सर्वजनाः सुखिनो भवन्तु

THE MISCELLANY

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

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INDIAN MEDICAL ASSOCIATION

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The Third Annual All India Pediatric Conference, Madras.

1952

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

The Conference will be inaugurated by his Excellency the Governor of Madras.

You are cordially invited to attend.

Reception Committee membership fee - Rs. 15/-
Delegates fee - - Rs. 10/-

PROGRAMME

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

Subjects Proposed for Discussion

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

Those who wish to read papers may communicate the Hony. General Secretary, Dr. S. T. Achar, Govt. General Hospital, Madras.

(FOR CIRCULATION AMONGST MEMBERS ONLY)

THE MISCELLANY

MONTHLY JOURNAL OF THE SOUTH INDIAN BRANCH
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RECENT ADVANCES IN THERAPEUTICS

BY

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(continued from previous issue)

Chloromycetin

This drug is the best anti infective drug in the treatment of typhoid fever. None of the other anti biotics are nearly so effective and all the cases of typhoid fever should be treated with this agent. The dosage recommended is:—

> 50 mgm per kilo of body weight initially given in 2 doses of one hour interval and then 0·25 gm is given every 2 hours till temperature touches normal and repeated at 4 hours intervals, during the following 5 days. Total dosage average 19·1 mgm given in a period of 8·1 days.

Further observation showed that this two hourly medication is a nuisance to the patient. Smadell and his colleagues started with 4 grms statum and later 1·5 gms twice daily till the temperature touches normal and then 0·75 gm twice daily for one week. This was found to be a very high dosage for an average Indian adult. Hence the dosage adopted in India is 4 capsules st. 4 capsules one hour later and 2 every 6 hours till temperature touches normal and then 2 capsules every 8 hours for 5 to 7 days.

At the Government Erskine Hospital, Madurai, Chloromycetin was used in a number of cases of typhoid and the results of the treatment of 72 cases were published in 'Antiseptic' September 1951. Out of 72 cases 29 had incomplete treatment; of the remaining 43 cases the following toxic symptoms were observed:

(1) A female patient, aged 42, with history of fever of 6 days duration with sordes in the lips and mouth, Subsultus tendinum, abdominal tumidity and temperature of 105°F. She was a plethoric individual, the heart sounds were normal and except a low muttering delirium, there was no other complication. The routine investigations were done; namely a blood count which showed WBC. 6400 and a culture for B Typhosus. The result of this came as positive after three days. Before getting the result the patient was given Chloromycetin 4 capsules st., 4 capsules 1 hour later and 2 every 6 hours. It was found that the restlessness and carphology increased and the patient died on the 2nd day. Is it possible that in some cases there is a therapeutic paradox? This was the only case we have seen of this type.

(2) Five cases of peripheral failure have been seen by us after Chlomycetin therapy. This peripheral failure has been attributed to loaded dosage. But in our cases we have not given a

high dosage and in spite of it we have had cases of peripheral failure. Mollaret and his colleagues have after necropsy in fatal cases, shown that a good amount of endotoxin is liberated in some cases from the too rapidly killed typhoid bacilli. The result is there is a sudden peripheral vascular dilatation and vasomoto collapse. We have taken B.P. records in all these cases and we had to stop Chloromycetin when the temperature suddenly drops to subnormal and there is a fall of B.P. We have given in such cases injections of Cortical Extract (Eucortone).

One such case is mentioned below:—

A patient aged 20 years with a fever of about 14 days duration and with a temperature of 103 degrees was admitted and his blood for widal was positive for 1 in 200. He was well nourished individual. Tongue coated, patient constipated, abdomen spleen just palpable, liver not palpable, heart sounds and heart boundaries were normal, respiratory system nil abnormal, B.P. was 120/80. Chloromycetin therapy was instituted on the third day after admission. The temperature was ranging up to 102 degrees to 104. There were no symptoms of toxaemia. The amount given was 4 capsules st., 4 capsules one hour later and 2 capsules every 6 hours. Two days after giving Chloromycetin the temperature suddenly dropped to a subnormal of 96 degrees. The pulse was of smaller amplitude and weak and was imperceptible. The B. P. was 90/60. Immediately Chloromycetin was stopped and the patient was given the following treatment:—Glucose and Coramine were given I. V. and Cortical Extract given subcutaneously and repeated every 4 hours. As the patient was cold and clammy, warmth was applied to the body. The patient recovered on the next day, the temperature shot up to 100.2 degrees F. and began ranging between 100 to 101 and came down after 4 days.

(3) There were 5 cases of relapse in spite of the fact that these patients received the full course of treatment.

In these cases we had to repeat Chloromycetin again.

(4) One patient had developed an urticarial rash after Chloromycetin and we gave concurrently anti histamines with beneficial result.

(5) One patient had nausea after administration of Chloromycetin.

(6) We had only one case of haemorrhage during the course of treatment with Chloromycetin.

Subsequently we have used much smaller doses of 2 capsules st., 2 capsules 2 hours later and 2 every 8 hours till temperature touches normal, and 2 twice daily for 5 days afterwards. Even in these cases we have recorded symptoms of peripheral failure. Hence a simultaneous administration of Percorten is helpful in cases of typhoid fever.

Chloromycetin recently has been made available in a custard flavoured liquid, designed particularly for administration to children. The Palmitate form of this drug is used for this purpose.

Chloromycetin has been found useful in primary A typical pneumonia. The dosage is 0·5 gm. every 3 hours and until 3 grms. have been given and then 0.5 gm. 4 times daily. The treatment is continued for 3 to 5 days after temperature touches normal.

In typhus fever Chloromycetin is given in dose of 3 capsules st. (0.75 gm.) followed by 0.25 gm. (1 capsule) every 4 hours until temperature touches normal and continued for 3 to 5 days

after normal. Chloromycetin has been successfully used in the treatment of influenzal meningitis and in undulant fever.

Aureomycin.

Aureomycin has been successfully used in a variety of applications. The medical literature on Aureomycin is increasing in such a rapidity that it is very difficult for the physician to keep abreast with the publications. The special interest in this drug is the striking spectrum of activity against many viral, ricketsial and bacterial infections. Aureomycin is given either by mouth or by IV. injections. The daily dosage of injection varies from 100 to 500 miligm. twice daily. The dosage by mouth is 25 mgm. per kilo of body weight per day divided into 4 equal doses. Wright has published excellent results in cases of Lympho granuloma venereum. All the 3 anti biotics e.g. Aureomycin, Chlromycetin and Terramycin are equally active in the treatment of ricketsial disease. Primary A typical Pneumonia, lymphogranuloma venereum group of viruses, as well as in granuloma venereum and mixed urinary tract infections. In my opinion there is no choice between the three.

Aureomycin has been successfully employed in infection of the mouth for the following conditions:

(*a*) Herpes simplex (*b*) Herpes Zoster (*c*) Apthous stomatitis (*d*) Vincents' Angina. In Pertussis, Aureomycin 25 mgm. per kilo of body weight per day for 7 days has given excellent results. In Viral pneumonias, it has been found to be a specific. Recently we have tried Aureomycin for some cases of measles with good results. Briefly it may be stated that for any viral, and ricketsial disease, Aureomycin is worth a trial. Cases of Amoebiasis have been treated with good results by Aureomycin in doses of 1.5 to 2 grams daily in 4 divided doses for 7 to 10 days.

Terramycin

Terramycin is another powerful anti biotic, and is found to be a valuable tool in the following:—

1. Pneumonias (Bacterial or viral)
2. Urinary tract infections
3. Gonorrhoea
4. Lympho Granuloma—inguinale
5. Streptococcal infections
6. Undulant fever
7. Amoebiasis
8. Ricketsial diseases

Dosage and administration: For adults and older children 2 gm. daily in 4 divided doses and for infants 25 mgm. per kilo of body weight per day in 4 divided doses. The treatment is given for 5 days.

It is the common practice of physician to use combinations of anti biotics or combinations of anti biotics and sulphanilamides. A number of combinations have been studied with the hope that the two agents are more effective than one and if the effect is not synergastic, it is probably additive. There is evidence to show that Penicillin and Streptomycin are more effective when used in combinations for sub acute bacterial endocarditis. Harrat has shown that Aureomycin by mouth and streptomycin by injection are more effective in undulant fever. Penicillin and sulpha diazine have been most extensively used in combination for the successful treatment of the bacterial meningitis. Streptomycin and sulphanamides have been used in combination in treatment of influenza bacillus meningitis.

Selection of anti biotics:—Penicillin continues to be the anti biotic of choice for treatment of all gram positive infection due to streptococci, pneumococci and for the treatment of syphilis and gonorrhoea. Streptomycin is a drug of choice for all tubercular infections. Chloromycetin is a drug par excellance in the treatment of typhoid fever. Aureomycin is very helpful in

viral diseases. Aureomycin and Terramycin are useful in ricketsial diseases, lymphogranuloma and undulant fever.

Tyrothricin

In view of the interest shown in medical literature with regard to the various anti biotic agents Tyrothricin came into prominence as Tyroderm in the treatment of Pyodermatoses. This drug is useful in gram positive infections, caused by Staphylococcus aureus, s.albus, Streptococcus hæmolyticus and Str.foecalis. Tyrothricin is also useful for treatment of sore throat and is available as Tyrozets.

Bacitracin

The anti biotic bacitracin is produced by the tracey I Strain of bacillus subtilis and was discovered by research department of the Columbia College of Physicians. Bacitracin has come into prominence in the treatment of pyogenic dermatoses by topical application- a thousand units per gm. of petrolatum. Bacitracin is available in 20 cc. vials containing 2 thousand and 10 thousand units and 50 cc. vials containing 50 thousand units. In neuro surgical infections involving the central nervous system and its coverings Bacitracin has been used in doses of 10 thousand units every 3 to 6 hours. The staphylococcus was bacitracin sensitive and local and or systemic administration permitted primary closure in healing of the wound. In chronic osteomyelitis bacitracin has been found very useful.

Neomycin

This is based on the results of study in the treatment of urinary infections. This anti biotic is given in doses varying from 50,000 to 100,000 units at 6 hour intervals for a period of 3 to 9 days.

Viomycin

A new anti biotic named Viomycin has been prepared from streptomyces and is being tried in streptomycin resistant tuberculosis.

Aerosporin or Polymyxin

This is obtained from bacillus polymyxin otherwise known as bacillus aerosporus Greer. This drug is effective for many gram negative organisms and is therefore indicated whenever a meningeal enteric or local infection or systemic infection is caused by any of the following organisms viz :—B.Pyocyaneus, B.coli, Kl. Pneumonia, Shigella and H. Influenza. Polymyxin B was selected from available polymyxins because of its relative freedom from toxicity in therepeutic doses.

Fumagillin

This new anti biotic has been found very effective against E. histolytic.

Varidase

This is a new biological enzymatic product containing 2 enzymes elaborated by Hæmolytic streptococci. These two enzymes, streptokinase and streptodornase have surprising efficiency in dissolving pus and fibrin. Varidase (Lederle) i.e. streptokinase and streptodornase contain 100 thousand units of the former and 25 thousand units of the latter per vial. Clinical applications.

(1) Hæmothorax—this dissolves fibrinous exudates and facilitates easy absorption in hæmothorax.

(2) Empyema. Varidase liquifies purulent of fibrinous deposits whether due to post pneumonic, pyogenic or tuberculous origin and permits complete removal of serous fluid.

(3) Chronic suppurations—Varidase removes necrotic debris and brings rapid healing in osteomyelitis, infected wounds, tubercular adenitis, etc.

Varidase should not be employed in the presence of active hæmorrhage or in acute cellulitis without suppuration.

The dosage recommended depends on the individual basis. For Hæmothorax and Empyoma an initial dosage of 200 thousand units SK and 50 thousand units SD are suggested. For a scalp wound, I have used 10,000 units SK and 2500 units SD every 24 hours for 10 days with very good results.

Antimalarial Drugs

The last war gave an impetus to the discovery of new antimalarial drugs since the supply of quinine was cut off by the Japanese invasion of East Indies. The advances made were (1) Methods for large scale manufacture of Mepacrine and Pamaquin. (2) The discovery of new antimalarials viz: Paludrine, Pentaquin and Chloroquin. (3) The discovery of new and important information regarding the life cycle of the malarial parasite, e.g. the exoerythrocytic cycle. Before the war three drugs were used in the treatment of malaria viz. Quinine, Mapacrine and Pamaquine. Many thousands of compounds which were essential modifications of these known active substances have been made. The important discoveries are given below:-

Paludrine: This drug is a new compound, in that it represents a new antimalarial with a new chemical structure. It was found that Paludrine is a causal prophylactic against mosquito induced falciparum malaria and only a partial prophylactic against vivax malaria: in the later case the exo erythrocytic forms are only inhibited and not destroyed so that when once the drug administration was stopped the surviving forms can start the cycle again. Paludrine has no gametocidal property but if present in the human blood containing the gametocytes of P.vivax and P.falciparum at the time of ingestion by mosquitoes the sexual development of the parasites in the insect host is inhibited, so that sporozoites, are not formed. In this way the drug is useful in preventing the spread of the disease.

Dose: 0·3 gm twice daily for 1st day.
0·3 gm once daily for 3 days.

Toxicity: The chief toxic symptoms are vomiting and the presence of red cells and casts in the urine. Gross hematuria sometimes develops.

Pentaquine and Pamaquin. Pamaquin (also known as plasmoquin) has actions on the gametocytes and in combination with quinine is highly effective in the treatment of malaria but its toxicity has precluded its general use though Dr. Monk in 1948 has stated that this toxicity has been exaggerated. Pentaquin is less toxic than pamaquin. A still newer compound is Iso-pentaquin, is even less toxic than pentaquin.

Dose: 0·02 gm. thrice daily for 10 days along with 5 to 7 grains thrice daily of quinine. Toxic effects are abdominal discomfort and pain, anorexia and occasionally transient weakness, headache and diarrhœa.

Chloroquine and Mepacrine: These two drugs have similar actions on the erythrocytic forms of P.vivax and P.falciparum.

Dose: Mepacrine 0·2 grm tds 1st day.
0·1 grm tds 3 days.

Chloroquine: 0·5 gm. St 0·25 gm after 6 hrs. and 0·25 grm on the 2nd and 3rd day. Toxic effects are mild and transient headache, visual disturbances, pruritis. Rare complication is a lichen-like rash.

Camoquin: is another synthetic anti malarial which has action only on erythrocytic forms and is used in doses of 0·2 gm bd 1st day and 0·1 gm bd next 3 days.

STAGE	DRUGS EFFECTIVE
Exo-erythrocyte	Paludrine, Pentaquine and Pamaquine
Assexual or Erythocytic	Quinine, Mepacrine, Pamaquine, Paludrine, Chloroquine, Pentaquine
Sexual	Pamaquine

Analgesic Drugs

Various analgesic drugs have come into vogue and some of the recent and important ones may be taken for consideration.

(1) PETHIDINE: (Dolantin, Demerol) is a spasmolytic drug comparable in efficiency to morphine in the relief of pain, and has chemical relation to atropine in formula. Pethidine is prepared by Roche. The drug is less depressant to respiration than morphine. It has weak atropine like effect as mydriasis and inhibition of salivary glands. It has direct papaverine like action on smooth muscles. The usual dose is 50 to 100 mgms orally or IM. It is an excellent drug to relieve the pain of child birth.

The toxic effects are 1. habit formation 2. vomiting 3. dry mouth 4. visual disturbances and 5. restlessness.

PHYSEPTONE: (Amidone) This depresses respiration less than morphine but more than pethidine. Prescott and Ransome have concluded that the depressant action on the infant's respiratory centre contra indicates the use of amidone in obstetric analgesia.

Amidone also depresses the cough reflex.

Dose: Oral: upto 7·5 mgm;
s.c. 2·5 to 10 mgm.

Toxic effects: Euphoria and vomiting

PHENADOXONE: (Heptalgin)

Dose: 10 to 20 mgm by IM
30 to 50 mgm by mouth

INTRAVENOUS PROCAINE as an analgesic has been used to relieve the pruritus associated with jaundice, for relief of pain associated with burns, for relief of pain in post operative cases and in obstetric analgesia. It is used in 0·1% strength and given at the rate of 4 mgm per kilo of body weight.

TREATMENT OF ANAEMIAS: Attempts have been made in recent years to find a new iron preparation for parenteral administration, since it was found that a good number of patients with iron deficiency anæmia suffered from gastro intestinal upsets after per oral iron therapy. This led to discovery of saccharated iron oxide for I.V. injections. I.V. iron therapy is indicated in

1. Cases of iron deficiency anæmias refractory to oral treatments
2. Hypochromic anæmias of pregnancy and puerperium during which periods gastric upsets are common.
3. Hypochromic anæmias associated with steatorrhoea or mucus colitis.
4. Hypochromic anæmias due to chronic hæmorrhage or chronic infections.
5. Severe anæmias in which rapid restoration or hemoglobin is desirable.

The response is dramatic and hence this therapy is considered as a boon, but such enthusiasms should be tempered by the knowledge that the therapeutic scope should not be exceeded. Unduly large doses or saccharated iron may give rise to the following toxic symptoms:—Multiple embolism in pulmonary and systemic circulations and consequent rigors, collapse with fall of B.P. tachycardia, dyspnoea, cynosis, pleuritical pain abdominal pain with diarrhoea and pyrexia. I.V. iron should not be injected faster than 1 cc per minute. Dosage is calculated according to iron deficiency. 5 cc of IV iron corresponds to 100 mgms and produces a rise of 4% in hemoglobin. Brown gives the following formula:

Normal H.B.—initial H.B. x 0·255 = to Fe.

Fe. is the calculated dosage of iron.

Normal H.B. is assumed as 15 gm in men and 13·25 gm per 100 ml. for women.

