


Medical Practitioner.

A monthly medical Journal.

V 6. no. 12 September 1935

The
Medical Practitioner
A Monthly Medical Journal

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

THE WISE PHYSICIAN

FOR
AMENORRHOEA



28 OCT 1935

FOR
CONTRACEPTION

THE OTHER TWO TRIED REMEDIES
MANUFACTURED AT OUR LABORATORY ARE:

KOO-KOOMIN

Has stood the test of trial by many eminent physicians as a sovereign remedy for WHOOPING COUGH and other coughs in children which are attended with spasm and difficult expectoration.

Rs. 1-8-0.

ZAMA

Is being prescribed with very good results by practitioners for ECZEMA and similar skin diseases attended with watering and itching with or without pustulation.

Price 12 As.

able at all important Chemists and Druggists.

g:—P.M. Zaveri & Co., Princess Street, Bombay.

s:—The Oriental Research Laboratory, Vepery, Madras.

CONTENTS.		PAGE.
Original Articles :		
Toxaemias of Pregnancy, By Dr. (Miss.) H. M. Lazarus, B.A., M.B., F.R.C.S. (E.) D.G.O.	...	273
Complications During Anti-syphilitic Treatment, By Dr. M. Ratnavelu, L.M.S.	...	278
Madras Medical Council, Review of work from October 1933 to March 1935, By Dr. V. Rama Kamath.	...	286
Abstracts :		
The Treatment of Angina Pectoris, By K. Shirley Smith, M.D., F.S.C., F.R.C.P.	...	283
Editorial :		
An All-India Protest.	...	291
News and Comments :		
Brothers Differ. ...	...	292
Dilemma continues ...	...	293
Is it Manslaughter. ...	...	294
An Opportunity. ...	...	295
Reform or Necessity ? ...	...	296
Cheap Sale of Inherent Right. ...	...	296
A Health Unit Scheme. ...	...	297
U. P. Government Adamant. ...	...	297
Notice of Resolutions to Madras Medical Council.	...	297
Correspondence, Reports, etc.:		
Obituary—Late Col. H. W. Acton ...	...	298
Report of Lt. Col. C. A. F. Hingstone, Member Madras Medical Council, visitor at the Final L. M. P. Examination, Madras ...	...	299
All-India Medical Council Bill....	...	300

MENESTRIN CAPSULES.

How do Menestrin Capsules prevent pregnancy ?

This question is often asked by some members of the medical profession. The capsules contain Quinine, Iron, Manganese, Ovary and Thyroid and a few other ingredients belonging to the indigenous system of medicine, so combined as to produce temporary hyperaemia in uterine mucous membrane which causes tonic contraction of the uterus and the resulting menstrual flow washes the uterine cavity. This plain answer was put to test by eminent physicians who are to-day prescribing the capsules to their lady patients who dread pregnancy.

To be sure of action the capsules should be taken on the very day when the expected menses did not appear.

The Therapeutic indication for prescribing Menestrin Capsules for Amenorrhoea is quite evident from the action of all its ingredients, a combination of which has been curing patients suffering from inveterate Amenorrhoea due to any causes functional or otherwise.

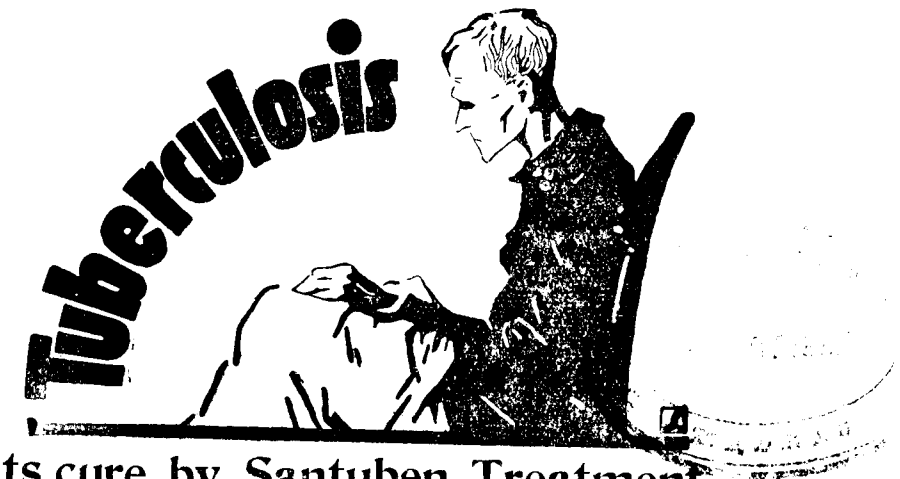
A VALUABLE OPINION

From a Gynaecologist.

I had some hesitation to use Menestrin Capsules in my lady patients who dreaded pregnancy. The explanation submitted to me by O. R. Laboratory, regarding the unique way in which the Menestrin Capsules bring about menstruation cleared my doubt and I have since been using the capsules extensively advising my patients to take them on the very day when the expected menses did not appear.

I am glad to say that in almost all patients who used the Menestrin Capsules from the day when the expected menses did not appear, had no disappointment at all.

There cannot be any hesitation to use the capsules in cases of inveterate Amenorrhoea as all the ingredients containing them are rationally indicated for the treatment of Amenorrhoea.



Its cure by Santuben Treatment.

- 1 Santuben introduced by Professor Dr. Wolff Eisner and manufactured in the pharmaceutical laboratory of Dr. Richard Weiss Ph. D., M.A., F.C.S. Berlin, has been approved and tested on over 20,000 cases of T. B. and acknowledged to be a **curative Treatment of Tuberculosis** including Catarrh.
- 2 The treatment consists of an application of a special Tuberculin ointment to be rubbed once a week and of a Guaiacol Silicum tablets for oral use. Santuben is a most successful weapon against T. B. and its timely use has saved thousands of patients from the lingering malady and death.
- 3 What the Doctors say :—
 Dr. Lt. Col. E. F. Gunter D. S. O. R. A. M. A. (Retd.) Principal Medical Officer writes :—No one dissatisfied with Santuben which has come to stay in my practice and I am so convinced to its efficacy that I am gradually giving up injections in its favour.
 Prof. Dr. Besredker Paris :—France will now take up the cutaneous treatment of T. B. i.e. Santuben Treatment.
 Capt. Dr. Late I. M. S., Bombay states :—He has tried Santuben in many cases with great success ; so he has taken up this treatment in his practice.
 Dr. I/C. Dispensary :—Small sample sent has been found effective please send $\frac{1}{2}$ box more.
 Capt. Dr. M. B. B. S. Hissar :—The first $\frac{1}{2}$ box sent by you has done good to the patient. Temperature has come down and the coughing is certainly less. Please send $\frac{1}{2}$ box more.
 Dr. M. B. B. S., Gowalia Tank, Bombay states :—He is greatly pleased with the results of Santuben.
 The above testimonials represent only a few of the numerous medical expert opinions with regard to Santuben treatment.

Price : Hospital packing for 20-30 days treatment containing 3X20 tablets and 1 tube ointment Rs. 11/8 less 12½% discount for profession.

Complete literature will be sent on demand.

Sole Distributors:—

MADAN TRADING COMPANY,
 185, Princess Street, Bombay 2.

CAMPHOREINE

Is a well-known and tried specific for
CHOLERA.

The chief ingredients of Camphoreine are Camphor and essential oils suitably combined with Chloroform and a few other drugs so as to produce specific action on the bacteria of any origin and serve as a reliable **Intestinal Antiseptic, Anodyne, Stimulant and Diuretic.** Hence, therapeutically indicated for the treatment of **Cholera** and all gastro-intestinal troubles due to germs or ptomaine poisoning.

The Public Health Commissioner for India has predicted that there will be a severe out break of Cholera in almost all the Provinces in India, especially in Madras, Bengal, United Provinces and Bombay Provinces. The successful treatment of a Cholera patient after the evacuation stage is a matter of chance. But the doctor can be sure of saving the patients' life, if he commences treatment soon after the attack and for this purpose Camphoreine is the ideal preparation.

For literature and further particulars apply to:

**THE ORIENTAL RESEARCH LABORATORY,
VEPERY, MADRAS.**

CHERACOL

(Upjohn)

Alcohol 3%

A cough preparation whose purpose is to allay cough without checking expectoration. Its fruit-like flavor is characteristic and unique. It is free from the heavy nauseous qualities of the old fashioned syrups: it contains Pottasium guaiacol in tasteless form 8 grs. Codeine phosphate 2 gr. Ammonium Chloride 8 grs. and Antimony and Potassium Tartrate 1/12 gr. in a cooling vehicle of pine and cherry barks with chloroform 2 mins. Its features are small doses of expectorants in such balance as to secure the lenitive effect of the narcotic without narcotism, and the loosening action of the "nauseant" expectorants without nausea.

Manufactured by:—

**The UPJOHN COMPANY,
U.S.A.,**



Further particulars from the
Sole Agents:

**T. M. THAKORE & CO.,
43, Churchgate St.,
Fort, Bombay.**

THE Medical Practitioner

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

Single Copy As. 4.

VOL. VI.]

SEPTEMBER 1935.

[NO. 12

Original Articles

*TOXAEMIAS OF PREGNANCY.

BY

DR. (MISS.) H. M. LAZARUS, B. A. M. B.
F. R. C. S. (E) D. G. O.,

Superintendent Government Victoria
Hospital, Madras.

(Continued from last issue.)

There is no definite classification of the toxæmias of pregnancy and this is due to our profound ignorance concerning the etiology of the disorders. Kellogg says "The conquest of the toxæmia of pregnancy depends primarily on a universal acceptance of some index, of some classification, some co-operative mode of study in every great obstetric centre."

The main difficulty arises when an attempt is made to classify the so-called pre-eclamptic and nephritic toxæmias which may complicate pregnancy. Vomiting of pregnancy, acute yellow atrophy of the liver and eclampsia are well defined entities and usually recognizable. Nephritis may complicate pregnancy but is sometimes rather difficult to recognize and classify the various types of kidney lesions during pregnancy and to make a differential diagnosis between the nephritic and pre-eclamptic toxæmias.

Most of us are familiar with a mild type of toxæmia manifesting itself usually in the eighth or ninth month of pregnancy and consisting of a slight elevation of blood pressure, a small amount of albumen in the urine and moderate swelling of the ankles. As soon as the patient has been delivered

the symptoms disappear completely, and in a subsequent pregnancy the condition may or may not occur. Kellogg designates this as the recurrent toxæmia of pregnancy and states that such a recurrence should be considered as a chronic entity distinct from the common kidney disease complicating pregnancy. Moreover he is of the opinion that it may be subdivided into two groups: (1) in which under the strictest possible prenatal care the prognosis for both mother and child is good and (2) in which the prognosis for the child is bad, no matter what the prenatal care may be.

There are a group of toxæmias in repeated pregnancies in the same individual in which it is impossible to demonstrate any signs, symptoms or laboratory findings suggesting nephritis. Stander and Peckham term these as *Low Reserve kidneys*. Many of the recurrent toxæmias belong to this category, as well as the so called simple albuminuria of pregnancy.

Mussey has attempted to classify the nephropathies of pregnancy and has directed our attention to the classification of Volhard and Fahr, which is as follows:—

A. Pyelitis and pyelonephritis.

B. Hypertension and nephritis.

1. Acute nephritis and pyelonephritis.

a. acute glomerulonephritis.
b. acute nephrosis.

2. Chronic nephritis.

a. chronic diffuse glomerulonephritis.
b. chronic nephrosis.

3. Sclerosis (Vascular lesion).

a. Benign hypertension.
b. Malignant hypertension.

* Elizabeth Matthai University Lectures 1935.

Mursey and Keith believe that the classification of nephritis during pregnancy into acute and chronic aids in establishing the prognosis. Patients with acute nephritis very rarely give a history of previous kidney trouble. They state that, in the acute type of nephritis, the presence of albumen in the urine and the sudden rise in blood pressure, with increased oedema, usually occur during the eighth and ninth month of gravidity and that a kidney function test shows satisfactory excretion, with a urine of high specific gravity. On the other hand patients with chronic nephritis often give a history of previous kidney trouble, and the hypertension, oedema and albuminuria make their appearance early in pregnancy, usually before the seventh month. In the latter, tests for renal function show poor excretion with the specific gravity of the urine either fixed or low.

Mursey divides the toxæmias of the later months of pregnancy into three groups: (1) acute toxæmias of the eclamptic type; (2) toxæmias due to exacerbations of chronic nephritis and (3) toxæmias due to definite renal infection (focal nephritis and pyelonephritis). He further subdivides the acute toxæmias of the eclamptic type into (a) those in which there is unquestionably pathologic evidence of disease of the liver and (b) those in which the symptoms of renal involvement predominate.

Affections of the kidneys which are of a degenerative nature but not inflammatory, Von Jasehke designates as *nephroses*. In these there is degeneration of the tubules but no demonstrable changes in the glomeruli or vessels.

Queen Charlotte's Hospital, London, divides these toxæmias of the later months of pregnancy according to the particular organ that appears to be affected most by the poisoning process, as evidenced by the symptoms as follows:—

RENAL-ALBUMINURIA OR PRE-ECLAMPTIC TOXAEMIA: This condition is characterised by head-aches, oedema of the legs and face, occasional vomiting, diminution in quantity of urine, rarely some blurring of the vision, together with albumen in the urine and a fixed low pressure. This is the ordinary mild type, and it should be noted that usually the patient says she feels quite well,

complaining only of slight swelling of the ankles. Headache is often absent. Albuminuria and raised blood pressure are found only on examination.

CENTRAL NERVOUS SYSTEM ECLAMPSIA: In addition to the symptoms of albuminuria, convulsions, come and other symptoms appear.

GASTRO-HEPATIC: A rare type characterised by urgent vomiting in late pregnancy, followed sooner or later by albuminuria and jaundice. It is usually fatal.

UTERINE ACCIDENTAL HAEMORRHAGE: The most prominent symptom is severe accidental hæmorrhage, together with albuminuria, and sometimes widespread oedema. Occasionally the patient has eclamptic convulsions.

CARDIAC AND PULMONARY: The outstanding symptoms here are severe cardiac failure of an otherwise healthy heart, rapidly clearing up after delivery and pulmonary oedema of an extreme type in which several points of frothy mucus may be coughed up.

In several American clinics the following classification is used:—

1. Vomiting of pregnancy.
2. Low reserve kidney.
3. Nephritis complicating pregnancy.
4. Pre-eclampsia.
5. Eclampsia.
6. Acute yellow atrophy of the liver.

"*Low Reserve Kidney*" is probably identical with kidney of pregnancy with certain types of recurrent pregnancy toxæmia, with the simple albuminuria of pregnancy, as well as with certain nephroses. It is frequently impossible, especially when the patients' history is unknown, to differentiate between the various types of kidney disease during the course of pregnancy, such as the acute and chronic nephritis and nephroses. The American clinics do not include the "Uterine" type of Queen Charlottes, e.g. Accidental Haemorrhage and neither of the foregoing classifications include that severe type of toxæmia so prevalent here, anaemia of pregnancy. I would classify the toxæmias of pregnancy in India as follows:—

A. MAJOR TOXAEMIAS.

1. Vomiting of pregnancy.
2. Acute yellow atrophy.
3. Nephritis complicating pregnancy with or without eclampsism.

Hypotensyl tablets for High Blood Pressure.

4. Essential hypertension with or without eclampsism.

5. Anaemia of Pregnancy.

6. Hepatic Eclampsia.

7. Renal Eclampsia.

8. "Beriberi" Cardiopulmonary toxæmia.

B. MILD TOXAEMIAS which do not end fatally are:

1. Neuritis, Cramps, Pruritis, Herpes, Eczema, Erythema, Urticaria, Acne, Asthma, Osteomalacia and Low Reserve Kidney or Kidney of Pregnancy.

VOMITING OF PREGNANCY.

According to Stander, Vomiting of Pregnancy occurs in almost 50% of all pregnancies. It appears at about the fifth or sixth week and lasts for a few weeks to two or three months. It is fortunate that in most cases the vomiting is very slight. Some patients experience only a feeling of nausea and it is customary to speak of morning sickness.

Soranus, in the last part of the first century was the first to describe this disease, but it was not until the nineteenth century that its importance was fully realised. Matthews Duncan in 1879, showed that vomiting of pregnancy is sometimes associated with definite liver lesions. Williams, Ewing and Stone have described a characteristic liver lesion in fatal cases of vomiting of pregnancy. This lesion consists in a necrosis of the central portion of the liver lobule, or, instead of necrosis, marked fatty degeneration of the whole lobule may take place. It is questionable, however, whether we are justified in speaking of a typical liver lesion of Vomiting of Pregnancy because in the fatal cases there must be superimposed the effects of marked starvation and dehydration and these in themselves produce histologic changes.

