

(For the use only of Registered Medical Practitioner or Hospital or Laboratory)

THE MADRAS CLINICAL JOURNAL

MONTHLY JOURNAL OF THE MADRAS STATE BRANCH INDIAN MEDICAL ASSOCIATION

Vol. I

JANUARY 1956

No. 1

CALRON

Iron-Glycerophosphates—Vitamins, A. D. B. Complex
in a palatable base.

FOR

Fatigue

Nervous exhaustions,

Low general health,

Convalescence,

During pregnancy and

Lactation.

For further particulars please write to:—

East India Pharmaceutical Works, Ltd.,

MADRAS-1

CALCUTTA - 26.

BOMBAY-14

CONTENTS

MANAGEMENT OF A CASE OF JAUNDICE	by Dr. M. D. Ananthachari M.D. Principal, Madurai Medical College, Madurai.	1
RECENT ADVANCES IN THERAPEUTICS	by Dr. R. Subramanyam, B.Sc., M.D., M.R.C.P., Madras.	7
TREATMENT OF GENITO- URINARY CONDITIONS	by Dr. A. Venugopal, M.S. Honorary Surgeon, Government General Hospital, Madras.	17
U. S. DOCTOR CRUSADES FOR AFFLICTED CHILDREN	A. U. S. I. S. Feature	25
ASSOCIATION NEWS		27

ELIXIR HEPOSIM WITH EXTRA FOLIC ACID & VITAMIN B₁₂.

A proteolysed liver, yeast stomach concentrate with the vitamins of the B complex inclusive of FOLIC ACID & VITAMIN B₁₂ for oral administration in gastro-intestinal disorders like sprue-like syndrome and coeliac diseases in children, manifestations of deficiencies of the components of the B complex and also of considerable value in the treatment of general conditions of blood impoverishment to supply the vital substances which stimulate the process of repairs and replacements of the tissues and assist in the maintenance of normal body functions.

Manufacturers:—

The South Indian Manufacturing Co.,

MADURAI.



Madras Clinical Journal



LIVOZYME

12

A NON-ALCOHOLIC HAEMOPOETIC AND LIPOTROPIC TONIC AND TISSUE REPAIRING AGENT

RICH IN

Natural Haematinic principles, Vitamin B Complex factors and Digestive Enzymes of the freshly Proteolysed Liver Yeast Extracts fortified by Synthetic Vitamin B Complex factors Folic Acid, Vitamin B12 and Lipotropic factors Choline and Methionine.

PLEASE ASK FOR LITERATURE AND CLINICAL SAMPLES OF THE ABOVE AND OUR OTHER SPECIALITIES

HAVE YOU TRIED?
OUR WELL KNOWN

MILKAN

EXTERNAL REMEDIES



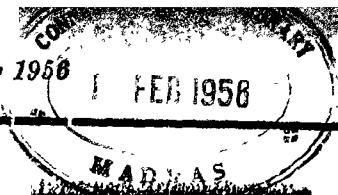
WITH
LABILE MILK
ALBUMIN BASE
SAMPLES ON REQUEST

- LIVOZYME
 - LIVOZYME WITH EXTRA FOLIC ACID
 - MULMIN
 - FERMICAL
- etc., etc.



ASSOCIATED DRUG CO., LTD
YERCAUD, S. I.

Artsman Co., Madras 2



W. T. SUREN & CO., LTD.

BOMBAY . MADRAS . CALCUTTA

Sole Distributors for:

TEDDINGTON CHEMICAL FACTORY LTD.

TELEPHONE: 30861

TELEGRAMS: SUREN



UNITED INDIA BUILDING,
SIR PHIROZSHAH MEHTA ROAD,
P. O. BOX 229, BOMBAY, 1.

Dear Doctor,

Re: Nutritional Anaemias

It is generally agreed that the commonest cause of anaemias in the tropics is nutritional, that is, protein lack with deficiencies of iron and other haematinics, e.g., folic acid, vitamin B₁₂ and proteolysed liver.

We have pleasure therefore in introducing

T.C.F. HAEMATINIC LIVER CAPSULES

which are designed to offer a suitable therapy for the treatment of anaemias in a convenient oral form. Full details will be supplied on request.

Awaiting your valued enquiries, we remain

Yours faithfully,
Per Pro. W.T. SUREN & CO. LTD.,

DIRECTOR.



Necessary for

MOTHERS DURING
PREGNANCY
& LACTATION

CHILDREN DURING
GROWTH, RICKETS &
UNDERNOURISHMENT

ADULTS DURING
CONVALESCENCE
and ASTHENIA

MALTOMIN

MALTOMIN combines necessary factors for nourishment and growth. Supplies all requirements of Vitamins, Iron & Calcium.

COMPOSITION. Each fluid ounce contains:

Vitamin B₁₂ 10 mcg., Colloidal Iron 4 gr., Vitamin A 16,000 I.U.,
Vitamin D 3,600 I.U., Vitamin B₁ 2 mg., Vitamin B₂ 1 mg.,
Niacinamide 20 mg., Calcium Gluconate 5 gr. and Malt Extract.

A PRODUCT OF *Cipla* BOMBAY-8.

LITERATURE SENT ON REQUEST.



CIPLA SALES DEPOT, 1/186 Mount Road, Madras.

GASTATONE

(Prof. GAJJAR'S)

a standardised MALT product,
containing essential VITAMINS and MINERALS

SPECIALLY NEEDED

to MOTHERS — during pregnancy and lactation
to CHILDREN — for rapid and sturdy growth
to ADULTS — who are run down

Descriptive literature on request:-

PROF. GAJJAR'S
STANDARD CHEMICAL WORKS LTD.,
116, CURREY ROAD, BOMBAY-13.



“ALBERT DAVID’S ”

Male Hormone

Testosterone Propionate

“Patients of male climacteric almost always get relief of its symptoms and a feeling of well-being by treatment with proper doses of Testosterone”

Werner, S. A...Post Graduate Medicine 4. 102. 1948

“Full libido and potency were restored in post pubertal castrates with 40 mgm. of Testosterone propionate weekly.” *Foss, Lancet 11 1306. 1937*

“31 cases out of 49 showed reduction in blood pressure and were relieved of headache, lassitude and insomnia”

Steinach...Wein. Klin. Woch. 102. 134. 1398

TESTOSTERONE
“Albert David”
in boxes of
3 ampoules of 1 c.c.
containing 10 mgm.
25 mgm., 50 mgm.
100 mgm. and
250 mgm. each
METHYL
TESTOSTERONE,
Tablets 5 mgm.
in bottles of
20 tablets
(Sub-lingual)

ALBERT DAVID LIMITED, HUTTWIL, BERNE, SWITZERLAND

Packed by: ALBERT DAVID LIMITED, CALCUTTA - 13



NEURAGEN

POTENT NERVINE TONIC & REVITALISER

for
VIGOUR
&
RADIANT HEALTH

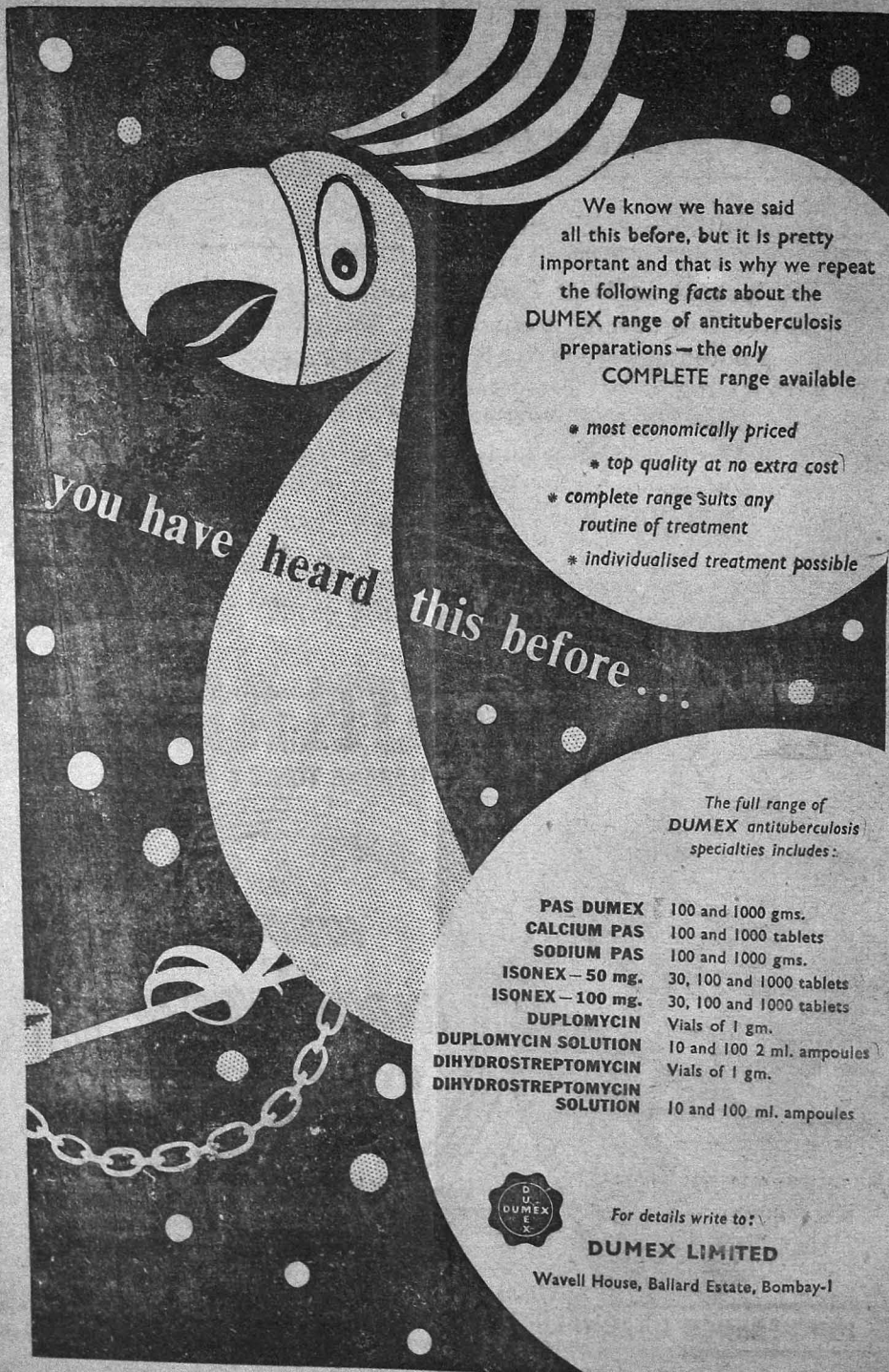
RECUPERATIVE
& **PICK-ME-UP**

Telephone : 4930

Cables : Multamine

Glycerophosphate of Iron, Sodium, Calcium, Strychnine and Manganese, Vitamin B Complex Ext., Vitamin C Sodium Calcium Formoxyl, Kola Nuts Fluid Ext., Wahoo Fluid Ext., Intestinal Ferments, Papaine, Organic Copper Salt, Iron Sulphate, Manganese Sulphate in Palatable base.