After determining the total dosage of iron required, start on the first day 30 mgm second day 60 mgm and thereafter 100 mgm till the total calculated dosage has been given. Pteroylglutamic Acid (Folic Acid):—A most important aspect of the action of PGA (Pteroylglutamic acid) in pernicious anæmia is the absence of effect on neurological complications. On the other hand these complications may arise in patients treated with PGA even after a good hæmatological response has been taken. Hence it was suggested that PGA may produce damage to the central nervous system. Such complications do not occur when other types of macrocytic anæmia have been treated. These findings make it clear that PGA should never be used alone in the treatment of pernicious anæmia. Folic acid or PGA is not the extrinsic factor of Castle since it is active without predigestion with gastric juice and is effective on injection. It is not the intrinsic factor which is readily destroyed by heat. It is not the active principle present in the liver extract since the effective daily dose of PGA is 10 to 20 mgm whereas the daily requirements of potent liver extract contains only 0·02 micro grams of PGA. Hence an interesting point arises regarding the mode of action. PGA is found in food as PHGA (pteroyl heptaglutamic acid). Heinle and Bethell found that the administration of PHGA by injection to normal persons produced the excretion of PGA in urine whereas there was no such excretion in pernicious anæmia. But in cases of pernicious anæmia controlled by liver therapy PHGA administration produces the excretion of PGA. Hence these authors postulates that anti anæmic liver principle acts as a conjugates spliting the PHGA into PGA which in turn stimulate the bone marrow to erythropoiesis. PGA is effective only in a macrocytic anæmia with megaloblastic change in the bone marrow. These conditions are:—

(1) Nutritional Macrocytic Anæmia
(2) Liver refractory Macrocytic Anæmia
(3) Sprue.

Folic acid is given in 15 mgm doses daily either by mouth or by IM. Vitamin B_{12}. This drug has been found especially effective against the neurological complication of pernicious anæmia. Berk has suggested that the function of the intrinsic factor of the normal gastric juice is to facilitate the absorption of Vitamin B_{12}. Although definite proof is lacking it is logical to assume for the present that Vitamin B_{12} is the active anti pernicious anaemia principle of liver. In other words B_{12} acts effectively in the treatment of pernicious anæmia.

Folic Acid and B_{12}. Bethell reported that the folic acid antagonist Aminopterin inhibited the response of vitamin B_{12} in a patient of pernicious anæmia. This finding naturally raises the question of synergistic action between folic acid and vitamin B_{12} but the subject is still sub-judice.

Patel has found that Vitamin B_{12} produced good response in cases of tropical macrocytic anæmia, nutritional macrocytic anæmia and in sprue. Dosage and administration: Hall found that oral administration was ineffective. Sturgis reports that one microgram of B_{12} per day by injection will restore the blood level to normal within six weeks. The present accepted dosage is 15 to 30 micrograms once a week.

Anticoagulant Drugs

Anticoagulants have been used in the treatment of thrombo phlebitis and coronary thrombosis. The possibility of preventing the extension of coronary thrombosis and the development of mural thrombi in the presence of myocardial infarction was suggested by Solandt, Nassim and Best in 1938. These investigators were able to prevent the development of both coronary thrombi and intra cardiac thrombi under

conditions in which such thrombi are produced in animals, by the use of the anti coagulant heparin. Their observations were applied in human beings. In the years 1945–46 Wright, Nickol, Page, Petres, Guyther and Brambel reported encouraging results by the use of the anti coagulant Dicoumarol. Mode of action of Heparin. Heparin inhibits blood coagulation both in vitro and in vivo. It appears to prevent the conversion of prothrombin to thrombin. Heparin is administered I.V. either in saline drip or by repeated injections. The duration of action of a single injection is brief, e.g. After 100 mgms. (10,000 units) the coagulation time is increased by a period of three hours. If I.V. alone is used injections may be given every six hours to maintain the coagulation time, exceeding 15 minutes (normal 4 to 7 minutes.) Dicoumarol: This drug should never be given without proper laboratory control of plasma prothrombin level. The action of Dicoumarol is to depress the formation of prothrombin by the liver. The effect is similar to vitamin K deficiency. The consequent reduction in the plasma prothrombin level prolongs the prothrombin clotting time and when this is sufficiently increased the ordinary clotting time is also increased.

Prothrombin level 20% of normal-give 200 Mgm Dicoumarol.

Prothrombin level 10 to 20% of normal-50 to 100 Mgm dose.

Prothrombin level below 10%-no Dicoumarol.

Promexan. This is a Dicoumarol derivative. The main features of this drug are:—(1) It has one fourth the potency of Dicoumaral and is proportionately less toxic. (2) It is more rapidly metabolised and excreted.

(3) The daily dose is 1200 mg. given in 4 divided doses, on the first day; later 300 to 600 mgm. daily. Promexan is a distinct advance over Dicoumarol, though the same plasma prothrombin level is essential. Anti coagulants are not to be given in kidney or liver damage or if haemorrhagic disease is present.

Chemotherapy in Leukemia

The use of Radioactive Phosphorus, Folic acid antagoniser and Nitrogen mustard, in the treatment of Leukemia is another advance that deserves mention. Radioactive Phosphrous is given in chronic Myelogenous Leukemia in a dose of 5 to 7 millicuries I.V. with a dose repeated after 6 to 8 weeks if necessary. Its advantages are 1. wide tissue dispersion, 2. a mild but prolonged effect, persisting for several months and 3. the absence of radiation sickness.

Folic acid antagonistis:—Folic acid is a growth stimulating factor. It was found by Farber, that folic acid antagonists (4-amino-Pteroylglulatamic acid) or aminopterin inhibited the growth of Leukemic cells. This folic acid antagonists produces a temporary but satisfactory remission in 50% of cases.

Dose: One mgm. I.M. daily for a week to 10 days, followed by 0.5 mgm. daily until there is a conversion from a blast type of bone marrow to a normal pattern.

NITROGEN MUSTARDS: These are given I.V. in almost all cases their administration is followed by Anorexia, Nausea and Vomiting. Dose: one mgm. per kilo of body weight on alternate days for 4 injections. Total amount of one course should not exceed 24 mgm.

Bal

Peters and Voegtlin found that toxic effects of Arsenic are produced by their property to react with certain essential thiol compounds in the protoplasm of the cells. BAL a drug found during the war has been found to compete with arsenic for thiol compounds; hence the toxic effects of arsenic on the protoplasm do not take place. BAL has been found of value in poisoning by the various arsenicals, mercuric chloride gold, lead and bismuth.

Dose: BAL is available as a 5% solution in arachis oil and benzyl benzoate. In practice it is given at 4th hourly intervals on the 1st day and twice daily thereafter.

Use of Tolserol in the Treatment of Anxiety Tension States:

One of the common conditions which a general medical practitioner is confronted is the problem of anxiety state. The appearance of a chemical compound of the propaneidol group on the medical horizon which will bring relief to many sufferers from anxiety is of great interest. Various reports have appeared about the efficacy of Tolserol (Squibb) in allaying the anxiety and producing euphoria, relaxation. The average dose is 0.75 to 1.2 grm. per day for 10 days.

PROCAINE AMIDE (PRONESTYL) This has been found useful in restoring normal rhythm in cardiac arrhythmias especially paroxysmal ventricular tachycardias. The dosage varied from 200 to 500 mgm. I.V, and the ventricular arrhythmias were abolished in most cases in 5 minutes.

Khellin in Cardiovascular Disease

This drug has selective action in dilating the coronary vessels and increasing the blood flow. It does not affect the B.P. This is a crystalline substance from the seed of a plant Ammi vis naga, which grows in the Eastern Mediterranean countries. Khellin is available as Vis Cardin (B.D.H.) Khellin is given by mouth as tablets 50 mgms. thrice daily. It has been found useful in angina pectoris. Dr. K. C. Mehta has described the usefulness of Khellin in renal colic and cardiac asthma.

Unsaturated Fatty Acids in the Treatment of Tinea Pedis

It cannot be said that the treatment of tinea pedis is wholly satisfactory. In spite of the imposing array of medicaments. It was Keeny Ajello, Broyles and Lankford, who demonstrated the fungicidal properties of undecylanic, propionic acid and caprylic acid. (Tineafax B.W. and Purnatol-Wyeth.) in ointment form, as well as dusting powder.

HYALURONIDASE IN PEDIATRICS: This counteracts hyaluronic acids in tissues by reducing its viscosity and thereby temporarily facilitating the dispersion of fluids, electrolytes and metobolites. 500 viscosity units is the dosage of choice. After the patient has been proved non sensitive by a skin test an ordinary hypodermic needle is injected into the site selected. The clysis is started with 5 to 10 c.c. of fluid, then 500 units of hyaluronidase in 1 c.c. distilled water is injected in the lumen of rubber tubing; following this the clysis is permitted to run at the rate desired.

HETRAZAN in filariasis:—One of the first and discernable effects produced by Hetrazan therapy is a very rapid and pronounced reduction of microfilariae per unit sample of blood. In many cases the count will drop to zero within 1 or 2 days after the first dose has been given. The mechanism of action of Hetrazan against the microfilariae of W. bancrofti is not known definitely. The dosage recommended is 2 mgm. per kilogram of body weight for 11 to 22 days. Hetrazan is a brand of Diethylcarbamazine tablet prepared by Lederle Laboratories. Another preparation, Banocide (diethylcarbamazine) is prepared by B.W.Jlo.

At the outset it should be realised that it is very difficult to review the whole vast and growing field of therapeutics. Hence the discussion has been confined to some of the important

aspects. If anyone wants to know more, he is advised to enlarge his knowledge by a reference to advanced books on Therapeutics.

In this we are reminded of Lord Tennyson who says

"WHO LOVES NOT KNOWLEDGE? WHO SHALL RAIL
AGAINST HER BEAUTY? MAY SHE MIX
WITH MEN AND PROSPER! WHO SHALL FIX
HER PILLARS? LET HER WORK PREVAIL."

ASSOCIATION NOTES

JOINT STANDING COMMITTEE OF THE ANDHRA AND SOUTH INDIAN PROVINCIAL BRANCHES, I.M.A.

The Joint Standing Committee met at Rajahmundry on the 3rd of March 1951 at 7-30 p.m. in the premises of the Viresalingam High School. Advantage was taken of the session of 17th Andhra Provincial Medical Conference with a view to bring about a closer contact between the two committees. Owing to the unavoidable absence of Dr. B. Tirumalarao, President, Dr. U. Krishna Rau, Vice-president occupied the chair. The following members were present. Dr. G. V. Hanumantha Rao & S. Chaganti were co-opted as members to attend the meeting.

1. Dr. P. A. S. Raghavan of Trichinopoly.
2. „ M. V. Krishna Rao of Vizagapatam.
3. „ K. Viswanadha Rao „
4. „ D. Rajasekhara Rao of Eluru.
5. „ P. Veeriah Chowdhury of Guntur.
6. „ D. V. Venkappa of Madras (J. Secy).
7. „ U. Krishna Rau of Madras (President).

At the outset resolutions were passed touching the sad demise of Dr. K. S. Ray, M. G. Naidu and P. Raja Rao. Dr. U. Krishna Rau in his introductory speech thanked the Reception Committee for having given the opportunity and facilities for holding the meeting and according a warm welcome to the members of the S. I. P. Branch.

The minutes of the previous meeting held at Madras on the 22nd November 1950 were read and confirmed.

A discussion arose about the Village Vaidya Scheme and the President wanted to know the views of the house after a thorough discussion to formulate a relevant resolution. At this stage the President explained to them the nature of the interviews he has had with the Minister for Prohibition, the Surgeon—General and the Minister for Public Health touching the various details and the results of the interview. The subjects discussed were, the recognition of the I.M.A., representation in advisory committee formed by Government, Village Vaidya Scheme, certificates of Guntur Medical College and restrictions placed on medical men on their possession and sale of spirituous preparations. On the whole the results were encouraging and favourable.

The discussion then was resumed on the Village Vaidya Scheme and after the view points of the members have been put forth and clarified the conclusion was arrived at to reiterate the resolution already passed recommending that such of those Vaidyas possessing a satisfactory standard of general knowledge and a minimum standard of general education might be given one year's training instead of six months on the rudiments of preventive and curative medicine as well, and absorbed as full—time auxiliary medical and health personnel in rural areas in Government and Local Board employ instead of allowing them to go into general practice as qualified practitioners.

The next question discussed was about the temporary Civil Assistant

Surgeons who rendered yeoman service to the civil population in war time being given recognition of their services by (1) relaxing the age limit to the extent of the years of their service, (2) fixing that 50% of fresh recruitment is reserved for such of those who had put in more service than two years of satisfactory service, (3) recruiting into permanent service all those who have put in a minimum of three years satisfactory service and obtained post—graduate qualification like M.D., M.S., D.O., D.G.O., etc.

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A meeting of the Joint Standing Committee was held at Kozhikode on 5—10—1951. The following members were present. Opportunity was availed of the sixth provincial conference of the S. I. P. Branch of the Indian Medical Association.

1. Dr. U. Krishna Rao.
2. „ P. A. S. Raghavan.
3. „ P. S. Srinivasan.
4. „ U. P. Mallaya.
5. „ D. V. Venkappa.
6. „ P. Veerayya Chowdhury.

Dr. G. V. Hanumantha Rao expressed his inability to attend and sent a message wishing the function success. Dr. K. Viswanatha Rao also regretted his inability. Two members were co-opted—Dr. C. V. Narayana Iyer and Manjeri Sundaram. The meeting was presided over by Dr. U. Krishna Rau. The important subjects that were discussed were about the Madras Medical Council Act and its amendment and the reiteration of the protest resolution passed by the Provincial Council of the S.I.P. Branch at Karaikudi, the expediting of the developments of the Medical Colleges at Madura and Guntur and to start the third year course of study from January 1952, inclusion of the licentiates in the graduates' constituency and the reiteration of the resolution of the treatment meted out to medical men in local bodies as regards their salaries and emoluments and to place them on the same basis as their brethern in Government service. The election of office bearers took place for the year 1951-52.

1. Dr. U. Krishna Rau, *President.*
2. „ D. V. Venkappa, *Secretary.*
3. „ P. A. S. Raghavan, *Member.*
4. „ U. P. Mallayya „
5. „ S. Subramaniam „

ERODE BRANCH

President: Capt. R. S. K. Raman.
Vice-President. Dr. E. S. Venkatraman.
Secretaries: „ N. N. Shenoy. „ N. C. Kuppusamy.
Treasurer: „ M. N. Shenoy.

A clinical Meeting of the Association was held on the 14th June in Erode Municipal Council Hall, when Major R. S. Rao, of Coimbatore spoke on "Extra-Pulmonary Tuberculosis". The meeting was largely attended by the local members and a good number of doctors from the muffusal stations.

Major Rao dealt with Tuberculosis of cutis, lymph glands and Tuberculosis of bones and joints. He also made mention of Tubercular Meningitis which gave cent percent mortality in all the cases he treated. In tuberculosis of the glands of the neck, Major Rao, advocated removal of the tubercular process involved a single gland and block dissection, if several glands were involved, with immobilisation in Plaster supported by streptomycin and P. A. S. Dealing with Pott's disease of the spine, Major Rao stressed the necessity of early diagnosis and immobilisation in Plaster casing with specific therapy of streptomycin and P.A.S. According to him all VAGUE pains in the centre of the back should be examined thoroughly and the skiagrams of the part should be taken to confirm the presence or otherwise of Tubercular process. Incidentally he mentioned the case wherein a breast of a young lady was amputated by a surgeon when a cold abscess was mistaken for a new growth.

In Tubercular arthritis, Major Rao, advocated immobilisation and intra-articular injection of streptomycin through a window, Gram of steptomycin mixed with 20 C.C. of normal saline is injected into the joint daily until there is improvement.

At the end of the lecture there was a lively discussion wherein several members took part. The meeting came to a close after a vote of thanks by the Secretary Dr. N. N. Shenoy. Dr. Miss. P. Sarojini provided Tea to the members. This clinical meeting was a success since it attracted many muffusil Practitioners.

MADRAS BRANCH

President: Dr. K. Narayanamurthi
Vice-Presidents: „ K. Vasudeva Rao
„ G. S. Katre
Hony. Treasurer: „ R. Sankaran
Hony. Secretaries: „ G. Ramachandramurthy, „ K. L. Narayana Rau

The Madras Branch of the Indian Medical Association had the unique privilege of hearing some of the distinguished scientists who attended the All India Scientific Conference in January 1952.

1. Dr. Jeoffrey W. Rake, Director of the Squibb Institute for Medical Research, New York and of International repute for his researches in Tuberculosis, Lymphogranuloma Venereum and Antibiotics talked on "Newer Hæmatemic Factors," on Wednesday the 16th January '52, at the Woodlands Hotel, Edward Elliots Road, Madras 4.

This lecture was very interesting and well attended.

M/s. Sarabhai Chemicals, Manufacturers and Distributors in India for E. R. Squibb & Sons of New York were at home to the Members. We thank M/s. Sarabhai Chemicals for their Tea.

2. Professor Arthur Stoll, Founder of the Pharmaceutical Research Laboratories, Basle, Switzerland spoke on "Ergot, Its Alkaloids, and their application in Therapeutics" on Friday the 25th January 1952 at the Madras Medical College. This meeting was held under the joint auspices of the Indian Medical Association, Madras Branch, Royal Institute of Chemistry, Madras Branch, and The Indian Pharmaceutical Association, Madras Branch. There was a large gathering and the lecture was higly scientific and instructive.

3. Dr. J. M. Tripod, M.D., Scientific Research Department, M/s. Ciba Ltd. Basle, Switzerland spoke on "Hormones and Vital Functions" on Tuesday, the 5th February '52 at the Madras Medical College. This lecture was arranged under the joint auspices of the Indian Medical Association, (Madras Branch) The Royal Institute of Chemistry, Madras Branch, and The Indian Pharmaceutical Association, Madras Branch. There was a very large audience and the lecture was very interesting and instructive.

M/s. Oriental Mercantile Distributors, who are the agents for M/s. Ciba Ltd., in Madras gave Tea on the occasion and we thank them for the same.

4. Dr. M. Krishnamurthy, M.S., Professor of Principles and Practice of Surgery, Madras Medical College spoke on Clinical and Operative Problems of the Enlarged Prostrate on 21—1—52 at the Madras Medical College under the auspices of the Madras Branch of the Indian Medical Association. The meeting was well attended.

There was a film show on "Aureomycin" after the lecture.

5. Major K. N. Rao, M.D., F.C.C.P., F.I.C.S., I.M.S. Superintendent, Tuberculosis Sanatorium, Tambaram spoke on Current Trends in Tuberculosis Control and Therapy on 28—1—52 at the Madras Medical College, under the auspices of the Indian Medical Association, Madras Branch. The meeting was well attended and much appreciated.

After the lecture there was a film show on "Hetrazan".