Vomiting of Pregnancy has generally been regarded as of three separate and distinct types:— 1. Reflex Vomiting. 2. Neurotic Vomiting. 3. Toxaemic Vomiting. Williams states that the neurotic is the most frequent type and Toxaemic the most serious.

The Reflex type of vomiting is very infrequent although there can be no doubt that certain abnormalities such as retroversion of the uterus and erosion of the cervix may be stimulating factors in the production of vomiting. It seems that it is more advisable

to classify cases of vomiting of pregnancy into grades or degrees of severity rather than into types. There may be metabolic or toxæmic basis for all cases of nausea and vomiting of pregnancy, while other factors such as abnormalities in anatomy or mental disturbance such as neurosis are added factors to aggravate conditions. It is better to speak of mild and severe vomiting of pregnancy and then to study these other superimposed factors.

ETIOLOGY: There have been numerous theories concerning the etiology of vomiting of pregnancy. Tweedy believes that absorption of food particles during the early stages of their digestion is responsible for hyperemesis and that in early pregnancy a foreign element appears in the blood, the normal food antibodies thereby being interfered with. Tweedy considers the vomiting of early pregnancy as nature's effort to reject food incapable of proper neutralisation. Siebert, on the other hand, believes in hunger as the cause of vomiting.

Levy-Solal found in the placenta of a vomiting patient an antigen which is reactivated by human serum and which produces shock in Guinea pigs; this antigen is not present in young normal placentas, and at the end of pregnancy the placenta is also without such an antigen. He concludes that women with vomiting of pregnancy are sensitive to placental extract and that they remain sensitive two or three days after abortion. After the fourth month, pregnant women are no longer sensitive to such an extract.

Hirst states that every woman during her menstrual life is constantly absorbing corpus luteum substance but that with the onset of pregnancy this absorption ceases. The corpus luteum of pregnancy increases in size until it reaches its maximum in the third month of gestation, and from this time on it is gradually absorbed. Vomiting of pregnancy disappears at about the time the corpus luteum begins to decrease in size, and Hirst suggests that this is not a mere coincident but that the corpus luteum plays an important part in relation to vomiting.

Some authors believe that the neurotic element plays an important part in hyperemesis. Lynch is of opinion that most cases of the vomiting of pregnancy can be explained on the basis of an underlying neurosis. Briudeau is also a firm adherent

of the hysteria theory for the etiology of vomiting.

Kotz regards over irritability of the vagus an underlying factor in most cases of vomiting, while Seitz thinks that it is due to reflex psychic and toxic vagal stimulation and that the vagal changes may be caused by disturbances of inner secretion.

Insufficient ovarian activity as well as insufficient adrenal and polyglandular activity has been suggested as the cause of vomiting of pregnancy.

In 1919 Hardinge and Duncan advanced the theory of glycogen deficiency in the liver of the mother as the cause of vomiting of pregnancy. They came to this conclusion because most patients suffering from vomiting of pregnancy had acetonuria, and because these patients improved on a diet rich in carbohydrates.

Velt suggests the production of a poison arising from Chorionic villi which he named "Syncytiotoxin". This poison is supposed to be neutralised by a maternal antibody called "Syncytiolysine." Failure on the part of the mother to destroy this foetal tissue that had entered the maternal circulation has been suggested as a factor in the production of vomiting of pregnancy.

There are various other theories concerning vomiting of pregnancy. Where the husband and wife belong to the different groups, a proteolysine is produced which causes hyperemesis.

From a consideration of the foregoing theories concerning the etiology of pregnancy it seems most likely that a metabolic disturbance and in particular perhaps, an upset in the carbohydrate metabolism, which in turn leads to incomplete oxidation of fatty acids plays a role in the different manifestations of this toxæmia of the early half of gestation.

The urine does not show any marked disturbances of the nitrogen partition except in very severe cases in which there is an increase in the ammonia coefficient. Williams and Slemons were the first to observe this change in the nitrogen partition and for a time regarded all patients suffering from vomiting of pregnancy with an ammonia coefficient of ten or over as severely sick. Underhill and others however have shown that a high ammonia coefficient may be the

result of simple starvation. Dieckmann and Crossen could find no marked disturbances in the urinary components except for a decrease in the Chlorides. The excretion rate of urea is within normal limits. Analysis of the urine in vomiting of pregnancy therefore has revealed no outstanding difference from the normal except a high ammonia coefficient which is probably the result of starvation.

Examination of the blood constituents has given more definite information. The non-protein nitrogen, urea and uric acid are usually increased in severe cases of vomiting of pregnancy. As anhydrosis is undoubtedly an important factor in the severe type of vomiting an increase in the blood constituents and a decrease in chlorides are often to be expected. A marked increase in uric acid however without other pronounced changes in the blood constituents is of great significance. Kermanner is of the opinion that in severe cases of vomiting there is a disturbance in the carbohydrate metabolism which is manifested by an abnormal sugar tolerance. Bokelmann and Bock noted a marked increase in acetone bodies in cases of vomiting of pregnancy.

Vomiting of pregnancy leads to under-nutrition and this in turn to decomposition of body substances. With longer starvation and after the carbohydrates have been exhausted, the fats and proteins of the body are called upon to furnish the required energy. In relative starvation the energy consumed, probably follows the same principles as in actual starvation, protein being spared to the very last. Small amounts of glucose given to starving animals are enough to neutralise a great amount of acetone bodies in the urine, and consequently acetonuria follows more as a consequence of carbohydrate deficiency than as a result of inanition.

The most outstanding chemical changes accompanying severe vomiting of pregnancy are a high ammonia coefficient in the urine, slightly increased nonprotein nitrogen, decreased blood chlorides, and increased uric, amino and lactic acids, with an accumulation of acetone bodies in the blood stream, and Stander further adds that dehydration, starvation and incomplete oxidation of fatty acids following a high ketogenic-antiketogenic ratio undoubtedly play the important

Hypotensyl tablets contain a special hypopiesic principle of the spleen.

part in the production of these chemical changes.

TREATMENT: Hirst believed that the corpus luteum plays an important part in the vomiting of pregnancy and has advocated the use of the extract of corpus luteum in the treatment of this disease. Carey suggested the use of desiccated placenta for the treatment of vomiting. He believes that the placenta is a gland of internal secretion and so may activate the thyroid and adrenals and thereby speed up the oxidation of partly spilt products that may be in the blood stream.

Transfusion with blood from postpartum cases was suggested by Carnett. His basis for this treatment is that vomiting of pregnancy is probably due to failure of the patient to produce a hormone antagonistic to the toxæmia which is caused by the poison. This treatment has been used by others but with unsatisfactory results. Treatment with the patient's own blood has also been suggested.

Roentgen-ray treatment has been used in the vomiting of pregnancy without convincing results. Many drugs have been suggested, such as luminal, calcium and bromides, but none of them have proved satisfactory. Titus has done a great deal of work on the glucose therapy of the vomiting of pregnancy. Thalheimer advocated the use of insulin in the treatment of vomiting of pregnancy and has reported some excellent results. Glucose when given along with insulin, acts as a protective against the development of marked hypoglycaemia. This combined therapy of glucose and insulin probably relieves the ketonuria and acidosis that usually accompany vomiting. Titus however is of opinion that glucose alone gives better results than insulin and glucose. There is great divergence of opinion as to the best method of treating vomiting of pregnancy.

The treatment of the patient depends on the severity of the disease and whether the patient is suffering from starvation and dehydration. If the patient is suffering from the earlier stages of severe vomiting of pregnancy the treatment is necessarily different from that when she is in the final stages, with marked dehydration, blood concentration and actual liver injury as a result of starvation.

If the patient is suffering from very severe vomiting of pregnancy, she is isolated and is given nothing by mouth for the first 24 hours. Fluids are given freely per rectum during this period. At the end of the first 24 hours, she is given small quantities of fluid by mouth at one hour intervals from 7 a.m. to 7 p.m. The kind of fluid is alternated and such drinks as orange juice, milk and barley water, glucose, and soda bicarb drinks. She is kept on these fluids till vomiting ceases and is then given solids to eat. In the average number of cases the vomiting usually ceases after the first few days. Sometimes it is necessary to repeat the routine of starvation, fluids and small solid meals a second or third time. It is very essential that on admission the patient be reassured by her doctor, her confidence gained.

In the very severe type of vomiting where there is a great loss of weight, a marked dehydration with perhaps signs of liver damage, it is essential to give the patient fluids and this is best accomplished by administering 10% of glucose solution intravenously. In the event of marked dehydration no time must be lost in restoring as far as possible the water balance of the body. The glucose may be given with or without the addition of saline. If with severe vomiting the patient is found to have a lowering of chlorides, 3% sodium chloride is given with equal parts of 10% glucose solution intravenously. Normal saline is also given subcutaneously. The use of insulin with glucose solution is discontinued as soon as the diacetic acid and acetone have been reduced to a trace. It is only given where there is ketosis. Ketosis may occur where there is acidosis or alkalosis. Within twelve hours after the vomiting is controlled, small amounts of dry food is given by mouth. Variations in the type and amount of food must be made, depending on the general condition of the patient and the period of starvation. In the occasional extreme case where induction of abortion is contraindicated, the patient may die regardless of the type of treatment.

The use of morphia is contraindicated as it is apt to increase the nausea. Small doses of atropine sometimes help to overcome the pylorospasm which is often present. The bowels are regulated by the use of mild purgatives.

(To be continued.)

COMPLICATIONS DURING ANTI-SYPHILITIC TREATMENT.

BY

DR. M. RATHNAVELU, I. M. S.,
(Honorary Assistant Surgeon, Venereal
Department, General Hospital).

Common complications that arise occasionally during intensive and radically curative treatment of Syphilis, extending over 2 years, are Dermatitis, Jaundice, Stomatitis and Haemorrhagic Encephalitis. The drugs used in the treatment are Arsenobenzol and its derivatives, Bismuth, Mercury and Iodides. All these produce cutaneous reactions and the place of honour is given to the Arsenobenzol compounds. Major complications are Exfoliative Dermatitis, Jaundice, Purpura haemorrhagica, aplastic anaemia, atrophy of the liver, severe gastro-intestinal reactions, ocular damage, renal reaction and death. Minor complications are slight skin eruptions, pruritis, Herxheimer effect, nitritoid reaction and arsenical stomatitis.

Etiology:

1. The health of the individual patient.
2. The drug and the method of preparation of the solution to be used.
3. The technique of administration.
4. Pre-existing skin conditions as dermatitis, eczema, lichen etc.
5. Alcoholism.
6. Highly neurotic patients.
7. Exposure to cold.
8. Injury to bone marrow which lowers the resistance to injections and tolerance to drugs.
9. Abnormal physiological function of the skin such as hypersecretion of fat leading to seborrhoea.
10. Sensitization by bacterial proteins and toxins circulating in the blood from any acute or chronic septic focus.
11. The theory of impaired liver function.
12. The theory of impaired suprarenals.

The trivalent arsenicals attack the vascular system and the liver, and through the vascular system the skin. The bone marrow is also more subject to arsenical attack. Pentavalent arsenicals attack the nervous system. The kidney is in general relatively exempt, the gastro-intestinal tract is usually

affected mildly. The gastro-intestinal tract, especially the mouth is the seat of attack under heavy-metal therapy. The kidneys in general, are more markedly affected by Bismuth or Mercury than with the Arsenicals; the vascular system less so. The liver is less affected by the heavy metals than by the arsenicals. The skin likewise has a relative immunity to heavy metals effect. Mercury damages the gastro-intestinal tract and the kidneys, Bismuth tends to affect like the arsphenamines, the vascular system and the liver. The vascular, hepatic and cutaneous reactions are due to the arsenic element in treatment and gastro intestinal (including stomatitis) and renal reaction to the heavy metals. Iodides give rise to coryza, puffing of eye-lids, headache, and rarely Iodide rash and do not cause serious alarm. Haemorrhagic Encephalitis stands out as the leading cause of death and because it is so largely idiosyncratic in onset, probably the most unavoidable cause.

Persons on the verge of poverty and cachitics are notably less tolerant of treatment than persons in better social conditions. High protein and high fat diets afford the maximum protection to the liver under arsenic therapy and that high carbohydrate diets afford maximum susceptibility to the liver injury produced by this group of drugs. High carbohydrate diet increases the seberrhic predisposition towards Exfoliative dermatitis. Trypsamide should not be employed in the pregnant women because nothing is known of its possible effect on the optic nerves of the child, irrespective of the mother; and malarial therapy should not be given during pregnancy, both because of its own serious effect and the abortifacient action of quinine.

Fever in syphilis is one of the first symptoms to disappear under arsenic treatment. The patient's temperature should invariably be taken as a routine before giving arsenic. Fever due to Tuberculosis, or a chronic pyogenic infection is a definite contra-indication to the use of arsenic. The parietic patient, particularly of the degenerated type is astonishingly tolerant of large dose of arsenic. Continuous treatment causes more minor but not more than the major reactions as in the case of definitely less effective intermittent treatment.

Hypotensyl tablets contain a special hypoplastic principle of the liver.

Intermittent treatment produces more complications than no treatment. Malignant syphilis and precocious tertianism are the result of short courses and arsenic injection without heavy metal. Patient's remediable defects should be identified and corrected. The removal or treatment of focal infections, early rather than late, general hygiene, mouth prophylaxis should be attended to. Alcohol and constipation should be avoided. A comparatively healthy mouth adds to the well-being of the syphilitic patient. A diet high in proteins and fats, and low in carbohydrates, helps in the prevention of cutaneous irritability.

The Patch test has a very considerable value though not absolutely infallible, in the detection of significant degrees of cutaneous sensitivity and risk of arsenical dermatitis. .3 gm of Neosalvarsan is dissolved in 1 c.c. of distilled water. A square inch piece of lint is saturated with this test solution, applied to the intact skin of the arm and fixed by adhesive plaster. At the end of 24 hours the patch is removed and the first reading made. A strongly positive reaction consists of an acute dermatitis at the test site with vesiculation. Partial positive reactions show only erythema and a few papules are not regarded as evidence of definitely established cutaneous hypersensitivity to the arsenic only pronounced dermatitis reactions are regarded as clearly positive. The test site of a strongly positive reaction usually returns to normal in about 3 weeks. Arsenic therapy should never be given to a patient who has developed exfoliative dermatitis or has developed jaundice though the patch test may be negative.

FUNCTIONAL TEST: Routine examination of urine should be made before giving arsenic and bismuth for albumen and sugar or bile if the conjunctiva is tinged yellow. Presence of pus in urine is important especially in tabetic neurosyphilis as evidence of the state of the kidney and bladder, damaged by retention and infection. The phenolsulphthalein test for renal function should be performed at the outset in tabetics for the estimation of renal tolerance and general condition, but is unnecessary during routine treatment.

Blood urea nitrogen should be obtained in tabetic patients, before beginning treatment, but is unnecessary as a routine except in patients under malarial therapy in which a

rise in blood urea, while under treatment, is a danger sign.

Estimation of Icteric index and Vandenberg reaction are essential in cases of patients who have developed jaundice during arsenic therapy.

Periodic differential blood counts of the Leucocytes is valuable in cases of slight itching and slight rashes and of stomatitis as threats of impending exfoliative dermatitis or aplastic anaemia due to appearance of abnormal proportion of eosinophiles and of nucleated reds.

DERMATITIS: The Arsenical radical in Arsenobenzol preparations gives rise directly to toxic Erythematous rashes, which, if severe or untreated, may proceed to Exfoliative dermatitis. Salvarsan and its substitutes play a larger part in the production of dermatitis than syphilis.

Chief predisposing causes are — 1. Alcoholism 2. Pre-existing dermatosis 3. Focal sepsis 4. Highly neurotic patients.

Exposure to cold may predispose to the dermatitis becoming more severe and to complications such as Broncho-pneumonia in a case of Exfoliative dermatitis. It may occur in non-syphilitic patients and hence syphilis has no part in its causation. The individual idiosyncrasy or susceptibility is one of the many complex factors that go to produce the explosion. Instances are many where patients have developed cutaneous reactions including the exfoliative type, irrespective of the dose and the number of injections given. Usually the complications are more common after the 3rd injection. It is much less frequent to intramuscular than to intravenous therapy. Initially it begins as a local or generalised erythema, which rapidly becomes vesicular or oedematous and finally ends in exfoliation. Generally the condition is ushered in by itching of the back of the hands and of the arches of the feet, and occasionally there is a sensation of formication round the mouth. It may occur within 24 hours after the last injection or it may be delayed for days or weeks. When the erythema becomes generalised, there is often an associated conjunctivitis and laryngo-bronchial catarrh. The face and eye-lids become swollen, itching is intense and the patient feels miserable. The temperature varies from 100 to 104 F. The erythematous condition quickly becomes vesicular and finally proceeds to desquamation. The patient makes a slow but uninterrupted

recovery unless complications set in. The most dangerous complication is Bronchopneumonia and to avoid this, the patient is confined to bed, till the temperature comes to normal and for sometime afterwards.