INDO-FRENCH PHARMACEUTICAL CO., CATHOLIC CENTRE, MADRAS-1.



you have heard this before...

We know we have said all this before, but it is pretty important and that is why we repeat the following facts about the DUMEX range of antituberculosis preparations — the only COMPLETE range available

- * most economically priced
- * top quality at no extra cost
- * complete range suits any routine of treatment
- * individualised treatment possible

The full range of DUMEX antituberculosis specialties includes:

PAS DUMEX	100 and 1000 gms.
CALCIUM PAS	100 and 1000 tablets
SODIUM PAS	100 and 1000 gms.
ISONEX — 50 mg.	30, 100 and 1000 tablets
ISONEX — 100 mg.	30, 100 and 1000 tablets
DUPLOMYCIN	Vials of 1 gm.
DUPLOMYCIN SOLUTION	10 and 100 2 ml. ampoules
DIHYDROSTREPTOMYCIN	Vials of 1 gm.
DIHYDROSTREPTOMYCIN SOLUTION	10 and 100 ml. ampoules



For details write to:

DUMEX LIMITED

Wavell House, Ballard Estate, Bombay-1

THE MADRAS CLINICAL JOURNAL

MONTHLY JOURNAL OF THE MADRAS STATE BRANCH
OF THE INDIAN MEDICAL ASSOCIATION

VOL. I]

JANUARY 1956

[No. 1

◦ MANAGEMENT OF A CASE OF JAUNDICE.

By

Dr. M. D. ANANTHACHARI, M.D.,

Principal, Madurai Medical College, Madurai.

In this discussion of to-day I propose to deal with the subject by posing a series of questions, and trying to answer the same, so that at the end of the hour, the subject would have been dealt with completely in a way, atleast according to my ideas, without inflicting on you a boring pedantic lecture.

Obviously the first question would be 'My doubt is raised that the patient may be having jaundice; what should I do? To get at the answer to this another question has to be posed namely — Is the patient having Jaundice ?

The answer may be easy or difficult. It may be so easy that a mere look at the patient will suffice ; or it may be so difficult that elaborate tests have to be done, for the answer to the question. The first test to be done is to examine the urine for :—

A. Bile.

B. Urobilin

The second is to examine the blood for

C. Van-den. bergh units.

Having established the existance of jaundice the next question arised namely "What type of Jaundice the patient is having?—"

The answer to this question may be easy or difficult and in some instances it may be extremely difficult too. In a large number of cases it is possible to give an answer to this question by doing the following tests.

1. Bile pigment in urine.

2. Urobilin in urine

3. Bile in the motions

Here a look may be sufficient to decide ; but in certain cases possible confusion may arise. The motion must not be found mixed with urine. The patient must be instructed to pass the urine and motion separately, and also not to dilute the motion passed with the water used for washing. Table 1. gives the points useful in differentiating the various types of jaundice from urine and motion tests.

◦ Lecture delivered at the annual meeting of the Thirunelveli Branch of I.M.A. on 29-10-55.

TABLE 1

Jaundice	Haemolytic	Hepatic	Obstructive
Urine	No bile Excess Urobilin.	Bile Urobilin.	Bile excess No urobilin.
Motion	Bile +++	Bile +++	Bile Nil.

In some cases, doubt may still exist. In hepatic jaundice there may be obstructive signs and so there may be no bile in the motion. Obstructive jaundice may show bile in motion occasionally; and haemolytic jaundice may show biliary obstruction from the presence of biliary calculi in the bile duct.

Emphasis in the diagnosis of jaundice is not in typing the condition, but in finding out whether the condition requires surgical or medical treatment. One has to diagnose whether the patient has a medical or surgical jaundice.

Obstruction outside the liver alone can be dealt with by surgery, while inside the liver, medical measures have to be resorted to. So diagnosis has to be according to the following classification:—

Obstructive a. Intra hepatic (Medical)
b. Extra hepatic (Surgical)

Hepatic
Haemolytic.

The diagnosis between intra-hepatic and extra-hepatic obstruction may be possible by the following methods of examination.

1. A very careful clinical history of the past and the present.
2. A thorough clinical examination of the entire patient and all his symptoms.

3. Laboratory tests;

Liver efficiency tests
(Bromsulphthalein)
Cephalin cholestrol flocculation.
Thymol turbidity
Alkaline phosphatase
Protein estimations of blood.

4. Radiology

Plain radiography
Contrast radiography.

5. Biopsy.

Diagnosis is nearly always easy; and rarely it may be in doubt after all the tests and examinations. In such cases one has to wait and note the evolution of the disease, but not too long. Exploratory examination is admissible in such cases. Operation becomes increasingly risky with the progression of the jaundice.

The following points are useful in diagnosis:

1. Typical calculous history; viz. repeated attacks of pain with fever and jaundice, leucocytosis, gall-bladder not enlarged, (liver may be so) History of typhoid, dyspepsia, flatulence, fair forty fecund and fat female.

2. Progressing steadily with complete obstruction to pancreatic dysfunction, palpable tumour, and no urobilin at all in both motion and urine. Gall-bladder enlarged. These suggest immediately tumour at the head of the pancreas.

3. Laboratory tests. Obstruction is present and the liver function tests indicate good liver function. It is at this stage that one must decide whether it is a medical or surgical jaundice. High values for cephalin cholesterol flocculation and low values for cholesterol esters are indicative of internal obstruction and medical jaundice. High values for alkaline phosphatase are indicative of surgical jaundice. We should depend on clinical findings and not on laboratory findings to the exclusion of the former.

Helpful clinical features are :

A. Jaundice is always mild and prolonged. Spleen is enlarged with slight anaemia, with little interference in general health—Jaundice is *haemolytic* in type.

B. Jaundice is severe, even greenish in colour, itching is prominent, general health is apparently good, stools acholic, urine is very dark with bile—the jaundice may be *obstructive*. It may be surgical or medical. The patient has to be examined diligently and repeatedly and a careful watch has to be kept on him.

C. Jaundice of a rapid onset, with a history of transfusion to vaccination or contact with a case of jaundice, insignificant degree of jaundice and presence of fever, obstruction of a mild and incomplete nature with liver enlarged and tender and with a history of having some injection or having taken some drugs, the condition is toxic or *infective hepatitis*.

D. Presence of nervous symptoms is of bad prognosis and is indicative of *hepatic jaundice*, even if obstructive signs are present. Progress may be rapid and sudden. There may be coma and haemorrhage. Twitching of muscles, neuritic symptoms, sudden crying and shouting, pupillary changes, rigidity of skeletal muscles, delirium, coma, all these make one suspect a hepatic jaundice.

E. The presence of foetor hepaticus, spider naevi, palmar erythema, ascitis, enlarged veins, and itching indicate hepatic disease.

One ought not to wait longer than six weeks if the case is not diagnosed in the obstructive type and has to advocate laparotomy. With longer standing jaundice the risks of operation increase.

How to TREAT after diagnosis is made,?

In *haemolytic jaundice* very little of treatment is required. The anaemia has to be treated with *iron, vitamin C, and liver extract*. The bowels have to be kept open. If the spleen is enlarged and the fragility of the R. B. C. is increased *splenectomy* is indicated. During this procedure *gall-bladder exploration* has to be made for pigment stones. There are *no restrictions* to be made on the patient's *dietetic habits*.

In *obstructive cases* diagnosis has to be made between medical and surgical types. Thorough examination of the whole body repeatedly at weekly intervals or even at less frequent intervals has to be done. Liver function tests have to be made repeatedly. *Treatment is symptomatic*. (Vide infra.)

In *hepatic jaundice* we have to take the case seriously from the outset and for as long as for three months after the patient has come to normal. *Rest* is to be insisted upon. The patient has to be taken away from any toxic

sources outside, viz. drugs works and industry. Treatment is *symptomatic*.

Symptomatic Treatment.

REST is essential and imperative in hepatic jaundice; and a restricted rest is ordered for three months during convalescence.

DIET:

Full calories

Restricted fat

Liberal proteins; dairy proteins preferred to meat proteins.

Full vitamins, especially B-complex, C, E and K.

Excess of carbohydrate and sugar

Restrict proteins if coma is present (even methionine and choline. These are not indicated during the acute process of liver cell injury; but are good in stages of recovery and new cell formation.)

Keep bowels open when bile is absent from motions.

DRUGS

Salicylates in mild internal obstruction. Mag. Sulf and soda sulph as cholagogues and choleretics.

Bile salts are best avoided in obstructive cases. Liberal use of glucose orally and parenterally.

SPECIAL DRUGS.

ACTH 10 to 20 mgs. I. V., or 80 to 100 mgs. intra muscular.

CORTISONE 100 to 200 mgs. daily.

These are very useful drugs to shorten the course of the disease.

Appetite returns very early itching is vastly improved. These drugs are not curative, but only ameliorative. There are a few contra-indications. There may be a tendency to retain fluids and should be avoided in the presence of ascites.

Avoid the use of drugs mentioned below.

Morphia, Barbiturates and Sulpha drugs.

SPECIAL CONDITIONS

Itching. This is present mainly in obstructive jaundice, to some extent in hepatic jaundice and never in haemolytic jaundice. It is due to circulating bile salts, and is present maximally in obstructive cases.

It may be very irksome, produce sleeplessness and even psychosis and sometimes lead to suicide.

Treatment is not always successful.

Dihydro ergatamine tartarate 1 mg. injection daily, ACTH and cortisone up to 150 to 200 mgs.; and calcium gluconate may succeed.

Haemorrhage. When it occurs it is a warning of the seriousness of the situation. It is possible in both obstructive and hepatic types of cases. It may be external and noticed or internal and concealed, and the patient becomes worse. We may also find sub-cutaneous purpuric type.

The condition is usually fatal; in hepatic and toxic jaundice.

Haemorrhage may be due to vitamin K. deficiency in obstructive jaundice. It is never seen in the haemolytic type of jaundice.

In obstructive cases give Vit. K. by injection as well as Vit. C., and calcium.

In hepatic jaundice Vit. K. is useless as the hepatic cells have failed in their function and do not produce prothrombin and fibrin. Transfusion is the only remedy.

Hepatic Coma. This is the termination for all liver diseases.

It has nothing to do with the degree of jaundice.

