calcification of the lungs as well as getting rid of the tubercle bacilli can be accomplished. Long-continued and regular administration of Collo Calcium besides improving the coagulability of the blood immensely benefits the general condition. The success which this preparation has met at the hands of various physicians in the treatment of

Haemoptysis should be a recommendation for its wide employment in such cases. It has a definite action on the coagulating power of the blood and the results are quite substantial because it enables the organism to assimilate and retain large doses. Again due to its convenient and pleasant form of administration and the multiplicity of routes in which it can be given it is a very useful preparation and can be taken even by the most fastidious. No injurious secondary effects are caused by it such as gastric disturbances, renal irritations etc., even when administered for long periods in large doses. Moreover, through this method of treatment Calcium, of which the organism is sorely in need, can be conveyed to it in an abundant measure, where it is well retained for long. Thus the surplus of calcium is constantly maintained in the lymph-stream and this aids the coagulating power of the blood. Hence it is that Pharmasol Collo Calcium is considered an ideal preparation both as a preventive and curative of Haemoptysis.

A complementary action of extreme importance.

In many asthenic conditions such as Neurasthenia, signs of profound disequilibrium of the organic nervous system are apparent.

Digestive troubles are common concomitants.

Loss of appetite, distaste for food, painful digestion, sensation of weight in the stomach, distention after meals and heat waves, are signs of nervous sympathico-tonic dyspepsia, which, according to Professor Surmont, Geneserine subdues with surprising rapidity. Heart troubles are also quite frequent in asthenic patients, and when cardiac erythm or palpitations are observed these are also definite signs of hyper-excitability of the sympathetic nervous system, which can be readily controlled by Geneserine.

It has been shown by the latest researches that the nervousness of these patients, their insomnia, irritability, tendency to worry without sufficient reason and the anxiety complex with Melancholia, are connected with this sympathico-tonic condition.

The central nervous system and the organic nervous system are closely related,

Any derangement of the activity of the sympathetic affects the conscious processes and these deplorable results ensue.

Asthenia itself is dependent on the same condition. It is well known nowadays that it does not result from complete exhaustion of a muscular nature, but rather from a kind of inhibition, exercised by the sympathetic system in a state of hyper-excitation on the nervous functions which control muscular activity and conscious cerebral processes.

It is therefore necessary to supplement the ordinary medicinal treatment of asthenia by the addition of a therapeutic agent that will restore the normal activity of the disordered sympathetic system. As proved by the results obtained now for several years Geneserine is the most effective of these agents.

Its action, tends in a higher degree than that of any other remedy, to increase the appetite, to improve digestion, to reduce cardiac erythmism if present, to restore sleep and to suppress the anxiety complex. This last effect is very pronounced; even before the patient has recovered the full degree of physical vigour and intellectual activity, the desire to work and the interest in life are re-awakened.

But, in particular, Geneserine supplies a means of restoring the organic equilibrium, without which the stimulation of the depressed organism by the arseno-strychnine treatment cannot supply any durable result; and it may be inferred that in conjunction with the salts of arsenic and strychnine, it provides a medicinal combination of unequalled efficacy.

It is suggested that during a course of treatment of asthenic and neurasthenic conditions with arseno strychnine combinations such as Hypercytol a few pilules daily of Geneserine may be prescribed for oral use. Two to four pilules per day are usually sufficient.

Digibaine in Mitral Regurgitation.

I was called to see Mrs. B., an elderly lady, who complained of dyspnoea and oedema of the ankles. She said that she had attacks of slight breathlessness but not to the extent she had when she came for my advice and never had there appeared any oedema of the ankles. Eliciting her his-

tory I found that she was a victim of chronic nephritis which appeared to be the potent factor in the causation of the present trouble. She gave me history of attacks of breathlessness and palpitation. When I examined her I found that there was a certain degree of cyanosis of the finger-tips, the nails displaying a sort of lividity. The apex beat was weak and slightly irregular and the pulse had lost its normal tension and was, as a result, readily compressible. The area of cardiac dullness was increased downwards and outwards to the left. On auscultation a systolic murmur was distinctly audible. There was marked accentuation of the second pulmonary sound. The diagnosis arrived at was Mitral Regurgitation. The patient was at once advised to keep to her bed and I limited my treatment to the administration of Digibaine. For the first three days I injected 1 c.c. of it in the vein and after that gave it orally. She had twenty drops daily. After a week of this line of treatment the improvement was remarkable. Oedema of ankles disappeared and she was able to get up and go about. At the expiration of ten days the pulse appeared to be of good tension and she was almost restored to her normal self. Although we cannot claim a complete cure of this affection by means of Digibaine I can safely say that the administration of it is a judicious line of treatment in these affections, which any physician will do well to follow.

Modern Recalcification Treatment

Experiments and research conducted all over the world have clearly indicated that the ions of calcium are essential for the preservation of life because of their regulating effect which is antagonistic to that of the ions of potassium and sodium. This regulating effect has been found in the intestines, uterus, blood vessels and the heart. The antagonistic action of calcium and magnesium on the one hand and potassium and sodium on the other maintain the mineral balance of the organism. Of these mineral ions those of Calcium play the predominant role so far as the vegetative functions are concerned. Hence we see that hypovegetative type means that there is demineralisation or decalcification of the organism. Again experiments have demonstrated beyond doubt that the various tissues of the organism are in perpetual

need of calcium and magnesium. We know that so long as the organism obtains its calcium supply from the blood, its various tissues carry on the normal activity. If this supply becomes defective for one reason or another, the organism tries to furnish itself from the other tissues richer in calcium. This means the beginning of organic demineralisation which results later on in many well known disturbances.

Calcium is present in the tissues of the human organism both in organic and inorganic form. The former viz. lactates, formates and ureides are contained in the blood, juices of the stomach and urine while the latter, which is the greater part, the phosphates, carbonates etc. is contained in bones and teeth. Looking to the functions these Calcium salts perform we will be able to realise the importance of their retention in the organism. These salts are present in the blood and nerve-cells, the activity of which is regulated by them. They increase phagocytosis. They diminish the tone of the involuntary muscles of the intestines and maintain the normal excitability of all the voluntary muscles. The coagulating property of the blood is dependent on the amount of calcium salts in it. The anaphylactic reactions are effectively prevented and combated by these salts alone. From all this we are able to deduce how very useful calcium as a factor is in the human organism in maintaining its vital functions be they chemical, dynamic or vegetative. Any deficiency in these salts therefore upsets the whole organism and hence the necessity of a reliable product of calcium. Pulmo-Calcium is such a preparation which has throughout given uniformly good results at the hands of several practitioners.

Pulmo Calcium is a white tasteless powder having the principles of the tribasic phosphates, carbonates and other salts of calcium and magnesium. It is efficacious because it is easily assimilated and is easily digestible. It is palatable. It is easily absorbed by the blood where it reduces its extra acidity and restores the normal healthy state of alkalinity. Through this medium Pulmo-Calcium carries calcium to the millions of nuclei, which are deficient in calcium. This product when taken in soon becomes transformed by the organic metabolism into colloidal carbonate which

remains in the organism for a length of time. It can be given by the mouth and no injections are necessary, as it acts with a rapidity and intensity that is really remarkable. The immediate rise of Calcium in the body which follows the use of this product is seen by the fixation of the calcium. Salts by the different tissues as manifested by the improvement of the various structures. Pulmo-Calcium on account of its splendid assimilation supplies the salts wherever they are deficient as for instance in rickets, anaphylactic states etc. or where the calcium consumption is above normal as in pregnancy, lactation etc. or where there are pathological processes of decalcification as for example Tuberculosis.