EXFOLIATIVE DERMATITIS runs a definite course. The prodromal symptoms are flushing after injection, slight or severe itching, gastro-intestinal irritation, erythema or patches of dermatitis at the flexures. In spite of the prodromal symptoms, the treatment is continued, the dermatitis breaks out within 48 to 64 hours after the next 1 or 2 injections. The first thing noticed is itching which persists throughout the course. Then develops a fine papular rash which has the appearance of goose skin. The papular eruption is first noticed on extremities, flanks and back and finally it becomes generalised. Rarely the face and scalp are the first to be affected. In severe cases the rash may be followed by malaise, head ache, vomiting, fever and faucial congestion. The cutaneous reactions are most marked on areas exposed to sun-light. A couple of days after the papules have appeared, they are converted into vesicles and rarely into bullae, depending on the severity of the reactions which soon bursts and become exudative. The skin becomes oedematous sooner or later and it is marked with the onset of exudation. Oedema is an essential feature and those cases in which oedema does not develop are not arsenical dermatitis. When the oozing or exudation is free, the itching is abated only to return with the drying up. The flexures and folds, as the axillae, the groins, the elbows and neck are the regions that suffer most with the onset of exudation. The oedema is more marked on the face, legs and feet and rarely the elbow regions. When the condition is fully developed, there is universal oedema, itching, lachrymation, oozing and sometimes a purplish or violet-tint usually on the face or around the eyes. The patient is very miserable, lies flat practically immobile with the face bloated, eyes closed, the whole body swollen and covered with clotted serum, with no interest in himself or in the surroundings. The mental condition is changed. He becomes irritable, indifferent and stubborn. He answers questions with reluctance and does not like to be disturbed. In fact he does not co-operate. At about this time,

conjunctivitis and stomatitis also develop. The oedema of eyelids is so marked that the patient is unable to open the eyes. The conjunctivae are red and inflamed with photophobia, lachrymation and a fair amount of purulent discharge. If the eyes are not properly attended to, cornea may get ulcerated. There is an accompanying glossitis, pharyngitis and laryngitis with difficulty of chewing and swallowing. The tongue is raw, red, painful and fissured. Appetite is poor and the patient has no desire to take food. Diarrhoea also sets in. The patient feels so chill, that he requires 2 or 3 blankets to keep himself warm. Chills, rigor and temperature varying from 101 F to 103 F are common features. Occasionally temperature may rise up to 105 F. The rise of temperature is maintained for the first few days and then assumes the characteristics of a septic temperature. Sleeplessness is rather the rule. The blood picture shows leucopenia with markedly reduced polymorphs (50 to 60%) largely increased eosinophiles (20 to 60%) and increased mononuclears. In course of time the dermatitis becomes universal and the exudation gradually diminishes till it finally stops. The wet oozing skin now changes to a dry scaly one and exfoliation begins. With exfoliation itching returns if it had already subsided. When the exudation is at its height the scales fall off, when the patient gets up the bed is full of scales every morning. The whole body from scalp to toe exfoliates before the condition finally subsides. Even if the dermatitis was not generalised the exfoliation is universal. The process of exfoliation continues for some weeks before it completely stops. Due to scratching the exfoliated skin hangs in folds. They may be trimmed and should never be pulled off. The thin skin of the palms and the soles also exfoliates. The exfoliated skin may come off in parts or at times it peels off as gloves. The hair thins and falls off producing alopecia which at times may be complete. The eyelashes particularly of the lower lids and eye brows also are shed. Ear ache with serous or sero-purulent discharge is fairly common as the external ear and auditory canal also exfoliate, the ear is packed with scales. When dermatitis develops during pregnancy it generally ends in abortion, miscarriage or premature delivery.

Hypotensyl tablets reduce Systolic Blood Pressure.

As the patient recovers, the oedematous leathery thickened skin peels off in large flakes and in due course tiny, pale, thin areas of normal skin appear here and there. The new skin is soft shining and of a lighter color. It takes weeks to months for the return of the original appearance. The complexion of the patient is greatly enhanced to compensate for all the suffering and misery. As the skin regains its normal state, the patient becomes less irritable, more reasonable and in better spirits, the appetite improves and sleep returns. Itching takes a long time to disappear. Usually it takes 10 to 12 weeks for the patient to return to his normal state after the protracted illness. Pigmentation of the skin is associated with the development of post arsenical dermatitis or as its sequel.

It generally clears up after sometime.

TREATMENT-PREVENTIVE: 1. Examine the patient for any signs of disease in kidneys, liver and foci of suppuration and remedy them before starting treatment. 2. Enquire into the previous history of intolerance to treatment such as dermatitis, jaundice, purple haemorrhagica etc. and if there is anything, avoid arsenic therapy. 3. Arsenobenzol derivatives should not be given to patients with seborrhoea, eczema or other dermatitis. 4. If the patient complained of itching after the last injection, stop arsenic and inject Sodium Thiosulphate. 5. In early and doubtful cases, give arsenic preparations fortified with Sodium Thiosulphate or Calcium Thiosulphate. 6. Remove all local irritants applied to the skin, e. g. Tincture of Iodine by alcohol and mercury by carbon tetrachloride or benzoin. 7. Give a high protein and fat diet to a patient before injection. 8. A complete blood count is necessary.

CURATIVE: Complete rest in bed and hospitalisation are essential. The bath room should be adjacent to it. An experienced and sympathetic nurse should be in attendance. Clip the hair short. Radiant heat is applied to minimise shock and to keep the patient warm. The mouth should be kept clean and when stomatitis supervenes, give condy's gargle. At the time of exfoliation it is beneficial to smear the lips with sterile vaseline or borated rose ointment. The patient is well covered with blankets to prevent chill. If the patient comes within 12 to 24 hours after the injection, veresection to the extent

of 10 to 12 ounces may be done. When the dermatitis becomes universal, there is generalised oedema and so fluid intake must be reduced, as too much will increase the existing oedema or the oedema will recur. When there is oozing from the skin particularly of the face bland wet dressings may be applied, for example Calamine lotion to which may be added 10 grs of Ichtyol to relieve itching. If the patient feels cold and chill, a dusting powder may be freely used for powdering the body and sprinkling on the bed.

Zinc Oxide	dram.	1.
Calamine preparata	drs.	2.
Mag. Carb. levis	drs.	2.
Acid Salicylic	grs.	v.
Pulvis Amyli add	ounce	1.

The powder dries up the exudate and relieves itching and can be used throughout. When the oozing is profuse, put on a wet dressing and change it as often as necessary. The patient should be sponged twice a day with warm water containing alkali and starch. Whenever possible the patient should be given a bath. The bath should be large enough for the patient to lie down. Half fill the tub with warm water and dissolve in it 8 oz of soda bicarb and 12 oz. of starch poultice to soothe the intolerable itching of the patient. The temperature of the bath is kept at 98 F and the patient should remain there for 10 to 30 minutes. On getting out of the bath, the body should be dried gently by mopping with a towel but not by rubbing and immediately after, powder the body before sending patient to the bed. The bed sheet is changed daily. When the exudation has stopped and the skin becomes dry and scaly, some mild ointment or plain sterile vaseline or cocoaunt oil and lime water emulsion is useful. The bath removes the scales and relieves the itching. The tags of skin hanging on should be trimmed and not pulled out. For conjunctivitis, wash the eyes twice or thrice a day with boric lotion (10 grs to one ounce) or when there is purulent discharge, 10% of Argyrol drops may be used. The ears should be syringed with boric lotion or 2% Soda Bicarb solution and remove all scales from the ear. The foci of suppuration should not be tampered with. It not only produces a flare up but also has been known even to cause death (Stokes). Autohaemotherapy 5 to 10 c. c is found useful for intolerant itching and for ulcerated patches.

Diet should be fluid or soft, wholesome and nutritious (e.g.) milk, congee, bread, barley water etc. Liver in some form should be included in the diet. Very slowly the patient should return to his normal diet. Any slight indiscretion in diet may provoke relapses. Alcohol and coffee should be prohibited.

Inject 5 to 10 c. c. of Sod. Thiosulphate (1 gm in 10 c. c.) intravenously every day for 6 days. If there is no improvement after 3 or 4 injections of Sod. Thiosulph. stop it and give 5 to 10 c. c. of Cal. Thiosulph (10%) intravenously. Sod. Thiosulph is a detoxicating agent clinically. It increases the excretion of arsenic and it is able to convert insoluble arsenic compounds in the skin into soluble ones. It also produces diuresis and acts through the reticulo-endothelial system. The reticulo-endothelial system through its phagocytic property is an important agent in the detoxication of blood.

Calcium Thiosulph has a greater value as a prophylactic and therapeutic agent in post-arsenobenzol dermatitis. It prevents nitritoid crisis and is useful in cases complicated with pulmonary tuberculosis. Liver extract has remarkable improvement in post-arsenical dermatitis. It can be given both by mouth and by injection. Liver extract (Bengal Immunity Co.) and Campolon (Bayer) is injected intramuscularly daily for 5 days. If it is injected before the dermatitis becomes universal it does not spread to other areas and if given early enough even the further development of dermatitis is stopped. It shows marvellous effect at whatever stage it is given. Liver soup or curry is given by mouth till the patient completely recovers. Blood examination during liver injections shows immature blood cells in the circulation. The liver extract stimulates and supports the impaired liver and also it stimulates the depressed bone-marrow. Arsenobenzol depresses the bone-marrow and the liver extract stimulates it by the fact that immature blood cells are seen in the circulation during liver treatment.

Glucose considerably lessens the bad effects of arsenic on the liver. Jaundice is unknown in those treatment centres where 3 fl. oz. glucose is given as a routine 1/2 to 1 hour before the injection. Inject 25 c. c.

of 25% glucose (Bengal Immunity Co.) intravenously daily for 5 days. A well fed liver is better protected by the reserve of large amounts of glycogen in its cells than a starved liver. The liver cells that are full of glycogen are unable to take arsenic and allow to be poisoned by it. The liver is the chief organ that metabolises the arsenobenzol compound. A damaged liver predisposes to dermatitis, as evidenced by the successful treatment of liver therapy. High fat and protein diet are given to protect the liver against injury and only a low carbohydrate diet should be given.

Exfoliative dermatitis has little or no effect on the course of syphilis. After an attack of post-arsenic exfoliative dermatitis, all antisyphilitic treatment should be suspended for 6 months and arsenic in any form should never be given. Do the patch test before resuming treatment. Only Bismuth should be given in such cases. If the patch test is negative, give small doses of arsenic of a different brand intramuscularly. Patients who were intolerant to Arsenobenzol compounds may tolerate Tryparsamide which is very valuable in the treatment of Neurosyphilis.

(To be continued)

Abstracts

THE TREATMENT OF ANGINA PECTORIS.

By

K. SHIRLEY SMITH, M.D., B.Sc., F.R.C.P.

A patient who genuinely experiences very severe pain in the centre of the chest most probably has some form of angina pectoris. This pain is the expression of myocardial ischaemia, which is the outcome of disease or derangement of the coronary arteries. If the arrest of blood supply is permanent, infarction of the heart muscle takes place and the pain is prolonged for hours or days (coronary thrombosis). During exertions the heart muscle requires extra blood, and if through disease of the coronary arteries this demand cannot be met temporary myocardial ischaemia results and anginal pain is experienced; this pain disappears with the cessation of effort, and is therefore known as angina of effort. Sometimes paroxysmal anginal pain arises independently of effort,

Hypotensyl tablets reduce Diastolic Hypertension.

but it is then associated with some factor that might be regarded as the equivalent of effort, such as a large meal or a fit of anger, or a sudden change in the temperature of the environment. Paroxysms of this kind are suitably referred to as spasmodic angina, or as angina decubitus if the attacks take place at night. A consideration of the syndrome of coronary thrombosis is beyond our present purpose. Of the other forms of angina, effort angina is by far the commonest; it will therefore receive primary consideration here.

Whatever its severity, anginal pain has invariably a continuity that distinguishes it sharply from the stabbing or pricking pains over the left mammary region which have no constant relation to effort and do not represent myocardial ischaemia. Anginal pain has a tendency to radiate into the throat, to the left shoulder and arm, and sometimes to both arms, even reaching the fingers. Unusually, radiation may involve the jaw, epigastrium, or scapula. Any conjunction of events that conduces to relative myocardial ischaemia may play a part in the production of anginal pain. Thus an emotional disturbance or any form of rapid action of the heart may be as potent as physical activity to invoke pain, while anaemia or hypoglycaemia serve as well as coronary sclerosis to starve the heart muscle.

GENERAL REGIME.

The decision that a patient is suffering from angina pectoris commits the physician to a complete review of the patient and his mode of life. This includes work and recreation, hours of rest, diet, habits, and temperament. The scheme of treatment should therefore embrace these factors in a suitable regime. It should also include preventive measures and the means of treating attacks. Finally, it should seek to control associated or contributory disorders.

The treatment of angina pectoris consists in a mode of life rather than a therapeutic system. Every modification in the daily life of the patient has as its object the avoidance of the pain. In milder grades of the malady the patient is allowed to pursue such activities as do not result in pain. It is often found that the amount of exertion necessary to induce an attack is remarkably constant, and the intelligent individual quickly learns to keep within the limits of pain-production. He should be warned to avoid those activi-

ties which might compel unwonted exertion, such as country expeditions and the care of children. All forms of strenuous activity—running, swimming, rowing, lifting, and the like—should be absolutely forbidden. Inquiry should be made into the business and domestic affairs of the patient, and, as far as possible, all sources of worry, anxiety and fatigue should be removed. Sometimes it is found that the hours of rest are insufficient; ten should be a minimum. The patient should be taught to relax his muscles purposely when resting, and to divert his mind, if necessary by suitable reading, from the cares and worries that so often aggravate the condition.

DIET.—There is no need to limit the diet in any way that is irksome or obtrusive. Moderation in a general dietary is to be advised. Meals should be small in bulk and taken with a minimum of fluid. In the spare, active type of patient a tablespoonful of medicinal glucose, taken in powder form with the principal meals, serves as extra nutrition for the heart muscle. In general, alcohol is best avoided, but the patient who sets store on a glass of sherry or white wine with a meal, or who finds that a whisky at night promotes mental relaxation and sleep, may derive more harm than good from abstinence. Exercise after a meal is particularly apt to induce anginal pain; sitting for half an hour to an hour after food is a good rule for all anginal subjects and especially for those in whom the taking of food predisposes to pain. When it is recognized that a change of temperature brings on an attack, the bedroom should be warmed both before retiring and before rising. Cold winds are especially to be avoided by these patients.

REST.—Confinement to bed for a period of two or three weeks is indicated in the following circumstances; when the attacks are becoming more frequent or more severe; when the nocturnal attacks supplement angina of effort; when there is suspicion that the anginal syndrome had a recent origin in coronary thrombosis; when there is evidence of active myocardial disease (for example, frequent premature contractions or various grades of heart-block); when associated diseases such as syphilitic aortitis or an anaemia exist. It is advisable sometimes to send the patient—if his financial status allows it—on a holiday of three to

six months in a warm but not hot climate. This is specially advisable if the disease is of recent onset and if it is suspected that the occupation or environment has contributed to the development of the syndrome in a highly strung patient; also if the anginal syndrome dates from an acute coronary occlusion. In the latter event the patient has, in any case, a month or two to spend before he can be allowed to resume even partially the physical and mental stress of his occupation.

MEDICINAL TREATMENT.

Medicines may be administered as treatment in an attack, as means of preventing attacks and as remedies for individual symptoms.

IN AN ATTACK.

An "attack" often consists merely in the development of a premonitory pain or sense of constriction during exertion. The patient should at once discontinue the effort and, if possible, sit down; he should chew a tablet of trinitrin 1/100 grain, and allow it to dissolve under the tongue. These measures usually bring relief within a minute or two; if not, another tablet should be taken.

The pain may in severer cases develop more suddenly or become rapidly intense. The same principle of immediate rest applies, but nitrite may be more advantageously inhaled. A capsule of amyl nitrite (5 minims) is crushed and held under the nostrils, while several deep breaths are drawn. The pain should then abate within a few seconds, and at the same time the patient experiences a sensation of heat in the face, throbbing of the head, and sometimes dizziness. Patients should be warned of these collateral effects before being given the first inhalation of amyl nitrite. When no nitrite is available, whisky or brandy may give considerable relief, and they may also be used if the patient shows any degree of collapse or faintness after the attack. If an attack persists for an hour or more in spite of nitrites, coronary thrombosis, has probably occurred the patient should be put to bed and given an injection of morphine $\frac{1}{4}$ grain.