It is usually fatal. Its significance is the same as that of urea in uraemia and shows an inadequacy or failure of liver function.

The etiology and mode of production is not clear.

A clinical state similar to this is produced after surgery for portal hypertension and seems to be related to ammonia excess in blood supply to the brain and the presence of certain proteins. The ill effects are reduced if Glutamic acid is given.

Treatment of hepatic coma.

(1) The bowels have to be kept open with enema or saline purgatives.

(2) Normal saline with glucose 5 to 15 % up to 2 to 4 pints by either intragastric or intravenous drip is a useful procedure.

(3) Glutamic acid in the form of Sodium glutamate up to 20 grs. may be used in the intravenous drip.

(4) Insulin 10 units with glucose is given earlier.

(5) Sedation

Avoid morphia and barbiturates. Paraldehyde is not a good choice. Bromides and chloral are tolerable. Avoid sedation itself; if possible. If not scopolamine 0.5 mg., Paraldehyde

2 to 4 c. c. s. or bromide 20 to 30 grs are all indicated.

(6) ACTH and Cortisone are useful drugs. (Vide supra)

(7) Paracentesis aggravates and sometimes precipitates the onset of hepatic coma. It is better avoided; and if one is forced to remove only small quantities at a time are removed to relieve abdominal pressure.

(8) Avoid excessive protein in diet. (Vide note on the use of choline) One has to depend largely on carbohydrates and sugar. While subsisting mainly on glucose, or when the patient is under the effect of cortisone the patient must be given Pot. Chloride 2 gms, daily as a minimal dose. This may be done by the use of fruit juice.

(9) One cannot be sanguine about a cure in spite of a satisfactory recovery during an episode of coma. It will come on again later, and will not yield to treatment. Many a patient who shows a satisfactory response to treatment initially sinks back into coma and dies later.

Jaundice in the course of other diseases.

Acute infectious fevers.

Jaundice indicates acute hepatic cell damage and liver injury.

So the prognosis is worsened.

Treatment must be done as in cases of hepatic cell damage.

During treatment with some drugs.

Jaundice appearing means that there is hepatic damage due to the drug used. So, stop the drug and treat the jaundice.

After transfusions.

Stop the transfusion, and get ready for the treatment of shock and anuria. The urine has to be kept alkaline. One has to hesitate to give blood transfusions in cases of haemolytic anaemia.

In heart disease.

Causes of jaundice in heart disease are hepatic anoxia and cell damage, and excess of haemoglobin products in cases of infarctions, particularly in lung. Jaundice may be mild and of the hepatic type. The obstructive type is rare.

UNICHEM LABORATORIES,

BOMBAY - 26.

- LIVO-B-COMPLEX** \bar{C} B₁₂ ... Oral Liver extract with B factors, Lipotropic factors, B₁₂ and Folic Acid.
- UNI-B-COMPLEX** \bar{C} G. ... 'B' & 'C' factors with diastase in tablets
- FERO-B-LIVER** ... Ferrous gluconate, LIVER, 'B' factors, folic acid-Liquid.

For further particulars, please contact:—

Agents: **M/S. GANAPATHY & Co.,**
48, BUNDER STREET, G. T. MADRAS - 1.

RECENT ADVANCES IN THERAPEUTICS

By :

Dr. R. SUBRAMANYAM, B.Sc., M.D., M.R.C.P.,

Physician, Govt, General Hospital, Madras,
and

Professor of Therapeutics, Madras Medical College, Madras.



With regard to the recent advances in therapy, the most outstanding advance that has occurred is in the introduction of antibiotics. It is only they who have practiced in the pre-antibiotic days can realise the tremendous change in the outlook with regard to some of the infective conditions like Pneumonia, Syphilis, gonorrhoea. In my student days diagnosis of pneumococcal meningitis meant certain death. But, today, if the case is diagnosed sufficiently early, the prognosis is considerably better. Even today pneumococcal meningitis carries a high mortality. It is often due to the fact that the case is spotted late in the course of the illness and the treatment is not energetically carried out. The introduction of antibiotics has been fairly recent, as late as 1940 and was made generally available in 1946, but some of them are already losing their potency. Cases are on record, particularly in the hospitals of western countries where Penicillin resistant staphylococci are increasingly prevalent. Fortunately in our country and in our hospitals, we do not use Penicillin as often as they do in the West, not on account of the conservative ideas with regard to the treatment but because of the economic conditions. To this day **PENICILLIN** stands unrivalled. In spite of its limitations whenever it acts, it acts exceedingly well. There is no such thing as a toxic dose. Any amount of Penicillin can safely be given, as long as it is being given I.M., orally or I. V. The only side effect is that Penicillin produces reaction when it has direct contact with the

nerve tissue. If directly applied to the nervous tissue, it is likely to cause convulsions. Barring this there is no definite contra-indication for the Penicillin therapy. Penicillin is useful in staphylococcal streptococcal and pneumococcal infections and gram negative organisms are also responsive to Penicillin therapy e.g. gonococci. In bacterial endocarditis caused by organisms that are sensitive to Penicillin it is useful. It is useful against syphilis, anthrax and Vincent's infections. Penicillin is ineffective in bacillus coli infections, common cold, dysenteric group of organisms, Brucellosis infections, (Malta fever), malaria, mumps and enteric group of infections Tuberculosis and Leprosy. The point to bear in mind in the use of antibiotics is that the drug must be made to come in contact with the area where the disease process is active. For instance in a case of localised pleural effusion, in the effusion the organisms are thriving. Even if the organisms are penicillin sensitive, no useful purpose will be achieved by giving Penicillin I. M. or orally. Penicillin should be given intrapleurally. Penicillin orally is not as effective as parenterally but if the dose is 4 to 5 times the parenteral dose it is all right. Toxic reactions are of an allergic nature, consisting of local sensitiveness. In non-sensitive and normal persons, no toxic or adverse effects are observed. Some of the toxic symptoms met with in sensitive persons are controlled by anti-histamines.

☆ Lecture delivered at Conjoint Meeting at Courtallam on 13-8-55.

The very next advance in antibiotic therapy was STREPTOMYCIN introduced in 1943 by WAKSMAN. Streptomycin is active against the gram positive and negative organisms, Tuberculous bacilli and Actinomycosis. In this country and in our hospitals it is only used mainly for tubercular infections. We use Streptomycin sulphate or Dihydrostreptomycin or the combination of these two. Streptomycin ordinary with dihydrostreptomycin can also be used. The concentration of streptomycin in C. S. F. is very low on parenteral administration. So in the tuberculous meningitis, it is better to give it intrathecally, 100 mgm. in 1 c. c. of double distilled water; with no adverse effect. Antibacterial effects have been found in C.S.F. as long as 24 hrs. after intra-theal injections; following paranteral injections, Streptomycin gives very satisfactory concentration in ascitic and peritoneal fluids and it is excreted in considerable amounts in bile. Unlike Penicillin it is a toxic drug with side effects. The larger the dose that is given, the greater the toxicity. Toxic symptoms include nausea, vomiting, abdominal pain, skin rash, generalised arthralgia, dizziness and vestibular damage. Deafness may also occur as also Eosinophilia. The most serious toxic symptom is on the 8th nerve. Permanent deafness may occur. Both penicillin and streptomycin may be combined. They also combine with sulpha group of drugs. Though large doses have been used, the tendency of late has been to restrict the dose to one gram I.M. every third day. Where the patient is in an acute stage with high temperature, it is given daily 1 gm. till the temperature settles down and once the fever settles down it is given every third day. For tuberculous meningitis (quite a large series of cases have been reported) intra-theal injections have been used and equally large series of cases have

been reported with equally good results without administration of streptomycin intrathecally.

The next antibiotic of importance is, CHLORAMPHENICOL. This was introduced in 1948. It is the only antibiotic that has been synthesised. It is fairly bitter in taste and is available in 250 mgm. capsules for oral administration. This is indicated for the treatment of typhoid fever, recurrent diseases and gram negative urinary infections. It is useful in bacillary dysentery and influenza as it is rapidly absorbed in the gastro intestinal tract. In spite of its broad spectrum action we use this almost exclusively for enteric group of fever. Like streptomycin, this has also got toxic manifestations. Aplastic anaemia has been reported in several parts of the world. Fortunately we have not had this trouble in our own hospitals where we use Chloramphenicol in a large scale. Apart from this, one of the common complications present in the ward as a result of Chloramphenicol therapy is rawness of the tongue and patients also complain of pruritus around the anus and symptoms of peripheral neuritis. These are due to the deficiency of vitamin B-complex in the system, conditioned by the fact that Chloramphenicol cuts out the coli group of organisms in the bowel or interferes with the absorption of vitamin B-complex. It is at best a bacteriostatic drug. The usual dose is 4-6 capsules stratum and one capsule 2 hourly. or 2 capsules 4th hourly, till the temperature touches normal. Once the temperature maintains normal for 24 hrs. or longer, the dose is reduced to half the previous dose i.e. one capsule 4 hourly, and another three days later, it is reduced to one capsule t. d. s. till the 10th day of convalescence. It is essential to carry on the chloramphenicol therapy well on into convalescence; otherwise relapses are seen. In chloramphenicol-

treated cases, if the drug is stopped too soon, the relapse rate may be as high as 30%. The relapse, when it occurs, should be treated as a fresh case and large doses of chloramphenicol must be given initially. *Chloramphenicol and penicillin do not go well together.* It is worthwhile to give Vitamin B-complex as a routine when chloramphenicol is being given.

Two other antibiotics that were simultaneously introduced into the market are AUREOMYCIN AND TERRAMYCIN. To my mind there is no great advantage in these later antibiotics. They are costly and the action of both of them are equivalent to the combined action of Penicillin and streptomycin. But the only advantage is that they can be administered orally and they are useful where Penicillin resistance has developed. In cases of staphylococcal or pneumococcal infections my own experience is that penicillin gives much better results when it acts than Aureomycin or Terramycin. Another advantage is that they are useful in the acute phase of amoebic dysentery. If for some reason or other it is felt that Emetine is contra-indicated, these antibiotics can be used. Their action is not in any way superior to Emetine. Only it has not got the cardiac depression which emetine has. These broad spectrum antibiotics act on coli group of organisms causing Avitaminosis and allows certain other fungal infections to grow due to their inhibiting organisms which ordinary prevent fungal growth. To prevent the growth of fungus, Messrs. Squibbs have introduced a product under the trade name Mysteclin. This contains steclin a mycostatic, and oxytetra-cycline which inhibits the growth of secondary fungal organisms. The drug has been introduced recently into the market and it is too premature to decide about its usefulness. Whether we have

reached the solution to the side-effects due to secondary organisms growing or not can be assessed in a year or two. There are a few other antibiotics which have been introduced and which are too toxic for internal medication but are quite useful for local administration. For example TYROTHRISINE, this is available in the form of a solution or ointment. This is marketed under the trade name 'Tyroderm'. This tyrothrisine is not likely to be used at any time internally. It can safely be used in external medication. It acts exceptionally well in Pyoder-mias but sometimes allergic reactions are likely to occur. This is effective in infections caused by Pneumococci, Streptococci and Staphylococci. It is also effective against gonorrhoea.