From the multiplicity of the indications of Pulmo-Calcium the first and the foremost that attracts our attention is Tuberculosis especially the pulmonary type. The aim of the physician in this disease is to calcify the focus and establish a sort of a barrier between the sound and the diseased tissue. Pulmo-Calcium when exhibited in this affection not only arrests the progressive decalcification of the organism, but compensates for it. Further, it brings about the calcification of the tubercle which is thus isolated from the surrounding sound tissues. Thus the natural process of recovery viz. encapsulation and calcification of the necrosed areas is greatly helped by this product. Hæmoptysis, the common symptom of this disease, is very often effectively combated in a perfectly natural manner by Pulmo-Calcium by increasing the coagulability of the blood and reducing capillary permeability. It also helps recovery of appetite, modifies gastro-intestinal disturbances and controls night sweats.

In rickets the mineralising osteo-genetic action of Pulmo-Calcium is of great assistance. That phosphates and carbonates of calcium are lacking in this disease is a well-known fact. Pulmo-Calcium ensures adequate absorption of these salts and thus the deficiencies are compensated for and the normal growth of bones and cartilages soon results.

For the delayed callous-formation of fractures Pulmo-Calcium is of great service. It hastens rapid union of fractures by assisting the formation of bony callus.

When there is not sufficient amount of

calcium the functioning of the nervous system, in fact the whole organism, is disturbed. The result is nervous debility, nervous dyspepsia, neurasthenia and similar other troubles. Pulmo-Calcium therapy is the effective way of supplying Calcium in these complaints. The body assimilates easily and rapidly all the salts of Calcium when given in this way and these troubles are thus overcome.

After prolonged illness and in convalescence where the calcium content of the blood is much reduced Pulmo-Calcium effectively makes up for the deficiency. Thus liability to further infection is avoided. The power of resistance is also raised as Pulmo-Calcium has the capacity of increasing phagocytosis. This latter property maintains normal health and if the product is taken regularly neglected colds, bronchitis and other affections of a kindred nature can be easily prevented.

Carious teeth are the result of an internal chemical disturbance in the body viz., calcium deficiency. Pulmo-Calcium is the proper remedy for arresting caries as also for preventing them.

Nettle-rash, eczema are easily alleviated by treatment with Pulmo-Calcium. This product has proved very useful in allaying itching and irritation commonly present in these affections.

In states of haemorrhage from any cause whatever Pulmo-Calcium is useful not only for combating them because of its coagulating power, but also as a prophylactic because it enriches the blood with calcium.

In patients who have undergone surgical operations Pulmo-Calcium treatment is of great benefit on account of its power of checking post-operative haemorrhages, lessening oedema and preventing acidosis etc. It thus hastens post-operative convalescence. It is therefore the best means at our disposal to give rest and comfort to the patient during this period.

Another indication in which Pulmo-Calcium can be beneficially given is Pregnancy. During this condition more calcium is required because of the increased activity of the Endocrine glands brought about by the foetus. Further there is decreased blood alkalinity and increased heart action. Besides, we have to take into account the extra calcium needed for the development and skeletal growth of the foetus. All this means that there is too

much demand on the mother's resources. Pulmo-Calcium should be prescribed in this condition to eliminate all the troubles that attend it. During this period of gravidity the overtaxed calcium metabolism causes a variety of functional disturbances which result in excess of permeability of cells and hyper-excitability of the vegetative nervous system. The result is hyperemesis, osteomalacia, oedema, dermatosis etc. Practical experience has shown that Pulmo-Calcium can be administered in all these cases both as a prophylactic and a curative as it effectively compensates for the paucity of calcium.

During lactation too Pulmo-Calcium is absolutely necessary as there is a heavy demand of calcium from the maternal organism, which has to withdraw the required quantity from the organs specially bones and teeth. This not only ensures the health of the mother but prevents such diseases in the child such as rickets etc. Furthermore, the growth of the child is quite normal and healthy. The enormous calcium requirements in these conditions therefore are met with splendidly by Pulmo-Calcium.

Pulmo-Calcium being a preparation which can only be given orally, the risks that attend intra-muscular or intravenous injections of calcium, such as pain and swelling at the site of injection, thrombosis of the veins or necrosis due to extravascular overflow, are entirely avoided. Again, there are no gastro-intestinal disturbances with this product. It is perfectly well tolerated even when given in high dosage. This property enables us to prescribe it in patients whose digestive organs are very weak. Pulmo Calcium is definitely superior to other products not because it eliminates all these inconveniences but on account of its ready assimilation and full utilization of the calcium contents in it by the organism. On account of its palatability and toleration it can be given to children even for long periods without the slightest harm accruing from it.

The conclusions that can be drawn from the above remarks are clear. Pulmo-Calcium is a product which can be considered the best as regards calcium treatment not only because of its perfect assimilation and toleration but on account of the excellent clinical results it produces.

Notes on Therapeutics, Diagnosis and other Medical Subjects.

SUBCUTANEOUS OXYGEN THERAPY

BY

OLIVER B. SIMON, M.D., BATAVIA, III

Everyone admits the logic of oxygen therapy, to a certain extent at least. It has been used more and more in recent years, and, chiefly by the inhalation method, for many years. A great many devices have been utilized, such as conducting the oxygen by catheters or rubber tubes into the nose and throat or to a funnel over the nose and mouth or to specially made inhalation masks, either direct from the tank or passing through water before reaching the patient. In recent years the so-called oxygen tent has been widely advertised to the profession by commercial concerns.

A few years ago the idea of giving oxygen subcutaneously was considered, but there were certain difficulties to be overcome in the administration, so the method has not become popular and, in fact, is almost unknown in this country. The difficulty was in the proper control and regulation of the gas pressure, so as to avoid possible dangers in its use. These difficulties have been overcome by the use of a contrivance or machine built by Dr. Bayeux, of Paris, France, and the subcutaneous method has become quite popular in Europe, at least, as evidenced by the appearance of considerable literature on the use of the method.

Let us consider the two methods, as to their advantages and disadvantages:

FIRST: Inhalation of undiluted oxygen may irritate lung tissue and aggravate illness, even if the gas is warmed or passed through water; whereas, when given subcutaneously, the oxygen is taken up by the blood directly, without coming in contact with lung tissue.

SECOND: The inhalation method is useless if the absorption area of the lungs is much reduced by accumulation of secretions, as in the pneumonias, pulmonary edema and pulmonary hemorrhage.

THIRD: The inhalation method is useless in obstructive conditions, such as

edema of the glottis, laryngeal diphtheria and chest paralysis; whereas the subcutaneous method is useful in all of these conditions, in addition to many others, such as exhaustion states of septicemia, pyemia and toxemias, chills, uremic convulsions and all forms of shock. It lessens post-anaesthetic nausea and vomiting, if given immediately after operations.

The dangers of the subcutaneous method must be borne in mind, but can be easily avoided by following the proper technique in its use. The main dangers are that the needle may be inserted into a blood-vessel or into an area having a broken blood-vessel, either of which might aspirate the gas into the circulation and cause embolism.

Another danger is that the pressure might rupture small blood-vessels and the gas be drawn into the blood stream. The maximum safe pressure is 40 grams per square centimeter, so if the gas pressure is kept under that amount there is no danger or risk of rupturing the small blood-vessels.

APPARATUS AND TECHNIC

The oxygen machine invented by Dr. Bayeux seems to meet all of the requirements of the subcutaneous method of giving oxygen. It has a small, detachable gas tank, with a capacity for 15 liters of oxygen gas and, when it is empty, it can be refilled from an ordinary oxygen tank by a special attachment. This small tank has to be attached to the apparatus during the administration of the gas. The valve on the tank is opened, allowing oxygen to go into the special chambers, which hold over a pint of gas if the pressure is sufficient. When the gage connected with the gas chambers stops its rise it indicates that the pressure in the chambers is equal to that in the tank and then the tank valve is closed tightly.