TO PREVENT ATTACKS.

The success or otherwise of a patient in warding off attacks of effort angina is in direct proportion to his intelligence and care in following the prescribed regime. The

pain is so often related to a particular amount of exertion, and even confined to a certain time of day, that a wise patient has a fair prospect of preventing attacks. But whatever forethought or care the patient exercises he is never free from the possibility of spasmodic attacks at any time and he should therefore always carry one or two capsules of amyl nitrite and some tablets of trinitrin. The latter deteriorate with keeping, and fresh supplies should be obtained every two months. If the patient feels he must undertake some activity that is apt to bring on the pain, he should take one of the trinitrin tablets a quarter of an hour in advance. If the patient is subject to pain at certain times of the day, despite his usual precautions, he should take trinitrin before those times. Such medication may be given from three to a dozen or more times in the day. By this means the patient may be able to follow quiet activities and lead a useful life, whereas otherwise he would remain gravely incapacitated, tied to his house, if not to his room. This therapy may not safely be regarded as a license for unnecessary activities.

Another drug that is known to produce dilatation of the coronary arteries is theobromine sodium salicylate (diuretin). This may be given as a routine in doses of 10 grains thrice daily; it is perhaps specially indicated when coronary sclerosis is attended by infrequent bouts of anginal pain. When the patient is highly strung, and there is a pronounced neurogenic element in the attacks, the combination of 5 grains of theobromine with half a grain of sodium luminal is often valuable.

FOR OTHER SYMPTOMS.

Apart from those medicaments directed to producing coronary dilatation, the patient may need treatment for associated disorders of function. If he is of nervous and excitable temperament a routine sedative such as a draught combining 10 grains of potassium bromide with $\frac{1}{4}$ grain of luminal may be given on retiring or twice daily. This will often enable the patient to tolerate the extra hours of rest which have been advocated in the readjustment of his regime. For insomnia this draught may be effective, or, alternatively, 20 grains of potassium bromide with 10 grains of chloral hydrate. Chloral hydrate (20 grains) or syrup of chloral 2 (drachms)

Hypotensyl tablets contain the blood pressure reducing principles of Mistletoe.

offers the best prospect of relief from angina decubitus.

Flatulence or gastric distension seems frequently to predispose to attacks of angina pectoris. A pill containing calomel $\frac{1}{6}$ grain, menthol $\frac{1}{4}$ grain, pulv. zingib. $\frac{1}{4}$ grain, and taken thrice daily after meals is then useful. The treatment of constipation is important, since many patients experience attacks through straining at stool. For constipation that is more than occasional it is best to employ a regular lubricant, such as paraffin emulsion half an ounce twice daily, with or without phenolphthalein 1 to 3 grains. Senna tea or cascara evacuant may be given in more obstinate conditions.

DRUGS TO AVOID.

Smoking is unwise for those who suffer from angina. In some syndromes it is clear that the use of tobacco increases the frequency and severity of the pain. For these patients, and for those who have chronic cough, smoking should be forbidden. On the other hand, there is less to be said for abstinence in those who have gained no benefit from it during a period of some months.

There are certain drugs that may be dangerous if given to anginal patients. Adrenaline, ephedrine, and thyroid, even in small doses in some subjects, increase the rate and force of the heart-beat. The myocardium will consequently demand increased blood supply, which the coronary arteries may not be able to provide. These drugs are therefore apt to provoke anginal pain.

TREATMENT OF ASSOCIATED DISORDERS.

Apart from the measures designed to prevent attacks or to alleviate other symptoms, there are frequently associated disorders which urgently need correction. Such collateral conditions may exert a harmful influence in that they throw an additional burden on the heart; to this group belong obesity, with the frequently attendant flat feet; high blood pressure; and thyrotoxicosis. Other associated abnormalities, such as anaemia and hypoglycaemia, render the patient specially liable to attacks by enfeebling the nutritive power of a myocardial blood supply already reduced in volume.

Obesity offers special difficulties of treatment in the subject of angina of effort. Exercise and thyroid medication are alike contra-indicated. Dieting alone remains. The

patient should be instructed to avoid fried foods, gravies and sauces; to take no sugar in beverages, no food at tea-time, no bread except at breakfast, and no food between meals. He is advised that lean meat, clear soup, fish, chicken, green vegetables, and fruit are not fattening and should form the bulk of the diet. Flat-foot and other minor foot troubles that may result from obesity constitute not only a source of peripheral irritation but a definite extra load on the heart. They therefore demand correction. The elimination of septic foci may turn out to be of importance. Sources of gross sepsis, such as dental caries, pyorrhoea, and sinus or tonsillar infection, demand judicious removal at an early opportunity.

High blood pressure commonly exists in those subject to angina. The regime, dietary, and medicaments already mentioned in the treatment of the anginal patient are those which may also help to lower the blood pressure. When the pressure remains persistently at a high level venesection (20 ounces) is indicated, and may be repeated at intervals of three months if it confers benefit. When a patient suffers from angina and thyrotoxicosis, thyroidectomy may be the only means of giving relief and improving the effort tolerance. If this operation is performed the surgeon should aim at complete removal. The resulting myxoedema can subsequently be corrected by suitable thyroid medication. If angina pectoris and diabetes occur in the same patient the coronary syndrome should first receive attention. It is wisest not to interfere too much with the diabetic condition, and the patient is safer passing small amounts of sugar with a mild hyperglycaemia. The attempt to abolish glycosuria and hyperglycaemia by the use of insulin in these patients has many times brought infraction of the heart or sudden death. The last, but by no means least important, contributory factor is anaemia. The cause (or colour index of the anaemia is immaterial from the standpoint of anginal pain. For pernicious anaemia the usual liver therapy should be instituted. For the microcytic or nutritional types, pil. feri, 30 grains thrice daily, or iron and ammonium citrate 40 grains thrice daily, will be suitable medication.

SURGICAL TREATMENT.

From time to time certain surgical procedures have been advocated for the relief of angina pectoris. Paravertebral injections

of alcohol are said to yield good results. Cervical or dorsal sympathectomy has also been followed by improvement in some cases. These and other surgical procedures are still largely in an experimental stage, and will not be further considered.

B.M.J., 11th May 1935.

MADRAS MEDICAL COUNCIL.

REVIEW OF WORK FROM OCTOBER 1933
TO MARCH 1934.

By V. RAMA KAMATH,

Member, Madras Medical Council.

(Continued from July issue).

FRAUDULENT AND INCORRECT REGISTRATION.

Another notorious feature of the mal-administration of the office of Registrar of the Madras Medical Council during the period from 1924 to 1932 was the registration of unqualified medical practitioners. There can be no doubt that these registrations were effected by fraudulent means. So far six cases have been found out and the Council erased three names (1) C. Seshachallum Nayudu (2) A. Thiruvankatam and (3) K. Narasimha Nayudu. The first was registered in 1929 with the qualifications L. M. & S., and D. T. M. H. Calcutta University and the second in 1931 with the qualification L. M. & S., (Singapore) and the third in 1925 with the qualification L. C. P. S. (Bombay). Three more will be dealt with by the Council at the next October session. It is really inconceivable how such fraud could be committed in the Medical Register when the Registration Certificates were issued under the signature of the Registrar. Yet such fraudulent registrations did take place and the harm these 'unqualified registered medical practitioners' must have done to the public, may be better imagined than described. The Medical Registration Act instead of protecting the public from unqualified practitioners was made use of by unscrupulous persons for quite a reverse purpose.

CONTROL OVER MEDICAL EDUCATION.

Section 21 of the Madras Medical Registration Act provides for the control of the Medical Council over the Medical Education both in Medical Colleges and Schools. Government and the Universities who have complete control over medical education of schools and colleges respectively

have not been submitting even for the formal approval of the Medical Council any proposal regarding changes in the curriculum of studies nor did the Medical Council apprise these authorities of their responsibilities. As mentioned by me in the Review of work published in The Medical Practitioner in the January 1934 issue, I moved a resolution in 1931 at the October session that two Inspectors should be appointed by the Council, one to supervise the final year L.M.P. Examination and the other the final year M. B. B. S. Examination and it took more than two years for this resolution to take effect. Dr. F. J. Dyson who was appointed as a visitor for the final M.B.B.S. examination submitted his report at March 1934 session of the Council and Lt. Col. Hingston did so at the October 1934 session of the Council. It was remoured that there was a surprise and a stir at the Madras Medical College Examination Hall and some of the examiners resented that the visitor appointed by the Medical Council was a chief medical officer of M. S. M. Ry., and not an educationist. It is a pity that these resenting examiners could not realise that the medical education imparted at the Medical College and the examinations conducted for testing the proficiency of the student, should not be merely of academic interest. The education imparted and the examinations conducted should serve the purpose for which they are meant i.e., to find out if students passing out from the medical college were competent to practise Medicine Surgery and Midwifery to the satisfaction of the public. There could not have been a better judge than a medical practitioner who in the person of Dr. F. J. Dyson has a double advantage, himself being not only in active practice but also having much to do with a large number of medical practitioners of all grades under him in his capacity as the Chief Medical Officer, M. S. M. Ry. Dr. Dyson made a report to the Council at its March 1934 session noting his satisfaction at the examination held for the final M. B. B. S. degree. Lt. Col. Hingston submitted his report to the Council at the October 1934 session. The report has been published in the correspondence columns of this issue. The report being self explanatory needs no special comments. My object in requesting the Medical Council to appoint visitors at the School and College for the final year

examination was to demonstrate to the profession and the authorities that the Provincial Medical Councils had adequate powers to control medical education and it was very unfortunate that the Provincial Councils did not exercise such control so far and that there was no justification for bringing into existence an all India Council for the purpose of controlling medical education in this country.

The dissatisfaction caused to some of the University examiners by the visit of Dr. Dyson at final year M.B.B.S. examination had a repercussive effect. Soon after Dr. Dyson's visit the Madras University authorities suggested to the local Government the desirability of amending the Madras Medical Registration Act to do away with the control of the Madras Medical Council over the Medical Colleges under the Universities as such a control was also exercised at present by the Indian Medical Council. The Government referred this matter to the Madras Medical Council for its opinion but the Council after long discussion did not approve the suggestion of the Madras University. The affair is not likely to stop here unless the Madras Medical Council treats Section 21 (Control over medical education) of the Madras Medical Registration Act as a dead letter as they have been doing heretofore.

ELECTIONS.

Part I. The Practitioners grouped under Part 1 of the Madras Medical Register are represented by one member. Dr. R. J. Dyson continued to represent them till the March 1934 session of the Council and later resigned his seat as he went home on leave. The vacancy was notified and nominations were called for by the issue of precepts on or about the 1st June 1934. No nominations having been received by the returning officer the election proceedings had to be conducted again in the month of August 1934 when Dr. R. J. Dyson was returned unopposed.

Part II. Part II of the Medical Register was represented during the period under review by Drs. Rao Bahadur T. S. Tirumurti and S. Rangachari. After the sad death of Dr. Rangachari the vacancy was filled up by Dr. M. S. Krishnamurthi Ayyar, the then Chief Editor of The Medical Practitioner who was returned to the Medical Council

unopposed. But Dr. Krishnamurthi Ayyar died suddenly 10 days after he attended the October 1934 session of the Council and the vacancy caused by his death was filled up by election, Dr. U. Krishna Rao being returned unopposed. Dr. Tirumurti's term of office expired on or about the 20th October 1933. But due to carelessness on the part of the then Registrar, the vacancy was not notified and Dr. Tirumurti attended the October 1933 session of the Council though he was not on that date a member of the same. I brought this irregularity to the notice of the Council at the March 1934 session and the Council had to re-affirm the proceedings of the October 1933 session of the Council to regularise the proceedings. The Election proceedings were notified early in April 1934 for the vacancy caused by the expiry of term of office of Dr. Tirumurti and Dr. Tirumurti was returned to the Council unopposed.

Part III. The practitioners registered in part III of the Madras Medical Register were represented by Drs. U. Rama Rao and V. Rama Kamath during the period under report. The term of office of Dr. V. Rama Kamath expired in the month of September 1934 and he was re-elected.

The Andhra University Seat: The Faculty of the Andhra University elected Major J. A. W. Ebdon, Principal, Vizagapatam Medical College to represent the Andhra University in the place of Lt. Col. Anderson who ceased to be a member being no more on the staff of the Vizagapatam Medical College.

NOMINATIONS.

During the period under review Lt. Col. K. G. Pandalai, Lt. Col. V. Mahadevan, Lt. Col. C. A. F. Hingston, Dr. T. Krishna Menon, Dr. N. Venkataswami Chetty, Dr. (Miss) Ida S. Scudder and Dr. C. Frimodt-Moller were the members nominated by the Government; after the March 1934 session. Drs. C. Frimodt-Moller and Miss Ida Scudder resigned their seats having proceeded home. In their place Dr. (Mrs.) C. M. Mouahan and Dr. (Miss) J. Findlay have been nominated by the Government and they took their seats in the Council at the March 1935 session of the Council. Dr. N. Venkataswami Chetti has been re-nominated, his term of office having expired in December.

1934. The late Dr. T. Krishna Menon was re-nominated in September 1934 his term of office having expired the previous month and after his sad death the Government have nominated Dr. T. Satakopan who took his seat on the Council at the March 1935 session.

MISCELLANEOUS ITEMS.

A medical practitioner passed out of the Bengal National Medical College which existed some years prior to the passing of the Madras Medical Registration Act applied to the Council to recommend him to the Government for the registration of his name in the Madras Medical Register. The Madras Medical Council has been appointing these few years a committee to consider about the registration of practitioners whose qualifications are not in the schedule approved by the Government and this committee refused to recommend the practitioner referred to above to the Government for registration. There are at present a few practitioners, passed out of the National Medical College who were permitted by the Government to be registered. To be consistent with the policy so far adopted by the Government as well as by the Council, I proposed at the October 1933 session of the Council that the Government be requested to permit registration of practitioners passed out of the Bengal National College in case they apply for registration on or before the end of July 1934 and that a notification be published in the Fort St. George Gazette and two English dailies that persons holding diplomas granted by the Bengal National College should apply for registration before the end of July 1934 after which date they will not be eligible for registration.

But my proposition was not carried by the Council. Drs. Dyson, Tirumurti and myself being for my resolution and Col. Anderson, Dr. Krishna Menon, Col. Mahadevan, Dr. Moller, Col. Hingston and Dr. Rama Rao being against. The General Medical Council Great Britain soon after it came into existence did register all practitioners who were practising Allopathic system though they did not pass out from any recognised institution and fixed a period within which such practitioners should apply for registration. The Bombay Medical Council followed the procedure adopted by the General Medical Council soon after it

came into existence and I thought it was desirable though late, to adopt the same procedure in Madras so as to give an opportunity to all especially so as the Madras Medical Council did register such practitioners till a few years ago.

It is most unfortunate that the Government do not use sufficient discretion while nominating members to the Council. They ought to give representation to all the existing recognised medical institutions without invidious distinctions. The Lady Willingdon Medical School is not so far represented in the Medical Council and one of the late Medical Officers under the Government who at the time of his nomination was the Principal of the Medical College still continues to be so though he has retired from service and the Madras Medical College as such, has no representation at present. It is not only unjustifiable and even illegal for a person to be in the Medical Council when he ceases to serve the purpose for which he was nominated by a body. As an instance in point the Medical Council, received a memorandum from the Government requesting the Council to state why they did not accept the recommendation of the syndicate of the Andhra University that a member elected under section 5 (1) (bb) of the Madras Medical Registration Act should be considered to have vacated his seat on the Medical Council when he ceased to be a member of the Faculty of the University. The syndicate of the Andhra University did primarily refer this question to the Madras Medical Council so as to enable them to send a representative of the Andhra University to the Medical Council as their previous nominee, Lt. Col. Anderson though ceased his connection with the Andhra University being transferred to the Madras Medical College, did not resign his seat on his own accord. The Council at the first instance did not approve the suggestion of the Andhra University though I pointed out to them at the time the illegality of the procedure then adopted by the Council. The memorandum referred to above was discussed at the March 1934 session and the Council resolved,

"To inform the Government that after reconsideration the Council is of opinion that a member elected by the Faculty of any University should be considered to have vacated his seat on the Medical Council when he ceases to be a member of the Faculty of that University, provided that the Council is informed accordingly."

Applying the same principle I moved a resolution at the October 1933 session to the effect,

"That the Council respectfully suggests to the Government that while nominating official members on the Madras Medical Council, such nomination should be made in the name of the office and not in the name of the person holding such office."