Another agent that has been introduced is Bacitracin. It is easily soluble in water and can be heated to 100° c without losing its effects. It is active against gram positive and gram negative organisms. It is useful in coccal infections.

Another antibiotic which has been recently introduced and which we have used in a couple of cases, is VIOMYCIN. With regard to this, its action is toxic to the kidneys but if the dose is limited to one gram or less and given not more than once in 24 hrs, toxic symptoms are not met with. In both of our cases, where we used this, we have given one gram every third day. In a case of miliary tuberculosis not responsive to streptomycin P. A. S. and I. N. H., and with a temperature ranging from 102 to 103° after the second injection of Viomycin, the temperature settled down to normal. In the first case the patient was able to maintain the normal for six months and in the second case, a medical student suffering from pleural effusion which failed to respond to other treatment, Viomycin controlled the temperature and after the second injection,

the temperature maintained normal. Given in high doses it is likely to cause damage to the kidneys. A therapeutic dose of 1 gram every third day may be given. No toxic symptoms have been observed by me nor has been reported with this dose.

A spectacular advance has been made in the treatment of **TUBERCULOSIS**. Soon after the advent of streptomycin, it was realised that tubercle bacilli develop streptomycin resistance in a short time. The resistance is particularly seen when the drug has been administered for a month. So a search for some other anti-tuberculous agent was made and P.A.S. was evolved (Para-amino-salic acid). This can be given either orally or parenterally. Generally oral dose is not well-tolerated when given in adequate quantities. The recommended dose is 20 grams per day. This is not tolerated by an average Indian. An average Indian's maximum tolerance is 10-12 gms. per day and he can stand the same without any gastro-intestinal upset. 10 gms. has been given I. V. for 20 to 30 days daily with very favourable results particularly in tuberculous meningitis, and miliary tuberculosis, and also in cases of bilateral pulmonary tuberculosis. In large doses, P. A. S. can cause hypothyroidism, but the changes are reversible. Within a short time after the advent of P. A. S., Iso-nicotinic acid neo hydrazide was brought out (I. N. H.). The recommended dose is about 300 mgm. per day. The dose is to be gradually increased. To start with, 50 mgm. should be given, and the increase should be gradual upto 300 mgm. per day. Compared to the other drugs, I.N.H. is non-toxic and at the same time it is highly effective. It is effective orally. With any one of these drugs, resistance is likely to occur if used alone, but in combination, they are very effective. The present tendency is to use the combination of

either streptomycin with P. A. S., or I. N. H. but I feel it is better to use all the three since you employ a less dose of P. A. S. with streptomycin. With the combined use of all the three drugs, from the start, resistance does not occur. Streptomycin can be discontinued at the end of a month. I. N. H. and P. A. S. can be continued thereafter for another three months in early cases, but in serious conditions, like Tuberculous Meningitis, it is better that the patient is all the time on anti-tuberculous drugs. In these cases it is better to give them I. N. H. and P. A. S. for six months or even for a longer period even though all criteria of cure has been established. It has been observed that even Oxytetracycline has bacteriostatic effect on the tubercles and is clinically effective, when streptomycin alone is not active. Sometimes one can lower the resistance of the tubercle bacilli by giving 2 c. c. of hydnocorpus oil s. c. weekly twice. This Hydnocorpus oil though it is a very poor agent by itself, helps in the disintegration of the bacilli in the presence of other powerful drugs like streptomycin, P. A. S. and I. N. H. In the large majority of cases of tuberculous meningitis, particularly when the children are brought in a conscious state, they recover completely without any residual symptoms, but once they have become unconscious, the position is not quite so good. With the combination of these three drugs, intrathecal administration of 100 mgm. of streptomycin daily is useful till the condition subsides and the child recovers consciousness.

Other drugs that have been introduced in the field of medicine are **ACTH** and **CORTISONE** and it is still too premature to say what will be the position of these two drugs in the next ten years. They are used in collagenous disease like rheumatism and rheumatoid arthritis. Cortisone is also available in the form of an oin-

ment which is used as a means of restoring the eye-sight in cases of syphilitic interstitial keratitis, previously an incurable condition. Cortisone is also useful as a means of saving the patient of allergic dermatitis. In cases of extensive psoriasis, given I.V. ACTH acts dramatically with very good results, though relapses are by no means uncommon. In Pemphigus vulgaris, cortisone given in adequate doses, is able to control the disease and make the life of the patient tolerable. They are also useful as adjuvants in the treatment of malignant diseases by giving a sense of well-being and creating an appetite so that he eats better and feels better but life is by no means prolonged. There are definite limitations for this group of drugs as they are contra-indicated in cases of hypertension, peptic ulcer, glycosuria etc. Cortisone is also useful in the treatment of Addison's disease. We have used them to control the typhoid toxæmia - after treating them with the specific drugs like Chloramphenicol. The effect of Cortisone in the course of typhoid is seen in the temperature being rapidly brought down to normal in 24 hrs. The toxæmia clears and the patient recovers. Even in cases of tuberculosis, it can be tried, provided the disease can be checked with anti-tuberculous agents. This drug can only be used, if the infection can be brought under control by specific drugs. If specific drugs are not available, Cortisone or ACTH should not be used in the presence of infection as they are likely to aggravate the infection.

TREATMENT OF MALIGNANT DISEASES.

The great advance has been the introduction of radio-active Isotopes and drugs like T. E. M. and Nitrogen mustard. Though the latter group of drugs like T. E. M. and nitrogen-

mustard do not prolong the life, yet they bring the disease under control and make life bearable where it would otherwise have been unpleasant. Nitrogen mustard acts by interfering with the cell division. It is most effective in preventing the mitochondrial division with the result that when administered to patients suffering from malignant diseases, the malignant cells which are undergoing rapid division are checked much more than the normal cells. Incidentally, it has been observed that nitrogen mustard is found to be of use in conditions like sub-acute nephritis, rheumatoid arthritis, psoriasis and Eosinophilic lungs. The exact role that nitrogen mustard plays is difficult to understand. The relief it gives in rheumatoid arthritis is sometimes better than what one can obtain with Cortisone or ACTH. Similarly in sub-acute nephritis, nitrogen mustard may bring on critical diuresis. Even in these cases, this cannot by any means be called a curative agent. Relapses have been known to occur. In the case of leukaemia treatment with nitrogen mustard is not so good as with deep X-ray therapy. T. E. M. (Triethylene-melamine) has found its application in Hodgkin's disease Reticulom-cell sarcoma, lymphosarcoma, chronic lymphatic leukaemia and giant cell lymphomatosis. The dose has got to be determined in each case. It is administered on alternate days. The usual dose is 1.25 mgm. This is not available in this country, but is available in the United States. The advantage with these drugs is that they can be made available to the man in the village. It does not need costly equipments like deep X-ray appliances and radium needles. They are only available in the big cities and even there not as freely as one desires. Even if these are made available in the remotest village, they still would need blood control. They also need expert medical supervision.

While advances are taking place in general medicine, other branches have not been lagging behind. In the field of **CARDIO-VASCULAR DISEASES**, the great advance has been the introduction of *Rawoulfia serpentina* group of alkaloids. About three years ago, when I addressed this Association on Hypertension, the position was this - only whole alkaloid was available in the market and that was not consistent in its action. Since then a good deal of research work has taken place and it is known now that the *Rawoulfia* drug contains a number of alkaloids, some even having the effect of elevating the blood pressure. Depending upon the place where the drug is collected, the composition of the root varies. Two purified alkaloids are now being made available in the market. They are rawoulfin under the trade name R. S. 51 and Reserpin under the trade name Serpasil. These products are more certain in their action and they are able to bring down the pressure more definitely. Being pure alkaloids they are available in crystalline forms. My own experience in a series of cases is that R. S. 51 lowers the pressure both in animal experiments and in hyperpietic patients. The action is presumably by a peripheral vasodilator mechanism, mainly involving the limbs, and the vasodilator mechanism seems to be inactivated by the administration of antihistamine preparations. It was also observed that these alkaloids are not always successful in their actions. They fail in about 40% of the cases, completely irrespective of the dose employed. The dose that I have been employing is 1/6 gr. t. d. s. a. c. Some of the patients have had this drug for more than three years continuously. Though they have taken the drug continuously, no adverse effect has been observed. In some cases once the pressure came down to normal, the drug was discontinued and only the pressure was recorded. The pressure maintained

normal for a variable time, interval varying from 3 to 7 days at the end of which time there was a tendency for the pressure to rise and sometimes reach even the pre-treatment levels. As often as the blood pressure is raised, by putting the patient on the drug, the pressure was brought down to normal limits. In other words, there was no drug tolerance. Among the cases that failed to respond to R. S. 51, we found in quite a good percentage of them, combining the drug with ganglion blocking agents like Vegolysen-T orally or Vegolysen parenterally will check the pressure. The great advantage of this *Rawoulfia* group of drugs over other agents is that when the pressure is brought down to normal levels from high pressure, absolutely no side effects were observed. For instance in one case the pressure was brought down from 200/120 to 130/90 in the course of a week and absolutely no side-effects were observed. Patient was able to pass urine quite freely and was feeling quite comfortable with the low pressure. *Rawoulfia* group of drugs are not very effective in the old age group. Men past 60 or 65 do not respond to them as well as the younger age group and cases of essential hypertension respond better than hypertension, secondary to kidney diseases. Where one alkaloid fails, the drug can safely be combined with another alkaloid. In some of the refractory cases, I have used another combination introduced by Messrs. Gluconate, under the trade name R. S. Forte. This contains R. S. 51 and other alkaloids which have hypotensive effect. Where R. S. 51 alone has failed to make any impression, this R. S. forte was found to have dramatic effect in some of the cases. When the patient is put on R. S. Forte, the B.P. should be recorded every day, since a steep fall in pressure may occur in some cases. The recommended dose is one tablet t. d. s. before food. The

pressure is watched, and if the fall is moderate or slight, it can be repeated for a few days but if the pressure has fallen down to normal levels, the drug is best withheld and the pressure alone is recorded for some days till it shows a tendency to rise. Then it can be repeated once again or it can be replaced by the milder R. S. 51 alone. With regard to **HEXAMETHONIUM COMPOUNDS**, oral compounds are safer but less certain in their action. I have had quite a number of cases in which so long as the drug was given orally, practically no effect was noted with regard to the blood pressure but giving the drug by the needle, it brought down the pressure considerably. 25 mgms. of oral hexamethonium compounds sometimes may have practically no effect, where as 25 mgms. parenterally may bring down the pressure to alarming levels. Once by accident in one of my cases, the patient was given 50 mgm. subcutaneously and he developed Pulmonary oedema. For this nor-adrenalin was very handy. It should be always within reach, where hexamethonium compounds are used parenterally causing hypotension noradrenalin rapidly elevates the pressure to the normal levels. Recently another ganglion blocking agent has been introduced under the trade name "ANSOLYSIN". On going through the literature, one feels that we have at last arrived at a more powerful anti-hyper tensive agent. In my own limited experience, I have found this drug producing too many serious side-effects. The most troublesome side effect that occurs in these cases are Amblyopia, inability to pass urine, inability to pass motion and spontaneous vomiting. Patient of course recovers from these side effects once the drug is stopped. To some extent the unpleasant side-effects are neutralised by administration of 1/15 gr. of Pilocarpine tablets t. d. s.