MADURA BRANCH

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

An Extraordinary General Meeting of the Association was held at 5-30 P.M. on Saturday the 21st June '52 at the Government Erskine Hospital, Madura. Dr. M. N. Rajan occupied the chair. The minutes of the previous monthly meeting were adopted. Proposed by Dr. P. Vadamalayan and seconded by Dr. P. Krishnamenon, Dr. K. C. Nambiar, F.R.C.S., Madras was nominated for the Presidentship of the South Indian Provincial Branch of the Indian Medical Association for 1952-53. Proposed by Dr. K. Ramachandran and Seconded by Dr. K. Gopal, Dr. P. Vadamalayan was nominated for one of the Vice-presidentships; Dr. N. R. Subramanyan of Tanjore was proposed for the other Vice-presidentship by Dr. K. G. Ramabadran and seconded by Dr. P. Krishnamenon.

Dr. N. R. Subramanyan, M.B., B.S., Hony. Physician, Government Head Quarters Hospital, Tanjore then addressed the meeting on Hepatic Cirrhosis. He dealt with this vast subject in a very interesting manner. The special points made out by the Lecturer were the signs and symptoms indicative of the pre-cirrhotic stage of the Liver when the changes were of a reversible type, and the treatment of the early case with proper diet, Lipotropins, B complex and measures to combat the secondary anaemia. The Lecturer has had success with slow I V drip of the tapped ascitic fluid itself.

Dr. N. R. Subramanyan replied suitably to the discussion that followed.

The meeting terminated after a vote of thanks.

TIRUNELVELI BRANCH

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

The monthly meeting of the Tirunelveli Branch of the Indian Medical Association was held on 26—4—1952 at Palayamkottai at the office of the District Medical officer when members numbering 36 were present.

After tea provided by Dr. T. V. Muthiah, M.B.B.S., the meeting began with the reading of the minutes of the previous meeting by the Secretary.

Then, Dr. R. Gopalan, B.A., M.B.B.S., read a short paper on "Cardiac Emergencies" in which he dwelt on the diagnosis and management of such cardiac emergencies as coronary thrombosis, angina pectoris, left ventricular failure manifesting as cardiac asthma or pulmonary œdema, congestive heart failure and cardiac dyspnœa.

There was some discussion following the lecture in which several members took part.

The meeting then terminated with a vote of thanks.

TIRUCHY BRANCH

President: Dr. R. Kalamegham
Vice-President: „ L. S. Ramachandran
Secretary: „ A. Dharmarajan
Treasurer: „ T. V. Sundaram

A meeting of the association was held on Tuesday the 3rd June '52 in the premises of the District Health Association, Puthur, Tiruchy under the Presidency of Dr. R. Kalamegham. About 50 members were present. After Tea kindly provided by Capt. K. P. Chidambaram, the President introduced Dr. M. G. Kini, M.B., Ch. B., FRCS., Bombay to the members and requested him to give his talk on "Rehabilitation of Crippled Children."

The lecturer addressing the members said that the first Physio-Therapy Training School would soon be started in Bombay and that two Specialists from Canada were on their way to India and two Indians who had training in America had also returned home. Now there were just a handful of qualified Physio-Therapists in the country and it worked out at 1 in 10 million of the population. There must be adequate number of these specialists to rehabilitate the crippled children in our country. Doctors also must specialise in this subject. India had the largest number of beggars in the world and most of these consisted of crippled children, and this was a blot on our country. He said that Rehabilitation should commence even in preventing crippling due to disease or injury. Rehabilitation consisted in rest, regulated exercise, massage and operation treatment. Crippling was of various degrees, some mild and scarcely noted and some terribly deformed. The major cause of crippling in children was due to Poliomyelitis. The King Institute, Guindy was the first in India to cultivate the virus and transmit the disease to experimental animals, and it was hoped that a curative serum and preventive vaccine would, in the near future be produced and thus there would be a reduction in the crippling of children.

Dr. P. A. S. Raghavan in proposing a vote of thanks to the lecturer eulogised the work of Dr. Kini in building up a big hospital for the crippled children in Bombay entirely by private charity. He also proposed a vote of thanks to the host of the evening. The meeting terminated at 8-30 p.m.

TANJORE BRANCH

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

The monthly meeting of the Association, was held at 4-30 P.M. on 27-4-52 at the Medical School Buildings, R.M. Hospital, Tanjore when the President, Dr. N. R. Subramanyan, M.B.B.S., was in the chair. Twenty five members were present.

After tea provided by the Secretary, the minutes of the last meeting were read and adopted. Communications from the Provincial Secretary were read out. The President then introduced to the audience the lecturer, Dr. V. Krishnamurthy, L.M.P., L.O., of Cuddalore N.T., who gave a talk on 'Pitfalls in the use of certain common drugs.' He dealt with the untoward effects of many common drugs. This was then followed by a discussion in which many members took part. The meeting then came to a close with a hearty vote of thanks to the lecturer and the host of the evening.

ABSTRACTS FROM THE CURRENT MEDICAL LITERATURE.

DIET IN OLD AGE—*G. J. Langley, M.B.E., M.D., F.R.C.P.—The Practitioner, Aug. 1950.*

The problems involved in arranging a suitable diet for old age are widely appreciated today, and for three reasons. First, the available diet is still to some extent controlled by rationing; secondly, the public press is frequently reminding us of the proportionate increase of old people in the general population; and thirdly, an increasing amount of interest is in evidence amongst the general public since the study of old age has been graced with a relatively new and quite popular title. None of these factors makes the problem either new or more easily solved.

It is, of course, a commonplace that almost every family has one or more members who have lived long enough to be regarded either as the senior member to be respected, or as the old member to be cared for and provided with such comforts and amenities as circumstances will allow. In either case a wide variety of opinions are liable to exist in the family as to what a suitable dietary for old age may be. Such opinions are further liable to be expressed with a violence in inverse ratio to the knowledge of the subject.

For many years past the long-suffering medical student has proved a completely satisfactory physiological guinea-pig, and the results of large series of observations are available in the physiological departments of the Universities. These form a mass of normal controls which inform us fully both of the average normal and of the limits of variation in health of most of the bodily functions. Such a mass of observations is entirely wanting in old age, and even if the necessary experimental animals were available, the difficulty in determining that they were really healthy animals would be very great. In spite of this obvious difficulty there is a good deal of evidence which can at least help to solve some of the many problems.

Bodily Metabolism and Advancing Years

A suitable diet, both as regards quantity and quality, must always be determined in the last resort by the bodily metabolism, and it is only too obvious that the actual metabolic requirements differ widely at the ages of twenty-five and sixty-five. But it may be well at the outset to consider even this obvious statement with some regard to the physiological facts and to inquire wherein lies this wide difference. May it be due to changes in the basic metabolic rate, or is it determined entirely by diminished bodily activity?

The basic metabolic rate in calories per square metre of body surface at the age of twenty-five has been estimated at 40, as against the same requirements at the age of sixty-five at 36·5 calories. The *expenditure of energy* by physical exertion profoundly affects these values, and it has been estimated that very slight effort, such as standing and dressing, will raise the metabolism by 50 per cent., whilst moderate effort, like continued walking and light housework, will raise it by 100 to 200 per cent. It is known that heavy and continued work may raise the metabolism from 8 to 15 times its basic value.

From such considerations it would appear that by far the major element in determining the metabolic requirements is the amount of bodily exertion. All the evidence goes to show that mental effort is not represented by any increase in metabolic demand. From this it therefore follows that any determination as to dietary requirements for an individual must first take account of the amount of physical exertion involved in the daily habits of the person concerned.

It is perhaps usual to regard active life at middle age which is not laborious or manual in its nature as requiring 2000 calories per day to maintain a nutritional balance, but this, over the age of sixty-five will usually be found to be in excess of requirement and, if taken, will probably lead to a rising body weight, except in those who continue, after that age, still to do quite heavy work.

The relation of the three great groups—proteins, fats, and carbohydrates—to each other in a suitable diet is still *sub judice* for adult normal life, so that any expression

of opinion in the matter in old age is likely to be more a pious hope than a logical conclusion. It is noticeable, however, that in the majority of people a gradual change in taste does take place, so that the younger members of the family are most interested in the sweet course, whereas their parents and elders greatly prefer the savoury. As will be seen later, this appears to be a physiological response to a slowly changing metabolism.

The physiological process of *digestion and assimilation* is largely understood for the healthy young adult, except in the field of the fats, and we should also know what changes, if any, accompany old age in the essential digestive secretions. So far as gastric acidity and peptic digestion are concerned there is evidence to show that these commonly run at a rather lower level and therefore act more slowly, but otherwise remain normal, except in individuals showing stigmata of disease known to be associated with gastric changes, such as pernicious anæmia and carcinoma.

We shall accept this the more readily if we can also accept Wendell Holmes' 'The Deacon's Masterpiece or the One Hoss Shay', as a true picture of the general failure of old age which affects the whole man rather than any particular system. We may then conclude, what is in fact a daily experience, that *protein absorption* and assimilation remain much as in earlier years, but take perhaps a little longer; and this may well be when we also consider the specific dynamic effect of protein digestion with its recognized rise in general body work.

It has been shown that *carbohydrate metabolism* slowly changes throughout life so that the response to a measured dose of sugar, under standard conditions, yields a response curve which gradually increases both in height and time. Once the forty-five age-mark is passed, in most individuals, the blood sugar level reached after the usual test dose of sugar exceeds the renal threshold, and return to the starving level becomes delayed by an hour or even more. This appears to record graphically the changes which take place generally in the bodily metabolism—a slowing of the process with some reduction in degree, but otherwise of normal form. It is this slowing process which may cause the appearance of glycosuria in older people if, and when, they are unwise enough to indulge in a large meal containing a high carbohydrate ratio.

The physiology of *fat absorption* is still not sufficiently understood to enable much to be said as regards changes in old age, as will readily be recognized from Professor Raper's recent paper (1949). It is, however, known that little change is found in the fæcal fats of old people, and it may be assumed that only minor changes in their digestion occur.

So far then, it would seem that in healthy old age all metabolic processes go on much as usual, but at a reduced rate, largely commensurate with reduced activity. This is no more than common sense and common experience usually tell us. The fact remains, however, that as age advances so bodily strength declines and weight slowly falls, as might well be expected. Accompanying this slowing process there is a diminishing demand for food and a falling appetite.

Excretory functions in Old Age

The problem so far seems simple enough. A general slowing of the digestive processes, a lessened demand for food, an increasing time for rest—all seem to fit together as age advances and to maintain a balance. This, however, also presupposes a continued ability to excrete metabolites, and in this respect increasing age may not be quite so happily placed. The ease with which fatigue is induced and the increase in time required for recovery are obvious reminders.

The mild and variable degree of *constipation* which often appears late in life, due in part to diminished muscular power and in part to a reduced indigestible residuum, does not appear to play any part in the general health of the individual, in spite of the expressed anxiety occasionally heard from those responsible for their care.

The *renal function* appears in a rather different light, but any consideration on this head can only be dealt with in the light of present knowledge of the metabolism of sodium chloride and water. In healthy old age there appears to be no

ecial change in the demand for fluid, d water excretion remains normal. Any sability in this respect may well be the first warning of an oncoming renal failure which will call for great care and attention. At very advanced ages nocturia seems rather usual than otherwise, but its occurrence appears to be connected more with bladder than with renal function.

Understanding of the *sodium chloride metabolism* of the body is still in a state of flux, even in the normal healthy adult, so that knowledge of it in old age is likely to be very much less. As in the case of water, there is normally no evidence of any difficulty in excretion during health, but any failure in this respect may well be regarded as alarming. There seems little doubt that it is always much easier to establish a salt excess than to produce a salt deficit. Present knowledge does, however, tell us something of the relation of œdema to *salt retention*, and this symptom, mild or severe, is common enough in the later years of life. For these reasons it would seem a wise precaution to limit the salt intake of old people, but only to the extent of allowing the usual amount for all cooking purposes and to keep additional salt at a low level. Any appearance of even a transient œdema at any time will call for a further reduction in salt use.

It is common experience that the response to tests of renal efficiency, even at a great age, is often surprisingly normal. The ability to excrete urea to a point at which the blood urea remains within the normal limits appears to persist in those who remain healthy and well. This seems to depend upon their lowered food intake, their reduced activity and the general slowing of all metabolic processes. It is a matter of common experience that the reserve power which preserves an adequate balance under widely varying conditions has been lost in the later decades of life, and any serious illness, especially if pyrexial, may readily lead to a rapidly developing renal failure with disaster not far away.

One further factor in the diet of old people must always be taken into account. They are perhaps a little liable to live on what they regard as an entirely suitable and satisfactory diet which fails to include adequate vitamins, and this oversight may quite seriously diminish both their health and their general vitality. It is probable that thiamine and ascorbic acid are the most important.

From all these considerations it would appear that in the later years of life, diet might well remain as before, but the quantity required will be reduced by a lessened bodily activity. With the solitary exceptions of diminished salt intake, partly required by reduced salt loss, and the necessity to ensure adequate vitamin supply, there seems little to be said.

Obesity in Old Age

That some increase in body weight takes place as age advances is so usual an experience that it may be regarded almost as physiological and is due presumably to a lack of balance between food intake and physical exertion. The effect of obesity, however, becomes more marked as age advances, partly because the amount of energy taken up in maintaining activity increases with the rising weight, but much more seriously because of the *rising blood pressure* which seems to accompany the process. Insurance companies have become increasingly conscious of the shortening effect of obesity on the expectation of life. Recent inquiry work has shown that a reduction in the degree of obesity is also commonly associated with a corresponding fall in the accompanying hypertension. From this one may believe that obesity in later life calls more urgently for an attempt at correction than at other periods of life. The bathroom scales would appear to be a desirable piece of equipment once the middle period of life has been passed.

Any of the more severe procedures for *weight reduction* involve a degree of dieting which calls for considerable mental stamina to maintain it. These are quite unsuitable for the later periods of life, but a reasonable control of daily calories, with reduced carbohydrate and fat proportions, is most desirable. This must be combined with mild but quite regular increases in bodily activity, chiefly by graduated walking exercise. The process must be spread over a long time, perhaps six months; no very great change in a short time is either to be expected or desired, but the capacity for effort and the sense of well-being will

slowly improve, and the blood pressure level should be watched during the period.

When, in old age, some normal activity must be given up for a time, it is only recovered with great difficulty. The man of seventy-five who can walk five miles a day and enjoy it, finds such a capacity extremely difficult to recover after he has been confined to bed with a coryza for a fortnight. Cicero was well aware of this difficulty, and it will be remembered that he describes how he retained his remarkable memory by a planned and conscious effort. The same is true of the digestive process, and if the diet of the aged has to be reduced for a short time, it is often far from easy for them to return to a more normal food intake. This form of adaptation is well known in the field of carbohydrate metabolism and is readily seen from the variation in sugar tolerance after a period of high, as compared with a period of low, carbohydrate intake.

Dietary Timetable

A whole series of problems arises in arranging the food timetable of later life. Such do not arise during active working years because occupational calls predetermine what can be done. Breakfast in bed is a case in point. It is usual for those over the age of eighty to take the first meal of the day in that way, possibly for the convenience of the household or possibly because it allows more leisure for the rather long process of bathing and dressing. But there are a group of more active octogenarians to whom such an idea is complete anathema, and it would be as unwise as unkind to interfere with their habits, particularly since no real advantage could be indicated.

If breakfast is a protein meal and evening dinner still more so, then it will be necessary for the mid-day meal to be low in protein content to keep the daily calories within their proper limits; so this meal should be small and light. The rationed supply of meat, small in quantity and inferior in quality, has done much to make this arrangement a necessity. A mid-day rest is of value, partly because it is often required after the activity of the first half of the day, and partly to allow time for the circulatory adjustments which are called for by the digestive processes.

The evening meal, when the main meal of the day, may wisely be retained for older people as a family ritual, such as was the case in Victorian times. The absence of hurry, the fact that the day's work is completed and that the family can enjoy each others' company, are all factors which make for satisfactory digestion.

The process of food absorption is a conditioned reflex and it is well known that many factors, small in themselves, may make or mar that function. The attractive service of meals is more important as age advances, and hunger, the best of all sauces, plays a lessening part. The old man who for some trivial reason has lost his temper just before a meal, is as unlikely to enjoy it as the one who finds a grub in the cauliflower. It is wise to ensure that some fresh fruit is included in the daily diet, and for this reason it seems a pity that the dessert course tends to become less popular now that fruit is usually available.

It is often asked how soon after the main evening meal is it wise for older people to go to bed. Manifestly much depends upon the habits of the individual, for those who read in bed for some time before attempting to go to sleep, it does not appear to matter greatly, but for those who expect to sleep as soon as they are comfortable in bed, it is unwise to make the attempt within an hour of a large meal, not because they may fail to sleep, but because they are so liable to awaken an hour or so later and fail badly at the second attempt. Public advertisement has made us only too familiar with 'night starvation', and the small amount of food required by older people makes this more likely than in earlier years, so that it is a wise precaution to keep some nourishment by the bedside, for it is a common experience that a wakeful night may be avoided by taking a couple of biscuits and a little milk.

If we agree that fluid requirement and fluid loss remain much as before in older people, this does not tell us in what form the fluid should be taken, but the increased tea ration for those over seventy might suggest the answer. Such an opinion is open to doubt, and much might be said for an increased alcohol ration, if we are prepared to consult individual tastes. A little whisky as a nightcap is reputed to help sleep, and a little wine with meals is supposed to improve the appetite. It may well be supposed that in small quantity the medicinal effect of either is negligible. But if older people derive any pleasure, or a sense of well-being, from it, taken in reasonable quantity, to deprive them of it will confer no material benefit and will cause the loss of yet another pleasure when they have already lost so much.

The Psychological Aspect

The readiness with which fatigue occurs is perhaps the most striking of all the changes which accompany old age, and this may reach a stage at which the appetite fails entirely. The process of recovery is then slowed a great deal and if such a process is repeated frequently, breakdown is sure to occur. It is noticeable how much more easily fatigue is established when doing something which is disagreeable than when occupied with some entirely pleasant task calling for the same amount of effort.

This leads directly to the greatest of all the problems of increasing age: if the process can be accepted with a continued happiness then the care of the aged is a light and pleasant task, but if every new disability is resented and occasions continual repining, then the individual and all his associates will be made miserable. Browning's words of Rabbi Ben Ezra may be remembered:—

> 'Grow old along with me!
> 'The best is yet to be,
> 'The last of life, for which the first was made'.