A pressure-reducing valve controls the flow of the gas at rates varying from 0 to 500 cc. per minute. A special manometer gage, of the aneroid type, measures the pressure in the tube which goes to the patient. The pressure may be either positive or negative. The control valve must be closed to zero while the needle is inserted through the skin. If the pointer on the manometer gage now turns to either a positive or negative reading before open-

ing the control valve, we know that something is amiss and the needle must be removed from that area and inserted into another distant area, such as on the opposite limb, where the indicator must remain at zero. A positive deflection indicates that there is back pressure from subcutaneous hemorrhage or that the needle is in a bloodvessel. A negative reading indicates suction, as from inserting the needle into a vein or into an area where there is an open or torn vein, with negative pressure. If the manometer gage stays at zero, conditions are ready for the opening of the control valve, to inject the oxygen into the subcutaneous areolar tissues.

In the regular commercial oxygen tanks there is a very high pressure and it would be very dangerous and foolhardy to conduct such a force directly into the tissues without the proper regulators. The pressure in a full tank of oxygen is, I believe, around 1500 pounds to the square inch.

The tissues, in some patients, are reasonably elastic and allow a rapid administration of the oxygen; whereas, in other patients, they are decidedly inelastic and the administration of the gas has to be done very slowly. The subcutaneous pressure as indicated by the manometer gage, must not be allowed to exceed 40 grams per square centimeter. The oxygen may be introduced at any rate from 0 to 500 cc. per minute, provided the subcutaneous pressure does not exceed 40 grams; however, the optimum rate is considered to be about 30 cc. per minute although I have frequently given it at the rate of 50 to 75 cc. per minute.

The dose may be measured accurately by computing the rate and length of time. The average dose, with this method, is about 500 cc. repeated according to indications. I have given as much as 1000 cc. per dose, and even more in badly cyanosed pneumonia patients, and also in septic cases, where the tissues seemed to have great avidity for the oxygen. The system will absorb the oxygen according to its requirements and the administration should not be repeated until the absorption is completed, as indicated by the absence of crepitation in the area where the gas has been injected. If the oxygen is not absorbed in 10 or 12 hours, I am of the opinion that it is not needed by the

patient's system. The oxygen must not be given twice in succession in the same area, unless the subcutaneous tissues have had time to regain their elasticity, which is necessary to facilitate absorption of the gas.

If there is very severe cyanosis, it is advisable to distribute the oxygen to two or three separate areas, injecting 200 to 300 cc. into each area. The average severe case of pneumonia will be quite comfortable when injections are made every 12 hours, and the disease is greatly ameliorated and its duration shortened. It may be necessary to give the oxygen every 4 or 5 hours, if the patient is much cyanosed. The benefit of the oxygen injection is often so marked that the patient, himself, will speak of it, and may even request that the injection be repeated when his dyspnea begins to return.

Oxygen therapy, where indicated, is compatible with any and all sorts of treatment, and is a very necessary adjunct in the treatment of anoxemia. However, oxygen is not expected to overcome the shortcomings of wrong treatment, as, for instance, the giving of digitalis in the acute, toxic stage of lobar pneumonia, where it is so often fatal to the life of the patient.

In the management of the pneumonia case it is vital that the nursing care must be of the very best. The nurse must be given very explicit instructions to be on the alert for any unfavourable changes in the condition of the patient and to make early and frequent reports to the attending physician direct, by telephone. Without the close co-operation of the nurse in treating pneumonia, the most skilled doctor's efforts may prove futile.

Most of the oxygen tents on the market are very uncomfortable to the patient, because of the difficulty of maintaining the proper percentage of oxygen and of regulating the temperature and humidity inside of the tent. This is more difficult in hot summer weather. The subcutaneous method obviates all of these details, which are so annoying and disconcerting to the patients' mental and physical comfort and wellbeing. These bad features of the tent method practically nullify any possible benefits in addition to having the disadvantages mentioned. The subcutaneous method, with proper technic, can be used in all conditions

requiring oxygen. The Bayeux oxygen machine is small in size and light in weight, and is easily carried in an ordinary Boston bag. I believe that the subcutaneous method is destined to supplant the inhalation method in a few years.

If any physician or hospital is considering the installation of oxygen equipment, I should advise the investigation of this method most thoroughly before doing so. It is by far the best, as well as the most economical. I have used my Bayeux Oxygen machine since 1928 and have been more than gratified by its efficacy and success in a great many cases. There is much more that can be written about this method, but it is not the purpose of this paper to exhaust the subject.

I claim no originality for what I have here written. It has been passed on to me by my friends who have access to the French and other European literature on the subject. My experience has convinced me of its value and practicability. So very little has been written about subcutaneous oxygen therapy in American medical literature that I felt that it was the duty of someone to pass the good word along to our profession.

(*Clinical Medicine and Surgery*,—March 1933.)

News and Comments.

The Third Andhra Medical Conference: We very much regret that due to circumstances beyond our control, we could not publish the proceedings of the Conference in the form of a Special Issue. The honorary Secretaries could not get as yet the Scientific papers read at the Conference by the practitioners and it is very painful to learn that some of these practitioners seem to have sent their papers to other journals quite in contravention to the unanimous resolution passed at the Conference that the papers along with other proceedings should be published in *The Medical Practitioner*. The papers read at a particular conference are certainly the property of that conference and the authors who read the papers cannot have any discretion regarding the publication of these papers. It will be a serious breach of known conventions and even against etiquette if the practitioners who read the papers do not hand over them to the Secretaries to deal them in the way decided

by the Conference. We have written to two of the Editors of the Medical Journals who were likely to publish these papers and also to one practitioner in Government service at Guntur who seems to have determined to treat the mandate of the Conference with disrespect in spite of advice in the matter in time. The fact that this practitioner happens to be one of the important office bearers of the Conference makes matters more distasteful. We trust better counsel will prevail with the practitioners who have so far not sent their papers to the Honorary Secretaries.

Under the above circumstances we have been forced to publish the proceedings in instalments. The Address of the Chairman, Reception Committee as well as that of the President of the Conference and two papers are published in the current issue. The resolutions passed at the Conference were published in the April issue. We shall publish the rest of the proceedings in the order they are made available to us.

Gaining Time to Confuse Issues:

The Indian Medical Council Bill seems to be as inauspicious as the time when it was introduced in the Legislative Assembly. Delay and procrastination seem to be the rule so far in handling this Bill. It is reported that the Government of India intend gaining time to make up for the absence of the Members of the Select Committee, many of whom have been now serving in other capacity as delegates to the Joint Parliamentary Committee, Reserve Bank Committee and Railway Board. It is also reckoned that it will not be possible for the members to meet earlier than August next. In the meanwhile the Government of India seems to have hit upon a device to consult the Provincial Governments as to the advisability of having a uniform standard of education for the Licentiate throughout India or to enquire whether the same object could be fulfilled by levelling up the existing medical education. This course of action serves a double purpose of not only gaining time but confusing the issues. This is the result of a perturbed conscience in not bringing the Licentiate within the purview of the Bill though every body concerned is inwardly satisfied that there cannot be any objection for such a course.