While R. S. 51 is practically free from side-effects, Serpasil produces congestion of the nose. The congestion can be relieved by putting in any of the decongestants. Oral parenteral use of antihistamines are contraindicated. Last year a few Scandinavian workers have published papers on marked hypotensive effect by administration of Androsterone with oestrogen hormones. We have tried this treatment by using Ciba's Femandren linguets. The composition of this is each linguet containing 0.05 mgm. ethyl oestrogen and 2.5 mgm. methyl Testosterone. We have used them as one linguet thrice a day after food, to be kept under the tongue. At the sametime calcium gluconate 10% 10 c.c. is administered I.V. According to the Scandinavian workers, the results have been very good. Our own experience in a limited number of cases is that it is not in any way comparable to Rawoulfia group of hypotensive alkaloids.

The introduction of **SURGERY** into the field of cardiology has almost revolutionised the outlook in the field of cardiology. Cases which have become totally incapacitated and crippled as a result of mitral stenosis, are now being operated and after operation they are able to look after themselves. In spite of operation, the limitations are not completely got over, but life is made tolerable, recurrences of pulmonary oedema are avoided and many complications are also avoided. Similarly, in cases of Fallot's Tetralogy bringing arterial blood supply to the lungs, result in clearing up of the cyanosis and the patient is able to lead an active life. In the case of patent ductus arteriosus, correction of the patent ductus results in a normal heart. The size of the heart is reduced, consequent on the arrest of the blood-flow through the patent ductus.

In the treatment of coronary thrombosis, ideas have become clearer. With regard to the management of the case, the essential principle is to combat the shock. Shock is combated by an adequate dose of morphine and if in spite of that a progressive fall in pressure occurs, this is checked. Some of the older clinicians might wonder why the pressure should be checked—is it not an attempt on the part of nature to give up the struggle? True; the myocardial weakness results in this way and it is not able to support the arterial blood circulation. Arguing this way, no treatment is called for and if no treatment is given as the arterial pressure progressively falls, life will ebb away. These are bad risk cases. In these cases steps should be taken to correct the fall in pressure. With this end in view nor-adrenalin can be injected. Also blood transfusion can be given. If transfusion is attempted, it should be very slow, taking one hour to administer one pint of blood. The pressure should be recorded periodically and as soon as the systolic pressure reaches 100 m.m. of mercury, blood transfusion should be stopped. Ideas with regard to anti-coagulants are also becoming more definite. In the average case or in good risk cases, anticoagulants need not be given but in the poor risk cases or in cases where there are multiple thrombotic lesions or where thrombosis is recurring, anticoagulants are extremely useful. I have felt on more than one occasion that life has been saved by administering anti-coagulants. What looked like a hopeless case was saved by giving Heparin or Dicoumerol derivatives. Anti-coagulants are best used where facilities are available for prothrombin estimation. In the absence of facilities, it carries a great deal of risk and the amount of risk involved is not worth the use of the drug. We have now Vitamin K. available both in the oral and injectable forms

for use in cases of bleeding, as a result of anti-coagulants. Blood transfusion should also be used for cases of haemorrhage occurring after the use of anticoagulants.

In the management of arrhythmias that are likely to occur in the course of coronary thrombosis, or otherwise, it has been observed, Quinidine gives very good results and equally good results are got by employing Atebrin or Mepacrine. Atebrin does not carry the same amount of risk as Quinidine does. Besides Atebrin-Procaïnamide can be administered either I. V. or orally. If the arrhythmias occurring is not after the thrombosis, it is better to give procaïnamide orally. This is available under the trade name Pronestyl.

In the management of congestive heart failure, **ORAL DIURETICS** are made available from last year. They are available as a sulpha compound, Diamox or a mercurial compound known as Mercloran. We have used Mercloran for about 12 cases with very satisfactory results and in none of the 12 cases was there any mercurialism or toxic effects of mercury noted. No damage to the kidney was evident by examination of the urine. All the same to the clinician using mercury continuously for a period of years it is not very appealing. Diamox is a sulpha compound with practically no anti-bacterial effect but has a marked diuretic effect. This can safely be combined with parenteral mercurial diuretics so that the patient does not get waterlogged before the next Mersalyl injection is given. While using Diamox, we have been able to handle some of the bad cases of congestive failures, in which previously we had to resort to tapping the pleural cavities.

In the case of respiratory disorders, particularly empyemas where decorti-

cation was the only procedure, now we have got **STREPTOKINASE AND STREPTODORNASE** available under the trade name **VARIDASE**. After aspirating as much of the pleural effusion as possible, Varidase is injected into the pleural cavity and at the end of six hours aspiration is again done. This varidase dissolves the dead tissue but has no effect on the living tissue. The pus itself is rendered thin and watery so that aspiration is rendered easy. In the last six months, we have used this procedure in 4 cases and in all of them radiologically we have been able to demonstrate complete aspiration so that surgery is rendered unnecessary in these cases. If the nature of infection is known before putting in Varidase, a suitable antibiotic may be put in and allowed to act on for 24 hrs. and then Varidase is put in and six hours later fluid can be aspirated.

While advances have taken place in the various systemic diseases, tropical medicine has not been lagging behind. The introduction of **Chloroquin** compound has rendered malaria comparatively an innocuous disease. Chloroquin-di-phosphate or Resochin has been used extensively in my wards during the last three years. It was made possible by the kind office of Messrs. Bayers Ltd. We have used this chloroquin, both for its anti-malarial action and for the amoebicidal action. We have used this for liver abscess cases and for cutaneous amoebiasis. We have also used this chloroquin made into emulsion for retention enema. Within two or three days of retention enema, the dysentery is controlled. In the case of liver abscess, marked shrinkage of the abscess, occurs and temperature rapidly settles down. Pain is the first thing to go and the temperature is the next. In successive cases, we have noticed in the liver amoebiasis, while the antibiotics are practically

useless in controlling the pain or the temperature, chloroquin has given rapid amelioration of symptoms. The only side effects that have been noticed by us, are fall in blood pressure, and a certain amount of discomfort in the abdomen, but in no case was it necessary, on this account to stop the drug. In the treatment of **PLAGUE**, it has been observed that apart from streptomycin which was found to be useful, broad-spectrum antibiotics like Terramycin and Aureomycin or Chloramphenicol are very effective and are to be preferred to streptomycin, since the side-effects of these broad-spectrum antibiotics are much less than that of streptomycin. In the treatment of **Tape-worm infection**, though Mepacrine has been claimed to have cured the infection, our experience has been otherwise. In two cases we have tried full doses of Mepacrine with no effect, and subsequently treated the same with Ext. Felimas Liquidum and expelled the worms. In the treatment of **Threadworms**, in a series of 5 cases, we have used Elixir Antepar. It is a very palatable preparation and can be used for children. The formula is Piperasin hydrate. Average daily dose for threadworm infection is 2 tea-spoonful b. d. for a week, proportionately less for children. In a very chronic case the result was extremely satisfactory. Antepar can also be used in the treatment of **Roundworm** infection by giving 6 dr. orally in the morning and repeating it a week later. The side-effects that have been mentioned are dizziness, paresthesia, muscular depression of a mild degree, vomiting and a sense of detachment but none of them have been noted in my small series of cases. In the treatment of round-worm infection, this is particularly a useful agent. In the case of round-worm infection, it is good to follow the administration of the drug by a saline purgative or

liquid paraffin if saline is for some reason or other contra-indicated. In the field of Psychiatry, introduction of Largactil or Chlor-promazine hydrochlor. is a great advance. This is extremely useful in intractable vomiting and also in some of the depressed states of old age.

Conclusion: It is vey difficult, in a short time, to cover all the advances

that have taken place in the last few years. An attempt has merely been made, to mention briefly, some of the outstanding ones and I am conscious that there are many omissions but I have attempted to put in some of the recently introduced drugs which have been used in my wards so that I can talk from my own experience about these.

RUMALAYA

*for Rheumatic & Rheumatoid
Disorders, Arthritis and Neuritis*

- BIBLIOGRAPHY:**
1. Bansod, M. V.—"Treatment of Rheumatism and Arthritis with Indigenous Drugs" *The Antiseptic*, June, '55.
 2. Krishna Murty, G., *The Indian Practitioner*, Aug. '55.

THE HIMALAYA DRUG CO. MAKERS OF WORLD FAMOUS **SERPINA**
251, HORNBY ROAD, BOMBAY 1 (INDIA)

◉ RECENT ADVANCES IN THE TREATMENT OF GENITO-URINARY CONDITIONS.

By :

Dr. A. VENUGOPAL, M.S.,

Honorary Surgeon, Government General Hospital, Madras.

The great advances made in surgery during recent years and the many spectacular remedies now available have made it safe to adopt surgical methods in many cases. To-day, the surgeon is reaping to an unprecedented degree, the fruits of the labours of his forefathers. Of the many specialities that have made significant progress, Genito-urinary surgery stands out prominently since many complicated conditions are now being remedied to the lasting benefit of the patient.

ENLARGEMENT OF THE PROSTATE

Urinary obstruction due to prostatic hypertrophy probably constitutes the most important of uro-genital complication, owing to its devastating effects on the whole urinary tract proximal to the internal urinary meatus. Back pressure, infection or a combination of the two causes an increasing and irreparable damage to the kidney with the result that the general health of the patient becomes seriously affected and in many cases, beyond hope of improvement.