The highest art of life is to grow old gracefully and to be thankful for the degree of activity in mind and body which remains, rather than complain constantly of the numerous and increasing limitations. Plato tells us, in his account of the meeting of Socrates and Cephalus, some of the factors which lead to a comfortable old age, reminding us that life flows more quietly, that we are delivered from the dominance of active passions, and that the evening of our lives may surely be as charming as the Indian summer of a dipsyte. It is the experience of most that a happy and contented old age allows life to flow smoothly, whereas for those constantly kicking against the pricks, it is likely that their digestion will be as complaining and irregular as their temper.

For each individual there comes a time when choice must be made between taking care of a waning health and strength, on the one hand, in the hope of adding length to life, and on the other, continuing to lead as active and interesting a life as possible in the determination to meet what may come with as good a grace as may be. It seems, however, that those who enter upon a valetudinarian existence, with the aid of their relatives, are constantly anxious about their diet, as about everything else, and life seems to degenerate into a presistently unsolved riddle, destructive of their own peace and that of all their friends.

At the opposite pole there are those who regard 'safety first' as the most hopelessly foolish cry ever popular in this country. They are quite prepared to meet disaster in whatever form it may arise, but they are willing to make no sacrifice to it and very little compromise. These are the people who seem to enjoy the later years of their life and such make no extravagant claims upon the dietitian—they are prepared to take all that a kindly nature may bestow. For such, the one obvious and possible disaster is grave and prolonged illness. When this occurs their dietary requirements must be appropriate to the particular disease which lays them low.

Diet in Illness

In so far as dietary treatment is helpful in the treatment of their illness, older people differ little from those suffering from the same disease at an earlier period of life. There is one side of this problem, however, which requires care, in that the excretory mechanism may have been slowed up or become defective beyond that of the absorptive capacity, and this must receive some attention. Here again the question of salt and water metabolism offers perhaps the major difficulty, whilst vitamin supply also calls for consideration.

Suitable diet in gastric disease is always a difficult problem, but in later life this is multiplied many times, and in older people the process of trial and error is almost inevitable. The mechanical problem

of mastication may itself offer an apparent difficulty, but Sheldon (1948) has shown in the course of his inquiry that this seems to be a minor matter, even in those who remain completely edentulous.

In reviewing the whole problem of diet in old age it may be suggested that digestion is a conditioned reflex and that any factor which disturbs the conditions will disturb the process. It would seem wise therefore to interfere as little as possible with the habits and desires of older people in the matter of their food. In particular it is desirable to consider with much care what is actually to be gained by any alteration in their diet. Our younger colleagues are so liable to prescribe a diet, distasteful and even irksome, to their older patients, when a little more sympathetic consideration would reveal that such demands are likely to have but little effect in cure and to offer but little help to that end.

Any interference with diet or mode of life which leads to unhappiness or misery in these older folk, is unlikely to help greatly in the mitigation of their symptoms, and, in the last analysis, they are free to determine whether they will accept the directions offered or whether they will continue to lead their lives in any way they may choose and accept the consequences.

Conclusion

Our modern life and its resources have changed the character of old age, which today is more often seen in the form of the well-nourished 'justice' with his 'wise saws and modern instances' than either the 'lean and slipper'd pantaloon' or the 'second childishness, and mere oblivion'. For this we may indeed be thankful, but it is clear that treatment of old age today differs widely from that which might have been suitable in the days of Shakespeare.

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ODDS & ENDS

There are 209,040 physicians in U.S.A. They want 22,200 more by 1954 to meet military and civilian health demands! A journal asks, is it a "feast or a famine."

♡ △ ♡

A woman dentist has designed, a 'false bosom' for bottle-fed babies to simulate actual breast—suckling conditions.

♡ △ ♡

Said a doctor in his old age, "I hope that when I go people will not say, "I am sorry he is dead", but "I am glad he lived."

♡ △ ♡

The girl was terribly scared when the surgeon came near her. "Don't you know I am a painless doctor," he tried to reassure her.

"May be" she replied. "But I am not a painless patient."

♡ △ ♡

Extracts from letters:

"I want money as quick as you can send it. I have been in bed with the doctor for a week. It has not done me any good. Still he wants his fee."

"I have no children as my husband is a bus conductor and works all day and night."

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

9

सर्वेजनाः सुखिनो भवन्तु

MISCELLANY

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

MONTHLY JOURNAL OF THE SOUTH INDIAN BRANCH
INDIAN MEDICAL ASSOCIATION

Vol. XIX AUGUST 1952 No. 2

THE SEVENTH

South Indian Provincial Medical Conference

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Dr. K. Rama Ayyar, M.B.B.S.

Hony. Secretary, Souvenir & Exhibition:
Dr. S. Chandrasekaran, M.B.B.S.

The seventh South Indian Provincial Medical Conference will be held at St. John's College premises on 20, 21 and 22 September 1952. The following items have been arranged.

1. A Scientific Session where papers by eminent medical men will be read and discussed.
2. An Exhibition of Medical, Surgical and allied products.
3. Publication of "Souvenir".
4. Entertainments.

All members are requested to attend the Conference in large numbers and make the Conference a success.

R. GOPALAN,
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THE MISCELLANY

MONTHLY JOURNAL OF THE SOUTH INDIAN BRANCH
THE INDIAN MEDICAL ASSOCIATION

VOL. XIX] AUGUST 1952 [No. 2

GLIMPSES OF THE ART OF MEDICINE AND MEDICAL AID IN ANCIENT SOUTH INDIA

BY

D. V. S. REDDY, M.B.B.S., M.Sc.,

Professor of Physiology, Madras Medical College, Madras

In my attempts and studies to reconstruct and write a comprehensive History of Medicine in India, I had to collect materials available for various Geographical Units and Historical Epochs. When I examine the available books and articles dealing with History of Medicine in Ancient India, I notice the dearth of data and absence of studies relating to Medicine in South India. Some of my medical friends have also been keenly feeling that such studies have been neglected in South India. I tried to persuade some of my Tamil friends in medical and literary circles, to undertake a study of ancient Tamil Literature and classics, with special reference to the theory and practice of health and medicine. Having waited for some time and finding that no one is prepared to spare the necessary time for this kind of literary studies, I had no alternative but to plunge myself into this work, I realise that my ignorance of Tamil language is a great obstacle and my dependence on English translations and critical essays in English and Tamil literature, is likely to give me only an imcomplete and inaccurate picture. If my enthusiasm and my mistakes, stimulate others, better placed and better qualified than myself, to embark on such studies, I shall feel amply rewarded for all the time and trouble I have taken in writing and publishing this article. I am not unaware of the difficulties in this study of ancient History of South India. Prof. Dikshithar, in his learned book, "Studies in Tamil literature and history" has clearly indicated, the type of sources to be utilised for the study of History. His lists include, in addition to Tamil literary works and inscriptions, accounts of Geographers, Ceylonese tradition and contemporary Sanskrit literature. I have already published articles giving allusions to medicine in inscriptions and in accounts of Geographers, etc.

Another difficulty with regard to South India is the fact that it is the meeting place or the confluence of various streams of Indian Culture. Into the golden Tank of the indigenous culture of South India, flowed different cultures from various directions during different ages and epochs. Sage Agasthya is said to be the founder of Siddha system of medicine, which can boast of a large collection of medical manuscripts mostly undatable, on various branches of medicine. I have recently reprinted a list of medical manuscripts prepared by Dr. Ainsle more than hundred years ago. I also know the work and publications of the Saraswathi Mahal, Tanjore. I find a brief account of Siddha Medicine

in a book called "Tamil India" by Purnalingam Pillai. An uptodate and critical study of Tamil Medical works is overdue. The Sanskrit culture and literature, had also permeated the whole of South India, even in the early centuries of the Christian era, as can be gathered from the Tamil classics themselves. Ayurveda also appears to have been studied to some extent side by side with the Siddha system. The Buddhists and Jaina schools, also brought with them, into South India, their humanitarian outlook on life and introduced centres of charity and relief of suffering. Then, the Saivite and the Vishnavite schools appeared and in their turn, have left numerous traditions, legends and miracles, relating to health, disease and treatment.

(i)

Very little is known of pre-history of South India and therefore, it is not possible to give a clear account of medicine in South India in pre-historic times. Judging from beliefs and practices of the countries and lands with which South India had cultural and commercial contacts in distant past, it is probable that prayers and sacrifices and to deities, charms spells by priests and sorcerers, must have formed a large part of their medicine.

(ii)

For the historic period, the History of Medicine of Tamil Nad, cannot be re-constructed without a special study of ancient tradition, handed down in Tamil literary classics and their commentaries. The earliest period known to history is generally referred to, as Sangam period. While the orthodox pandits give a mythological origin and push back the Sangam period to many millenniums before Christ, the modern scientific historian is not prepared to concede a much earlier age than 10th to 5th century B.C., as the earliest period of Sangam literature.

The original literary works of this period are all supposed to have been lost. There are, however, two important collections of verses and poems, one of eight and another of ten, which are the gleanings from the 3rd Sangam period and which give glimpses of the social and cultural life of the capitals and royal courts of the early period. In addition to the above, there are 18 minor works on morals. The titles of some of the minor works of the later Sangam period, dealing with the Morals and Ethics are borrowed from ancient medical theory and practice. One fragment is called "Tirikadugam" which means "Three bitter drugs". There is a famous prescription of three bitter drugs. Just as three medicinal articles would effect speedy cures of physical ills, things referred to in this Vemba would be a cure for mental ills and will lead to a sound mind at last. A second work is named "Siru Panchamulam" referring to a well-known prescription of five medicinal articles. As the medicine compounded of five drugs would go a long way to cure the bodily ills, so also the maxims contain in each of these verses would, by proper application, relieve one of cyclic births and deaths. A third work is named "Eladi," alluding to a medicine compounded of six drugs. The six medicinal articles are compared to six worldly truths, pertaining to the life of house-holders and ascetics.

(iii) The art of Healing and Health in Kural

Thirukural, a code of morals is the most famous Tamil classic by Valluwar, composed, about 2nd century B.C. Thirukural contains stanzas, dealing with the various aspects of daily life, relating to Dharma, Artha, Kama and Moksha. There are many interesting side-lights on Physicians, personal hygiene, diet regimen suitable for different seasons, and for healthy living. There is also a short section of 10 stanzas directly dealing with principles of health, prevention and treatment of disease. There are verses also to indicate how health education was imported to the people through the medium of moral and religious works, and how it became part of the social and cultural life of the nation. The following is the gist of the meaning of the verses, dealing with the art of healing. The first seven verses deal with restraint in eating proper food. The last three deal with the actual code for treating patients.

(1) If food is taken in excess or deficient of the requirements of an individual, he is prone to attacks of disease due to disturbances of Vatham, Pitham and Sleshmam as laid down in Ayurveda.

(2) If a person takes food only after he is sure that what he had previously taken is fully digested, there will be no necessity for him to take any medicines.

(3) If the previous meal is digested, eat in moderation according to your digestive capacity. This conduces to longevity.

(4) Knowing fully that the previous meal has been digested and when falling very hungry, eat food which is not in variance with the requirements of the individual, with the time and seasonal period of taking food and with the constitutional needs of the individual.

(5) If one takes food found suitable to his health and if one exercises self-restraint in the matter of quantity of food taken, the body is saved much of suffering.

(6) The man who eats just less than his full requirements retains the joy and health of eating, while he who eats more, invites disease.

(7) The ignorant person who eats beyond the measure of the bodily fire, i.e., gastric juice, i.e., beyond the power of his digestion, must be prepared for all sorts of bodily ailments.

(8) A physician must first diagnose the disease, then the cause of the disease and then must apply measures to remedy the cause of the disease.

(9) The physician while treating a patient must take into consideration the strength of the patient, the stage and nature of the disease and the season.

(10) Four elements go to make up the right treatment, viz., the patient, the doctor, the medicine and the attendant who administers medicine.

(iv) GLIMPSES OF MEDICINE IN ANCIENT TAMIL KAVYAS

(CLASSICS)

Silappadhikaram and Manimekkalai—Twin Epics of 2nd century A.D.

(a) Silappadhikaram

"*Medical Profession*": The Medical Profession was already in a flourishing state. In the description of festival of Indra, various places and streets, are mentioned in the city of Puhar. There were not only the King's Street, Bazaar Street, Merchant Street, Brahmin Street, but also, the street of "Physicians and Astrologers" and of "Agricultural Communities" and "Jewellers."

In the descriptions of the expeditions led by Senguttavan to Ganges and Himalayas, no mention is made of Doctors and Physicians, though Jesters, Dancing Girls, Musicians are mentioned among the people, accompanying the expedition. Probably the Physicians and Surgeons formed part of the Army and personal staff of the court.

Centres of Relief of Suffering: Mention is made of certain places where people obtained medical relief:—Among

the places described in Puhar, the following are of medical interest (1) "Next there was the place, with the miraculous lake, by bathing in and circumambulating which, all *hunch-backs* and *cripples*, the *dumb*, the *deaf* and the *lepers* were cured, of their infirmities and gained health and grace of form." (2) "Then there was the open space where stood the tall shining stone, by the worship of and going round which, were cured all those who had grown *mad* by being deceived (into consuming drugs), those who were suffering from *palsy*, as a result of poison, those *bitten by sharp toothed venomous serpents*, and thos who were possessed by *devils* with protruding eyes."

Hygiene of Seasons and Cosmetics:— In the description of the life of ladies, in Puhar, at the time of sunset, mention is made of different "bed chambers for hot season" and for "cold weather." In summer, Madhavi "betook herself to summer retreat in the lofty upper story reaching the sky". "She also decorated the expanse of her breasts, with pearls of Southern Sea and sandle paste of Southern Hills. These were the unexceptional tributes appropriate to the season". To please Kovalan, Mathavi bathed her fragrant hair in the perfumed oil, prepared by mixing up 10 kinds of astringents, five spices, 32 herbs, soaked in water, and dried the hair in fuming incense, perfumed with the paste of musk deer.

Preventive Medicine and Public Health: It is also interesting to read that there were separate quarters for prostitutes, actresses, maid servants, bag-pipe musicians, and maidens, bearing flowers and betels.

After making sacrifices and offerings, the elderly maidens pray to Indra "May the Kingdom not be troubled by hunger, disease and enmity."

Allusions to medicines and drugs: After the voluptuous enjoyment of the lovers, the lotus eyes of ladies lost their colour and gained a reddish tinge. The people in the city wondered and said "If our great feast can do nothing to remove redness from the eye of our women folk, is there *any medicine* at all, that can cure, in this wide earth"?

The lover's companion says "The straight fish-shaped eyes in a full moon face have caused *love sickness incurable by medicine* but curable by the lady's soft and yellow pasted breasts". Among the 8 aids employed by the thief are "Manthra and Drugs". The thief "relies on the strength of sleep-giving incantations to put to sleep watchmen at the gate of the palace."

Types of deformities, and diseases:— There are also reference to deformities, sickness and disease: One song says "You cause *sickness incurable by any medicines to ladies*. The maid is afraid of discovery of signs of love in her mistress, by the latter's mother and says "Lord of the mountain track! My lady suffers mental anguish but the cause of illness is not known. If the unknown disease is detected by her mother who will be pained at it, what shall I do?"

Some interesting case—reports are also available (1) Kama is said to have changed his male form to that of hermaphrodite. (2) When Malathi was feeding her co-wife's child, with milk, the fluid chocked the child, who hiccoughed and died. (3) A man with monkey's hand on one of his arms (4) Eunuch in women's clothes (5) dwarfs, hunch-backs, carrying paste of musk deer and white sandal paste (6) "A courtesan is shunned like a disease by pious and learned men, who avert their faces."

There is exquisite humour in the lyric song in which a maiden speaks to her maid, about the arrival of the sorcerer.

> "O Girl! I am moved to laughter! To cure me of my love sickness caused by the owner of the cool hill on which pepper grows, my mother who is not aware of the idle talk in the village, thinks that the spirit of Murugan has manifested itself in me and has sent for the Velan's (Exorcist) Veriyadal, intending to adjure it"
>
> "This again provokes laughter in me! If this exorcist who is appointed to deliver me from love sickness caused by the lord of the mountains, comes, that exercist is a fool. If Murugan will manifest himself then, he will be a greater fool, even though he destroyed the Krauncha mountain".

And so on, in this strain, the girls sing light-heartedly.

Then the maid replies.

> "The son of the Lord (Siva) seated under the Banian Tree will come riding his peacock with his consort to the courtyard where the appointed exorcist—will perform the Veriyadal. When he comes, we shall ask his blessing on our marriage with the Lord of the great mountain".

Veriyadal is a kind of dance performed to cure a man or woman of an evil spirit. The Velan invokes the aid of Subrahmanya and is possessed by God's spirit and thus exorcises the bad spirit out of the victim.

Lastly, in the addendum to the paddikam, written by an early editor, not very long after the destruction of Madura, by fire, according to the curse of Kannikai, the kingdom is said to have "suffered from *draught and famine followed by Fever and Plague*". It was only after the new king propitiated the lady of Chastity by suitable sacrifices and festivals that there was plenty of rain and the kingdom once more was rid of disease and distress.

(IV) b. Manimekhalai

Manimekhalai is really a continuation of the story of Silappadhikaram. The sage of Aravana Adigal, defines disease as "consisting of the suffering of the body by a change in its natural condition in consequence of the results of deeds". Aputra is described as distributing among the blind, the deaf, the maimed and those oppressed by illness, what he received as alms in his begging rounds.

In the city of Puhar, was a centre called "Chakravallakotta inhabited by hermits, who made destruction of suffering their main business of life. There was, in that area, a resting place, a work of charity, a habitation for all those who suffer from hunger, from disease, and have no one to look after them".

The begging bowl of Buddha, which Manimekhalai obtained, had power to feed any number of people and to cure even the disease "Elephant Hunger". In Kanchi, when Manimekhalai placed the sacred, miraculous bowl, on Buddha's seat, there came crowds, of people, speaking 18 languages "The blind, the deaf, the maimed, the helpless, the dumb, *the diseased* and those suffering from hunger". To all of them, Manimekhalai supplied food in abundance. Their suffering was also relieved. Manimekhalai also requested the king to destroy the house of punishment—the prison—and erect in its place, a house of charity.