Unjustifiable Ban: The Government of India have recently passed orders that

Government servants in the Medical Department should not be members of the Indian Medical Association and if they are already on the roll of the Association they should resign their membership. The underlying causes which made the Government to take this action may be many, but the Government point out to one clause in the rules of the Association which calls upon the members to help any member or members while contesting election to such bodies which are likely to interest themselves about medical profession. Such a clause has been pointed out by the Government to be against the Government servants' conduct rules. When Government servants are allowed to take part in voting it is inconceivable how this clause would affect the Government servants' conduct rules. The only thing expected of the Government servants is not to canvass or indicate any way how they will vote which condition there is no need to be violated as the rules of the Association exists at present. Yet to satisfy the qualms of conscience of those concerned, the Central Council of the Indian Medical Association have deleted the alleged objectionable clause and if the Government still continues the ban it cannot be due to reasons so far made public.

Excise Rules in U.P.: Dr. Indra Narain Saxena, Member, Medical Council United Provinces writes to us that the Government of United Provinces are considering or perhaps have already formulated rules demanding license from Unregistered but qualified practitioners of the Allopathic system and points out that the U.P. Government was unjust in asking qualified practitioners to take license as such a step would involve extra expenditure on the part of the qualified practitioners. If the Medical Act did not exist we would have appreciated the reasonableness of Dr. Saxena's arguments, but when such an argument coming from one who has chosen to be a Member of the Medical Council makes his position untenable. If Dr. Saxena is convinced that Medical Registration Act is of little importance to the profession he ought to come out of it and declare so and boycott the council, in which case he would have had sympathy and co-operation from all right thinking men.

A Statistical Enquiry: We congratulate the All India Medical Licentiates'

Association for having conceived the idea of conducting statistical enquiry into the various causes of Bronchial Asthma with a view to find out some effective cure. This enquiry will be conducted by the Scientific Research Committee of the Association of which Dr. Chhabil Das, Dalhousie, Punjab, is the Honorary Secretary. Though Bronchial Asthma is not the direct cause of mortality, it certainly keeps patients as living corpses. Many such living beings prefer actual death at times; such is their agony. None can realise the economic waste of having such living corpses, more than the members of the Medical profession and the profession are thankful to the All India Medical Licentiates' Association for encouraging the members of the profession to find out the causes and cure of Asthma by offering honorariums of Rs. 200, Rs. 150 and Rs. 100 for three best papers on the subject. There is a restriction that only members of the Association are eligible for competition. This may look rather sectarian or even selfish. But taking into consideration the lot of the Licentiates on the whole we should say they are quite justified in making the charity begin at home.

Intending competitors may apply to Dr. Chhabil Das for further particulars.

The Madras Medical Council: In 1929, soon after Dr. V. Rama Kamath was elected as one of the members of the Medical Council he wrote an article in this journal, wherein he described the affairs of the Medical Council as conducted by the then Registrar to be very near those of the "State of Denmark". It took nearly three years to replace the then Registrar who pleaded youth, inexperience and increasing private practice as the causes which prevented him from discharging his duties as required by the existing Medical Act. Since last October the affairs of the Council are in the hands of a retired medical man who must be past sixty and who is debarred from private practice. So, there cannot be any excuse of youth or inexperience in the case of the present Registrar. Yet the Register for 1931 is yet to be published and the value of registration has not been realised by those who are in charge of such work. In other civilised countries especially in Great Britain, the Registrar invites medicoes for registration, the moment the final year results are out by writing to each and every one

individually. In Madras applications for Registration are pending, in some instances for over six months. Cases of delays are kept secret even if enquired into and the aggrieved parties do not get replies even for letters sent by registered post with acknowledgment. One such instance has come to our knowledge. The regime of the young old Registrar has cost the Medical Council nearly Rs. 5000 collected from the practitioners and not accounted for in the books. The 9 months imprisonment which the Registrar's clerk was recently awarded for criminal misappropriation of Rs. 47-4-0 out of the above large amount, has left the Government as well the Medical Council poorer than what they were before they started the case, as the balance has yet to be realised; how and when no body could say so far at least. We trust that the present Registrar, who for some years served in the Medical Council as one of its nominated members, will soon realise that though age has to be respected it cannot be tolerated if history repeats though in some other way.

New Surgeon-General: Major-General Sprawson is the Third Surgeon General with the Government of Madras who is to occupy the position of the Director General of Indian Medical Services. Consequently some importance of luck is attached to the chair of the Surgeon-General with the Government of Madras as those who aspire to be the Surgeon-General hope to be Director-General also and consequently the competition is more lively and keen. Though Medical profession calculates always rationally, it cannot discountenance luck especially in the matter of appointments. The times have changed far and that quickly too, and even the Government had to change the routine. So long as there were no Indians among the I. M. S. officers as senior-most in a particular province, the senior-most European I.M.S. officer became automatically the Surgeon-General of that province. Later when senior-most I.M.S., was an Indian in a province, it was thought desirable to make the seniority question an all-India one and this will continue perhaps till an Indian I.M.S. officer becomes the senior-most among the existing I. M. S. officers in India. Then some other method of recruitment for the post of the Surgeon-General may be found out.

So Madras has been having the Surgeon-General from outside these few years and now it so happens that three senior most I.M.S. are found amongst those who served in Madras the major portion of their services. Of these one is an eminent Surgeon who till he left Madras was the first Surgeon, General Hospital, the second was the Inspector General of Prisons in Madras and now doing the same duty in Assam and the third is the Director of 'food deficiency diseases' working in the Madras Province. It is reported that these three are the aspirants and have been recommended by the India Government to the Madras Government and that the latter will soon choose one if they have not done so as yet.

The recent retrenchment policy of the local Government in the Medical Department cannot permit them to have an ambitious I.M.S. officer who cannot but have Civil Surgeons round about him, and who has a tendency of transforming Asst. Surgeons into Civil-Surgeons. The Government have since found out that it is possible for Asst. Surgeons to do special work which was once considered, could not be done by them unless they were styled as Civil-Surgeons. It is also said that a strong party of medical officers who can influence the destinies of the Medical Department are not also in favour of the ex-first-Surgeon. The second aspirant, they say, is nearer Simla (we do not know why they say so) and has a chance and that the party referred to above favour his candidature. The third would, it is thought, do better service to the suffering humanity by continuing his investigations in 'food deficiency diseases'.

A Query?: Did the comments in these columns last month have anything to do with a vague circular distributed to the faithful colleagues of the Chairman Government Committee on Honorary Medical Officers, is the question asked by one of our readers. The circular is to the effect that *there may be one more meeting of the Committee*. Place and date not being mentioned the circular smells like the military orders which cannot usually be definite, having to depend upon the movement or action of the opposing forces. There are also rumours that the Chairman of the Committee who is the Surgeon-General has taken upon himself the responsibility of

gathering evidence from his paid subordinates regarding the reference made to this Committee by the Government. One such subordinate seems to have submitted a memorandum mentioning amongst other objections in the matter of displacing paid officers by honoraries that this course would be fundamentally wrong as the hospitals are maintained by Government Funds and it would be most risky to entrust anybody else except Government paid officers to manage the Government hospitals. It is also said that one or two concrete examples have been mentioned where an honorary has bargained his position. There was very little need for the Chairman to refer this question to his subordinates; he might have answered for all of them himself. We would ask only one question. Will the chairman himself like the office of the Surgeon-General be done away with. This is bound to follow if honorary system were to be in full swing and must happen as such an appointment is not found anywhere else in the world.

Next circular will perhaps be, "Ready with your pens to sign the report".

Who is senior? The criticisms in these columns levelled against the policy of the Government in not recognising seniority in the medical department whether it be for promotion or privileges of office, such as, study leave, are bearing fruits though not quite good ones. At the last Budget Session, the Minister in charge of Medical Portfolio had to admit the injustice done to the seniors in the matter of study leave and the Minister assured the House that in future, seniority would be taken into consideration when granting study leave. Just at this time it so happened that the Surgeon-General had recommended three Asst. Surgeons for study leave one of them was very near 8 years service but not full 8 years. It was unfortunate for this Asst. Surgeon that the definition was not made on the floor of the Legislative Council about seniority in service and the discretion naturally resting with the Secretariat and not in the S. G.'s office, the Secretariat has since declared that those with 8 years service are amongst seniors. Why not 10 years or 15?—rather round figures—is the question that will be naturally asked next. The answer will depend upon

the persons who apply for study leave at the time.