The exact cause of prostatic hypertrophy is not known. It has been attributed to sexual over-indulgence and celibacy, to chronic infection and to numerous other factors. Recently, it has been ascribed to endocrine factors. It has been known that normal amounts of male hormone are necessary for the development and maintenance of the prostate gland as also a normally functioning anterior pituitary. The prolonged injection of anterior pituitary or anterior pituitary like substances in the experimental animal produces

enlargement of the prostate gland. The prolonged injection of the male sex hormone in excessive amounts into either castrated or normally adult male animals produces prostatic hypertrophy.

Enlargement of the prostate is very common in men over 50 years of age.

The pathology of prostatic hypertrophy is seen in three of the prostatic lobes—those which are immediately in contact with prostatic urethra—the median and two lateral lobes. The anterior lobe and posterior prostatic lobe are never involved in benign prostatic hypertrophy. Cancer of the prostate usually originates in the posterior lobe of the prostate. Although the lateral lobe or median lobe may be primarily involved in malignant disease, 90% of prostatic cancer develops in the posterior lobe. The incidence of cancer of the prostate is about 20% to 30% in all men past 60. Malignant disease of the prostate gland constitutes a clinical problem of increasing magnitude.

Symptoms. The most characteristic and usually the first symptom of prostatic hypertrophy is *slowness of the urinary stream*. Urinary obstruction may vary in severity from a complete retention of urine to a mild abnormality unobserved by the patient. As the amount of residual urine increases, the usual capacity of the bladder becomes reduced and *urinary frequency* results. When *infection* occurs, there is *burning on micturition* and *urgency* due to inflammation from the infection.

◉ Lecture delivered at the Conjoint meeting, at Courtallam on 14-8-55.

Associated complaints are recurrent bleeding, nocturia, and recurrent urinary tract infection. The determination of *residual urine* affords valuable but not conclusive evidence of obstruction, for when it is present, it is strongly suggestive of vesical obstruction but when absent, does not exclude this possibility.

The diagnosis is made by a consideration of the *history*, the *symptoms*, and by *routine examination* and *cystoscopy*. *Rectal examination*, although of the greatest importance, must be regarded as only one link in the chain which leads to correct diagnosis. A routine practice in some of the institution is a micro-fluogram of the chest of every patient admitted. And if there is any suspicion of abnormality, an x-ray is taken to obviate the possibility of overlooking any intra-thoracic abnormality. A *Khan test* and an *electrocardiogram* should be done to find out, if there is any cardiac malfunction or any irregularities in rhythm. In addition, the haemoglobin percentage, the non-protein, nitrogen and the *blood chemistry* are done. An *x-ray of the bony pelvis* is also taken and the *serum acid and alkaline phosphatase* levels are determined. *Excretory urograms* are also taken as a routine to find out the state, of the upper urinary tract and its function. *Cystoscopic examination* is done as a routine and also retrograde pyelography in cases where haematuria is present with obstructive symptoms.

Lastly a *cystogram* is done to show the size of the prostatic shadow. When the urinary obstruction has persisted over a period of several months, the shape of the bladder becomes pyramidal and its cystographic outline irregular due to trabeculation and multiple diverticulae. Because of this appearance, it is sometimes called a "Christmas tree" bladder.

PRE OPERATIVE ROUTINE

All patients with distended bladder are treated first by catheter drainage. At the first sign of intolerance to catheter drainage, suprapubic drainage is instituted.

The patients are given Penicillin and Sulphadiazine or Sulamyd as prophylaxis against dangers of urinary sepsis. If the urine culture reveals B-coli infection, other antibiotics like Streptomycin, Aureomycin or Terramycin should be given to control the urinary infection. Familiarity with the facts of fluid balance is essential in handling prostatic patient, as correction the disturbance in water exchange constitutes a prerequisite for operative intervention. After treating the septic and dehydrated patient, one has to treat the acute vitamin deficiency that is usually present in such cases. Riboflavin, ascorbic acid and thiamin chloride are added to the intravenous fluids.

Treatment. There are now four methods, generally accepted and practised, of removing obstructing tissue and restoring the vesical neck, i.e., 1. suprapubic in one or two stages; perineal; 3. transurethral, and 4. Retropubic. In each of these operations, the object of the procedure is to remove the obstruction with the least risk to the patient and with the greatest expectancy of producing a cure of prostatism.

Suprapubic prostatectomy, the oldest method of all, has gone through many changes in the pre operative care, post-operative care and refinement in operative technic, so that now the mortality and morbidity resulting from this operation have been materially reduced, to compare favourably with those of any other method. It is frequently stated that it is the easiest method to learn to perform; for that reason, it is the one most generally used by the occasional operator and by all general surgeons all over the world.

Transurethral resection is the operation of choice in median-lobe enlargements of the prostate and in cases of benign hypertrophy of the prostate. The mortality following transurethral resection has been in the neighbourhood of 2 to 3 % in some institutions. It is popular because hospital stay is short and the mortality rate is lower than when perineal and suprapubic routes are used. The operation is tedious, often laborious, and requires a calm and collected temperament to achieve consistently good results.

Perineal prostatectomy has never enjoyed the general popularity of other methods, as it is considered technically difficult and because of the occasional complication of rectal fistula, varying degrees of incontinence and a high incidence of impotency.

Retropubic prostatectomy, a purely British technic, is considered the best to eliminate the evils of an obstructing prostate according to British urologists. This method, devised by Terrence Millin, must be regarded as the youngest of the four classical means of access to the prostate. It is essentially an abdominal extravesical approach. Hendrickson of Sweden probably gave this operation the most extensive trial for over twelve years. He gave it up because of severe poorly controlled, primary haemorrhage, post-operative stricture and persistent suprapubic fistulas. Millin has resurrected this approach and has stirred up urologic activity by mentioning some of the advantages like (a) shortest convalescence among all the open operations, (b) avoiding damage to the rectal and external sphincter which is not uncommon when the perineal route is adopted.

Complications like bleeding, infection, etc., that occur after retropubic prostatectomy can be controlled, but there is one complication where most urologists have given up hope and that

is, osteitis pubis. This complication has been treated by immobilisation, physiotherapy, x-ray therapy, antibiotics and chemotherapy but with no success. Of late, cortisone is being tried for many urological conditions. A few cases of osteitis have been benefited by this therapy.

The hazards of prostatectomy have been materially reduced within the last decade by the improved techniques of modern surgery, the vast improvements in the methods of anaesthesia and the remedies available to control all infection have influenced the decision in favour of a surgical treatment for cases of enlargement of the prostate. Twenty years ago, the mortality rate following prostatectomy was about 25% and to-day the overall mortality rate is somewhere between 1 to 2%.

CANCER OF THE PROSTATE

Diagnosis.

In most cases it is readily accomplished by simple digital examination of the gland. A *hard fixed irregular and enlarged gland* is usually malignant. The history of the patient, rectal palpation and x-ray study of the urinary tract and skeleton are satisfactory means of diagnosing prostatic carcinoma. In cases, which are doubtful, a *biopsy* of the gland may be helpful. There are four methods used: (1) perineal biopsy; (2) needle biopsy using a silverman's needle, (3) Transurethral biopsy, and (4) Transrectal biopsy. Examination of prostatic fluid with Papanicolaou's stain may be useful in making a diagnosis of carcinoma.

A *therapeutic test* is tried in cases of doubt. The patient is given *estrogens* and examined at two week intervals. In nine cases out of ten, if carcinoma is present, the gland will begin to soften and decrease in size and the small suspicious nodule

will become less prominent within 4 to 6 weeks. Although this response to therapy does not always aid in making a diagnosis, it can be relied upon in the majority of cases.

Treatment :

Radical perineal prostatectomy offers the only hope for cure in those patients having a small early cancer of the posterior lobe. Operative mortality was 5%. Transurethral resection is only palliative procedure to relieve the patient's obstructive symptoms. Palliation is indicated when cure by surgery is accepted as being impossible or when surgery is contraindicated. The other measures available are 1. *Hormonal therapy*, 2. The use of radio-active isotopes, 3. *Irradiation*, 4. *Bilateral adrenalectomy*.

Hormonal therapy :

Just as the prostate fails to develop in the absence of testicular androgens, so the growth momentum in many cancers of the gland can be checked or modified by androgen deprivation. Oestrogen in the form of Stilboestrol 5 mgms by mouth three times is given. Elimination of androgens is accomplished by *orchiectomy*, combined with administration of small dose of *oestrogen*. It is more effective in controlling prostatic cancer than the administration of oestrogens alone. Bilateral *orchiectomy* is done only after the diagnosis is proved by microscopic examination or by evidence of bony metastasis visible on the x-ray.

Pituitary irradiation in doses sufficient to depress glandular activity has resulted in improvement in some cases refractory to oestrogens.

The results of endocrine treatment are encouraging; it is effective in

90% of cases. The abnormal clinical symptoms completely regress.

The use of radio-active isotopes by Flock and his colleagues in 1952 has shown some promise. The technique consists essentially of "exposing the carcinomas and regional lymph nodes and seminal vesical through the suprapubic approach and thoroughly infiltrating the entire area with the solution of radioactive isotope. The usual dose is 50 to 150 millicurie of *radioactive gold* in colloidal solution diluted to a total volume of 20 millilitres." The complications have been minimal while marked shrinkage of the tumour has occurred in every case of Flock. If radioactive isotopes fulfil the promise suggested at preliminary observations, their use may completely remove the need for total prostatectomy.

Irradiation by x-ray and radium has been condemned because of the irritating effects on the bowel and the bladder close by.

Bilateral adrenalectomy has been carried out in a few cases of advanced cancer of the prostate and good temporary results have been reported. Time will eventually decide which method is of greater value.

The prognosis in cancer of the prostate is poor. After from two to five years, symptoms begin to recur and very little can be done except to keep the patient as comfortable as possible by means of sedatives and narcotics.

MANAGEMENT OF RENAL TUBERCULOSIS:

Diagnostic studies include careful physical examination. *Urine examination* including microscopy, culture on Loewenstesin's medium, guinea

pig inoculation and estimation of the *sedimentation rate* may all help us to arrive at a correct diagnosis. *Intravenous pyelography* and *retrograde pyelography* will give us an accurate picture as to the extent of damage in the kidney. Abdominal aortography has been used to show the pattern of the renal arteries and their branches. Tuberculous lesions are ischaemic and those of any size show a corresponding lack of vascular pattern in an aortogram. This method may be of great help to the surgeon to decide whether partial nephrectomy should be done in cases of renal tuberculosis where lesion is localised as shown by the *aortogram*. By *cystoscopic examination* and *ureteric catheterisation*, the progress of the disease in the bladder and the kidneys can be estimated and the value of treatment assessed.

Treatment includes general measures, antibiotic and chemotherapy and surgery.