The Queen tried to take revenge on Manimekhalai for bringing about the death of the Prince. The Queen fumigated Manimekhalai with poisonous gas to make her insane and put her, in hot room but on account of the miraculous powers, and divine grace, Manimekhalai escaped unhurt through all these.

There are also a few interesting allusions to practices and clinical conditions:—

1. A pregnant woman was not allowed to bathe in the sea-water.

2. Mother's breast begins to yield milk at the sight of the face of a hungry child.

3. A cobra is described as 'Dristi-visha'—causing death by poison, at the very sight of it.

4. Pradyumna, assuming the form of a Eunuch and dancing in the capital of Bana, to recover his son Aniruddha.

5. Yougandharayana appearing as a diseased beggar in the town of Ujjain —capital of Pradyota to bring about the release of Udayana.

6. As a result of the curse by Vrischika, Kayasandakai suffered from great hunger—"Elephant Hunger". All the quantities of food she ate vanished without effect.

7. Attacked and gored by a cow, a brahmin beggar had his abdomen torn open and his protruding entrails had to be held up in his hand. A Buddhist monk, going on his rounds, carried the wounded Brahmin to the Vihara and helped to dispel the pain and suffering of the injured man.

***

I cannot think of any better way of concluding this article than quoting from the immortal poet. "In the manner in which the lofty hills are reflected in a mirror, it (Silappadhikaram) expresses, the essence of the cool Tamil Country."

INDIAN MEDICAL ASSOCIATION

SOUTH INDIAN PROVINCIAL BRANCH

Secretary's Office :

POST BAG No. 530, COIMBATORE

Minutes of the meeting of the Council of the South Indian Provincial Branch of the Indian Medical Association held at Kodaikanal on 11th May, 1952.

MEMBERS PRESENT :

1.	Dr. P. Vadamalayan,	*Vice-President—(Chairman)*	
2.	„ A. G. Leelakrishnan,	*Secretary*	
3.	„ K. Rama Rao,	*Joint Secretary*	
4.	„ A. K. Rajagopalan,	*Treasurer*	
5.	„ R. Varadarajan,	...	Chingleput.
6.	„ C. Arumugam,	...	Coimbatore.
7.	„ M. G. Nair,	...	do.
8.	„ T. Sivanandam,	...	do.
9.	„ V. Krishnamoorthy,	...	Cuddalore.
10.	„ Miss K. Kunhinani,	*(Co-opted)*	Kdaikanal.
11.	„ P. B. Annangarachari,	...	Madras.
12.	„ Lt. Col. T. S. Shastry,	...	do.
13.	„ K. Gopal,	...	Madura.
14.	„ P. Krishna Menon,	...	do.
15.	„ M. N. Rajan,	*(Co-opted)*	do.
16.	„ T. S. Balasubramania Iyer,	...	Trichinopoly.
17.	„ V. Iravatham,	...	do.
18.	„ P. A. S. Raghavan,	...	do.
19.	„ S. Chandrasekaran,	...	Tirunelveli.

1. As per rule 7-b of the South Indian Provincial Branch of the Indian Medical Association, the President co-opted Dr. M. N. Rajan of Madura and Dr. Miss K. Kunhinani of Kodaikanal for this meeting of the Provincial Council.

2. Owing to the unavoidable absence of Dr. Y. P. Vasudevan, the President, Dr. P. Vadamalayan, the Vice-President took the chair and conducted the proceedings.

3. Condolence Resolutions :

The following resolutions of condolence were moved by the President and passed unanimously, all members standing for a minute:

"This meeting of the Council of the South Indian Provincial Branch of the Indian Medical Association places on record its deep sense of sorrow at the death of Dr. R. Krishna Iyer of Palladam and Dr. K. N. Ramanathan of Coimbatore, and authorises the Secretary to convey this resolution to the members of their bereaved family".

4. Minutes of the Previous Council Meeting:

Read letter from Dr. Ramachandramurthy of Madras regarding the minutes. The Secretary explained that the minutes were prepared as per the notes forwarded to him by the President. The letter was recorded.

Dr. P. A. S. Raghavan proposed that the minutes as circulated be adopted and Dr. P. B. Annangarachary seconded, and the resolution was carried unanimously.

5. Messages of inability to attend:

The following members have sent letters expressing their inability to attend this meeting:

1. Dr. U. Krishna Rau
2. „ Y. P. Vasudevan
3. „ C. R. Parasuraman
4. „ D. V. Venkappa *(Recorded)*

6. Resignation letter of Dr. U. Krishna Rau as President of the Association was accepted and the following resolution proposed from the chair was passed unanimously.

"This meeting of the Council of the South Indian Provincial Branch of the Indian Medical Association places on record the valuable services rendered to the Association by the Hon'ble Dr. U. Krishna Rau as President of the Association for the last 18 months".

Dr. V. Krishnamoorthy of Cuddalore suggested that a copy of the letter of Dr. U. Krishna Rau addressed to the Provincial Secretary may be sent to all the branches, and the suggestion was accepted.

7. In view of the resignation of Dr. U. Krishna Rau as President of the Association, Dr. Y. P. Vasudevan, the senior Vice-President has assumed office as the President of the Association for the remaining period of the year.

8. Congratulatory Resolutions:

(*a*) The Council of the South Indian Provincial Branch of the Indian Medical Association congratulates Dr. U. Krishna Rau on his appointment as Minister for Industries, Labour and Transport in the Madras Cabinet and wishes all success to him in the discharge of his duties.

(*b*) The Council of the South Indian Provincial Branch of the Indian Medical Association congratulates the following doctors on their election to the Madras Legislative Council:

1. Dr. A. L. Mudaliar
2. „ P. V. Cherian
3. „ C. Nathamuni Naidu
4. „ M. V. Krishna Rao

(*c*) The Council of the South Indian Provincial Branch of the Indian Medical Association congratulates Dr. P. V. Cherian on his election as Chairman of the Madras Legislative Council.

(*d*) The Council of the South Indian Provincial Branch of the Indian Medical Association congratulates Dr. M. V. Krishna Rao on his appointment as Minister for Education in the Madras Cabinet.

All the above resolutions were moved by the chair and passed unanimously.

9. Business Arising out of the Last Council Meeting:

(*a*) Condolence resolutions:—forwarded.

(*b*) Congratulatory resolution:—forwarded.

(*c*) *Insurance Scheme for the members of the Indian Medical Association*: The Secretary was authorised to write to M/s. The United India Life Assurance Co., Ltd., that the individual rate schemes sponsored by them has been recommended to the members and that the members interested in the scheme will deal direct with the company.

(*d*) *Permanent office for the Provincial Association*: The question was discussed in detail and several members took part in the discussion. It was finally decided that a new enlarged sub-committee with the following members shall be formed and that this committee should be asked to report before the next meeting of the Provincial Council on the following terms of reference:

Members of the Sub-Committee:

1. Dr. Y. X. Vasudevan, President
2. „ P. Vadamalayan, Vice-President
3. „ A. G. Leelakrishnan, Secretary-Convener
4. „ K. Rama Rao, Joint Secretary
5. „ A. K. Rajagopalan, Treasurer
6. „ T. S. Tirumurthy, Madras
7. „ P. A. S. Raghavan, Trichy
8. „ V. Krishnamoorthy, Cuddalore
9. „ S. Subramaniam, Karaikudi

The quorum for the sub-committee meeting shall be five. The Secretary shall be the convener of the meeting and to call for the meeting at his office.

Terms of Reference:

1. To consider and report about the location and or permanent staff for the Provincial Office.
2. To consider and report about any changes in the existing rules that may be necessary.

(e) Item No. 6-d (recorded)

(f) Item No. 6-e (recorded)

(g) *Private Medical Practitioners and Rent Control Act*: The letter from Chief Secretary to the Government was read and recorded. The following 2 members were asked to wait on deputation before the Minister for House Rent Control with the Government of Madras and to impress upon him

the necessity for exempting Private Medical Practitioners from the operations of the Rent Control Act.

1. Dr. K. Rama Rao
2. „ P. A. S. Raghavan

(h) Items No. 6g to 6j—recorded.

(i) *Supply of B. M. J.*: Secretary's action approved.

(j) Purchase of a new Portable Typewriter for the Treasurer's office was approved and the sum of Rs. 535/- was sanctioned for the same.

10. Sub-committee's report on the 5 year plan—read and recorded. The council is of the opinion that the procedure adopted by the convenor Dr. P. A. S. Raghavan was in order.

11. Propaganda grant from the I.M.A.—Circular No. 18 of the I.M.A:

The above circular from the Central Office was discussed and several members took part in the discussion. The general trend of the opinion was that no useful purpose will be served by the Central Office deputing an outsider to visit the outlying areas of the country for doing propaganda for I.M.A. Only prominent members locally can take adequate steps for improving the membership of the Indian Medical Association. The Council is of the opinion that better results for a membership drive and for the formation of new branches could not be expected by the tour of a member from a different Provincial area, however prominent he might be. The Council suggests that the necessary grant may be paid from the funds of Central Association for the expenses incurred by the Local branches on the recommendation of the Provincial Council concerned.

The Council authorises the Secretary to convey this opinion of the Council to the Central Office.

12. Residencies in Hospitals in U.S.A. and Canada:

The Secretary informed the council that the following applicants have been selected by the Central Office for Residencies abroad:

1.	Dr. M. D. Adappa (Mangalore)	E. N. T.
2.	„ A. S. Manavalan (Madras)	General Surgery
3.	„ C. Gopalan Nair (Madras)	Obst. and Gyn.
4.	„ C. V. Ramakrishnan (Trichinopoly)	T. B.

13. **Negapatam Branch**—Suspension recommended by the Council.

14. **Anamalais Branch**—The formation of a new branch was approved.

15. Various proposals for increasing the membership strength of the Indian Medical Association were discussed and the council is of the opinion that the formation of new branches of the Indian Medical Association may be encouraged especially in the larger Districts and the Provincial executive is requested to take all steps that may be necessary to improve the membership strength of the Local branches with the active help and co-operation of the executive of the Local branch associations.

16. Provincial Branch Status for Madras Local Branch:

The Provincial Council suggested that the Madras branch may apply to the Central office for permission to form branches within the city and after a substantial increase in their membership strength, may apply for the Provincial status.

17. Circular of the Indian Section of International Congress of Doctors:

The circular was read and the council is of the opinion that a separate association for the purposes mentioned in the circular was unnecessary, as the Indian Medical Association itself can and will usefully undertake this task. The council authorises the Secretary to convey this opinion of the council to the sponsors of the above Congress in India and to the Central Office.

18. The quarterly statement of accounts by the Treasurer—approved subject to final audit.

19. Venue of the Next Council Meeting:

Dr. V. Krishnamoorthy of Cuddalore invited the next meeting of the council to Cuddalore and the invitation was provisionally accepted by the council.

20. Any Other Items:

(a) *Joint Standing Committee*: The council reviewed the work of the Joint Standing Committee and the following resolution was adopted after discussion by almost all the members present:

"Since there is at present no subject to be referred to the Joint Standing Committee and as this Council is not aware of any agenda from the Council of the Andhra Provincial Branch, the members of the Joint Standing Committee representing the Council of the South Indian Provincial Branch of the Indian Medical Association need not attend the forthcoming meeting of the Joint Standing Committee at Tenali on behalf of the South Indian Provincial Branch, if there be any meeting".

(b) The following resolution was passed unanimously:

"In view of the concession granted by the Medical Council of India to the medical licentiates for obtaining M.B., B.S., degree Viz:

1. Six months for licentiates who have undergone three months intensive course at the Army Medical Training Centre;
2. Six months for L.M.P's following D.M.S. and other similar qualifications which involve medical studies for 5 years;
3. Six months for holders of L.T.M. (Calcutta) and D.T.M. & H. (Bombay),

and in view of some of licentiates who have undergone special courses of training with or without official Diplomas in some special branches as L. T. M. or D. T. M. & H., the South Indian Provincial Branch of the Indian Medical Association requests the University of Madras as a general principle to grant a concession of 6 months education in the condensed M.B., B.S., course for such of those licentiates who have undergone any course of study after the taking the licentiate qualification, like L. O., L. G. O., T. D. D., D. O., and D. G. O., etc.

Proposed by Dr. A. G. Leelakrishnan
Seconded by „ P. A. S. Raghavan Carried unanimously.

(c) *The Resolution of the Executive Committee of the Madras Branch of the I. M. A.:* This was considered and the following resolution was adopted:

"This Council is of the opinion that temporary service personnel who were not given permanent appointments last year, may be given preferential treatment in the coming selection of Assistant Surgeons in permanent service, in view of their temporary service for a various period of years and authorises the executive of the Madras Branch to interview the Hon'ble Minister for Health to represent this matter".

(e) The following resolution given notice of by Dr. D. V. Venkappa of Madras regarding Famine relief was approved:

"The South Indian Provincial Branch of the Indian Medical Association resolves to take such steps as are necessary towards the urgent medical relief in famine stricken areas by coutributing according to their mite in the shape of personnel and money".

The other 4 resolutions given notice by Dr. D. V. Venkappa were not considered by the Council.

(f) Resolution of Dr. M. R. Kamath of Mangalore: "In view of the hard conditions under which the Rural Medical Practitioners have to work, this Association recommends to the Government of Madras State that their children may be given the same educational concessions announced recently in the Press and made applicable to the children of Non-Gazetted Officers of the State Government and the servants of the Local Bodies and further desires that this may be given effect to from June 1952 when the school year begins".

Considered and approved.

(g) Request from Mr. R. Lakshminarayanan, clerk in the office of the Provincial Treasurer for an increase of pay. The Secretary explained that the budget for 51—52 has no provision for any increase under the item 'salaries'. Hence, this question was postponed to the Annual Provincial Council Meeting.

(h) Advertisement income for the "Miscellany": The Secratary appealed to all the council members to secure more advertisement for the "Miscellany" with a view to improve its finances and to make it more useful to the profession.

After a vote of thanks by the Honorary Secretary to Dr. P. Vadamalayan for having so ably conducted the proceedings of the council, to the Proprietor and the Staff of the "Holiday home", Kodaikanal for their hospitality to the visiting members of the council during their stay there and to Dr. A. K. Rajagopalan, the meeting came to a close at 8 p.m.

Dr. A. G. Leelakrishnan,
Secretary.

Dr. P. Vadamalayan,
Vice-President,
Chairman.

ASSOCIATION NOTES

COIMBATORE BRANCH

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

The monthly meeting of the Coimbatore District Medical Association was held on Saturday the 21st June 1952 at 6-30 p.m. at the Association premises. Dr. I. Pitchai Robert presided. 75 members attended the meeting.

After tea and light refreshments the minutes of the previous monthly meeting was read and adopted.

Proposed by Dr. S. Ganapathy and seconded by Dr. N. Jegannathan the following nominations were unanimously adopted:—

Dr. Y. P. Vasudevan was nominated for Presidentship of South Indian Provincial Branch of Indian Medical Association and Dr. K. Rama Iyer of Tirunelveli and Dr. K. C. Nambiar of Madras as Vice-Presidents.

The following resolution proposed by the Chair was unanimously adopted all standing.

This meeting of the Coimbatore Dt. Medical Association records its deep sense of sorrow at the sudden demise of Dr. U. Rama Rao, one of the Ex-Presidents of the Indian Medical Association, a veteran medical journalist, a staunch patriot and a great philanthropist, and requests the Secretary to convey the same to the bereaved family.

This meeting also records its deep sense of sorrow at the death of Dr. M. K. Menon of Koduvayur and requests the Secretary to convey the same to the members of the bereaved family.

Then the President introduced the Speaker of the day Dr. R. Subramaniam B.Sc., M.D., M.R.C.P. (Lond)., Physician, General Hospital, Madras who gave his talk on "Coronary Thrombosis—Diagnosis and Treatment", and the lecture was very much appreciated by the members. There was a lively discussion on the subject and several members took part.

The President in his concluding remarks thanked the speaker of the day.

With a vote of thanks by the secretary to the lecturer and the hosts of the evening Drs. (Mr. & Mrs.) Vareed, the meeting terminated at 8-30 P.M.

ERODE BRANCH

President: Dr. R. S. K. Raman
Vice-Presidents: „ E. S. Venkataraman
Secretaries: „ N. C. Kuppusamy; „ M. N. Shenoy
Treasurer: „ M. M. Shenoy

A meeting of the Erode Medical Association was held at the Segundar High School on Saturday the 5th of July with Major R. V. N. Nayudu in the Chair. Dr. V. Govindan Nair, Retired Professor of Venereal Diseases Andra Medical College, Vizagapatam, addressed the gathering on Venerale

Diseases, their Clinical features, and Modern methods of treatment.

The learned Lecturer dealt in great length about the salient features of the five venereal diseases. He emphasised the correct methods of diagnosis and pleaded for adopting modern methods of treatment in these diseases. In the treatment of Syphilis for instance, all the practitioners should adopt the line of treatment advocated by the World Health Organisation. 4·8 Mega units of Penicillin should be given and the preparation chosen must be P.A.M. (Penicillin Procaine in oil with 2% Aluminum Monostearate.) There are still a few advocates to supplement the above treatment with Bismuth and Arsenic. The former twice a week and the latter once a week.

Aureomycin and Terramycin have revolutionised the treatment of venereal diseases. They are easy to administer and the toxic effects are few. The only disadvantage is their cost. The general dosage is 60 Mgs. per kilogram body weight. To quote an instance in a moderately built individual in a case of Lymophogramuloma Inguinale 2 grams per day of Aureomycin for 10 days will clear the infection.

Steptomycin is useful in cases of gonorrhoea resistant to penicillin and in gramuloma venerium. Sulphonamide is still the drug of choice in the treatment of soft chancre. Dr. V. Govinda Nair regretted that no adequate steps are taken by the Health Department towards the education of the general public for prevention of venereal diseases.

At the end of the lecture there was a general discussion in which many practitioners took part. The meeting terminated with a vote of thanks by the Secretary Dr. M. N. Shenoy. Dr. L. K. Muthuswamy treated the members to sumptuous tea.

SOUTH KANARA BRANCH

President: Dr. A. F. Cœlho
Vice-President: „ M. V. Shetty
Secretary & Treasurer: „ M. Umesha Rao
Jt. Secretary: „ B. R. Hedge

A Clinical meeting of South Kanara Branch of the Indian Medical Association was held in the District Head Quarters Hospital, Mangalore, S. K. on Sunday, the 15th June 1952 at 4-30 P.M. Dr. S. G. A. Raju, the District Medical Officer presided. About 30 members were present.