An ingenious yet faulty G. O. : As adverted to in our Editorial columns in the last issue, the Government of Madras, Local Self-Government Department, have issued a G. O. on 1-2-33 making provision for the registration of practitioners of Indian Medicine and it is said that a Medical Council under the name of The Central Board of Indian Medicine had been brought into existence perhaps by a previous G. O. as nothing is mentioned about the constitution of this Board in the G. O. under reference. The G. O. evidently takes the place of a Medical Registration Act and those in the Secretariat and outside who were responsible to adopt this ingenious method, cannot be congratulated for contriving a procedure which they thought and are still thinking has the force of law. But legal opinion on the G. O. seems to be otherwise, and it is said that the Local Self-Government Department of the Government of Madras have no power to deal with 'Medical Registration' as this subject is a reserved one under the existing Government of India Act. It is inconceivable why the Government had recourse to a back-door method in bringing about the registration of practitioners of Indian Medicine especially in Madras where the portfolio of registration is in charge of an Indian Member, himself a practitioner of the Unani System. None except the clever framers of the G. O. would or could know why a procedure which could be questioned by any body who are not under the administrative control of the Government, was adopted and passed in the form of a G. O. After referring briefly to the two Sections of the G. O., one dealing with registration and the other with the cancelling of registration, we could state why and how the G. O. is legally unworkable.

We have published Section I of the G. O. *in toto* elsewhere in our Correspondence Columns. Section II of the G. O. deals with the procedure regarding registration of practitioners and cancelling of such registration for the abuse of the privileges of registration practically copied from the Madras Medical Registration Act and hence not published in our columns.

The Committee of the Central Board of Indian Medicine or the Board itself has

powers to enquire about the infamous conduct of a practitioner in a professional respect and an opportunity has been given to the practitioner to be heard in person or by a pleader. In other words, the Committee or the Board who sit in judgment about the conduct of the practitioner should constitute itself into a Court for the purpose of such an enquiry or else the procedure adopted by the Committee or the Board or the decision arrived at by them can certainly be questioned in a Court of Law and nullified if not objected to and a claim made

for damages by the aggrieved parties. In the provincial Medical Acts Section 17 gives power to the Council or Committee to constitute themselves into a judicial Court, and there is also a Section in the Medical Act indemnifying the action of the Executive of the Council or of the Council itself. These provisions could not be forced on the public or the profession by the executive action of Government, and therefore, the ingenious G. O. cannot but be faulty.

CHYAVANAPRASH.

(WITH CALCIUM)

Ayurvedic and Allopathic system combined.

The unrivalled preventive and curative confection used throughout India for **Phthisis and other wasting diseases.**

Prepared most hygienically and scientifically according to the Ayurvedic formula.

128 Doses for Rs. 3-4-0 only.

APPLY TO :

THE ORIENTAL RESEARCH LABORATORY,

VEPERY, MADRAS.

A Materia Medica of Pharmaceutical Combinations and Specialities

By Dr. U. B. Narayana Rao, with an Introduction by Dr. G. V. Deshmukh, M. D. (Lond.)
F. R. C. S. (Eng.), Crown Octavo, 375 pp. (50 blank interleaved pp.)

Price Rs. 2-8-0.

This useful book was reviewed in the columns of The Medical Practitioner last August and ever since, the undersigned have been receiving lot of enquiries from the members of the profession. Over 2200 preparations of various manufacturers both in India and outside have been dealt with in this book in a way most useful to the practitioners. The book is available for sale at the office of:

**THE MEDICAL PRACTITIONERS' SERVICE BUREAU,
VEPERY, MADRAS.**

TREATMENT OF TUBERCULOSIS

WITH

SANTUBEN.

The facts discovered in the Postmortem examination that 90 percent of the tuberculosis patients are cured is a logical proof that tuberculosis is a curable disease.

Prof. Dr. Wolff Eisener of Berlin University after 20 years special hard work on the tuberculosis research has placed before the Medical world his wonderful cutaneous treatment which is called SANTUBEN.

Curative treatment of Tuberculosis: (Approved and successfully tested on over 20,000 cases in all-stages of T.B.). Santuben is a harmless and most simple treatment, having the best therapeutic and prophylactic effects. It consists of the Tuberculin ointment to be rubbed and guaiacol silicate tablets to be taken by mouth.

The original formulae and composition is found in the MATERIA MEDICA by Dr. U. B. Narayanrao.

Santuben cures all cases of T.B. including complaints of catarrhal nature. By its use the grave symptoms of T.B. disappear rapidly. Coughing stops, bodily weight and appetite increase, temperature falls, night sweats are reduced and finally Tubercle Bacilli in sputum and blood disappear.

Lt. Col., F. E. Gunthar, Physician to Margret Hospital for Consumptives writes that he always switches on Santuben with the happiest results.

Many Doctors in Bombay and up-country have sent their appreciations.

My general representatives for India, MADAN TRADING Co., 185, Princess Street, Bombay 2, will be pleased to forward to any Doctor, interested in the treatment of such cases, complete literature and samples for trial for convincing themselves as to the treatment of Tuberculosis with Santuben.

DR. RICHARD WEISS,

PH. D., M.A., F.C.S., BERLIN, GERMANY.

LYMPHOTHORMON

THIS IS ANOTHER PHARMACEUTICAL PREPARATION OF DR. RICHARD WEISS
FOR THE PROPHYLAXIS AND TREATMENT OF ELEPHANTIASIS.

Elephantiasis (Filaria Bancrofti) belongs to the most terrible of diseases to be found in tropical and subtropical countries. We are now acquainted with the fact that the filamentous worms, called Filariae, come in question as exciters of this disease. They quarter themselves in the lymphatic glands, and rob the glands of their normal activity.

This circumstance has led to the recognition of the fact that, as a prophylaxis as well as for the effectual treatment of Elephantiasis, a healthy organism capable of resistance, is an important proviso. It is for this reason that the modern hormone-therapy plays an important part in grappling with Elephantiasis.

The new hormone preparation *Lymphothormon*, conveys to the body in the form of an effective combination, all those hormones which the lymphatic glands need in order to function properly, and thus to stimulate the glands once more to perform their normal functions. The new preparation contains the most important hormones for nourishing the human body. In addition to the hormone of the thyroid gland, the male sexual hormone, and in addition to the hormone of the hypophysis (pituitary gland)—to the importance of which Professors Aschheim and Zondek have specially called attention within the last few months, — the hormone of the suprarenal capsule. By the administration of these hormones, the capability of the lymphatic gland in resisting the Filariae, is considerably heightened.

However, as one is compelled to employ all possible means at one's disposal in the fight against this contagious malady, the disinfecting medicaments are also added to the hormones, and bring about the destruction of the group of Filarian excitants. Of these medicaments, Trypoflavin must be mentioned in the first place.

Directions:—Take a tablet 3 times a day after meals for a period of 4 weeks, and then discontinue the treatment for 4 weeks. After having made this pause, the treatment should be repeated. A treatment with this preparation for two months, carried out every year, is calculated to protect the organism against Elephantiasis. As a curative measure during and after the attack the dose mentioned above should be doubled.

For further particulars apply to:—

MADAN TRADING Co.,

185, PRINCESS STREET, BOMBAY 2.

Correspondence, Reports, Etc.

LETTERS TO THE EDITOR.

The All-India
Ophthalmological Society.