Streptomycin is indicated instead of operation in:—

- a. advanced bilateral disease.
- b. Tuberculous bacilluria with no overt lesions.
- c. Tuberculous disease in the only functioning kidney.
- d. post-operatively to treat focus in the second kidney, sinus or fistula at the side of nephrectomy.
- e. residual tuberculous cystitis and
- f. as pre - and post - operative umbrella for surgery.

Nephrectomy is still the only certain method of eradicating tuberculosis of the kidney. Surgeons still differ

about the length of ureter that should be removed. Some advocate a complete nephro-ureterectomy in all cases; others are content with the removal of as much ureter as can be reached through the incision of the loin. It would seem rational to be guided by the condition of the ureter as known before or found at the operation. The plan found to be successful by many experienced surgeons is to remove as much as can conveniently be reached through the loin incision unless the ureter is diseased when total ureterectomy is undertaken. It has been found that with chemotherapy, little harm results from leaving behind a diseased stump of ureter, provided it has free drainage into the bladder.

Partial nephrectomy is done in cases where the tuberculous lesion affects a polar calyx of one kidney. The purpose of this operation is not the eradication of the disease but removal of a major lesion of the kidney and this presents complications like cystitis and, to improve the patient's chances of resisting the disease, it is hoped by further experience in properly selected cases, partial resection may be adopted. The early enthusiasm which claimed that chemotherapy should entirely replace operative surgery has been chastened by the results. On the whole, tuberculosis of the urinary tract, apart from the kidney responds well to chemotherapy.

Post-operative sinuses or tuberculous infection of the wound is the most feared complication of nephrectomy. Residual infection of ureter and bladder after nephrectomy is now prevented or cured, the drug most successful and therefore mainly used is streptomycin, its chief ally being PAS. Isonicotinic hydrazide, is being tried and is found effective in improving the bladder lesions

of renal tuberculosis. The thiosemicarbozone drugs have been used but the results are not impressive. The dosage of streptomycin has varied from 120 to 240 gms in America, while in Great Britain, 90 grams have been considered to be the maximum. The average dose of P. A. S. is 12 grams per day. Drug resistance was found to be the most important limiting factor in the effectiveness of Streptomycin, P.A.S. and Isoniazide. Since the mode of action of all three drugs appears to be different, it is reasonable to assume that a combination of these 3 potent drugs may greatly increase their effectiveness and further defer development of drug resistance. The follow-up of these cases appears to justify the conclusion that modern chemotherapy can at least modify the lethal course of renal tuberculosis.

So far as prognosis is concerned, one should bear in mind that it is *very difficult to say* that any patient with tuberculosis of the kidney is cured by nephrectomy alone or by nephrectomy followed by streptomycin. In fact, it is the after treatment that improves the general condition of the patient which is more important, and it is more proper to speak of an arrest of the disease than to speak of a cure.

TUMOURS OF THE BLADDER

Undoubtedly, the most important problem confronting the urologist to-day is that of effectively controlling cancer of the bladder. Victor F. Marshall of Cornell Medical Center states that bladder neoplasms comprise 3% of all malignant tumours and that they are four times more common in men than in women. Average age at onset is 55. Over 90% of the growths are epithelial.

The symptoms are Haematuria, frequency, urgency, nocturia, burning on urination and pyuria. Obstruction to the ureters is common, since most of the neoplasms are on the floor of the bladder. *Metastasis* tend to appear first in the pelvic lymph nodes and produce few early symptoms. Blood-borne metastasis may occur nearly anywhere, but the lumbar spine, bony pelvis and lungs are the commonest sites. Thus back-ache and sciatica may be important symptoms. Weight loss is common in advanced stages.

Bimanual examination with the patient anaesthetised may reveal induration of the vesical wall and even extension beyond when the growth is fully malignant. Papilomas and small tumours are almost never palpable.

The urine contains red and white cells. Study of the *urinary sediment* by the Papanicolaou technic may reveal neoplastic cells. There is no substitute for *cystoscopic* examination and biopsy in the diagnosis of vesical neoplasms.

Complete diagnosis consists of proving the presence of neoplasm by cystoscopy, *cystogram*, *biopsy*, and estimating its extent and grade of malignancy.

The important *therapeutic procedures* at present in routine use for cases of malignant growths of the bladder are *surgical*, *electrosurgical* and *radiotherapy*. The past ten years have witnessed a wave of enthusiasm for more radical methods and the development of the operation of *total cystectomy* has provided great stimulus to surgeons, pathologists, biochemists and radiologists, to study the innumerable problems created not only by the removal of this organ, but

also those problems associated with the necessity for urinary diversion.

Papilloma of the bladder is successfully treated by local destruction, fulguration or electroresection either transurethrally or suprapubically. The overall poor results of irradiation, the limited applicability and unpredictability of electroresection techniques and the limited applicability of segmental resection have been prime movers in the decision to evaluate total cystectomy as a therapeutic modality in bladder cancer.

In some of the institutions, the *Brunswick procedure* for these bladder tumours is being done which consists in a combined abdomino-perineal approach for removal of the bladder, prostate, seminal vesicles and a radical removal of the lymph glands in the pelvis and along the great vessels up to the level of the third lumbar vertebrae. Within a few years, it will be possible to determine the overall 5 to 8 year survival rates for these procedures and to decide whether or not radical surgery is really worthwhile in the treatment of advanced bladder cancer.

Pelvic exenterations are done now for cases of advanced cancer of the bladder and three and four year survival rates have been reported by many clinics. The percentage of cures will always be low as pelvic exenteration is done only for advanced cases of cancer. The obligation of the surgeon is to prolong life in comfort and whenever possible, he should seek to do this. Certainly it is hoped that the necessity for such procedures may fade away completely in the future. But the patients with advanced and uncontrolled pelvic cancer cannot await some future discovery of biologic or chemotherapeutic cancer control. There is an acute problem which

must be dealt with at the moment. Thus total pelvic exenteration is not only good as a palliative measure but as a means of offering in some cases, a survival period of 5 years or longer.

Looking into the future, I find that the progress will probably be not along the line of great development in surgical technique or even in diagnosis but will, in all likelihood be, influenced tremendously by the study of endocrinology, biochemistry, vitamins and chemotherapy. To-day the prospective patient, after hearing the great strides that surgery has made in the last two decades, has become more inclined to the view that the hazard of surgery is less than the hazard of delay.

SEDATIN

*

An elegant and palatable hydrastis compound indicated as an utero-ovarian sedative and analgesic.

Manufactured by:—



Trade Mark

The Mysore Industrial & Testing
Laboratory Ltd.

Malleswaram. Bangalore 3.
Madras Sales Depot: 35/37.
Thambu Chetty Street, Madras-1.

FIPA

CALCIUM WITH VITAMIN C TABLETS

A VALUABLE ADJUNCT IN THE TREATMENT OF
TUBERCULOSIS

EACH TABLET CONTAINS:

Calcium Gluconate	7 1/2 Grains
Vitamin C	100 mg.
Vitamin D	500 I. U.

Available in Packings of 40, 100 and 1000 tablets.

Manufactured by:

FINE PHARMACEUTICALS
MOTILAL STREET, KUMBAKONAM

*The Latest and
The Most*

*Significant Advance
In the Treatment of TUBERCULOSIS
Resistant to all other Drugs*

CYANOPASCAL

Each tablet contains:

Cyanacetyl Hydrazide	...	20 mg.
Para amino salicylic acid	...	0.5 gm.
Di-Calcium Phosphate	...	100 mg.
Vitamin D	...	250 I.U.

Also available:

CIAZIDE-50 (Cyanacetyl hydrazide 50 mg. per tablet)
CIAZIDE-100 (Cyanacetyl hydrazide 100 mg. per tablet)

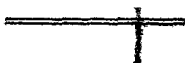
Detailed literature and rates on request from:

THERAPEUTIC PHARMACEUTICALS,
Chotani Estate Proctor Road BOMBAY-7

or from

THERAPEUTIC AGENCIES, 4, Kondi Chetty Street, MADRAS-1.

U. S. DOCTOR CRUSADES FOR AFFLICTED CHILDREN



To Dr. Wynne Sharples the verdict that her two children had an incurable disease was call to action—action to help them and others born with the same affliction. The career of this 31-year-old American doctor has become a crusade on behalf of victims of mucoviscidosis, a little-understood disease that affects the exocrine (mucous) glands of infants and children.

The tragedy that motivated this crusade first struck some three years ago in the home of Dr. Sharples, who in private life is Mrs. George de Mohrenschildt, wife of a petroleum engineer in Dallas, Texas. Their son, four-month-old Sergei, was in Florida recuperating from a severe case of bronchial pneumonia when he suffered a relapse. The pediatrician who was called in gave a dread diagnosis. The boy, he said, had mucoviscidosis — a congenital and hereditary disease for which no cure was known. Like many doctors, he considered it fatal.

Later, when Dr. Sharples took Sergai to a specialist in the disease, she received less despairing news. He confirmed the earlier diagnosis but was less pessimistic about the child's fate. "We can keep him alive with antibiotics," promised Dr. Harry Schwachman of the children's Hospital in Boston, Massachusetts.

Mucoviscidosis, more generally known as cystic fibrosis, is a generalized disease involving mainly the lungs and the pancreas and is caused by the malfunctioning of the exocrine (mucous) glands. Children born with it have continual respiratory infections and coughs and

cannot digest their food properly. They fail to gain weight although they have excellent appetites.

Back home in Dallas, Sergei did well on daily doses of penicillin for the lung infection, a diet designed to prevent digestive upsets and pancreas powder to aid digestion. But the following year, when Dr. Sharples second child was born, tests disclosed that the little girl, Nadya, also had been born with mucoviscidosis.

The young Doctor Mother launched the Children's Exocrine Research Foundation and raises money to support its work. Funds are sought from other medical research foundations and from selected corporations and individuals. As headquarters for the organization, Dr. Sharples chose her girlhood home of Philadelphia, Pennsylvania, because of the many medical centers in that area and the free office space that was made available.

"We do not have a research group working for the foundation," Dr. Sharples explains, "but give all our funds as grants to doctors applying for money to do research on cystic fibrosis and closely related diseases." The organization also works to stimulate research in its field, keeps the medical profession informed of new development in research and supplies free information regarding the incidence, diagnosis and treatment of the disease. "We are happy to share results with any doctors anywhere," Dr. Sharples says.

"The disease is incurable," she says, "but new methods of treatment have enabled many children to

live relatively normal lives for years. This improvement in outlook has come from the daily use of antibiotics."

lives of victims through childhood and into adulthood. Many patients are now in early adolescence and the oldest known victim is a man of 30, according to the foundation.

If the condition is recognized before irreparable damage has taken place in the lungs, intensive treatment can frequently prolong the

ABRIDGED from a U.S.I.S. feature.

Editor.