But the resolution fell through for want of a seconder. Evidently my colleagues in the Council valued personal relationship more than the interest of the principle involved in the resolution. Now that the Council reconsidered their own judgment with regard to the representation of the Andhra University, I hope to move the resolution above once again.

Ever since I entered the Medical Council I have been seriously considering the desirability of controlling quack practice. I therefore moved the following resolution on the 5th March 1934.

"The Council respectfully suggests to the Government the necessity of adding a section to the Madras Medical Registration Act (IV of 1914) for the purpose of prevailing quacks from practising the Allopathic system of Medicine and Surgery."

Almost all the members of the Council including the President opined that it was impracticable to stop quackery and said that even in more advanced countries the Governments were not able to stop quackery. Thinking that discretion was better part of valour I did not press this resolution. I intend to place this matter before the Council in some other form in the near future.

My revered late colleague Dr. M. S. Krishnamurthy Ayyar moved the following resolutions at the October 1934 session of the Council:

"1. That in the interests of the public and the medical profession it is highly desirable that candidates that pass out successfully from the Medical Colleges and Schools should undergo a practical course of training in Medicine, Surgery and Obstetrics, in the Government or recognized medical institutions for atleast a period of one year, before they become eligible for registration by the Council.

2. That a Committee of not less than three local Members of the Council be appointed to make suitable arrangements for the location and equipment of the office of the Council.

3. That the Government be requested to affiliate the Medical Schools to the Universities.

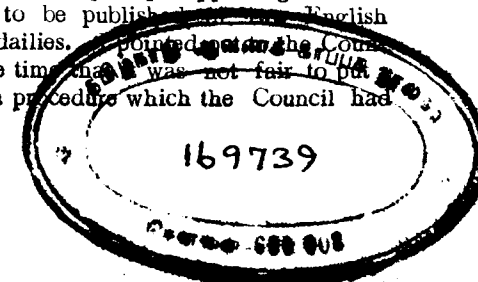
4. That the Council to take active measures against persons holding bogus medical qualifications."

The first resolution has been referred to a Committee who have not as yet submitted their report. The second resolution was not pressed as the President informed the Council that he was taking suitable action in the matter. The third resolution was postponed for consideration for one more year. Regarding the fourth resolution the President of the Council was requested to do the needful in the matter.

At the October 1934 Session of the Council the President brought to the notice of the Council that a huge expenditure of over Rs. 600 was incurred by the Council to conduct an election held to fill up a vacancy in connection with Dr. Kamath's election in part III constituency of the Council and though there was opposition the number of votes received in favour of some of the candidates was very small, the candidate next to the successful candidate not securing even 100 votes, the total number of votes polled being nearly 1500, and suggested to fix a deposit of Rs. 50 payable by each candidate nominated for election irrespective of the constituency for which he stood. This was agreed to by the council and it was decided that any candidate who did not get 1/6 of the total number of votes actually polled should be made to forfeit the amount of deposit to the Medical Council. The rules framed for conducting elections under the Madras Medical Registration Act will have to be amended in case the Government agree to the proposal of the Council.

At the March 1935 session of the Council, the Registrar suggested that the practice of sending precept cards to individual electors notifying election proceedings might be discontinued as this procedure cost a large amount of money. After prolonged discussion, the Council decided to discontinue the old practice of sending individual precepts to the electors and resolved that a general precept should be issued by the President about any vacancy on the Medical Council, the precept to be published in the Fort St. George Gazette and a brief advertisement inviting the attention of the electors to the precept appearing in the Gazette to be published in the English Madras dailies. The Council at the time was not fair to but stop to a procedure which the Council had

36
Lm 211, N30 MF
N 35



been adopting ever since it came into existence and I suggested that the electorates should be first intimated about the intention of the Council for future elections and for the impending elections to fill up the vacancy caused by the expiry of term of office of

Dr. U. Kama Rao, the usual procedure of sending individual precept should be adopted. But the whole Council was against my proposal, Dr. M. R. Guruswamy Mudaliar only remaining neutral.

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.

TWO OF OUR TRIED PRODUCTS.

1. NAVARATNA IODISED SARSAPARILLA
With Mercury & Arsenic
Best Blood Purifier and an effective remedy for Syphilis and its complications.
2. NAVARATNA GONOCOCCODINE (Elect Santal Alba Cum Cubeb et Gokhru)
An effective specific in all the stages of Gonorrhoea.

Madras Stockists:—

Manufactured by

Messrs. APPA & CO.,
Esplanade

THE NAVARATNA PHARMACY,
P. B. No. 68, Cochin.

Obtainable from all leading Chemists in important Towns.

Antiphlogistine
TRADE MARK

The PERFECT POULTICE
AND DRESSING FOR
INFLAMMATION
AND

THE DENVER CHEMICAL MFG. Co., NEWYORK. CONGESTION.

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.

CLINICAL NOTES

AND

PRACTICAL SUGGESTIONS.

The Problem of High-blood Pressure.

Of late interest in blood pressure has become increasingly widespread. This is so not because the condition is met with now more frequently than before, but because of the comparative ease with which we can estimate blood-pressure. It will therefore be of interest to consider blood-pressure in respect of its pathological manifestations, its relation to longevity and its general significance.

Blood-pressure, as is generally believed, is not something to be frightened about, because normal health and well-being require the maintenance of a certain pressure distending the vascular system. Hypertension is however undoubtedly a precursor of arterio-sclerosis and cardio-vascular disease, but even these conditions are at times not associated with high blood-pressure. When accompanied by some cardiac or vascular disease then the term essential hypertension is applied to it.

Most of the cases of high blood pressure begin with arterial spasm arising from various causes. Toxic conditions are more often the cause of hypertension and of arterio-sclerosis. Toxic products resulting from diseases of metabolism and foci of infection such as teeth, tonsils and chronic appendix are considered by some to be the essential factors in the causation of hypertension. Obesity and diabetes also bring about this condition. Strong family tendency and its incidence after fifty and its frequency more in women than in men are usually the important factors in hypertension.

Whether due to acute toxins, physiological disorders, psychic disturbances or environment a considerable number of people are prone to get this affection more readily than others. Repeated stresses of worry, infection etc. cause temporary vascular changes which soon become permanent and which if not removed or treated cause persistent high blood-pressure. If the latter continues for some time and if the organic changes have taken place, the pathology

becomes quite definite. Usually the first lesion of hypertension is a sclerosis of the arterioles. The kidneys may be later involved but the essential lesion is widespread and very soon involves the larger vessels which show signs of sclerosis. Stiffening of the larger vessels primarily affect the systolic pressure and sclerosis of the arterioles and small vessels increases the diastolic pressure. The heart also becomes hypertrophied, though it is physiological in the initial stages. Later on the aorta widens and becomes sclerosed. Most of the patients live and become adjusted to their changed and changing conditions.

As regards prognosis the study of the etiological factors has conclusively proved that high blood pressure is not a serious disease if each patient can be given individual care and proper treatment. Regulation of life in matters of diet and exercise and strict observation of the physician actually helps prolongation of life beyond the normal span in many cases. Although high blood-pressure cannot be considered a virtue still there are a number of cases in which it has persisted for years without any harm to the individual. Many persons suffering from it to live comfortably and reach ripe old age after long years of hypertension. The prognosis therefore is by no means always bad.

The treatment of high blood-pressure falls under three general headings, viz. hygiene, diet and drugs. It is based primarily on the knowledge that at first there is generalised disorder of the vascular system consisting of functional vaso-constriction which progresses until the small blood-vessels become sclerosed with super imposed vaso-constrictions. Finally the blood supply to the various organs is cut down as a result of which degeneration of these organs sets in, and their functions soon become impaired. Concerning the hygienic treatment, relaxation, freedom from heavy muscular exertion, warm baths, out door exercise, and the cultivation of habits of repose and efforts to relieve the tendency to worry are some of the points which should be borne in mind. Waste of nervous or physical energy should be guarded against. As regards diet it should be so arranged that the intake of food should be just sufficient for the energy requirement of the patient. In the obese type of individual

reduction in diet and restriction of fats and carbohydrates should be advised. High blood pressure patients have a bad psychological condition which needs correction. Most of them eat too fast and too much. Some work too hard and drink a lot. In such cases the disease can be easily arrested by the correction of these habits and regulation of life. The reduction of obesity, treatment of glandular deficiencies, removal of known foci of infection and guarding against other diseases may go a long way in overcoming this condition. In this way the life of the patient can be prolonged even beyond reasonable expectancy.

As for drug treatment Sodium and Potassium Iodide are classical remedies but unfortunately they cannot be used in each and every case because the action of Iodide varies so much in different patients. They are specially valuable in cases with syphilitic infections. Bromides are helpful in certain cases characterised by nervous irritability but the remedy that is most helpful in cases irrespective of symptoms of whatever character, is Hypotensyl. Its effects have been carefully studied by several physicians who assert that the fundamental value of this drug in hypertension lies in its property of breaking the vicious circle of vascular fatigue, cardiac distress and hyper-irritability, thereby permitting physiological rest most essential in such cases.

Hypotensyl is a combination of the mistletoe or *Viscum Album* and hypotensive extract of liver and spleen. The action of these ingredients are admirably united in this combination. While mistletoe exerts a spasmolytic and sedative influence on the vasomotor nervous system, it has no stimulating effect on the nervous system proper, nor does it depress the heart. It is able to remove the alimentary, toxic and nervous causative factors of arterial hypertension in cases of arterio-sclerosis, gout, nephritis, albuminuria and eclampsia. It relieves contraction of the blood-vessels and avoids overtaking the organs whose functions are deficient. It is thus able to combat renal and hepatic insufficiency. It stimulates the excretory functions of the organism. This ensures proper elimination of the toxins from the system. Mistletoe

helps the cardiac muscle to overcome the spasmodic contraction of the peripheral vessels and thus maintains the condition of the heart in an effective manner. Under its influence albuminuria at first diminishes and is eventually checked. It has an excellent diuretic action and it helps to lower the blood pressure by its action on the centres in the nervous system. Mistletoe therefore forms a very important and most useful ingredient of Hypotensyl.

In arterio sclerosis and consequent high blood-pressure there is always a deficient hepatic activity and the inclusion of hepatic extract in Hypotensyl is therefore very reasonable. It helps the elimination of nitrogenous material which is deposited in the arteries and elsewhere. This elimination helps reduction of blood-pressure to a remarkable extent.

The extract of spleen is also included in Hypotensyl as it has been proved that it contains a pressure reducing principle.

From this rational composition of Hypotensyl we can easily see why it fulfils all the expectations based on theoretical considerations. It has proved of great value in the treatment of high blood-pressure. The symptoms such as sensation of oppression in the chest or in the cardiac region, headache, giddiness etc. are effectively ameliorated and the disease is soon rooted out. Hypotensyl today become a favourite remedy for the treatment of arterio-sclerosis and the concomitant hypertension. By rapid relief of the various subjective symptoms it brings about appreciable reduction in blood-pressure.

Hypotensyl is a scientifically perfect remedy for the conditions for which it is meant. It is entirely free from such harmful drugs as iodine, strychnine or arsenic. It does not disturb the digestive system nor does it leave any injurious after effects. While under Hypotensyl regime one can carry on one's occupation without any interference. Even after a fortnight's treatment it effects improvement and creates an increased feeling of well-being. It is able to prevent further development of arterio-sclerosis. Dosages are to be regulated according to individuals and sphygmomanometer

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

meter readings. In most of the cases blood-pressure is reduced by 20 to 30 mm Hg. after about 4 hours. Usually 3 to 6 tablets are given daily for a period of three weeks at the end of which one week's rest from treatment may be recommended. From this we can conclude that the problem of the treatment of high blood-pressure can best be solved by this most effective and yet innocuous weapon.

The following case clearly proves the efficacy of Hypotensyl:

Mr. S., a Hindu, about 64 years of age was for a long time suffering from gouty arthritis and myositis. The pains had disappeared when he came under my care but there were clear signs of arterio sclerosis and high blood pressure. Shortness of breath, oppressive pains in the heart region, headache and insomnia were some of the symptoms complained of. On examination of the heart I found the left ventricle dilated. The blood pressure was 210 mm systolic and 90 diastolic. Urine showed traces of albumin. Hypostatic congestion of both the lungs was found present on auscultation. I at once started him on Hypotensyl treatment in addition to salines. After a week I stopped the salines and he was administered only Hypotensyl tablets, six of which he was taking daily. After two weeks he showed clear signs of improvement. The pulse and the blood-pressure improved. The latter was 180 systolic and 75 diastolic. Oppressive pains in the cardiac region were no longer felt. After three weeks he was having complete rest from all treatment for seven days, after which he commenced taking the tablets again. He was able to walk and climb the stairs without any breathing difficulties. Pains disappeared, sleep was restored and the patient was able to do his work without any trouble. Urine was clear and free from albumin and the lungs hardly showed any signs of congestion. After two months the patient's general condition was excellent and he felt more fit than he had done for years. No by-effects were experienced by the patient even after this prolonged treatment.

Some forms of arthritis and their treatment.

It will be reasonable at the outset to discuss some common forms of arthritis, as their medical aspect and treatment is such a vexed question amongst the majority of physicians.

Arthritic diseases may be either specific or non-specific. In this article we shall confine ourselves to those groups of arthritic manifestations which are quite common. These are mostly infective and non-specific. The most common varieties of arthritis which we shall deal with here are fibrositis, myositis or vague pains. These varieties we come across almost every day in our practice and most of them are due to streptococcal infection either from apparent or hidden foci of infection. The streptococci in these infections are usually of low virulence. The septic foci present in the organism absorb their toxins and produce a peculiar susceptibility in the patient which renders him liable to attacks of arthritis. This is how, what is loosely termed Rheumatic Arthritis results.

We must before commencing treatment look out for some kind of septic foci. If *Pyorrhoëa Alveolaris* is present it must be attended to, as the various bacteria that go along with the food or are swallowed, are absorbed and may lead in predisposed individuals to rheumatoid arthritis, fibrositis, myositis etc. The next probable focus that should receive our attention is the bowels where colitis or any chronic infection if present may produce fibrositis or inflammation of the joints, muscles or tendons. Tonsils, or adenoids are other sources of infection. Septic tonsils may be the chief factor in the causation of arthritic phenomena. Other possible sources of infection are the antra and the sinuses. Septic absorption from these places may cause vague pains in the joints or even rheumatoid arthritis.

As a result of this septic absorption any joint or muscles in the body may be affected. The various arthritic manifestations are in the forms of Rheumatic Arthritis, Lumbago, pain in the muscles, nerves or fibrous tissues. The pain complained of is of varying grade and it may occur in the chest, back or along the back of the thigh. The pain is usually sharp and annoying and may be constant or transitory. Lumbago,

for instance, caused by septic absorption from the focus of infection is generally in the form of fibro-myositis. It is very often painful and troublesome. Thus we see that the trouble may range from simple myositis by severe arthritis, as a result of absorption of toxins from the septic foci of infection.

These varieties of arthritic manifestations must be differentiated from the specific group of arthritis in which the causal organisms are gonococci Tubercle bacilli etc., When this is done we have to search for sources of septic infection which are not always apparent. In these cases of non-specific infective arthritis, with which we are mainly concerned in this article, there is no cardiac involvement, unlike acute rheumatic arthritis.

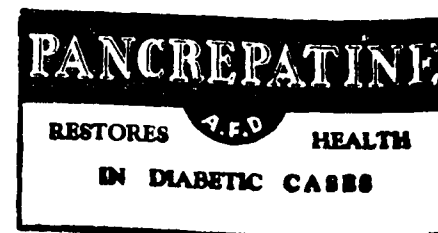
The prognosis in this non-specific infective arthritis is usually good, provided the finding out and eradication of the foci of infection is properly carried out and satisfactory treatment instituted at once. These types of streptococcal subinfections may cause subacute or chronic progressive disease which may involve one joint after another. Early diagnosis and proper treatment, eradication of the septic foci and selection of the right sort of treatment count much in the prognosis.