Intimation has just been received from the Secretary that the long over due third annual meeting of the above Society has been further postponed. It is now two years since the last meeting was held, whereas the article of the Society definitely state that there should be an annual session. Calcutta was decided as the venue of the meeting, "in view of the fact that neither the President nor any of the members from the Bengal area were able to attend either of the two conferences of the Society". And now, it has not suited the convenience of the Bengal members to arrange for a conference all these two years, and the Secretary has just kindly asked us to wait a bit further.

Now that the Society has not practically been functioning for nearly two years, I think one is entitled to ask who is responsible for this state of affairs. If Bengal is not enamoured of the Society, should we be begging at her doors? Is there no other place in India equally fitted as Calcutta to be the venue of our Society? If even this annual show is denied, I wonder what other return the Society is going to offer for the subscription of Rs. 15 each member is paying.

If the organisers find it impossible to hold a conference in Calcutta at least before the close of the year, I suggest the following three alternatives for the earnest consideration of the executive committee:—(1) Convene the meeting elsewhere or (2) start a "Journal of Indian Ophthalmology", at least a quarterly for the present, or (3) if the above two not be feasible, close up the Society and send back to the members the subscriptions they have so far paid.

A. MEMBER.

An appeal to the members of
Medical Profession.

The "Third Andhra Medical Conference" held at Guntur, resolved to send a Deputation to wait upon the Special Committee of the Legislative Assembly at Delhi appointed to consider about the right of inclusion of the Licentiates in the All India

Medical Register along with other points concerning the Bill. Perhaps you are aware that a very strong cause of the Licentiates and graduates should be placed before the Special Committee probably in a couple of months and as such you are hereby requested to enlighten the deputies with your views and opinions on the subject at an early date. The Deputation consists of Dr. D. S. Ramachandra Rao, M.A., M.D., Bezawada, President of the conference, Dr. V. Rama Kamath, Editor, "The Medical Practitioner" and Dr. D. Govinda Rajulu, Bezawada.

D. GOVINDA RAJULU.

The Kistna District Rural Medical
Practitioners' Association.

The above Association was brought into existence on 15-4-33. The meeting was held in the Dist. Head quarters' Hospital premises, Masulipatam, at 5 P. M. with Dr. P. R. Venkatarama Iyer, M.B.C.M., District Medical Officer, Kistna in the chair. A constitution was framed and proposed and unanimously agreed to. The D.M.O. was elected as the president of the Association and Dr. N. Rama Rau, L.M.P. Rural Medical Practitioner, Gollapalli, as the Secretary and Treasurer.

This Association is affiliated to the Provincial Rural Medical Practitioner's Association and the secretary of the former should be in consultation with the secretary of the latter association in all matters concerning the subsidised practitioners.

The D.M.O. in his closing speech, spoke about the duties of a Rural Medical Practitioner and impressed upon the audience the importance of sincerity of purpose which in the long run was sure to bring success in life.

N. RAMA RAU, L. M. P.

The Trichinopoly District Medical
Association.

A monthly meeting of the above Association was held on Monday the 24th April, at 4 P.M. in the Government Head Quarters Hospital Trichinopoly. Dr. S. Padmanabha Sarma the D.M.O. the President of the Association presided. Dr. Balavelayutham Pillay, A.D.M.O. was "At Home" to the members of the Association. About 40

members were present. Dr. P. A. S. Raghavan the Secretary of the Association read the minutes of the last meeting and it was passed. He also made a statement that the Association was registered and that he was in correspondence with the Surgeon-General regarding the grant of travelling allowance to rural practitioners and Government servants. Dr. S. Padmanabha Sarma demonstrated a case in which he had recently removed a stone from the kidney and explained the various signs and symptoms and the technic of the operation. Dr. Raghavan demonstrated an interesting case of Gumma of the Scalp. Dr. V. Subramanyam, Honorary Dentist demonstrated a case of Acute-Hook-Worm disease. Dr. R. Sambasivan demonstrated the application of carbon-di-oxide-snow in a case of Nevus in a child. Dr. Kothandapany of Andimadam brought a case of Multiple Osteo-Arthritis which was also demonstrated. The Secretary then announced that the next meeting would be held on 13-5-33, when Major, A. Krishnamurthy, B.A. M.B.C.M., A.I.R.O., District Medical Officer of Ramnad would deliver a Lecture on Venereal Diseases.

P. A. S. RAGHAVAN,
Secretary.

Trichinopoly District Medical Association (Registered).

The monthly meeting of the above Association was held on Saturday the 13th May 1933, at 5 P. M. in the E. R. High School Trichinopoly. Dr. S. Padmanabha Sarma the President was "At Home" to the members. Nearly 45 members and 5 visitors from other Districts attended. Dr. T. S. S. Rajan was proposed to the chair and it was unanimously carried. Dr. Rajan demonstrated the case of a boy aged about 8 years who developed Talipes Equinus Varus, about 2 years after an attack of Infantile Paralysis and on whom he had recently performed Tenotomy and Resection of Os calcis. He also demonstrated a case of Sarcoma in the rectum which he had removed from an old man that morning. Dr. R. Sambasivan demonstrated a child aged about 8 years which showed trouble in the lungs and abdomen. There was a lively discussion as to its diagnosis. Dr. T. S. S. Rajan then introduced Major A. Krishnamurthy B.A., M. B. C. M., District Medical

Officer, Ramnad and called upon him to deliver his Lecture on 'Venereal Diseases'.

Mr. K. G. Sivaswamy Ayyar, Secretary of the Servants of India Society Trichinopoly, gave a lecture on Rural Scheme and requested the Doctors to give as much help as they could for the Rural Scheme.

After the Lecture there was a Dinner at 8 p.m.

Rules for the Registration of Practitioners of Indian Medicine.

G. O. No. 231 P. H. DATED 1st FEBRUARY, 1933.
SECTION I.

1. Persons possessing any of the following qualifications shall be eligible for registration.—

(i) Diplomas in Indian Medicine granted by the Board of Examiners in Indian Medicine appointed by the Government of Madras.

(ii) Diplomas in Indian Medicine granted by or under the authority of the Government of India or a Provincial Government or an Indian State or by any recognized University or Examining body in India, provided that applications for the recognition of such diplomas are recommended by the Central Board of Indian Medicine, Madras, and accepted by the Government of Madras.

(iii) Holders of Government titles of professional eminence like Vaidya Ratna and Chifa-ul-Mulk.

(iv) Other practitioners of Indian medicine who do not hold any of the qualifications noted above but are granted special recognition by the Government of Madras on their applications being recommended by the Central Board of Indian Medicine.

Proviso.—Notwithstanding anything contained in these rules, it shall be competent for the Central Board of Indian Medicine to register, during the period of the first five years from 1st February 1933 any person who is proved to the satisfaction of the Board to be an eminent practitioner of Indian medicine of not less than ten years' standing.

2. Practitioners registered under these rules shall be divided into two classes as noted below:—

Class A.—Practitioners whose qualifications denote at least a minimum standard of professional training for undertaking medical, surgical (including obstetrical) and medico-legal work.

Class B.—Practitioners whose qualifications denote at least a minimum standard of professional training for undertaking medical work only.

3. Except with the special sanction of the Government, no one other than a practitioner of Indian medicine registered under these rules, shall be competent to hold any appointment as medical officer in any institution of Indian medicine maintained or aided by the Government or a local body or both.

4. The registration of applicants under sub-rules (iv) of rule 1 above shall be subject to the condition that the applicant give proof to the satisfaction of the Board that he has been a practitioner of not less than ten years' standing except where the Board decide otherwise, and that he has undergone adequate professional training—both theoretical and practical—for a period of not less than four years before the commencement of his practice.