After light refreshments, the following cases were presented to the members for clinical examination. The case notes with the investigations made in the hospital were also made available.

1. A case of Jaundice.
2. „ Perthe's Disease.
3. „ Parkinsonian Syndrome.
4. A case of Bronchectesis.
5. „ Lung abscess.
6. „ Hydronephrosis.
7. „ Hoarseness.

Members took keen interest in the discussions especially on differential diagnosis and Capt. Mangesh Rao, the newly appointed Hon. Consulting Surgeon guided the members and expressed that more such clinical meetings be held for the benefit of the younger medical men. He also expressed a desire that members should take more interest in such meetings. Dr. S. G. A. Raju the President first thanked Capt. Mangesh Rao for making the clinical meeting a success. He also said that

members should get interesting cases, for the benefit of the members and for demonstration purposes. Dr. M. Umesha Rao, the Hon. Secretary thanked the District Medical Officer for permitting to hold the clinical meeting in the Hospital and making the cases available for the meeting and for presiding on the occasion. He also thanked Capt. Mangesh Rao for giving the benefit of his wide knowledge and mature experience to the members of the Association.

After the clinical meeting Dr. M. V. Shetty, the Vice-President of the Association took the Chair, in the absence of the President and the business part of the meeting was taken up. When the subject of nomination of members for the Presidentship and Vice Presidentships was taken up the members opined that without knowing the list of all members it would be difficult to nominate. As such the Hon. Secretary was requested to get a list of members from the Central Office and the paper was made to lie over. Regarding the offer of the copies of the B.M.J. by the B.M.A., it was decided to request the Central Office of the I.M.A. to provide free copies to the Branches having a library and a reading room.

***

A meeting of the South Kanara Branch of the I.M.A. was held in the Ganapathy High School Hall, Mangalore, S.K. at 5-30 P.M. on Saturday, the 28th June 1952. Dr. A. F. Coelho, the President was in the Chair.

About 25 members attended the meeting. The letter received from the Prov. Branch saying that it is impossible to supply the list of all members of the I.M.A. to the Branches and that it was only outstanding members the Profession that are to be nominated for the offices of the President and Vice-President of the Central body, was read. After some discussion the following members were nominated to the Offices.

Dr. R. J. Vakil, Bombay—*President*

Dr. A. K. Sen, Calcutta
„ A. V. Baliga, Bombay and
„ U. Mohan Rao, Madras
} *Vice-Presidents for 1952-53.*

The reply received from the Central Office re. free supply of B.M.J. was also placed before the meeting.

After light refreshments, Dr. M. Umesha Rao, the Hon. Secretary introduced Dr. S. R. Pandit, B.A, MBBS, BSSC, D.B. (London) Retired Director of Pasteur Institute, Shillong and Vice-President of the Nilgris Branch of the I.M.A. the lecturer of the day. The President then requested the learned lecturer to deliver his lecture on 'Some Aspects of Chemotherapy'. Dr. Pandit first thanked the Association for honouring him and giving him an opportunity to meet his old friends. He then began his lecture by saying that the term Chemotherapy is applied to the specific treatment of infections with artificial synthetic remedies and that with Chemotherapy has opened a new fascinating chapter in the medical science. He said that Quinine was known as a specific for malaria and is one of the earliest Chemotherapeutic drugs but that the actual foundation of the therapy was laid by the German Scientist Ehrlich, who devised a measure known as 'Therapeutic index' to determine the efficacy of such drugs and found out that the greater the index the greater is the usefulness of the drug in therapy. Though drugs so far discovered were active against protozoal diseases and spirochete no drug was synthetised till 1935 which was active in bacterial diseases. It was in that year

that Dr. Domagk demonstrated Prontosil red in which it was found that it was the sulphanamide part of the drug that was active. He also showed that the Chemotherapeutic drugs show a high degree of selectivity in their action. Dr. Pandit then went on to explain how the drugs act in vitro and vivo.

He then said that apart from the artificial synthetic products which have a curative action in infections due to protozoa, spirochete and bacteria there is another class of agents which act similarly but are elaborated naturally by plants moulds etc.—known as Antibiotics though there is no distinctive distinction between the two. eg. Quinine which should strictly come under 'Antibiotics.' As an example of Antibiotic he named 'Chloromycetin'. The first place among antibiotics, he said, must be given to Penicillin not only because the discovery was an invaluable contribution to medical science during the century but it also paved the way to further discoveries of similar antibiotics from moulds and bacteria. He then went on to talk about drug fastness and said that in therapy one devise is to employ adequate dosage of the drug both in its size and the interval between the doses and also by continuing the treatment till the infection has been fully controlled. He also said that as the drug resistance is limited to the particular drug and not to others another device that is employed to attack infection is to use more than one chemotherapeutic substance at the same time-eg. Penicillin and Sulphanamides or Dihydrostreptomycin and PAS. Such a combination of drugs, he said is termed 'SYNERGISM'.

He also said that further work is needed to find means to combat drug resistance bacilli and that we can hope that Chemotherapy will prove itself a boon to the suffering people. During the question time, Dr. K. K. Bhat and Dr. Umesha Rao elicited some more information about the subject from the learned lecturer.

Dr. Coelho in his concluding remarks said that Chemotherapy is becoming more and more important nowadays and that we can hope for better drugs in the treatment of diseases, thanks to the work of the Bacteriologists and Chemists. He then dealt with his own pet subject of Leprosy in which Chemotherapy has revolutionised the treatment and prognosis of this dreadful disease. In the end he thanked the learned lecturer for his scholarly lecture and hoped that attempts will be made to deal with the drug resistant microbes.

With the usual vote of thanks by the Hon. Secretary, the meeting terminated.

***

A monthly meeting of the South Kanara District Branch of the Indian Medical Association was held on Saturday, the 26th, July 1952 at 5-30 P.M. at Dr. M. Umesha Rao's consulting rooms, when Dr. K. R. Kini, M.B.B.S., presided. Dr. G. M. Prabhu, Retired Civil Surgeon reported some interesting cases he came across during his vast practice. The cases were discussed and the discussion was very lively.

Dr. M. V. Shetty, M.S., who was recently appointed as the Honorary Surgeon of the District Head Quarters Hospital, Mangalore, was congratulated on behalf of the Association by Dr. A. F. Cœlho the President of the Branch Association. Dr. U. P. Mallya, Ex-MLA, also spoke on the occasion. Dr. Shetty replied suitably.

After which Capt. N. Mangesh Rao, the Hon. Consulting Surgeon of the Dt. Hd. Qrs. Hospital demonstrated a few X-Ray Photos to differentiate Tumour of the Lung from Abscess of the Lung radiologically.

Dr. M. Umesha Rao, the Honorary Secretary was at home to the members of the Association on the occasion.

MADURA BRANCH

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

A monthly meeting of the Association was held on 19-7-1952 at the Willis F. Pierce Memorial Hospital by kind invitation of the Medical Superintendent and members of the Staff of both the mission Hospitals. The large gathering were treated a pleasant tea party after which the meeting was held in the open lawn. Dr. M. N. Rajan occupied the chair. The minutes of the previous meeting were adopted. Dr. C. C. Anbunathan M.B.B.S., D.M.R., read a very interesting paper on "Antibiotic Thearaphy in General Practice" which was highly appreciated. He answered suitably a number of questions. Dr. J. J. Barnes presented a Radiograph of the Pelvis in a case of Carcinoma of the Prostate with Secondaries in the bony pelvis and read out the case report. Dr. H. S. Thomas gave a brilliant review of his tour of the U. S. A. with suitable colour slides for nearly an hour and half. The meeting terminated after a vote of thanks.

MALABAR BRANCH

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

A monthly meeting of the Malabar Branch of the Indian Medical Association was held at 5 p.m. on Saturday the 26th July 1952 at the Hackett—Wilkin's Memorial Hall in the old Govt. Headquarters Hospital Buildings, Kozhikode.

Dr. C. K. Menon presided. About 30 members were present.

The members were treated to nice refreshments the host of the day being Dr. C. G. Menon.

After the introductory remarks, the president declared open the Association Reading Room at the same hall. The Secretary read the minutes of the previous meeting held on 25th May 1952 and also the circulars from the Central office regarding the Clinical Assistantship at Grangegorman Mental Hospital, Dublin and a circular regarding the 3rd Annual All-India Pediatric Conference to be held at Madras on the 24th, 25th and 26th of August 1952.

The voting for a President and two vice-Presidents for the South Indian Provincial Branch of the Indian Medical Association was then gone through. Then two interesting papers one on SHOULDER PAIN by Dr. C. K. Menon and the other on PROLONGED PYREXIAS by Dr. C. R. Parasuram were read. The papers were followed by discussions in which all the members took part.

After the vote of thanks by the Secretary, Dr. C. R. Parasuram the meeting ended.

The Tirunelveli District Medical Association

(Branch of the I. M. A.)

PALAYAMKOTTAI

Minutes of the Meeting of the General Body of the Tirunelveli Branch of the I. M. A. held at the office of the District Medical Officer, Palayamkottai at 5 P. M., on 5—8—1952.

Dr. K. Rama Ayyar, M.B. B.S., the President conducted the proceedings. 60 members were present.

The following resolutions were carried out unanimously.

(1) Resolved to invite the Seventh South Indian Provincial Medical Conference to Palayamkottai on the 20th, 21st and 22nd of September 1952.

(2) Resolved that all the members of the Tirunelveli Branch of the I. M. A. shall be the members of the Reception Committee and shall pay a sum of not less than Rs. 20/-.

(3) Resolved that the Delegate's and Visitor's fee shall be Rs. 15/- (including the delegation fee of Rs. 5/-).

(4) Resolved that any Registered Medical Practitioner of the modern system of medicine shall become a member of the Reception Committee by paying a sum of not less than Rs. 20/-.

(5) The following members have been elected as office-bearers of the Reception Committee and the following Committees have been formed with power to co-opt more members if and when necessary.

Reception Committee

Chairman: Dr. K. Rama Ayyar, M.B.B.S.

Vice-Chairman:
1. „ K. Madhava Menon, M B.B.S.
2. „ P. R. Acharya, M.B.B.S.
3. „ R. V. Chockalingam Pillai, B.A., M.B.B.S.

General Secretary & Treasurer: „ R. Gopalan, B.A., M.B.B.S.

Joint Secretary: „ R. Subramanian, T.D.D.

Transport Committee

1. Dr. G. Subramaniam, M.B.B.S.; Secretary.
2. „ P. Vadivale, L.M. & S.
3. „ P. S. Kalyanasundaram, L.M.P.
4. „ T. V. Muthia, M.B.B.S.

Entertainment Committee

1. Dr. L. Mahadevan, M.B.B.S., D.O.M.S., Secretary.
2. „ (Kumari) K. M. Lakshmi, M.B,B.S.

3. Dr. B. Srinivasan, L.M.P.
4. „ K. Ramachandra Naidu, L.M. & S.
5. „ (Mrs.) C. A. Joseph, D.M. & S.
6. „ T. Alwar, D.M. & S.

Sanitation accommodation (including water supply) Committee

1. Dr. A. R. Tampi, M. B. B. S., D. L. O., Secretary.
2. „ M. D. Kanthiah, L. M. P.
3. „ V. Sivasambu Pillai, L. M. P.
4. „ T. V. K. Iyengar, L. M. P.
5. „ (Kumari) P. Yeshoda, L. M. P.
6. „ (Kumari) Mary Thomas, M. B. B. S.

Volunteer Committee

1. Dr. G. N. Kantayya, B. A., M. B. B. S., Secretary.
2. „ V. Kuruvilla, M. B. B. S.

Food Committee

1. Dr. K. Rama Ayyar, M.B.B.S., Secretary.
2. „ K. Madhava Menon, M.B.B.S.
3. „ R. Gopalan, B.A., M.B.B.S.
4. „ R. V. Chockalingam Pillai, B.A., M.B.B.S.
5. „ D. I. Abraham, L.S., M.F.
6. „ (Kumari) C. F. Paul, M.B.B.S.
7. „ (Kumari) M. R. Jumna Bai, L.M.P.

Scientific Committee

1. Dr. K. Rama Ayyar, M.B.B.S., Secretary.
2. „ R. Gopalan, B.A., M.B.B.S.
3. „ R. Subramaniam, T.D.D.
4. „ K. Madhava Menon, M.B.B.S.
5. „ M. Viswanathan, D.M. & S.

Souvenir & Exhibition Committee

1. Dr. S. Chandrasekaran, M.B.B.S., Secretary.
2. „ N. Chandrasekar, M.B.B.S., D.O.
3. „ P. V. Venkatachalam, M.B.B.S.
4. „ S. Krishnamurthi, B.A., M.B.B.S., D.O., M.S.

Working Committee

1. Dr. K. R. Muthukumaraswami, L.M.P.
2. „ V. Dharmarajan, L.M.P.
3. „ T. Alwar, D.M. & S.
4. „ G. Kalyanam, M.B.B.S.
5. „ S. Anantharamakrishnan, L.M.P.
6. „ R. Ratnaswami, M.B.B.S.
7. „ V. Guruswami, L M.P.
8. „ P. S. Subbiah, L.M.P.
9. „ K. Narasimhan, L.M.P.
10. „ E. A. Krishnamurthi, M.B.B.S.

Application as per proforma to be submitted *in quadruplicate* – 3 copies to be sent to the Central Office along with a fee of Rs. 5/-

PROFORMA:

Subject for Study.....

1. Name.....
2. Address.....
3. Married or Single.....
4. Member of.....Branch (.....Provincial Branch)

   Date of Joining I. M. A.....

5. Qualifications.

   (*a*) Academic.....

   .....

   .....

   (*b*) Experience.....

   .....

   .....

   .....

   .....

   (*c*) Other qualifications

   .....

   .....

   .....

6. Copies of Testimonials, not more than three, to be attached—one of which must be from the Dean or Principal of the Medical College

   .....

7. Names and addresses of two references to be sent

   1. .....

      .....

      .....

   2. .....

      .....

8. *Three copies* of Passport size photograph-with name and address in block letters to be attached with the application.

South Indian Provincial Branch

INDIAN MEDICAL ASSOCIATION

Post Bag No. 530

OPPANAKKARA STREET — COIMBATORE

CIRCULAR No. 18 — *6th August, 1952.*

To

All the Local Branch Secretaries

Sub: ***7th South Indian Provincial Medical Conference.***

The Tinnevelly branch of the Indian Medical Association has invited the South Indian Provincial Branch to hold its 7th South Indian Provincial Medical Conference at Palayamkottai in September, 1952. The probable dates of the Conference will be from 20th to 22nd September, 1952 and the venue of the Conference will be the St. John's College and Hostel premises, Palayamkottai. All the members are requested to attend the Conference in large numbers and make the Conference a success.

Each branch is entitled to elect delegates to the Conference in the proportion of one delegate for every 10 members. All the Branch Secretaries are requested to elect their delegates to the Conference and to send the list of such delegates in duplicate to the Provincial Office before the 15th September, 1952. The Branch Secretaries are informed that all members other than the elected delegates can attend the Conference as visitors.

All the branch Secretaries and all the members of our Provincial Association are earnestly requested to co-operate with the Tinnevelly branch and to make the Conference a success.

Sd. A. G. Leelakrishnan,
Honorary Provincial Secretary.

Registered No. M. 4839

ODDS & ENDS

Women, it is said, carry about twice as much fat as men.

♡ △ ♡

A Chicago doctor predicts, 55 years from now, one with a bad heart may be able to buy a new one.

♡ △ ♡

In surgery, eyes first and foremost, fingers next and little; tongue last and least.

♡ △ ♡

Extracts from letters

"Please send me money at once as I have fallen into errors with my landlord."

"Doctor, I hope you will be different from other doctors and examine the X-Ray films less and me more."

♡ △ ♡

Dr. X was a man who took his profession seriously and he had an immense practice. What annoyed him was to be sent for by fussy women to treat the most trifling ailments. One woman was particularly aggravating in this respect, and he resolved to cure her.

One day she observed a red spot on her hand, and at once telephoned for him. He came, looked at the spot and said "You did well to send for me early."

"Is it dangerous, then?" she asked.

"Certainly not," said the doctor, "but tomorrow it would have disappeared, and I should have lost my fee for this visit."

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

सर्वेजनाः सुखिनो भवन्तु

THE MISCELLANY

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

MONTHLY JOURNAL OF THE SOUTH INDIAN BRANCH
INDIAN MEDICAL ASSOCIATION

Vol. XIX SEPTEMBER 1952 No. 3

(29th) ALL INDIA MEDICAL CONFERENCE

OF

INDIAN MEDICAL ASSOCIATION

PATNA

The 29th All India Medical Conference will be held in Patna on the 26th, 27th and 28th December 1952. On this occasion a scientific section of the Conference will be organised. Subjects for papers include Medicine, Surgery, Obstetrics and Gynæcology, diseases of the Eye, Ear, Nose and Throat, Pathology, Pharmacology, Preventive Medicine and Medical Jurisprudence and Toxicology, Anatomy and Physiology. Three topical subjects have been selected for symposia namely (1) Place of Antibiotics and Chemotherapeutic drugs in the treatment of tuberculous infection (2) Management of heartfailure and its complications and (3) Bowel disorders.

Facilities for epidiascope and microprojection will be available. Arrangements will be made for the exhibition of interesting pathological specimens and skiagrams.

Eminent leading personalities and leaders of the profession from all over India are being approached to inaugurate and preside over the scientific sessions respectively.

(continued on 3rd cover page)

(FOR CIRCULATION AMONGST MEMBERS ONLY.

THE MISCELLANY

MONTHLY JOURNAL OF THE SOUTH INDIAN BRANCH
THE INDIAN MEDICAL ASSOCIATION

VOL. XIX] SEPTEMBER 1952 [NO. 3

DISEASES OF THE PROSTATE AND THEIR TREATMENT

BY

MAJOR P. GOVINDA RAU, M.B.B.S., F.R.C.S.

Associate Member of the British Association of Urological Surgeons.