The treatment of these troublesome and chronic complaints has become very simple on account of the discovery of Iodaseptine injections. Most of these cases are amenable to this line of treatment together with eradication of the septic focus. Iodaseptine is a combination of Iodine (42%) and Formine with Benzo-Methyl group. It is available in the form of injections or drops, but the injections are always preferable to the oral method of treatment. These injections which are given either intramuscularly or intravenously are particularly efficacious in these subacute or chronic varieties on account of their antiseptic properties. They promote the process of combustion and stimulate the eliminatory organs such as the kidneys and the liver. In suitable doses Iodaseptine will overcome even obstinate cases of the types mentioned above. The Iodine in it is of great help in relieving pain and in reducing thickenings and inflammations of the tissues involved. The Iodine also acts as a best antiseptic and thus the toxins generated in the alimentary systems,

and which are the prime factor in the causation of these troublesome conditions, are effectively destroyed. Formine also helps this antiseptics while the Benzo Methyl group assists in relieving the pains. Despite this powerful combination Iodaseptine injections can be continued for prolonged periods as they do not cause haemolysis nor have they any deleterious effects on the blood constituents. Iodaseptine is mildly toxic and perfectly well tolerated. When injected in large doses it does not cause shock. To start with 5 c.c. of the solution is usually sufficient. The injections are better given intravenously. The dosages may be increased according to the needs of the case. As much as 20 to 30 cc are given at a time without causing the least shock or signs of intolerance. Treatment with this product is therefore very effective and speedy in these cases.

Coupled with this treatment the sources of infection need eradication. Pyorrhoea Alveolaris should be treated, septic tonsils or adenoids should be removed. This ensures not only complete recovery but prevents further recurrence also. Constipation or enterocolitis, if present, should be adequately treated by the administration of Mycol tablets. Elimination effected by means of these tablets is of great value in almost all of these cases. Rest, fresh air and sunlight should be strictly enjoined on the patients. Streptococcal toxæmia is often accompanied by mental worry and depression, but the necessity of rest, both mental and physical, is not sufficiently realised at present.

Iodaseptine injections supplemented by rest, eradication of septic foci and elimination of toxins constitutes a powerful, speedy and harmless treatment which overcomes these troublesome and tedious cases of non-specific types or arthritis.



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

THE Medical Practitioner

VOL. VI.]

SEPTEMBER 1935.

[NO. 12

AN ALL INDIA PROTEST.

The Medical Licentiates throughout India held protest meetings on 20th September to express their protest against the passing of Indian Medical Council Act on 20th September 1933. Our readers are quite familiar about the past history of the Indian Medical Council Bill before it was entered in the Statute Book. We have discussed in these columns about Indian Medical Council Bill at all its stages and pointed out to its sponsors that there was no need for a Bill which served no purpose either to the profession or to the public, but involved a recurring yearly expenditure of over Rupees 75,000. But the Government of India was adamant and behaved as if it had neither a body nor a soul. The Government member in charge of the Bill did his duty as the most faithful servant of the Government and we admired his talents for espousing an unholy cause, making it appear as the most holy one, assuring the medical profession honour abroad and efficiency at home though in effect, the Act had humiliated the largest section of the qualified medical profession in India and done away with all the possible chances of attaining for the profession as a whole efficiency at home.

The very name of the Act is as fictitious as the Council is unreal. Neither the Act nor the constitution brought into existence by the Act, convey an idea of the purpose for which this statute was enacted. The original preamble of the Indian Medical Council Bill when it was introduced in the Legislative Assembly ran as follows:

"Where as it is expedient to establish a Medical Council in India and to provide for the maintenance of a Register of qualified Practitioners of modern scientific medicine

in order to establish a uniform minimum standard of qualifications in medicine for all provinces such that persons attaining there to shall be acceptable as medical practitioners throughout British India".

The Select Committee opined that the opposition to the Bill was due to the exclusion of the Medical Licentiates in the proposed all-India Register and amended the preamble modifying the scope of the Bill to the establishment only of an all-India Council whose duties were limited to two functions namely:

- (a) the securing of a uniform minimum standard of higher qualifications in medicine for all the provinces, and
- (b) the arrangement of schemes of reciprocity with medical authorities of other countries.

The original preamble and the modified limited scope of the Medical Council justify our remarks that the whole affair is sham.

In all civilised countries Medical Acts were introduced not so much in the interest of the medical profession but wholly to safeguard the interests of the public as is enunciated in the preamble of the British Medical Act of 1858 (21 & 22 Vict Chap. 90) which runs thus:

"Whereas it is expedient that persons requiring medical aid should be enabled to distinguish qualified from unqualified practitioners. Be it therefore enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled and by the authority of the same as follows".

It is therefore plain that the Indian Medical Council Act does not serve the public at all. It only serves to lower the status of the Medical Licentiates. Do they deserve this treatment? The Government of India has taken undue advantage of their power

News and Comments

Brothers Differ: It was really a strange coincidence that when the Medical Licentiates throughout India were condemning the Indian Medical Council Act on 20th September, Dr. A. Lakshmanaswami Mudaliar, the Madras University Representative on the Indian Medical Council, spoke about the past and future activities of the Council in the most glowing terms at Mysore on the same day, when he presided over the Mysore Medical College day celebrations. He said amongst other things:—

"You have referred, Sir, to your hope that ere long this college will be given recognition by the All-India Medical Council. I am delighted to see that you propose taking this step, for I can assure you that in these days of increasing competition and keener struggle in life, the Mysore Medical Graduate would otherwise be severely handicapped by isolation, whatever may be his qualifications and accomplishments. As a member of the All-India Medical Council, I am, however, very much gratified at the statement you have made that you propose seeking recognition in the Council in the near future. This may seem strange to those who have spared no pains to depict the Council in the blackest colours and to assure the public that nothing good will come out of it and that it was a subordinate agency registering the decisions of its supposed principal. One need not be surprised at such comments and as one who has had some little experience of work in academic bodies, I can say that criticisms such as these are natural and should be expected in the somewhat hectic atmosphere that is prevalent in India at present. As one who has watched with care and anxiety the activities of the Indian Medical Council since its inception, and as one whose sole aim is to see that the Council occupies a place similar to that of analogous bodies in other countries, may I say that such criticism is neither warranted nor justified? A little cool thinking will convince the unbiased citizen that such cheap satire is not calculated to rectify defects, if any. The prestige and influence which the Council will wield will, however, depend upon its own activities, and I hope and pray that undismayed by such criticism from within and unperturbed from any comments from without, it will continue to do its duty with a singleness of purpose, and with this one objective before it to promote efficiency at home and secure a place of honour for its medical alumni."

How the high hopes displayed by Dr. Lakshmanaswami Mudaliar about the Indian Medical Council differ from the grave apprehensions expressed by his twin brother Diwan Bahdur A. Ramaswami Mudaliar, who represented Madras on the Legislative Assembly at the time the Indian Medical Council Bill was on the anvil of the Legislative

Assembly, could be seen from the speech made by him on the floor of the Legislative Assembly during the discussion of this measure. That the Indian Medical Council was a subordinate agency registering the decisions of its principal was rightly apprehended by Diwan Bahadur Ramaswami Mudaliar, when he questioned the Government, "Why did the Government of India send the whole bill again with connected papers to the G. M. C., for their opinion. Such a procedure was unwarranted and showed servility to the G. M. C." Again with regard to reciprocity Mr. Ramaswami Mudaliar averred "Why, when in the bill all qualifications of British degrees were recognised the same reciprocity should not be given to Indian Council.....The reciprocity you talk is a delusion and a snare." Dr. Lakshmanaswami Mudaliar believes that the Medical Act would promote efficiency at home and secure a place of honour for its medical alumni. His opinion is an exact paraphrase of the view expressed by Sir Faz-li-Hussain, the Government Member who was in charge of the Bill. We admire the faithful servant of the Government of Madras as much if not more than the then faithful servant of the Government of India who acted his part most splendidly though to the detriment of both efficiency and honour of the medical profession in India. We wish to tell Dr. Mudaliar that the Medical Licentiates deserve from him as much sympathy as the Medical Graduates of the Mysore University and wish him to realise "that in these days of increasing competition and keener struggle in life" the Medical Licentiates will be severely handicapped by isolation, if the Medical Council does not recognise them. The quality of sympathy expressed by a prominent graduate, unless it be all pervading, is likely to be misinterpreted otherwise. Will Dr. Mudaliar try to include in the future activities of the Indian Medical Council the desirability of not isolating the Medical Licentiates? A Medical Council without a Medical Register and without disciplinary control over those whom it recognises as medical men is sham and not worth existing. Is it not most derogatory to the prestige and status of the All-India Council to permit those whom it recognises as qualified practitioners to be tried for discipline by Provincial Councils which consist of the Medical Licentiates, who are not recognised by that august body?

Dilemma continues: Under the caption "Honoraries-A Dilemma" we discussed in the Editorial Columns in the January 1935 issue about the hesitation of the Surgeon-General for promoting Clinical Assistants holding L.M.P., qualifications as Honorary Assistant-Surgeons, and Honorary Assistant-Physicians the very next designation to which a Clinical-Assistant was entitled if found proficient. We also pointed out that there were two Medical Licentiates who had finished honorary service for over two years and who were recommended by the superintendents of the respective hospitals, where the honoraries were serving, had not been promoted as Honorary-Assistant-Surgeons. As mentioned by us, the hesitation seems to be due to the fact that senior Sub-Assistant-Surgeons, some of whom holding British qualifications and working in the same hospitals, might grumble against such promotions. Though this argument is to a certain extent reasonable, the action of the Surgeon-General in not promoting the Clinical Assistants as Honorary Assistant-Surgeons in spite of their proficiency and good service is unjustifiable from the point of view of the existing confusive state of affairs regarding the denominations of Medical officers in the Medical Department. In no other civilised country there is a post by the name Surgeon-General, in charge of Civil Medical Administration, nor do cadres in medical service exist in the manner they exist in India. The designation next to Surgeon-General is District-Surgeon or Civil Surgeon, then comes the Assistant-Surgeon and last the Sub-Assistant Surgeon. None of these designations indicate the nature of duties performed by the respective medical officers. A Sub-Assistant, as the name indicates should be the Assistant of an Assistant-Surgeon and this subordinate officer should be styled as such if his duties pertain to Surgery. But now even in stations where a sub-assistant medical officer performs his duties independently both as a surgeon or a physician, he is called Sub-Assistant-Surgeon. The incongruity was more when, till a few years ago the Assistants to Physicians in Government General Hospital were called Assistant-Surgeons. To do away with such meaningless names in Honorary service, the Committee appointed by the Government to formulate a scheme of Honorary Medical service, recommended to the Government and the Government accepted

the designations suggested by the Committee. The Committee did away with the old designation, Honorary Sub Assistant Surgeon and called the Honoraries by names depending upon the work they had to do. A registered practitioner even he be a Medical Licentiate, was recruited first as a Clinical Assistant, then after two years of service he could become a Honorary Assistant-Surgeon or Physician, and the Committee framed regulations who and when an Assistant-Physician or Assistant-Surgeon could be promoted as Honorary Physician or Surgeon. Accordingly many of the Clinical-Assistants were promoted as Honorary Assistant-Physicians or Assistant-Surgeons, and till about a year and a half ago no distinction was shown between a Graduate and a Licentiate, in the matter of promoting them as Honorary Assistant Surgeons or Physicians. In the meanwhile there were changes in the office of the Surgeon-General and also at the Secretariat. Major-General Sprawson, the actual author of the Honorary Medical Relief Scheme was succeeded by Major General Sir Connor and the Personal Assistant to Surgeon-General, Rao Bahadur Dr. P. K. Warriar retired and was succeeded by Rao Sahib Dr. S. K. Pillai. The present Chief of the Medical Administration and the Personal Assistant both of whom had nothing to do with the new scheme worked out by their predecessors and sanctioned by the Government did evidently not relish the appropriateness of the designations especially with regard to the Medical Licentiates. They would have done better service to the department over which they have supreme control if instead of disturbing an established scheme, suggested to the Government to designate the Medical Officers under the Government according to the duties they performed, instead of calling them by names not indicating the work they do. The Government, who sanctioned the scheme, seemed to be more inconsistent in not sticking to the old order passed and accepted by them. It is rumoured that the Surgeon-General has recommended new designations to the Honoraries holding L. M. P. qualifications and the government had agreed that there should be a distinction between Graduates and Licentiates Honoraries but have suggested a designation sounding more queer than that recommended by the Surgeon-General. As we have no official information about the new designations for the

L.M.P., Honoraries, we refrain from making further comments and in the meanwhile appeal to the Government to stick to their old order regarding the designations of Honoraries without making invidious distinctions as such a course will be against the spirit of Medical Ethics enunciated by the Medical Registration Act.

Is it Manslaughter: A registered medical practitioner practising in the Agency tracts, Jeypore, reports to us that the President Taluk Board, Koraput has issued a circular to the Schools under his charge that all Headmasters of High and Middle Schools should address him to issue requisitions to Medical Officers in recognised hospitals when they require leave on medical certificate. As a result of this circular the medical certificates issued by this practitioner were not taken into account and a teacher was fined for absence, and another whom the medical practitioner declared to be unfit to join duty was sent to the medical officer in charge of the local hospital, which officer made this teacher fit to join duty, and that after a few days the teacher got seriously ill and succumbed to his illness. The private medical practitioner mentions in his letter that he had brought to the notice of the Surgeon-General the facts of the two cases referred to above by means of two communications and that he had also brought the above incidents to the notice of the Registrar, Madras Medical Council. To his first communication to Surgeon General, the practitioner received a reply that necessary action was being taken in the matter but the Registrar Medical Council informed the practitioner that he could not interfere in the matter. The first letter addressed to the Surgeon-General was dated 11-6-35 and the reply received from the Surgeon General was dated 18-6-35. The second letter to the Surgeon-General was dated 9-9-35, and if any action had been taken at all, as mentioned in the reply from the Surgeon-General to this, practitioner dated 18-6-35 there would not have been a necessity for this practitioner to address the Surgeon-General once again about the repetition of the same act by the President Taluk Board, which in the second instance resulted in the death of the patient on account of the Taluk Board President disbelieving the veracity of the certificate issued by this practitioner. This is a glaring instance to prove how risky it is to

disbelieve or question the opinion of a medical attendant about a sick patient, who is expected to know all about the patient having had to observe him during the course of his illness. The medical officer to whom the patient is sent for opinion regarding the rest the patient should have, during the course of his illness or after, cannot at times know the real state of the health of the patient whom he has to observe only once for the purpose of a certificate. The question now arises as to who should be held responsible for the death of the patient referred to above. Whether such an action will amount to a criminal negligence is a question to be decided by the practitioners of legal profession in a court of law. The Taluk Board President happens to be an Official of the grade of Deputy Collector, who was expected to respect Government Orders passed recently with regard to medical certificates issued by registered medical practitioners to non-gazetted government servants. According to those orders, the Head of a department if he chooses might send a certificate issued by a registered medical practitioner to a Government medical officer for a second opinion, in which case the Government medical officer must send for the registered medical practitioner who issued the certificate, requesting him to be present at the time the patient goes to the medical officer for the second opinion. In the cases under reference neither the Taluk Board President nor the Assistant-Surgeon before whom the patients were directed to appear, seem to have respected the Government Orders. Both these officers might take shelter on technical grounds that Government Orders are not applicable to the local bodies. On such a lame excuse a non-official Taluk Board President might technically escape. But all the same he is morally or even legally responsible for having caused the death of a subordinate of his. But the medical officer cannot escape. He is bound to respect the Medical Registration Act, the Ethics sanctioned by this act require that a patient already under the treatment of a registered medical practitioner should not be seen by another even in his official capacity, unless sufficient notice is given to the medical practitioner who was already in charge of the case. The practitioner would do well to report the Medical Officer's conduct to the Madras Medical Council, when we trust the Council will

not only take necessary disciplinary action against the medical officer but will also bring to the notice of the Government the necessity of the Local and Municipal Bodies respecting the Government Orders on the subject of medical certificates. It is also expected that the Madras Medical Council will press the Government to do away with the baneful procedure of taking second opinion on the medical certificates issued by Registered Medical Practitioners as the Ethics enunciated by the Medical Registration Act was specially meant to guard the welfare of the public and not at all the interests of the medical profession.

An Opportunity : The Madras Government has almost decided to buy the tuberculosis sanatorium belonging to Dr. Muthu at Tambaram, a village about 10 miles from the city of Madras. The estimated sale price seems to be very near to 70,000 rupees. It is said that the Government intends making this sanatorium a part of the Government Tuberculosis Hospital in the city and accommodate in the building of the sanatorium early and convalescent cases of tuberculosis.

We would suggest to the Government the advisability of starting a Tuberculosis Society as has been done recently at Coimbatore for the running of the sanatorium at Perundurai and entrust to this society the responsibility of running the sanatorium at Tambaram. It should be the aim of the Government in future to encourage the starting of institutions for medical relief by the people themselves, the Government concentrating its attention on Public Health only. His Excellency, Lord Erskine has been complaining more than once that people in India unlike in other civilised countries depend entirely on the Government for running institutions for medical relief. There is now an opportunity for His Excellency to educate the public to run hospitals for the benefit of the public. The amount allotted for the city of Madras out of the Silver Jubilee Funds may be made a nucleus for running the Sanatorium at Tambaram, the amount, the Government has decided to pay to Dr. Muthu being treated as a contribution by the Government and more money raised by the Tuberculosis Society in the way it is being done at Coimbatore. The Sanatorium at Tambaram may be called after

King George most appropriately. We appeal to His Excellency Lord Erskine to set an example in this province by educating and encouraging the public to run institutions for medical relief themselves and His Excellency has now a splendid opportunity for this purpose.