5. The following rules shall govern applications for registration under sub-rule (iv) of rule 1 above:—

(a) All applications shall be sent through a local association of practitioners of Indian medicine if there is one in the locality.

(b) All applications received shall first be considered by a standing sub-committee constituted for the purpose consisting of seven members elected by the Board, of whom not less than five shall be from among city members of the Board with the President of the Board as ex-officio member and chairman of the sub-committee. In the absence of the President, the sub-committee shall elect one of their members as chairman. The sub-committee

shall ordinarily meet during the time of the meetings of the Central Board of Indian Medicine.

(c) All applications received from a district in the mufassal where a member of the Board permanently resides shall be referred to that member for remarks before the same is considered by the standing sub-committee.

6. (a) Every person who applies to be registered under these rules shall pay a registration fee of fifteen rupees and a stamp duty of annas twelve.

(b) This rule shall not apply to any person whose name has been registered under any Act or rule for the registration of practitioners of Indian medicine for the time being in force in any part of British India, if the said Act of rule provides for the registration of persons registered under these rules without the payment of any fee.

7. The Local Government may either *suo moto* or otherwise revise any order passed by the Board under the rules in this section.

CREOSOTONE, (UPJOHN)

Each ounce represents :

Creosote and Potas. Guaiacol Sulphonate,	16½ grs.
Quinine Sulphate,	1 gr.
Nux Vomica,	1 gr.
Combined Hypophosphites of Calcium, Potassium, Manganese and Iron,	8 grs.

Usual Dose :

2 to 4 drachms

A SOLUTION of Creosote and Guaiacol (with tonics), which your patients will take without objection. The Guaiacol is imperceptible to the taste, being present in the form of a soluble, palatable combination.

Creosotone is valuable for treatment of catarrhal conditions of the bronchia, in early or suspected tuberculosis, winter cough, and as a reconstructive during convalescence, either alone, or in connection with cough sedatives as required.

Creosotone is Free from Opiates and Alcohol.

Manufacturers : The UPJOHN CO., Kalamazoo, Mich U. S. A.

For samples and literature apply to sole agents :

T. M. THAKORE & COMPANY,

Head Office : 43, Churchgate St., Fort. Bombay.

1/75, Nainiappa Naick St., P. T. Madras.

Reviews.

THE ANNUAL REPORT OF THE
NOWROSJEE WADIA MATERNITY
HOSPITAL, BOMBAY, FOR THE YEAR 1932.

Annual administration reports of public Institutions are prepared with the object of placing before the public, the work done in the institutions as the public who contribute towards the expenditure of the institutions have a right to demand such reports. This applies not only to Government Institutions which are established and maintained wholly from the public revenue, but also to other institutions which are subsidised partly by the Government or local bodies. So, it is necessary that these reports should be published not only in newspapers but also in the Medical Journals as the medical profession is naturally interested in such reports. We wish the Madras Government follows the good example of Bombay in submitting the annual reports of the Medical and Public Health Institutions to the existing medical journals for review.

Coming to the report under review, we are pleased to state that the annual reports of the above institution have been sent to us for review ever since our journal was started. It is satisfactory to note that the work of the institution shows improvement on all directions. The institution is a private one, aided by grants from the Bombay Corporation and the Government of Bombay. The Madras Government Maternity Hospital, said to be one of the best in the East, does not compare favourably with the Nowrosjee Wadia Maternity Hospital. The total number of confinements attended in the Nowrosjee Hospital was 4,231 against 3389 in the Madras Hospital, and the maternity mortality in the former was only 67 against 84 in Madras. The details of

the causes of the maternity deaths are given for each and every case. The hospital is a clinical hospital where medical students reading for M. B. B. S. course are being trained. For postgraduate training 8 graduates attended the hospital while the number of such students in Madras is less.

The institution is under the charge of an Honorary Principal Medical Officer Dr. M. V. Metha, assisted by a large number of honorary doctors, Radiologists, Dentists, etc.

The total expenditure for the year was about Rs. 160,000, which is very much less than that spent on the Madras Maternity Hospital. We congratulate again the Principal and the Staff on the good work turned out by them.

Before closing we would like to draw the attention of the Government to this institution so that they may realise that an ideal Maternity Clinical Hospital could be seen with better results by honararies with much less expenditure.

Atebrin.

IN THE TREATMENT OF MALARIA.

Serial Press References.

A booklet has been recently published by Messrs Haverro Trading Co. Ltd. compiling in an intelligent way the experiences gathered by them from various eminent physicians both in India and in the West. The book though small in size serves the purpose of easy reference to practitioners in the Tropics who should be ever anxious to stamp Malaria. We cannot discuss the therapeutic value of Atebrin better than what has been done in this book and our readers may apply to Messrs Haverro Trading Co. Ltd. 15, Olive Street, Calcutta for this booklet and it will be sent to them free of cost.

The Journal of the Indian Medical Association
(FORMERLY THE INDIAN MEDICAL WORLD)

Editor-in-Chief:

Sir Nilratan Sircar, Kt., M.A., M.D., etc.

with a strong All India Editorial Board.

An independent monthly journal devoted to the interests of the Medical Profession in India.

FEATURES:

Original Articles by eminent Medical Men
Up-to-date Indian and Foreign Medical News and Notes
Abstracts of interesting papers from leading contemporaries
Medical affairs at home and abroad.

Annual Subscription Rs. 6/-

Postage Free.

Free Copies to Members of the Indian Medical Association.

Sample copy free on request.

Rate table on Application.

An excellent medium for Advertisement.
For particulars, please write to

The Secretary in Charge, 67, Dharamtola Street, CALCUTTA

MADARY PILLS FOR INSANITY

Owing to the excellent qualities of Madary Pills, orders are pouring on from the eminent Physicians from all parts of the country.
Copy of a letter.

Dear Sirs,
Please send me V.P.P. by return post two bottles of MADARY PILLS for an Epileptic patient.
I tried the last bottle sent by you A(1.....

Yours faithfully,

Port Commissioner's Qrs. Calcutta.

Impregnable against:—INSANITY, SLEEPLESSNESS, Restlessness, Insomnia, Confusions, Chorea & all Mental Disorders.

Price Rs. 4 only

FREE SAMPLE WITH FULL LITERATURE ON REQUEST

THE IMPERIAL CHEMIST COY. Chemists, Girgaon, Bombay: 4.

Stockists in Madras:—

MESSRS SRI KRISHNAN BROS., P. B. 166, MADRAS.

THE RESEARCH LABORATORY.

HARRIS ROAD, MADRAS.

Microscopical, Cultural and Bacteriological Examinations of Blood, Sputum, Urine, Faeces etc., done.

Khan, Widal, Wassermann and Complement Fixation test for Tuberculosis etc., done.
Stock and Autogenous Vaccines prepared.

Sterile Solutions for injection always in Stock.

Please apply for further particulars to:

THE MANAGER.

ESTABLISHED 1906.

The most widely circulated Medical Journal in India, Burma and Far East, having a circulation of 4,000 copies every month.

THE INDIAN MEDICAL JOURNAL

THE OFFICIAL ORGAN OF THE ALL-INDIA MEDICAL LICENTIATES' ASSOCIATION.
A Record of Medicine, Surgery, Public Health & Medical News, Indian & Foreign.

EDITED BY

Rai Sahib Dr. P. C. Roy.

Published monthly at Calcutta, by the All-India Medical Licentiates' Association
Annual Subscription ... Rs. 6 | Bonafide Medical Students ... Rs. 3.
To members of A. I. M. L. Association Free (To pay only Rs. 4 Annual Subscription with Rs. 2. Admission Fee on Enlistment). For rates, etc., write to

THE MANAGER,
135, Harrison Road, Calcutta.