The prostate gland is the most important of the male accessory reproductive glands. It is a musculoglandular organ lying at the neck of the bladder and enclosing within its structure, the prostatic portion of the urethra and the ejaculatory ducts. Diseases of the prostate are fairly common from the acute prostatitis, both specific and non-specific, occurring in the young, to the benign and malignant enlargements of the prostate occurring in the adult and the aged. In the whole field of Urology, diseases of the prostate are of special interest to the general practitioner, as the diagnosis and treatment of many affections of this gland are well within reach of the facilities available to him.

Anatomy and physiology of the prostate. The prostate is the size of a walnut and weighs on an average about ½ oz. The gland consists of five lobes, two lateral, one middle, an anterior and a posterior. The various lobes of the gland send their ducts to open into the posterior urethra. As mentioned above, the prostate lies in a strategic position for causing obstruction to the bladder. The function of the prostate gland is the production of a chemical substance which dilutes the testicular and seminal vesicular secretions, and separates and activates the spermatozoa. This secretion contains an enzyme which is said to coagulate the secretion of the seminal vesicle, thus favouring the retention of the seminal fluid within the female genital tract, and thus promoting impregnation.

Diseases of the gland.

Prostatitis is a common disease. It is usually associated with inflammation of the posterior urethra, seminal vesicles, vesical neck, trigone of the bladder, or even the epididymis, and should therefore be studied in relation to both the urinary and the genital tracts.

Acute prostatitis is most frequently due to the Gonococcus, but there is also another condition which is not of venereal origin. Contributory causes are masturbation over a protracted period, excessive sexual excitation without gratification, excessive sexual intercourse, and coitus interruptus. Infection reaches the prostate most commonly from the posterior urethra, but it may be descending as from the kidney, or blood borne, as from a primary focus in the sinuses, teeth or tonsils or again the condition may be a complication of influenza.

An acute prostatitis may end in resolution, the formation of an abscess, or chronic prostatitis.

Symptoms of acute prostatitis are those of the posterior urethritis with which it is most frequently associated, i.e. urgency, frequency, burning pain during urination and occasionally, dribbling of urine. The prostate may swell up so much that there is retention of urine. There may be associated fever and pain in the perineum, rectum, loins, penis, or above the pubes.

Diagnosis is easy. Rectal palation reveals a hot enlarged gland, and the second glass in the two glass test reveals a cloudy urine.

Treatment is rest in bed and application of heat to the area in the form of hot sitz baths. However these days there is no necessity for symptomatic treatment as the condition is readily amenable to treatment by antibiotics, and the condition is rapidly relieved in most cases. Penicillin should be tried first and the dosage should be 5 lakhs penicillin intramuscularly twice a day for about three days. In cases where penicillin does not work, streptomycin should be employed in 1 gm. doses daily for about four or five days.

Chronic Prostatitis is a common condition in adult males. When searching for the cause of obscure infections, it is very important to examine this gland. It is considered as second only to infected tonsils as a cause of arthritis.

Chronic prostatitis may result from any cause which congests the gland, such as long standing infection and various forms of sexual abuse. Other factors are prostatic calculosis, and stricture of the urethra, certain vitamin deficiencies, and endocrine dyscrasias. 50 to 90% of gonorrhoeal prostatitis ends up as chronic prostatitis, and it is only immediately after the acute attack is it possible to find gonococcus in the discharge after massage of the prostate. (There are exceptions to this. I came across a case recently where the prostatic massage discharge showed large numbers of intracellular Gonococci even though the patient had been suffering for more than two years and had undergone treatment with penicillin, aureomycin, terramycin, and two courses of streptomycin.) In chronic prostatitis also, the infection may not be venereal; it may be blood borne or again non-venereal infection from the urethra. A weakened constitution is a good contributory cause of chronic prostatitis.

The common organisms demonstrated are the colon bacillus, the staphylococcus, and the streptococcus.

Signs and symptoms. The most frequent complaint is one of slight pain, a urethral discharge which may be profuse or merely the morning drop, and neurasthenia. The pain may be local or referred. The local pain is of the nature of a heaviness in the perineum and is associated with the history of the passage of prostatic fluid on defaecation. The referred pain may be felt in the back, inner side of the legs, groin, penis or sacrum. Frequent and painful urination urgency and difficulty are also common complaints. Frequently there may be no local symptoms at all although the patient suffers from arthritis etc. due to his chronic prostatitis.

Diagnosis is based on rectal palpation, repeated analyses of the voided urine, microscopic examination of the prostatic secretion and ejaculate, and urethroscopic examination of the posterior urethra and vesical neck.

Rectal palpation reveals a hard and enlarged gland; the gland, is also nodular and baggy spots may be felt between areas of induration.

Microscopic examination of the secretion collected from the meatus as it drops from there, as the prostate is being massaged, gives the greatest help in diagnosis. Negative findings on one examination are not sufficient.

Pus from the affected portions of the prostate may not come out at the first massage due to the blockage of the ducts of that portion of the gland. Normal secretions may be collected and give no indication of the inflammation present. Two or more manipulations are necessary before these ducts open, and diagnosis may be made correctly after at least 3 examinations after massage. In many cases, however, massage produces a profuse secretion which contains large numbers of pus cells. Massage for diagnostic purposes must be gentle but not too gentle. If too gentle, it is not sufficient to express the secretions, and if too severe it may lead to epididymitis.

Normal prostatic fluid is opalescent and viscid, and microscopically is seen to consist of corpora amylacea, lecithin globules which are refractile, and columnar epithelium. In chronic prostatitis, the prostatic secretion is less opalescent and much of the lecithin is replaced by pus cells which are often in clumps. These methods are sufficient in the vast majority of cases. In some cases, urethroscopic examination may be necessary to reveal marked inflammatory changes of the posterior urethra, and swelling of the verumontanum—sometimes the only signs of the underlying prostatitis.

Prognosis. The patient with long-standing prostatitis should be told at the outset that his treatment also will take a long time.

Treatment. Dilatation of the prostatic urethra, massage, urethrovesical irrigations and instillations, and chemo- and antibiotic therapy are all used in the treatment. The main problem in the treatment is the provision for free drainage. The most effective method for this is a gradual gentle, but thorough dilatation of the prostatic urethra after which massage should be carried out. When performing dilatation, the usual precepts about using only the bigger sized sounds rather than the smaller sized ones (sizes smaller than 21 F or English size 12) should be borne in mind. Dilatation should be done twice a week, and each time should be followed by massage. Later these treatments can be at intervals of a week, still later at intervals of two weeks, and at longer intervals after that. Dilatation of the urethra causes occluded ducts of the prostate gland to resume drainage and empty their septic contents. Massage causes expression of retained secretions. stimulation of contraction, of smooth muscle fibres of the prostate, and final removal by stretching of the adhesions of the prostate with neighbouring structures.

Sulphadiazine in doses of 1 gm. 4 times a day, and later reduced gradually is enough for a large number of cases. In other cases penicillin, and in still others streptomycin may have to be employed.

Prostatic abscess. Abscess of the prostate is frequently due to the Gonococcus; it can also occur as a complication of systemic infection or may be secondary to superficial pyogenic infection, such as carbuncles and boils. Symptoms are pain in the perineum, chills, fever, and frequent and painful urination which may progress to complete retention. Many of these patients come with a history of frequent micturition and examination shows a fairly distended bladder and the frequent micturition is just an overflow incontinence.

Diagnosis is easy on rectal palpation. The presence of a uniform doughy swelling is made out.

An untreated prostatic abscess may rupture into the urethra, when there is relief, or into the rectum when a rectourethral fistula may follow. The abscess may also burrow into the perineum, bladder, or even the peritoneum. In most cases with the present day antibiotic treatment, there is resolution of the condition.

Treatment is for the infection and the associated retention of urine. The bladder should be emptied carefully irrigated and the same time streptomycin must be given in 1 gm. daily doses for about ten days. The difficulty of micturition may last for the first four or five days during which time the bladder might require to be relieved at least once a day. In one recent case, although the condition was relieved there was a certain amount of atony of the bladder and this was corrected by the administration of carbachol tablets; the 0.002 gm. tablets of carbachol were given twice or thrice a day for about ten days after which the bladder regained its normal tone. Evacuation of a prostatic abscess is rarely necessary these days, and when it is necessary the method of choice is through the posterior urethra. A perineal section is done, the finger is introduced into the prostatic urethra, and the honeycombed interior of the prostate cleaned out, so that no pockets remain.

Syphilis of the prostate is rare.

Tuberculosis of the prostate is not a primary condition. It is almost always secondary to tuberculosis in some other portion of the genitourinary tract, and most often the infection is in the kidney. It is a halfway house for infection to travel to the epididymis.

Symptoms. There is the usual frequency, dysuria, hæmaturia and pyuria. Examination shows a *nodular* elastic gland and it may be more affected on one side than the other. The prostatic secretion may show tubercle bacilli.

Treatment. As the condition is secondary, treatment must be for the primary disease and so the usual hygienic, dietary, and therapeutic measures for a tubercular infection of the genitourinary tract should be employed. In addition when the semen does not show any spermatozoa and the epididymides are not affected, bilateral vasectomy should be carried out to prevent infection spreading to the epididymis. In young persons when the spermatic fluid shows fair number of spermatozoa and there is a reasonable chance of fertility, this should not be carried out, though, even here if one side is more affected than the other, it is worthwhile considering vasectomy on that side to prevent peripheral spread. However, in these days of therapy with streptomycin and P. A. S. it is unnecessary to do vasectomy as the epididymis is also protected by the treatment.

Prostatic calculus. Calculi of the prostate may be considered to be of two kinds—those that lie entirely within the substance of the gland or its fascial capsule, and which have no possible contact with urine, and those that are associated with dilated prostatic ducts or other openings into the posterior urethra and which can be seen by urethroscopy. In the latter group of cases, there is a communication with the urinary passages. A third type —the false prostatic calculus, as it may be called—is found in a pouch in the posterior urethra itself, and is associated with vesical calculi.

Of the two types of true prostatic calculi mentioned above, the first type is chiefly found in association with adenomatous prostates, and the calculi which are generally small are found mainly in the outer parts of the gland. This condition is generally symptom free, and does not need any treatment. On the other hand, calculi, in the substance of the gland associated with dilated prostatic ducts are of surgical importance. This type of calculi are also found in association with stricture of the urethra.

Symptoms. Many patients with prostatic calculi have no symptoms. Others complain of a gradual diminution of the urinary stream and sometimes pain. The urine may be turbid.

Examination may reveal a crystal clear urine or as is more often there may be shreds in the urine. Rectal examination of the prostate reveals a distinct crepitus in some cases. This crepitus is of a fine variety and has been described as resembling that obtained when an area of surgical empysema is palpated. In other cases the prostate may be hard to touch, and differential diagnosis from carcinoma of the prostate may be difficult, but it will be noted that unlike in carcinoma there are no hard lateral extensions in the region of the lymphatics. Positive diagnosis is made from X-ray skiagrams, when radioopaque bodies are made out just behind and slightly above the pubic symphysis—they usually appear as seed-like opacities situated behind the pubic sympysis, the most frequent grouping of the stones being either as a horse shoe or a ring.

Treatment. As mentioned above, the small stones associated with the outlying portions of the gland do not require treatment. The other type in which urethroscopic examination reveals gaping prostaic ducts with stones in them requires treatment and dilatation of the urethra ought to relieve the symptom of difficulty of micturition, where this gives no relief. Total prostatectomy is the only way of completely eradicating the condition.

(To be continued)

INDIAN MEDICAL ASSOCIATION

SOUTH INDIAN PROVINCIAL BRANCH

Secretary's Office:

POST BAG No. 530, COIMBATORE

Minutes of the Meeting of the Council of the South Indian Provincial Branch of the Indian Medical Association held at Courtallam on 26th July, 1952.

MEMBERS PRESENT:—

1.	Dr. Y. P. Vasudevan	...	President.
2.	„ P. Vadamalayan	...	Vice-President.
3.	„ A. G. Leelakrishnan	...	Secretary.
4.	„ A. K. Rajagopalan	...	Treasurer.
5.	„ T. V. Sivanandam	...	Coimbatore.
6.	„ C. Arumugham	...	„
7.	„ P. B. Annangarachari	...	Madras.
8.	„ D. V. Venkappa	...	„
9.	„ K. Gopal	...	Madurai.
10.	„ G. A. Naidu	...	„
11.	„ P. A. S. Raghavan	...	Trichy.
12.	„ E. Mahadevan	...	Tirunelveli.
13.	„ S. Chandrasekharan	...	„
14.	„ R. Gopalan	...	„
15.	„ R. V. Chokkalingam	...	„
16.	„ K. Rama Iyer	...	„ (Co-opted).
17.	„ K. Madhava Menon	...	„ (Co-opted).

1. As per rule 7 (b) of the South Indian Provincial Branch of the Indian Medical Association, the President co-opted Dr. K. Rama Iyer and Dr. K. Madhava Menon for the meeting of the Provincial Council.

2. **Resolution of the Executive Committee of the Madras Branch:** The President explained to the members of the Council the events that lead to the change in the venue of the Council Meeting and about the rules for a three weeks' notice of the Provincial Council Meeting. The Council accepted the explanations of the President and decided to drop the matter.

3. Read letters from Dr. P. B. Annangarachari, Dr. R. Sankaran and Lt. Col. T. S. Shastry of Madras Branch.

The President explained the rules and the Provincial Council decided to drop the subject after approving a draft letter to be sent to these three members.

4. **Minutes of the previous Council Meeting:** Dr. P. B. Annangarachari proposed that the minutes as circulated be adopted and Dr. G. A. Naidu seconded and the resolution was carried unanimously.

5. **Condolence Resolutions:** Condolence resolutions at the death of Dr. U. Rama Rau of Madras, Dr. K. Govinda Iyer of Valliyur, Tinnevelly

District and Dr. G. S. Katre of Madras were moved from the chair and passed unanimously all members standing for a minute.

6. **Business arising out of the Previous Council Meeting:**

(a) *Insurance Scheme for Members of the I. M. A:* The Secretary informed the Council that the United Indian Life Assurance Co., Ltd., have forwarded a new draft group insurance scheme for our members and the Council requested the Secretary to publish this new scheme in the "Miscellany".

(b) *Permanent Office for the Provincial Association:* The proposals of the Sub-Committee were placed before the Council and the Council approved the draft proposals with slight modifications and requested the Secretary to circulate the draft proposals to all the local branches to elicit their opinion and to place the proposals before the Annual Meeting of the Provincial Council.

(c) *Rent Control Act and Private Medical Practitioners:* Dr. P. A. S. Raghavan explained the result of the deputation to the Minister for House Rent Control. The Council authorised Dr. P. A. S. Raghavan and Dr. D. V. Venkappa to contact the concerned authorities again and to submit a report before the next meeting of the Provincial Council.

(d) *Madras Branch:* Letter from the Central Office approving the formation of a number of branches within the city—recorded.

(e) *Joint Standing Committee:* Dr. D. V. Venkappa and the Secretary explained about the formation of the Joint Standing Committee. The President informed the Council that the rules of our Provincial Council and the Joint Standing Committee appeared to be defective in certain respects and suggested that a Rules Sub-Committee may be formed to alter, amend or add to the rules of the Provincial Council and of the Joint Standing Committee. The following members were elected to the Rules Sub-Committee:

1.	Dr. Y. P. Vasudevan	...	President.
2.	„ A. G. Leelakrishnan	...	Secretary.
3.	„ A. K. Rajagopalan	...	Treasurer.
4.	„ P. A. S. Raghavan	...	Trichy.
5.	„ P. B. Annangarachari	...	Madras.
6.	„ S. Chandrasekharan	...	Tirunelveli.
7.	„ V. Krishnamurthi	...	Cuddalore.

The members of the Sub-Committee will propose amendments, alterations or additions to the existing rules of the Provincial Council including the rules of the Joint Standing Committee. The Sub-Committee will meet before the next meeting of the Provincial Council at the place of the meeting of the Provincial Council and submit its proposals to the Council. It will also consider the amendments proposed by the Central office regarding the I. M. A. Rules and recommend its suggestions to the Provincial Council.

(f) *Educational Concession for Licentiates to obtain the Degree:* The reply from the Indian Medical Council—recorded.

Dr P. A. S. Raghavan and Dr. D. V. Venkappa were requested to meet the Vice-Chancellor of the University of Madras and make representations to him in this matter on behalf of the Provincial Council.

(g) *Educational Concession to Children of Local Fund and Rural Medical Practitioners*: The reply from the Assistant Secretary to the Government of Madras, Educational Department—recorded.

The Council requested Dr. P. A. S. Raghavan and Dr. D. V. Venkappa to meet the Education Minister and to represent to him about this matter.

7. **Letter from South Kanara Branch regarding Publication of a List of all the Members of the Provincial Branch**: The Secretary placed the correspondence between the Central Office, South Kanara Branch and the Provincial Office—recorded.

8. **Advertisements of Doctors in the "Miscellany"**: Letter from Madura Branch—recorded.

The Council felt that the Managing Editor of the "Miscellany" may charge for the advertisements by the members of the I. M. A. at 50% of the usual charges for others.

9. **3rd Quarterly Statements of Accounts by the Treasurer**: Approved subject to final audit.

The Provincial Council requested the Treasurer to place the statement of accounts on the table one hour before the Provincial Council Meeting.

10. **I. M. A. Circulars**: Recorded.

11. **Venue of the Next Provincial Council Meeting and Conference**: If a decision regarding the holding of the Provincial Conference in September —October 1952 is not forthcoming before the 20th August 1952, the Secretary is authorised to call for a meeting of the Provincial Council at Cuddalore in September, 1952.

If there is to be a Provincial Conference in September—October 1952, Dr. P. A. S. Raghavan and the Secretary were authorised to open the ballot papers at Coimbatore before the 25th of August, 1952 and to declare the results of the elections of the President and Vice-Presidents of the Provincial Association for the year 1952—53.

12. Letter from Dr. L. K. Muthuswamy, Erode—recorded.

13. Resolved that the South Indian Provincial Branch of the Indian Medical Association wait on deputation before the Hon'ble Minister for Public Health with the Government of Madras and to press on him for the immediate adoption of the Provincial Scale of pay for the Local Fund and Municipal Medical Officers and for their immediate provincialisation and thereby accord the status of Civil Assistant Surgeons.

—Moved by Dr. P. B. Annangarachari.
—Seconded by Dr. K. Rama Iyer.

Adopted unanimously and Dr. P. A. S. Raghavan and Dr. D. V. Venkappa were requested to meet the Health Minister in this connection.