Reform or Necessity? It is for the first time in the annals of the history of the Medical Acts in this country, we find an advertisement published in the lay press giving equal opportunities for all practitioners registrable under the Provincial Medical Acts. The advertisement is published under the authority of the Government of India and runs thus:—

Applications are invited from medical men registrable under Provincial Medical Acts in India including Assistant Surgeons of the Indian Medical Department for the appointment of Assistant Director, All-India Institute of Hygiene and Public Health Calcutta.

The first portion of the advertisement bodes reform in the right direction but the words "including Assistant-Surgeons of the Indian Medical Department," makes one entertain a suspicion if this advertisement is an eye-wash to appoint an Assistant-Surgeon of the Indian Medical Department already in the good graces of the authorities concerned in the advertisement. The announcement of the name of the candidate at a later date will show the real purpose of the advertisement.

Cheap Sale of Inherent Right: We cannot congratulate the Bombay Medical Council on the decision arrived by them, at the last meeting of the Medical Council with regard to the Registration of Degrees of Foreign Universities. The question of registering the Medical Degrees of American Universities was discussed by the Council and one of the members of the Council proposed a resolution that the American Degrees may be accepted in case the Indian Medical Qualifications were recognised in America. But the Council decided to request the Government to refer the subject to the Medical Council of India. All the Provincial Acts are more or less copies of the British Medical Act and there is a mandatory section in the Provincial Acts forbidding the Registration of Practitioners belonging to India or other countries where the medical qualifications recognised by the

Provincial Acts are not registrable. So the Bombay Medical Council would have been quite justified to refuse the Registration of Candidates belonging to America in case the medical qualifications registrable under the Provincial Act are not recognised in that country. It looks as if the Bombay Medical Council has sold their inherent right so cheap to the Indian Medical Council that there exists no statutory relationship between the two councils.

A Health Unit Scheme: The Government of Madras has sanctioned the proposal of Lt. Col., C. M. Ganapathy, director of public health to run a Health Units Scheme in Chingleput district from October 1. An area of 25 villages with a population of about 40,000 people has been selected in Sriperumbuthur Taluk. The work is to be carried on as an experiment for 18 months and the continuation of the scheme is to depend upon the results achieved. The Unit will have one Health Officer, four Health Inspectors, four Health Visitors and eight Midwives. This scheme is estimated to cost about 29,000 rupees in the first year. The Government of Madras will finance the scheme out of the funds received from the Central Government with a contribution of 40 per cent from the Rockefeller foundation of America. The Council will be formed consisting of the Revenue Divisional Officer, Saidapet, as chairman, and the representatives of the Rockefeller foundation, the Presidents of the Panchayat Boards, and representatives of villages as members. The Council is to meet periodically and submit reports to Government.

This scheme is really a laudable one and bound to yield good results. But the period of 18 months is certainly too small to gauge the results of the Scheme. The results of such schemes are usually decided by the birth and death rates and as these rates depend more upon economic and social conditions of the people, the assessing of the results of the scheme for 18 months is bound to be fallacious, even in case the reported results were to be satisfactory. Is it possible for any Government including the Madras Government to be able to spend huge sums of money on experiments of spectacular nature. The scheme as published in the newspapers has nothing wonderful in it which could not be achieved by the Public

Health Department, as all that was mentioned in the scheme is nothing more than the usual routine work expected of the department. The Director of Public Health would have done much better service if he whipped the existing staff under him to be as much active and keen in their work as it is humanly possible for them and pressed the Government to give him more money and men and made the public feel the existence of a department for preventing human ailments.

U. P. Government Adamant: The U. P. Government has after all promulgated the new Poisons' Rules on or about the 18th May, 1935. Our readers might remember that soon after the amendments to the rules framed under Poisons' Act XII of 1919 were discussed on the floor of the U. P. Legislative Council we commented on the subject in these columns in July last year and pointed out that there was no need of bringing the medical practitioners under the control of the Excise Department with regard to the Poisons' Act and rules framed there under, as the Provincial Medical Council could exercise disciplinary control over the registered medical practitioners for abusing the rights with regard to the sale of poisons, there being a specific clause in the code of Medical Ethics giving statutory power to the Medical Council to deal with the registered medical practitioners who abuse the rights regarding the sale of poisons, the punishment contemplated being the eraser of the names of the practitioners from the Medical Register. No higher punishment could be thought of than the eraser of the names of the practitioners from the register which deprive them of all their rights and privileges as registered medical practitioners. On the lead of the Meerut Medical Association, all most all the existing medical associations in U. P. protested at the time against bringing the medical profession within the purview of the Excise Department for dealing in poisons like, Aconite, Atropine, Carbolic Acid, Chloralhydras, Digitalis, Strophanthus etc., all numbering about 250. The new rules require a registered medical practitioner to keep a register for entering not only the purchases of about 250 drugs but also to note down the names of the patients with their addresses and the quantity supplied to each of them in the exercise of the profession. The hardship and

the attendant worry to which the U. P. Medical Practitioners are now subject to, may be easily imagined. It is a pity that the Inspector-General of Civil Hospitals U. P. who is also the President of the U. P. Medical Council encouraged the Government to introduce these new rules in spite of the fact that the U. P. Medical Council passed a resolution protesting against these rules and a large section of the members of the legislative council did likewise when these rules were the subject of discussion on the floor of the U. P. Medical Council. The U. P. Government is adamant and it is therefore necessary that the medical profession throughout India should take up this question seriously lest the other Provincial Government should copy the example of U. P. The new rules if disobeyed will make a practitioner liable after conviction for imprisonment for a term which may extend to 3 months or a fine which may amount to Rs. 500 or with both and on a second conviction with an imprisonment for a term which may extend to 6 months or with a fine which may amount to Rs. 1,000 or with both. The punishment contemplated for the breach of Poisons' Act rules is certainly most rigorous and severe.

Notice of Resolutions to Madras Medical Council: Doctor V. Rama Kamath, member Madras Medical Council, has given notice that he will move the following resolutions at the October Session of the Council.

(1) The Madras Medical Council respectfully points out to the Government that in the interest of Medical Education, the Madras Medical Council should have representatives of all the recognised teaching Medical Institutions without exception, and while nominating such representatives on the Madras Medical Council, the nominations should be made in the name of the Office held by such representatives and not in the name of the persons.

(2) The Madras Medical Council is of opinion that the Preliminary General Medical qualification for admission into the Medical Schools should be not lower than the University Intermediate Standard, as otherwise the students of the Schools will not be able to cope up with the higher Standard of Medical Education now intro-

duced in the Medical Schools and therefore requests the Government to raise the Standard of Preliminary Education to the Intermediate Standard.

(3) The Madras Medical Council respectfully suggests to the Government the desirability of bringing into existence in this province a State Medical Faculty in the place of the Medical Board of Examiners for the purpose of controlling the education and conducting examinations of the medical students for Non-University medical qualifications.

(4) The Madras Medical Council requests the Government to introduce the procedure of obtaining a second opinion on the certificates issued by Registered Medical Practitioners in the Local and Municipal bodies in the way they have done for the non-Gazetted Servants of the Government, till this procedure is done away with as recommended by the Madras Medical Council some time ago.

(5) a. The Madras Medical Council requests the Indian Medical Council that it is desirable in the interest of public as well as the Medical Profession as a whole that they should take over the control of Medical Education of all the recognised teaching Institutions so as to establish a uniform minimum standard of Medical Education in this country and to bring under the disciplinary control of the Indian Medical Council all Registered Medical Practitioners.

b. That it is the considered opinion of the Madras Medical Council that bringing the Medical Licentiates within the purview of the Indian Medical Council, cannot interfere with their control over the Medical Education of Graduates, and such a course cannot interfere with the recognition by the General Medical Council, Great Britain, of the University Standard of Medical Education in this country.

(c) That it is not desirable to have two Statutory bodies to control the Medical Education of the Graduates and that therefore the Medical Council suggests the Indian Medical Council to make the Provincial Medical Councils as the branches of the All-India Medical Council.

(6) The Madras Medical Council requests the Government most respectfully not to contemplate any changes in the designation of the Honorary Medical Officers depending

upon their qualifications as the names introduced by the Government on Honorary Medical Relief Scheme, and sanctioned by the Government, are satisfactory being consistent with the spirit of Medical Registration Act and suggests to the Government to introduce such names in the designation of the Medical Officers under their employ.

Correspondence Reports Etc. OBITUARY

Late Col. H. W. Acton.

It is with deep regret that we have to record the sad death of Col. H. W. Acton, Director of the School of Tropical Medicine Calcutta which took place on 26th August 1935 at London Col. Acton had a brilliant record of service ever since he joined the Indian Medical service in 1907 after a bright and successful career at the Middlesex Hospital, England. His first three years of Military service were mostly spent in North West Frontier and in 1910 he was made the Assistant Director of Pasteur Institute at Kasauli. In this institution he in collaboration with Col. H. P. Harvey, I. M. S. investigated the possibility of the use of a (dead) carbolised vaccine in anti-rabic treatment which has since been used with great efficacy. In 1912 Capt. Acton became the Director of the Pasteur Institute. He conducted research concerning many diseases such as latent malaria in man, bird malaria, etc. In 1916 he was reverted to Military duty and went to Mesopotamia as pathologist and surgical specialist. Even here he conducted research and did valuable work on sandfly bites. In 1918 he was posted to convalescent depot at Dagshai. At this station he experimented and proved that other alkaloids in cinchona bark were as effective as quinine in the treatment of malaria and that cinchona febrifuge could be used as an efficient and much cheaper remedy than quinine.

Major Acton joined the Calcutta Medical School of Tropical Medicine as Professor of Pathology, Bacteriology and Helminthology in 1921 and held this appointment till April 1933. In Calcutta he carried out a large volume of work of a very high order. His work on epidemic dropsy is one of the most learned contributions to the study of that disease. He made a special study of

Tropical skin disease and built a special Skin Clinic at the school. He made special study of the fungi which are responsible for many skin diseases. Lt. Col. Acton became Director of the School in 1928 and in this capacity he gave incentive to every department in the school. In 1933 he became seriously ill and went to England on leave. In recognition of his services he was awarded the C. I. E. in 1931. In the death of Col. Acton India has lost a very capable and enthusiastic research worker. We convey our heart-felt condolence to the family of Col. Acton.

Report of Lt. Col. C. A. F. Hingstone Member Madras Council, Visitor at the Final L. M. P. Examination Madras.

With the exception of the Pathology examination, which I regret I was not able to be present, I was able to visit all the other examinations, and spent many hours listening to the candidates' answers in the practical, clinical and oral examinations in the various subjects.

The following are the impressions I got:—
“On the whole the examinations are exceedingly well conducted and the standard of the examinations was quite good, far above what was required fifteen years ago when I was on the Board of Examiners then. The examination is now carried out much on the same lines laid down by the University of Madras.

The arrangements for conducting the practical and oral and clinical and written examinations are all quite satisfactory.

There are one or two alterations and additions I consider very necessary.

(1) There is no oral examination in General Medicine, with the result it is not possible to find out accurately if the student knows the subject sufficiently well to be given a Diploma in Medicine.

Example.—One candidate was given a somewhat difficult skin disease case and failed to pass, and as there was no oral examination held in General Medicine to see if the candidate knew anything about Medicine, it may have been unfortunate for the candidate, under the present rules, that he failed in Medicine on account of not being well up in skin diseases.

On the other hand, some candidates who were well up in skin diseases passed, it was not possible, in their case, under the present rules, to know if they knew anything about General Medicine, although they passed.

(2) The marking in the different subjects and the percentage required for pass requires to be very considerably altered.

Example.—If a candidate gets 67 per cent in his paper for Pathology and only 16 per cent for practical and oral, he passes because he has obtained 50 per cent of the 150 marks allotted to Pathology, whereas in a properly conducted examination no candidate who gets 8 marks out of 50 in the practical and oral examination should be permitted to pass in the subject.

(3) Every candidate should be required to get 50 per cent in every part of the examination.

(4) Another observation I should like to make is that the teaching in some of the Medical Schools does not appear nearly so efficient as in other schools.

Example.—No candidate would have passed from the Willingdon School in the first year unless grace marks had been given to some of them and very few of the Vellore School either.

In the first year, there appeared to be batches of good students, and batches of very indifferent ones, and the indifferent ones seemed to be chiefly the lady students.

I am inclined to think that it would be better for the students and better for the general public in the future if lady students were taught along with the male students, in the same hospitals where there is ample clinic material and the teachers in Medicine and Surgery are experienced in the subjects.

It will be noticed from the statements attached that the results in Surgery at the Willingdon School is very poor, a very low percentage of passes, whereas the percentage of passes in Medicine from the Vellore school is very low. Both from the Willingdon and Vellore, the percentage of passes in Midwifery is higher than that of the Stanley Medical School. The standard of teaching in Midwifery in all the schools appears to be most satisfactory. It will be much more satisfactory and a better standard of medical education will be the result if all women students in Madras were taught by experienced teachers in Medicine and Surgery at the Stanley Medical School where the

clinic material is ample. For Midwifery the women students at the Willingdon School should remain there for that subject at present, and the improvements where necessary carried out in the teaching of the first year subjects. The subjects in second and third year appear to be satisfactorily taught at Vellore and Willingdon schools.

There seems to be very poor teaching in Inorganic Chemistry at the Willingdon School compared with the results of the other two schools.

It has always been to me in the past, difficult to understand why the women Sub-Assistant Surgeons should always be so efficient in Midwifery and much below the standard of the male Sub-Assistant Surgeons in Medicine and Surgery. I think the explanation is the one I have given above. They have not had efficient teaching in these two subjects, either the teachers are inefficient or the clinic material in Medicine and Surgery is not sufficient.

I attach a list of percentage of passes of the L.M.P. Board of Examinations, also the statement showing the percentage of passes in the various subjects of the L. M. P. examinations.

In conclusion I would strongly urge that the examination be conducted on the same lines as the University. The same percentage of marking in each subject for a pass, as is required by the University. The standard for the L.M.P., be fixed by the Board of Examiners, the present standard seems to be a very satisfactory one.

The Examiners have been carefully selected, with one or two exceptions. Examiners should be appointed for three years. And I have already pointed out the percentage required for a pass should be 50 per cent and in each subject, and in each part of it. There must be an Oral Examination in Medicine.

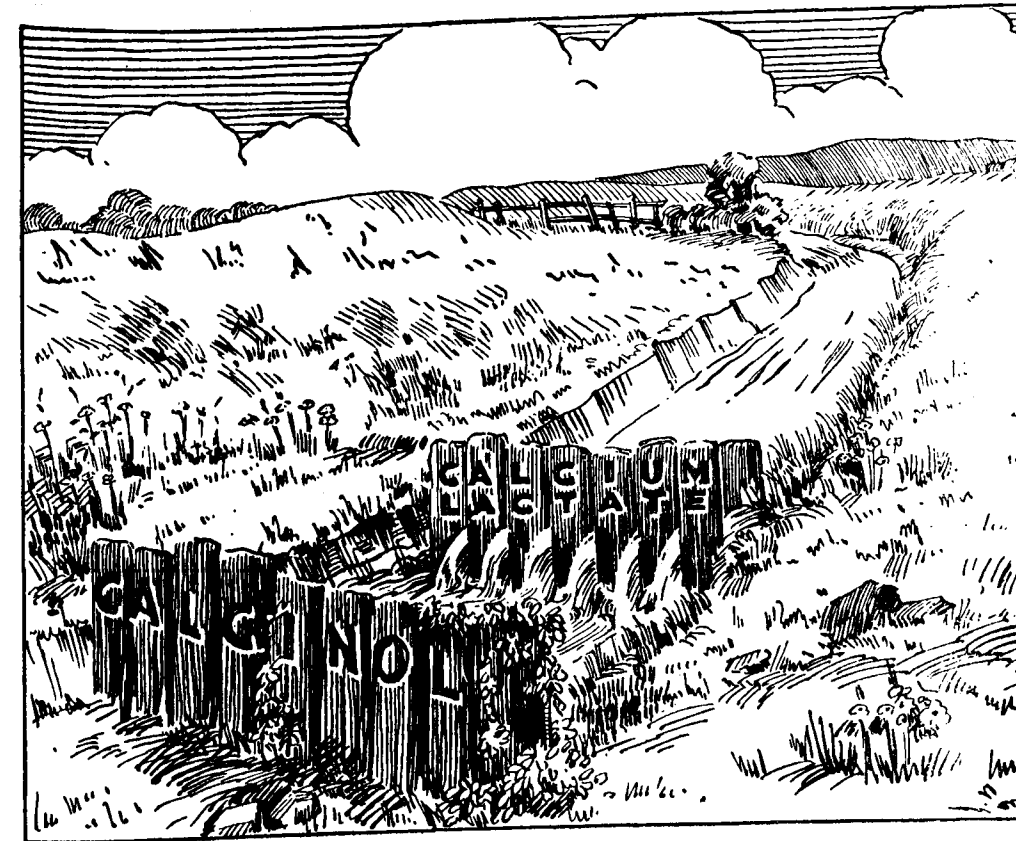
I should like to add that I was perfectly convinced in my own mind that the general education of some of the candidates was of a very low standard, some of them had difficulty in understanding the questions in Physics put to them. This can be easily remedied, if a higher standard of education is insisted upon for the entrance examination. If this is not possible the Board should conduct a preliminary examination in English, to test the candidate's knowledge of the English language. Each candidate

should be required to pass in this examination in addition to the present examination which is accepted to qualify for entrance into the Medical Schools of this Presidency.