THE THIRD MADRAS STATE OPHTHALMIC CONFERENCE 1956 SALEM

Dear Colleague.

The Third Madras State Ophthalmic Conference is to be held at Salem on the 31st March (Saturday) and 1st April (Sunday) 1956. A Souvenir is also being published. Dr. M. S. MEHKRI, B.Sc., M.B.B.S., D.C.M.S., (Lond.) of Bangalore, has kindly consented to preside. The detailed programme will reach you later. We most heartily welcome you to the conference. Please keep those days free.

If you have any paper to read, or an article to be published in the souvenir, we shall be most happy to have them.

Salem-5
11-1-56 }

Dr. S. GURUBATHAM,

Convener.

ANNOUNCEMENTS

160 copies of the Medical Bulletin, Vol. I, No. 4, have been received from the Director of Medical Services, Madras, and are ready for supply to the members of the Indian Medical Association, Madras State Branch. Such of those members of the I. M. A., who are desirous of having a copy and who have not already registered their names for the supply of No. 4 of the Medical Bulletin may send a requisition for the same to the Honorary Secretary, Indian Medical Association, Madras State Branch, 6, Rajabhadhar Mudaliar Road, Thyagarayanagar, Madras 17, enclosing 6 annas postage stamps towards the cost (inclusive of postage) for each copy of the Bulletin required. 40 copies of the Medical Bulletin Vol. I, No. 3 are also available and such of those members of I. M. A. who wish to have a copy of No. 3 also, may send the cost at 6 annas per copy and obtain the same.

Madras 17. }
21-12-1955 }

R. Sankaran, L.M.P.,

Honorary Secretary, Madras State Branch, I. M. A.

ASSOCIATION NEWS

ERODE BRANCH

The Annual Day of Erode Medical Association was held on the 14th of Dec. 55 in Sengunthar High School with Dr. N. C. Kuppusamy in the chair. The following were elected as office-bearers for the year 1955-1956.

Dr. K. Balasubramaniam—*President.*

Dr. (Mrs) Sethu Bhaskaran,
—*Vice-President.*

Dr. M. N. Shenoy—*Secretary.*

Dr. M. M. Shenoy—*Treasurer.*

Dr. L. K. Muthusamy—*Representative
to Madras State Council.*

Dr. N. C. Kuppusamy—*Representative
to Central Council.*

There was a Scientific session. The Members were addressed by Dr. P. K. Kalyanaraman on "Rogamalika-A Symphony in Diseases".

Major Rangasamy dealt at length on War-Surgery at the Korean Front.

* * *

SOUTH KANARA BRANCH

The Tenth Annul General Body Meeting of the South Kanara Branch of the Indian Medical Association, Mangalore, was held on Sunday, the 4th December 1955, at the S. C. C. C. Bank Meeting Hall, Mangalore.

The following office-bearers were elected for the year 1955-'56

Dr. M. Umesh Rao, *President.*

Dr. (Miss) Colaco,

Dr. K. Nagappa Alva, *Vice-Presidents.*

Dr. V. R. Bhat, *Hon. Secretary and
Treasurer.*

Dr. B. R. Hedge, *Hon. Joint Secretary.*

Members of the Executive Committee.

Dr. A. F. Coelho,

Dr. B. G. Baliga,

Dr. M. G. R. Sampigethaya,

Dr. M. Rangappa Kamath,

Dr. S. N. Alekal,

Dr. K. Narayana Naik,

Dr. K. B. Shetty,

Dr. C. P. Kamath,

Dr. M. D. Adappa,

Dr. U. P. Mallya,

Dr. K. Krishna Bhat,

Representatives to Central Council.

Dr. P. Narayana Rao,

Dr. N. L. Kalle,

Dr. V. R. Bhat,

Representatives to State Council.

Dr. M. Umesh Rao,

Dr. K. Nagappa Alva,

Dr. K. B. Shetty,

Dr. U. P. Mallya,

Dr. B. R. Hedge.

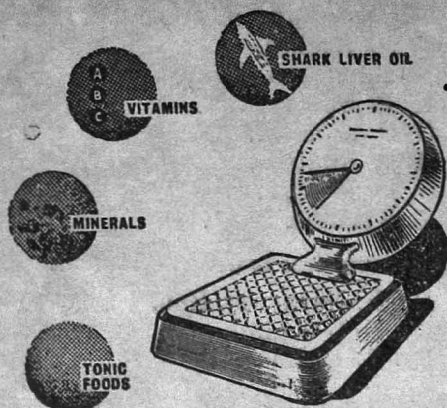
There was an interesting and illuminating discourse on "The Geographic Pathology of Cancer" by Dr. G. D. Valiath, M. D., D. T. M. (Cal.), Vice-Principal and Professor of Pathology, Kasturba Medical College, Mangalore with Dr. L. Mangesh Rao, M. B., C. M., F. R. C. S., D. L. O. Dean, Kasturba Medical College, Manipal, in the Chair.

There was a film show of two films, "Syphilitic Venereal Diseases," and "Treatment of Tuberculosis", exhibited by the kind courtesy of Messrs. Sarabhai Chemicals.

* * *

TIRUCHY BRANCH

A monthly meeting of the association was held on Saturday the 21st January 1956 in the premises of the Medical Association Buildings, Salai Road, Woraiyur, Tiruchy under the Presidency of Dr. V. Enok, MBBS, DGO, LM, ZGO. Dr. P. Arunachalam, MD, MRCP, TDD, DMR, FCCP, Madras addressed the members on "The Doctor's Bag."



THE NEEDLE SWINGS FARTHER!

A valuable tonic and nutrient for increasing weight and building up resistance to diseases.

COMPOSITION

Each fluid ounce of SHARKOFERROL

represents:—

Vitamin A (from 40 mins. of Shark Liver Oil approx.)	25,000 I.U.
Vitamin D	5,000 I.U.
Saccharated Oxide of Iron N.F.	55 grs.
Hypophosphites of Lime, Sodium & Potassium B.P.C.	12.5 grs.
Vitamin B ₁ B.P.	3 mgms.
Vitamin B ₂ B.P.	2 mgms.
Niacinamide B.P.	40 mgms.
Copper & Manganese	Traces
Palatable Base enriched with Flavoured Malt Extract	Q.S.

SHARKOFERROL

In 1 lb. Bottles.

ALEMbic CHEMICAL WORKS CO. LTD., BARODA 3.

EVEREST MP. 52/2A

In all stages of Intestinal Amœbiasis

PRESCRIBE

ENTROKIN

B. C. P. W. Iodochloroxyquinoline

LOW TOXICITY
HIGH THERAPEUTIC VALUE

Also useful in

OTHER INTESTINAL INFECTIONS
OF VARIOUS AETIOLOGY

BENGAL CHEMICAL

CALCUTTA - BOMBAY - KANPUR

NARDYL

Nardyl - a new product-marketed by The Himalaya Drug Co., 251, Hornby Road, BOMBAY-1 is a combination of well tried indigenous ingredients like Rauwolfia Serpentina, Jatamansi, Brahmi etc. and claims to give satisfactory results in neurocirculatory asthenia, anxiety states and mild mental disturbances. It is reported to be a cerebral sedative and nervine tonic.

It is supplied in packings of 50, 100, 500, 1000, and 5000 tablets.

INDIAN MEDICAL ASSOCIATION.

Madras State Branch.

CIRCULAR LETTER No. 4. 21-12-1955

Dear Doctor,

You must be aware of the devastation caused by the recent unprecedented rains in the Tanjore, Tiruchirapalli, Ramnad and other districts of the South and the consequent floods and the resultant damage and havoc inflicted on human life, cattle, standing crops and other properties including industrial concerns. The harrowing account of damage and misery caused, appearing in the newspapers daily, must arouse the feelings of generosity and sympathy that is inherent in all of us, especially medical men, to render such aid as is possible to those suffering humanity in the affected areas. With this view, the Indian Medical Association, Madras State Branch has decided to open a Relief Fund and collect a decent amount, besides new clothes, medicine and other utility articles and place the same at the disposal of the official organizers of flood relief in the respective districts. The question of organizing volunteer medical relief for persons in the affected areas has also to be seriously considered.

Will you kindly therefore place this subject at an emergent meeting of your branch and take urgent and adequate steps to make a handsome collection of money and other relief articles in your area and thus aid a humanitarian cause to your utmost capacity?

All sums collected in this behalf may kindly be sent to me with the full list of donors and other persons so that such collections may be pooled together and evenly distributed to the affected areas. Collections made in kind, other than cash, may be retained with you for the disposal of which separate instructions would be issued on receipt of particulars of such collections in kind made.

I appeal to you and to the members of your branch to give this subject TOP PRIORITY and afford relief to the poor victims of nature.

Yours sincerely,

R. SANKARAN, L.M.P.

Honorary Secretary, Madras State Branch, I. M. A.

THE EDITOR'S PAGE

The Editor extends through this page his grateful thanks to the members of the profession for their encouragement that they have given during the last year. The success that it had been, was because of the kind patronage given to the Journal, by the lecturers in the Medical Associations, who have taken the pains to put their lectures in black and white so as to enable the Editor to put the same in print. I am sure the members of the profession, have had a piece of post graduate instruction; and on their behalf the Editor tenders his grateful thanks to the contributors.

The Journal has assumed a new name. But it is the same old wine in a new bottle. The Madras Clinical Journal will still strive at providing the Medical Profession subject matter that is of use to the average practitioner and not of the "High Brow type" and in this effort the Editor, requests contributions from the lecturers to the various medical associations. It is rather a hard piece of work to do, but may the Editor appeal to them to do this bit of service to the Profession? In this effort at securing lectures, the Secretaries of the associations have a large part to play. They may kindly send requests to the Doctors to get a manuscript copy of their lectures, and kindly pass it on to the Editor.

The individual reader too has a constructive part to play in this piece of service to the profession. He can collect useful abstracts from the different journals and send the same to the Editor for publication. They can also impress upon the representatives of the various pharmaceutical firms that go to them about giving an advertisement in the Journal. An increased number of advertisements will bring the Journal enough money to increase the number of pages, and provide more articles.

To the various Pharmaceutical firms who have helped the Journal with their advertisements, the Editor tenders his grateful thanks and requests them to continue their patronage in a larger measure.

To those firms that have not had the mind or budgetary provision to advertise in the Madras Clinical Journal, the Editor craves permission to point to them that the Journal has no income from subscriptions, as it is sent absolutely free to all the members of the Madras State Branch of the Indian Medical Association. There is no subsidy that is paid to the Journal by any association or body. The entire effort at publishing and distributing the Journal has to be financed from advertisements from the various firms. The Editor feels proud to point out that the Journal is avidly read and even preserved by many practitioners in the State. So can he expect encouragement from this quarter please?

Editor.