Antiphlogistine

The PERFECT POULTICE
AND DRESSING FOR
INFLAMMATION

AND

CONGESTION.

THE DENVER CHEMICAL MFG. Co., NEW YORK.

169712

32
Lm 211, N 2000
N 33



TWO indispensable products for all-round practice :

ADALIN

The preparation with a two-fold action:

As mild hypnotic it induces a soothing and refreshing sleep.

As a harmless sedative it acts in all forms of nervous complaints.

PHANODORM

The powerful, universal hypnotic.

After a sound sleep, the patient awakes feeling fresh and fit.

Literature and full particulars on application :

Bayer-Meister Lucius

HAVERO TRADING Co., Ltd.,
Pharmaceutical Dept. P. O. Box 2122, 15, Clive Street, Calcutta.

NEOSALVARSAN

PLASMOQUINE

SERA & VACCINES

ASPIRIN - Bayer

PYRAMIDON

NOVOCAIN

YATREN 105

NEOSTIBOSAN

THE CITY COLLEGE,

G. T., MADRAS.

A Senior Cambridge Certificate is Invaluable

not only to **Medical Licentiates** who wish to improve their prospects by taking up the M.B.B.S. Degree of the Madras University and other Foreign University degrees.

It is also invaluable to others who wish to have bright careers in lines other than medicine without passing even the Intermediate examination of any Indian University. It opens to them most of the bright lines which till now, were reserved only for graduates of recognised Indian Universities.

Many have already taken advantage of this course and improved their prospects. You can take tuition either **by post** or **in person** and appear for the examination at any one of the following centres :—

Ajmere	Nagpur	Ootacamund	Sanawar
Coorji	Hyderabad	Yercaud	Quetta
Cuttack	Indore	Maler Kotla	Shillong
Namkum	Coonoor	Ghora Gali	Trivandrum
Amaraothi	Lovedale	Lahore	Allahabad
Jubbulpore	Madras		

Special facilities are given to you to take any of the Indian Vernaculars. Latin and French are no more compulsory.

Every mail brings in appreciations from our successful and satisfied candidates.

Every satisfaction guaranteed to our candidates.

Apply for a copy of our prospectus to :—

THE CITY COLLEGE,
31, BROADWAY, MADRAS.

K. S. R. ACHARYA, B.A., L.T., F.R.E.S. (Lon.)
Principal.

Courses, Postal and Personal, are in full swing for the December 1933 Exam. at the centres named above. Admissions for the Dec. '33 Exam. close on 20th June 1933. Successful candidates are eligible to certain scholarships.

PROVEINASE

VARICOSIS
PHLEBITIS
DISTURBANCES
OF THE
PUBERTY
AND OF THE
MENOPAUSE



Triturated Orange (Hypophysis, Thyroid, Suprarenal)
Cupressus, Horse Chestnut, Hamamelis.

THE GREAT REGULATOR OF VENOUS CIRCULATION
2 to 6 Tablets per day—Agents: E. Stella & Co., Bombay.

One Herb Specific—An Indigenous Discovery

FOR DYSENTERIES AND DIARRHOEAS OF ANY ORIGIN.

It has a specific action on the liver whose dysfunction gives rise to intestinal disturbances of various description. It has proved by its action on the liver that the growth of Bacteria in the intestines is due to changes in the bile content and if the liver function is set right, the Bacteria die a natural death. Very encouraging reports are being received so far from the medical profession to whom this is sold at a special price of Rupee One only.

Try one bottle on your patient. It is a harmless remedy containing only one herb.

Available at :

The Oriental Specific Depot.,
VEPERY, MADRAS.

PHONE No: 3034.

Dr. S. R. BHAT

M. B. B. S., L. D. Sc. (Calcutta)
DENTAL SURGEON

THE X-RAY & ELECTRO-THERAPEUTIC DENTAL SURGERY

289, Esplanade, Madras. Opposite to Corporation Fruit Market.

The most well-equipped dental surgery with all electrical apparatus such as X-Ray, Ultra-Violet Ray, High frequency current etc.

Reminders and Suggestions

PRODUCT	COMPOSITION	INDICATIONS
ACECOLINE	The Vagal Hormone or Arterial Dilator.	Trophic Disturbances & Vagal Insufficiency.
ARSENO SOLVENT	Glucose-saline Solution, Guaiacol & Chloretone.	Painless Solvent for Sul-farsenol.
BACKERINE	Salts of Magnesia.	Hyperplasias, Cancer.
BOLDINE	Alkaloid of Boldoa Frags.	Gall-stones, Jaundice Tropical Liver diseases.
BROMO VALERIANATE	Valerian Strontium Bromide etc.	Hysteria and Nervous Affections.
IODOBESIN	Pluriglandar total extracts combined with Iodalbumen.	Obesity.
PERTUSSIS SYRUP	Valerianate (Odourless) Chloral Hydrate and Strontium Bromide.	Coughing-fits & Whooping-cough.
PULMO CALCIUM	Tribasic Phosphate, Carbonates and Salts of Lime and Magnesia.	Recalcification of the Organism.
RHEANTINE	Vaccine by Oral Route.	Gonorrhoea.
SARCOPTOL	Colloidal Sulphur.	Diseases of the Skin and Scalp; Eczema.
THOROXYL	Formiates and carbonates of Thorium, Dydimium and Cerium.	Acute and Chronic Diarrhoeas, Enteritis.
UROGENINE	Sodium Benzoate, Lithia and Piperazine.	Diuretic, Antiasthritic.
VIOXYL	Ferrum Dioxypheylarsenate Vanadium Dioxypheylarsenate Ferrum Methylarsenate.	Accelerator of General Nutrition.

THE ANGLO FRENCH DRUG Co. (Eastn.) Ltd.,

POST BOX NO. 460.

BOMBAY.

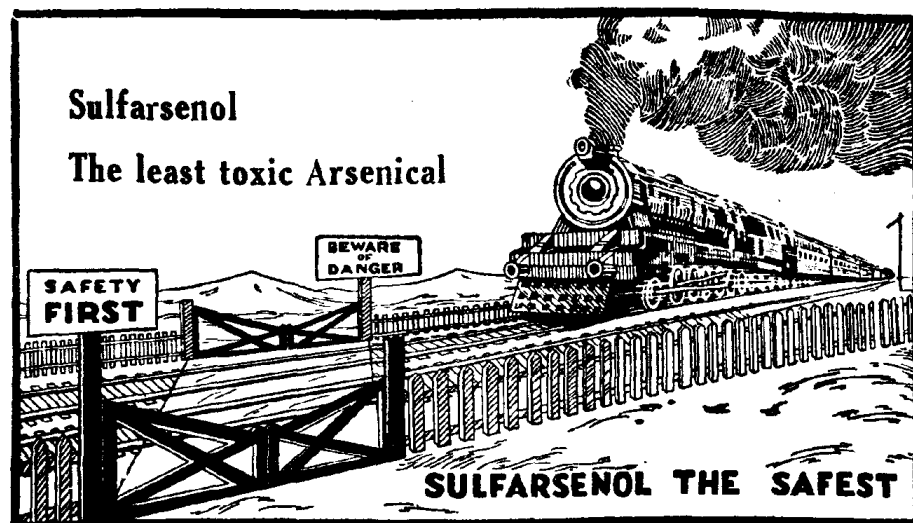
*Patients prefer
painless
injections!*



ARSENO-SOLVENT
ensures
painless administration of
SULFARSENOL

Sulfarsenol

The least toxic Arsenical



THE ANGLO FRENCH DRUG Co., (EASTERN) Ltd.,

POST BOX No. 460

::

BOMBAY