All-India Medical Council Bill.

To protest against the Indian Medical Council Act of 1933, to urge on the Government of India the necessity for amending the Act so as to include the Indian Medical Licentiates within its purview and to request the Members of the Indian Legislature all over the country to take up this question in right earnest and remedy the wrongs done to the Medical Licentiates as well as the bulk of the independent medical profession, were the main points of discussion that arose at a public meeting of the medical profession of Madras held under the auspices of the Madras Branch of the All-India Medical Licentiates Association on Friday the 20th September 1935 at 6 P. M. at Gana Mandir, No. 10, Thambu Chetty Street, Madras. Dr. V. D. Nimbkar F. R. C. S., presided. The Chairman in his preliminary remarks while sympathising with the Medical Licentiates in their legitimate grievance of non-inclusion in the Indian Medical Council pointed out the futility of the All-India Medical Council as it excludes all Indian medical men with qualifications granted in institutions established by the Government themselves. He further condemned the idea of higher and lower qualifications as conveyed in the Bill for, when viewed carefully, even the M.B.B.S. degree would fall under the category of lower qualifications.

The following resolution was then moved by Dr D. V. Venkappa, Provincial Secretary, All-India Medical Licentiates' Association, Madras: "This general meeting of the Medical Profession of Madras held under the auspices of the Madras Branch of the All-India Medical Licentiates' Association, places on record once again its emphatic protest against the Indian Medical Council Act of 1933 and urges on the Government of India the necessity for amending the Act forthwith so as to include the Indian Medical Licentiates within its purview and thus allay the discontent and dissatisfaction in its rank and file and the bulk of the independent medical profession. The mover while tracing the origin, growth and the final stages of the All-India Medical Council



To swallow Calcium is not sufficient.

To retain it is more important.

Yet Calcinol costs no more to attain this result.

The satisfied physicians are prescribing it regularly and our samples and particulars will perhaps encourage you to try it.

CALCINOL

Agents:

RAPTAKOS, BRETT & CO., LTD.

Bombay

Calcutta



Bill explained how the vast group of Indian Medical Licentiates, two prominent members of whom the late Dr. Lohakari, B. A., I. M. P., and Rao Sahib Dr. U. Rama Rao were responsible to give the very idea of the formation of the All-India Medical Council, are left in the back ground on flimsy grounds of lower qualifications. Here, the speaker pointed out on authority how the Medical qualifications granted in India were in no way inferior to those obtained abroad.

Dr. A. Sreenivasan, M. R. C. P., while agreeing with the views expressed by the mover gladly seconded the resolution. Dr. V. Rama Kamath, Member Madras Medical Council and Editor "Medical Practitioner" Madras, in supporting the resolution spoke at length about the ways and means how the protest could be made felt by the authorities. He suggested how the Members of the Indian Legislature who were responsible for passing the Indian Medical Council Act of 1933 could as well repeal the same, provided the members of the medical profession used their discretion in exercising their votes to only those who upheld their cause. He further explained how the All India Medical Council is unwanted in India in view of the immense powers already in existence to the Provincial Medical Councils which have been established on almost the same lines as the British Medical Council. The Doctor opined that by the formation of the All-India Medical Council there is a considerable drain on the public Exchequer and which is in far excess to the amount allotted to the Provincial Medical Councils.

Dr. U. Krishna Rao, M. B. B. S., Member Madras Medical Council and Editor "The Antiseptic" spoke next on the resolution. He gave a vivid picture of the farce when the All-India Medical Council Bill stood at the anvil of the Legislative Assembly. He pointed out how determined the Government

were being influenced by the powers abroad to get the Bill passed in the teeth of all around protests both by the profession and the general public. Speaking on the strength of his position as a Member Madras Medical Council representing the Graduates and as an independent medical practitioner, he observed there could not be any difference regarding the status as independent medical practitioners whether they be Medical Licentiates or Graduates and as such he found no reason why the All-India Medical Council should exclude this large body of Medical men who formed the bulk of the medical profession in India. He further encouraged the members that his paper "The Antiseptic" would always be ready to uphold and fight for the cause of the Medical Licentiates. He further exhorted the audience to observe the 20th of September of every year as the Anti-India Medical Council Day until such time as the Medical Licentiates are included within the All-India Medical Council.

Dr. R. Ramanjulu Naidu, Vice President of the Madras Branch of the All-India Medical Licentiates' Association moved the following resolution:

"This meeting of the Madras Branch of the All-India Medical Licentiates' Association resolved to appeal to the Members of the Indian Legislature all over the country to take up the question of inclusion of the Indian Medical Licentiates within the purview of All India Medical Council in right earnest and thus remedy the wrongs done to the Medical Licentiates as well as to the bulk of the independent medical profession.

Dr. U. D. Gopal Rao, Secretary of the Madras Branch of the All-India Medical Licentiates Association seconded the resolution.

With a Vote of thanks to the Chair and the Authorities of the Hall, the meeting came to a close.

GLYCERODINE (Colloidal Iodine for Subcutaneous Injection)

Dose $\frac{1}{2}$ to 2 cc. Subcutaneous injection painless. Efficacious in Plague, Puerperal Fever, Diphtheria, Carbuncle, Cellulitis, Rheumatism, Gout, Intractable Neuralgias, Staphylococcal and Streptococcal infection and all conditions where Iodine is indicated. Supplied in 24 cc. and 12 cc. bottles and in boxes of 6 in a box @ Rs. 5, Rs. 3, & Rs. 2, respectively. Please ask for a List of Pharmaceutical, P. B. Preparations and Sterile Solutions for Injections.

The Indian Chemical & Pharmaceutical Works, MEERUT.

169739

500 008

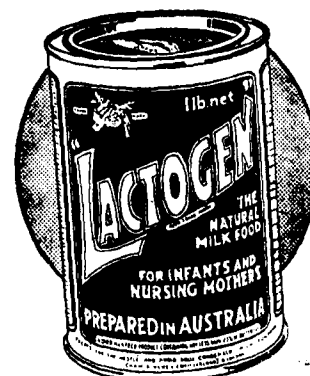
KEEP YOUR KNOWLEDGE UP-TO-DATE

MUCH that was considered final in baby food standards has recently been surpassed by research work and improved processes of manufacture. We are therefore submitting the latest and most important facts about **Lactogen** so that you may know where you stand when recommending this fine food for children under your care.

Lactogen is pure, fresh, full-cream milk, modified by the addition of pure carbohydrates in order to rectify the deficiency natural to cow's milk, made germ-free and dried by **Lactogen** processes that preserve unchanged the valuable mineral and vitamin content of the fresh milk. **Lactogen** is thus made, as nearly as possible, similar to breast milk.

Even the most delicate babies can take **Lactogen** as their sole food from birth. And as a supplementary or alternate feed, **Lactogen** has no equal. Unlike raw milk, **Lactogen** never varies in quality or constitution, whenever or wherever you buy it.

LACTOGEN



A NESTLE'S PRODUCT
A safe basic diet during all
stages of a child's development.

Nestle and Anglo-Swiss
Condensed Milk (Export)
Co., Ltd.
P. O. Box 396, Calcutta.

DOCTORS! Relieve your patients.
From :—Haemorrhoidal complaints by using



A Wellknown German Doctor—Dr. Herbert Berger writes :—

"On the strength of experience I have of haemorrhoidal preparations I wish to inform you, without having been requested to do so, that with Hadensa I have achieved the best and promptest results".

Hadensa stops bleeding, cures ulcers,
Buy from any chemists stores.

JOURNAL OF THE INDIAN MEDICAL ASSOCIATION.

EDITED BY

SIR NILRATAN SIRCAR, K.T., M.A., M.D., D.C.L. etc.,

With the help of A Strong All-India Editorial Board
The Official Monthly Publication of the Indian Medical Association.

FEATURES. 1. Original Articles. 2. Case-Reports ; 3. Society Proceedings; 4. Valuable abstracts from leading medical journals from all over the world.

PUBLISHED ON THE FIRST DAY OF THE MONTH

Annual subscription : Rs. 6. Post free.

Free to members of the Indian Medical Association.

AN EXCELLENT MEDIUM FOR ADVERTISEMENT

For particulars, write to :

Secretary,

67, Dharmatala Street, Calcutta.

THE MEDICAL BULLETIN

Empire Automobile Bldg., Queen's Road, Bombay 4.

**VALUABLE FORTNIGHTLY JOURNAL
FOR THE GENERAL PRACTITIONER.**

**ARTICLES BY EMINENT MEDICAL MEN
USEFUL ABSTRACTS
INTERESTING NEWS.**

Many, many doctors read it, Write for sample copy now.

Annual subscription—Rs. 5—post free.

Supplement to the 'Medical Practitioner'

(1)

HERE IS A NEW OPPORTUNITY TO MEDICAL LICENTIATES TO HAVE HALL MARKS IN RECOGNITION OF THEIR WORTH

Thanks to the great unselfish workers both in your ranks and outside, it is now possible for you to enjoy new privileges. With the help of Our Postal Tuition you can, at your own home, at your own convenience and at your own speed without detriment to your regular practice, prepare for the

SENIOR CAMBRIDGE EXAMINATION

**which comes off in July '36 at Lahore,
or December '36 at several centres in India**

● The moment you pass that Examination with Credits in the subjects approved by the General Medical Council, London, you become eligible to get admission to higher courses of study in India as well as England. For example, in India, you are eligible to get admission into the Madras Medical College and to appear for the *M.B.B.S. Degree* Examination at the end of a two years' course.

● We have to our credit many Medical Licentiates who owe their rise to the best tuition we gave. They are found in all places in India, Burma and even Africa.

● We also guide you to get admission to many learned Societies in Great Britain, Membership in which will get you many advantages. The following are but some of those Societies :—

- | | |
|--|--|
| 1. The Medical Society of London | 2. The British Medical Association |
| 3. The Royal Society of Medicine | 4. The Pathological Society of Great Britain and Ireland |
| 5. The Clinical Research Association | 7. The Assurance Medical Society |
| 6. The National Health Society | 9. The Ophthalmological Society of the United Kingdom |
| 8. The London College of Physiology | |
| 10. The Royal Institute of Public Health | |
| etc. | etc. etc. |

**OPPORTUNITY NOW KNOCKS AT YOUR DOOR
SHE WILL KNOCK BUT ONCE IN
YOUR LIFE TIME
BE SURE TO LET HERE IN**

TURN OVER

(2)

**HIGHER COURSE IN MEDICINE & SURGERY BY
PRIVATE STUDY ONLY, WITHIN INDIA**

*First M.B., B.S., Degree Examination of the University
of Madras for Medical Licentiates*

Medical Licentiates !

Are you aware of the new rule which permits you to appear as private candidates for the First M.B., B.S., Examination conducted by the University of Madras? This is one of the results of your agitation for the last 25 years. Many have already taken advantage of this privilege ; the following are but some of them :

Dr. SRI RAMACHANDRA RAO
.. C. TARAVADY
.. J. SURYAPRAKASA RAO

Dr. D. R. VAIDHYA
.. ALI BAHADUR KHAN
There are many more.

○

Other things being equal, the Medical Licentiates who have passed this Examination stand a better chance over others so far as admission to the 2 years' course in the Madras Medical College is concerned. This makes them eligible to appear for the M.B., B.S., Degree Examination at the end of a two years' course there.

○

Only those Medical Licentiates possessing either the Cambridge Senior Certificate as approved by the General Medical Council, London, or Intermediate Certificate of a recognised Indian University, are eligible for admission to this course.

○

We enable you to prepare for this at your leisure and at your convenience with the least dislocation to your regular practice with the help of our efficient Postal Tuition.

○

For Particulars apply to :

THE CITY COLLEGE, MADRAS

Reminders and Suggestions

DISEASES.	INDICATED MEDICINES.
ARTHRITISM : AZOTEMIA : BILIARY INSUFFICIENCY : BONE DISEASES : CARCINOMA : (Pains of) CANCER (Anaemia of) DENTAL CARIES : DYSMENORRHOEA : (Pains of) ECZEMA : (Irritation of) FLATULENCE : GLAUCOMA : (Pains of) GOUT : HYPEREMESIS GRAVIDARUM : HAEMORRHOIDS : HYPERSECRECTIONS : IRITIS : INFLUENZA : LYMPHATISM : MALARIA : METRITIS : OSTEO MALACIA : OBESITY : PAINS : POST OPERATIVE PAINS : PRURITIS : PREPARATORY TREATMENTS BEFORE OPERATION : PYREXIA : REGURGITATIONS : SMALL-POX : URTICARIA : WHOOPING COUGH : WORMS :	Panbiline, Iodalose. Hepatrol. Panbiline. Pulmo Calcium, Fer-Ma-Pho. Cryogenine. Hepatrol, Cryogenine. Pulmo Calcium, Fer-Ma-Pho. Cryogenine. Cryogenine. Sedogastrine, Papyta. Cryogenine. Iodalose, Urogenine. Opocrin Ovary, Oestryl. Mycol, Mictasol. Sedogastrine, Genoscopolamine, Genatropine. Cryogenine. Orargol. Pulmo Calcium, Cryogenine (for temperature.) Cryogenine. Calcium, Cryogenine, Opocrin Pituitary. Iodalose. Cryogenine. Cryogenine. Cryogenine. Cryogenine, Agocholine. Cryogenine. Sedogastrine. Cryogenine. Mycol. Iodaseptine, Felsol. Rectopaniline.

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

POST BOX NO. 460.

::

BOMBAY.

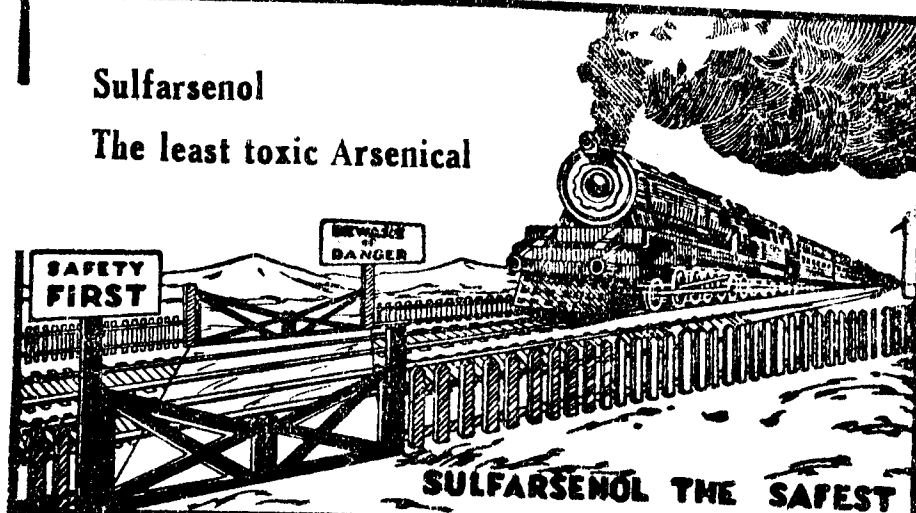
Reg. No. M. 2528.

*Patients prefer
painless
injections!*



ARSENO-SOLVENT
ensures
painless administration of
SULFARSENOL

Sulfarsenol
The least toxic Arsenical



SAFETY FIRST
BEWARE OF DANGER
SULFARSENOL THE SAFEST

THE ANGLO FRENCH DRUG Co., (EASTERN) Ltd.,
POST BOX NO. 460 :: BOMBAY

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