14. **Vote of Thanks**: The Honorary Secretary finally proposed a vote of thanks to the Tinnevelly Branch for their hospitality to the Provincial Council members and to the President for having ably conducted the proceedings in so short a time and the meeting terminated at 5 P. M.

Dr. A. G. Leelakrishnan,
Hony. Secretary.

Dr. Y. P. Vasudevan,
President.

SPECIAL MEETING OF THE NILGIRI DISTRICT BRANCH OF THE INDIAN MEDICAL ASSOCIATION HELD ON *Monday 14th July 1952*

To meet Col. C. Mani, Regional Director for South East Asia of the World Health Organisation, a special meeting of the Association was held at 9-30 A.M. on Monday, July 14th 1952 at the Nutrition Museum of Nutrition Research Laboratories, Coonoor.

Lt. Col. J. C. Bharucha, the President of this Branch welcomed and introduced Col. Mani.

Col. Mani said that he was pleased to have this opportunity of meeting medical men of this District and of telling them about the aims and activities of the World Health Organisation. Though the World Health Organisation orginated nearly four years ago, as one of the specialised agencies of the United Nations Organisation, it inherited some of its functions from the Health Division of the League of Nations e.g. statistical and epidemiological services, control of drugs liable to produce addiction and publication and reference services. To-day on account of decentralisation for efficient working, there were six regional offices.

World Health Organisation has done a great deal in assisting member countries to strengthen their Public Health Services especially in Public Health Administration, Maternal and Child Health, Environmental Sanitation, Nutrition, Health Education of the public and Nursing. He gave examples of this assistance given especially to countries of the South East Asia Region.

World Health Organisation acted as a depot for technical information. Through its expert committees on various diseases, through generous fellowships, seminars and teaching missions World Health Organisation has done very good work in teaching and training.

Advisory services were made available for member countries including survey of needs and formulation of long term and short term plans. In the control of communicable diseases, large scale efforts were directed to combat Malaria, Tuberculosis and Syphilis, Yaws and Bejel. Attention was also directed in localised outbreaks of Plague, Smallpox, Typhus and Rabies and also on survey work on Brucellosis, Q fever, Bilharziasis and Leprosy. Help has been given to many member countries to overcome shortages in insecticides, antibiotics and trained personnel.

Much has been achieved through co-operation with other organisations like F. A. O. and UNICEF. The Speaker laid much stress on the catalytic activity of the World Health Organisation. For instance, where an anti-malaria campaign had to be launched, trained personnel, equipment etc., were available on the spot. The only thing needed was a little initiative to bring the various forces together.

The great sign of hope for the future of the World, the speaker concluded, was this unprecedented international co-operation in the field of health.

Some questions were asked regarding the control of spurious drugs and World Health Organisation's activities in the control of Venereal Diseases.

The meeting closed with a vote of thanks by the President.

MADRAS BRANCH

President: Dr. K. Narayanamurthi
Vice-Presidents: „ K. Vasudeva Rao
„ „ G. S. Katre
Hony. Treasurer: „ R. Sankaran
Hony. Secretaries: „ G. Ramachandramurthy
„ K. L. Narayana Rau

TEA PARTY

TO DR. T. S. TIRUMURTHY, DR. U. KRISHNA RAU, AND DR. M. V. KRISHNA RAU.

The Madras branch of the Indian Medical Association got up a Tea Party on 6-5-52 at the Madras Medical College to felicitate Dr. T. S. Tirumurthy on his election as President of the Indian Medical Association and Dr. U. Krishna Rau and Dr. M. V. Krishna Rau on their appointments as Ministers in the Madras Cabinet. Dr. K. Narayanamurthi, M.D., President of the Madras branch was in the Chair. There was a large and distinguished gathering present on the occasion.

Dr. K. Narayanamurthi, welcoming the distinguished guests of the day said that he regretted his inability to express personal felicitations to Dr. Tirumurthy who was unavoidably absent on that day. Welcoming Dr. U. Krishna Rau, he said that among the younger generation of doctors he was really the doyen of the profession, coming as he does, from a distinguished family of doctors, and being the son Dr. U. Rama Rau, of one of our best men of the profession, he justified the expectations of his friends. He also referred to the various positions of honour held by Dr. Krishna Rau with great credit and stated that therefore it is in the fitness of things that he has been called upon to be a Minister.

Referring to Dr. M. V. Krishna Rau, Dr. Narayanamurthi said that he knew him for a pretty long time and that he derived inspiration for social work from his sister who ran a home for Harijans. He said that Dr. M. V. Krishna Rau was a gentleman of great sacrifice and courage and by his social work and multifarious activities he is held in high esteem and love in Andhradesa and that his appointment as Education Minister in the Rajaji Cabinet has given great satisfaction to one and all.

Dr. Narayanamurthi, in conclusion said that by the appointment of two members of the medical profession as Ministers, the medical profession has been honoured and that these two ministers will acquit themselves with great credit. He assured the full support of the profession to them and to the govt.

Dr. D. V. Venkappa who next spoke also felt very sorry for the absence of Dr. Tirumurthy and stated that he (Dr. Tirumurthy) has raised the prestige and dignity of the profession in Madras that he took an active part in social, political, medical and public health matters and that by his election as President of the Indian Medical Association it is proved that he is held in great esteem and respect by medical men all over India.

Referring to Dr. U. Krishna Rau he said that Dr. Krishna Rau has rendered valuable services to the I.M.A. in the various capacities and also to the nation. Dr. Venkappa also referred to his sterling qualities and the excellent manner in which he conducted himself during his Mayoralty.

Felicitating Dr. M. V. Krishna Rau, Dr. Venkappa enumerated the various services rendered by him to the profession in particular and to the nation in general and Dr. Venkappa concluded wishing good luck to both the Ministers.

Dr. A. V. S. Sarma who next spoke referred to the excellent manner in which Dr. U. Krishna Rau conducted the Antiseptic without fear or favour and that Dr. U. Krishna Rau was a fountain of mellifluous service and was captain of the medical team of the province. He said that Dr. U. Krishna Rau possessed scholarliness, humility and culture in an abundant measure and above all the unique blessing of cornucopis.

Referring to Dr. M. V. Krishna Rau, Dr. Sarma said that he was a man of simplicity, sweetness and integrity and that he was well known in Andhradesa as a staunch congress worker, believer in khadi as a holy duty and that he took an active part in the national struggle. He also recalled that Dr. M. V. Krishna Rau was responsible in getting recognition to the Andhra M.B.B.S.

Dr. K. C. Nambiar also associated himself with the sentiment expressed by the previous speakers and congratulated the guests.

Dr. M. U. Krishna Rau in his reply thanked the I.M.A. for the honour done to him and said that he came especially to show his respect to his revered teacher, Dr. Tirumurthy but was very sorry that Dr. Tirumurthy could not be present. He thanked the association for giving him an opportunity to meet the members of the Madras branch.

Dr. U. Krishna Rau also thanked the I.M.A. and said that he will always remember the interest of the I.M.A. and said that though he is not in charge of public health, the Public Health Minister will consult him in many matters and that he will voice the opinion of the I.M.A. in such matters.

Dr. P. Ramachandramurthy proposed a vote of thanks to the chief guests of the day. He also thanked the members of the Madras branch for their cooperation in making the party a grand success.

MADURA BRANCH

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

Proceedings of the Combined Meeting of the Erskine Hospital—Clinical Society and the Madura Medical Association.

JOINT CLINICAL SESSION ... HELD ON 30-8-1952

A combined Clinical Meeting of the Erskine Hospital—Clinical Society and the Madura Medical Association was held at 5-30 P.M. on 30-8-1952 at the Government Erskine Hospital, Madurai. After a Tea Party provided by a *Committee of Hosts, the business proceedings began with Dr. M. N. Rajan in the chair. Moved from the chair, the following resolutions were passed all members standing:—

Resolution No. 1

"The Madura Medical Association has heard with profound grief the news of the passing away of Dr. M. G. Kini at Bombay, and places on record its sense of appreciation of Dr. Kini's brilliant work as a Surgeon and his invaluable services to the Medical Profession in General."

Resolution No. 2

"The Madura Medical Association deeply mourns the passing away of Dr. M. A. Nayar and considers his untimely death, an irreparable loss to the science of Ophthalmology and to the Profession in this State."

The minutes of the previous two meetings were read and adopted. The following were unanimously elected as Delegates to the 7th South Indian Provincial Conference:—

1. Dr. Abdul Sattar.
2. Dr. S. Kanthimathinathan.
3. Dr. K. G. Ramabadran.
4. Dr. M. Venkatachalam Chetty.
5. Dr. M. Palaniappan.
6. Dr. M. G. Varadarajan.
7. Dr. K. A. Kalyanam.

It was proposed to send more delegates from among members who will attend the conference and who wish to move resolutions up to a total of 15 delegates for which the branch is entitled to. Dr. C. S. Patel (Bombay) was unanimously elected for the Presidentship of the Indian Medical Association for 1952-53. The following were unanimously elected for the 3 vice Presidentships of the Indian Medical Association for the same year.

1. Dr. V. Govindan Nair — Madras
2. Dr. S. K. Mukherjee — Indore
3. Dr. S. Samaddar — Patna

Circulars No. 20 of the Provincial Office as well as circulars No. 24 and 28/51-52 of the Central Office were read out for information of the members.

Circular No. 17 of the Provincial office was considered and the enclosed draft proposals regarding a Permanent Office for the Provincial Association and modification of the existing rules were approved in entirety. The Secretary

pointed out that Resolutions for the 7th South Indian Provincial Conference should be sent to the Provincial office on or before the 15th of September, 1952. The following cases were then demonstrated:—

1. HYDATID CYST OF LIVER & LUNG ... Dr. P. Vadamalayan
2. HYDATID CYST SPLEEN
3. ECTOPIA VESICAE
4. SPINA BIFIDA OCCULTA
   ... Dr. S. V. Joseph
5. SOLITARY CYST OF THE KIDNEY ... Dr. K. S. Krishnan
6. NEPHROLITHIASIS ... „
7. GENITAL TUBERCULOSIS
8. A CASE OF THIRD CRANIAL NERVE-PARALYSIS
   ... Dr. R. Venkatasami
9. OSTEOCLASTOMA TREATED WITH X-RAY THERAPY ... Dr. M. G. Varadarajan

Dr. Muhamed Ismail, M.B.B.S., District Medical Officer and the President of the Erskine Hospital Clinical Society conducted the clinical session.

Committee of Hosts:—

1. Dr. Abdul Sattar
2. Dr. T. V. Venkatesan
3. Dr. P. Krishna Menon
4. Dr. S. V. Joseph
5. Dr. R. Venkatasamy

1. Letter from Secretary, Tirunelveli Dist. Branch that the proposed Conference at Courtallam during the middle of July could not be held on account of paucity of accommodation.
2. Circular from the Provincial Office regarding the forthcoming Provincial Conference. It was unanimously suggested that our branch is not willing to invite the said conference this year.
3. Circular from the Provincial Office that our branch is recommended to get a copy of the B.M.J. at cost price. It was unanimously approved not to get the journal at cost price.
4. Circular No. 13 from the Provincial Office regarding the steps to be taken for the medical relief in famine stricken areas by contributions. Read.
5. Circular from the Centre regarding the nomination of one President and three vice-presidents for the Centre for 1952-1953. As the circular was received late and the nominations could not be sent before the prescribed time, the subject was dropped.
6. Circular from the Centre regarding two clinical assistantships in Dublin, Ireland. Read.

Then the President introduced Major P. Govinda Rao, M.B.B.S., F.R.C.S. Madurai, to the members and requested him to give his talk on Diseases of the Prostate and their treatment. The lecturer gave an excellent lecture on the subject which was followed by a discussion in which many members took part. The Secretary proposed a vote of thanks to the lecturer, the host of the evening and to the authorities of the Bishop Heber High School. Then a film show on Anemia, Pediatric Anaesthesia, and Tolserol by Messrs. E. R. Squibb & Sons, Baroda was held. The meeting terminated at 9 p.m.

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A meeting of the association was held on Saturday the 12th July 1952 in the premises of the District Health Association, Puthur, Tiruchirapalli. About 50 members were present. As the President and the Vice-President were absent, Dr. T. V. Srinivasan was unanimously proposed to the Chair. After Tea kindly provided by Dr. T.V. Sundaram, the President introduced Dr. P. Natesan, M.B.B.S., Hony. Surgeon, Govt. Stanley Hospital, Madras to the members and requested him to give his tatk on "Recent Developments in Venereology." The lecturer gave a brilliant lecture on the subject which was very much appreciated by the members. After the usual discussion by several members, the Secretary proposed a vote of thanks to the lecturer, the host of the evening and to the Secretary, Dist. Health Assn. for allowing the premises for the meeting, the meeting came to a close at 8-30 p.m.

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To meet Dr. U. Krishna Rau, M.B.B.S., M.L.A., Minister for Industries, Labour and Motor Transport, Govt. of Madras, the members of the Tiruchy Dist. Medical Association gave a Tea party on Saturday the 16th August 1952 in the premises of the Dist. Board Meeting Hall, West Bouliward Road, Tiruchirapalli. The party was attended by 75 members.

TANJORE BRANCH

President: N. R. Subramanyan, M.B.B.S.
Hony. Secy. & Treasurer: S. Narayanan L.M.P.

The monthly meeting of the Tanjore District Branch of the Indian Medical Association was held at 4-30 p.m. on the 15th June 52 at the Medical School Buildings, R. M. Hospital, Tanjore, Dr. N. R. Subramaniam, M.B.B.S. was in the chair, 32 members were present.

After the tea provided by the president, the minutes of the previous meeting were read and adopted. Circulars and communications from the Provincial Secretary were read out and discussed. Resolutions congratulating Dr. P. V. Cherian on his election as President of the Madras Legislative Council, Dr. U. Krishna Rao and Dr. M. V. Krishna Rao on their being appointed as ministers in the Rajaji Cabinet and Dr. Nathamuni on his being elected to the Madras Legislative Council, were passed as also a condolence resolution on the death of Dr. U. Rama Rao. The President then spoke of "Infective Hepatitis". He pointed out that it was not a mere catarhal condition but a virus infection, requiring prolonged rest in bed and diet of high calorific value. Fats also may be given and Antibiotics tried. He said the prognosis was good. This was followed by a discussion and the meeting terminated with a vote of thanks to the President for his interesting lecture and also the excellent tea provided.

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The monthly meeting of the Tanjore District Branch of the Indian Medical Association was held at the Medical School Buildings, R. M. Hospital, Tanjore on 27-7-52 at 4-30 p.m. Dr. N. R. Subramaniam was in the chair, 38 members were present.

After tea provided by Dr. N. Ramanathan, M.B.B.S., Tanjore, the minutes of the last meeting were read and adopted. Circulars and Communications from the Provincial Secretary were read out and discussed. The house then voted for a President and two Vice Presidents, for the South Indian Provincial Branch of the I. M. A. from among those nominated for those offices.

A resolution was passed authorising the President to take suitable steps for the collection of funds to construct a building to house our Association. Dr. P. Narayana Rao then demonstrated a case of pruritis defying all treatment.

Dr. K. R. Ramachandran, M. S., Hon. Surgeon, Government Eraskine Hospital, Madurai was then introduced to the members. He spoke on "Modern Trends in the treatment of Peptic Ulcer". He mentioned the causes of the condition and outlined the medical treatment and the value of Intragastric milk drip at nights through a Ryles tube. He said that Gastrectomy was the operation of choice except in cases of pyloric stenosis when gastroenterostomy was indicated.

Vagotomy was sometimes helpful as also Vasoligation. He also suggested methods for meeting complications like Perforation and Haemorrhage. This was followed by a lively discussion. The meeting terminated with a hearty vote of thanks to the lecturer and the host of the evening.

ABSTRACTS FROM THE CURRENT MEDICAL LITERATURE

SKIN DISORDERS IN THE ELDERLY

—Sydney Thomson, M.D., F.R.C.P., F.R.S. Ed.—The Practitioner, Aug. 1950.

The clinical changes which occur in the skin with increasing age are variable. During infancy the skin is thin and soft, being almost velvety in early childhood. This is particularly true of girls, and a few of them retain this delightful texture throughout life, even into extreme old age. With most folk, however, the passing years reveal a progressive drying of the skin as old age is approached and attained. Then the skin shows fewer tension lines, is wrinkled, and there is a marked loss of elasticity. This is most easily seen when a fold is pinched up between finger and thumb, then suddenly released: as long as a full minute may then pass before the skin subsides and flattens to its normal state. These phenomena suggest that the aged skin is thinned. In fact the epidermis is but little reduced in thickness, the dominant changes being in the dermis, where both collagen and elastic fibres are altered, the latter markedly so.

Other changes slowly become apparent. The hair follicles diminish in size or even disappear over most of the body; yet the beard hairs increase in diameter. The sebaceous glands become hyperplastic, whilst there is a diminution in the activity of the sweat glands. Fat tends to disappear from the subcutaneous tissues. This curious mixture of atrophic and hypertrophic changes is exaggerated when pathological processes become apparent. The cause of these gradual changes is unknown. Malnutrition, arteriosclerosis, or pressure, do not seem to play any important part. It should be noted that these changes are most marked in those areas exposed to sunlight.

Pruritus Senilis

Pruritus senilis may be defined as itching of the skin when no changes can be seen other than those of the normal ageing. Secondary excoriations are often present and these then suggest the possibility of parasitic infestation. The coincidence of the two conditions did occur fairly frequently years ago among those who were down and out, and 'vagabonds' disease' was more common among the elderly. But the affliction is now extremely rare, and I have not seen an example for about fifteen years. Before deciding that the itching is part of the picture of senility, care must always be taken to review such possibilities as hepatic and renal disease, early leukæmic changes, and latent gout.

The condition may start as an intermittent itching over a particular area, commonly the legs. Gradually the irritation spreads until it involves the trunk and limbs, but rarely the head to any marked extent. At first it is noted as an exaggeration of the normal physiological itching as a result of temperature changes experienced when undressing. Although many cases of moderate degree are common, it is usual for advice to be sought only when the sensations are severe; then control may prove extremely difficult.

In addition to the more usual antipruritic lotions and ointments there is 1 percent. silver nitrate, 50 percent. S.V.M.I. in water, a lotion which may be dabbed on whenever necessary. This is most valuable, as too, is an ointment consisting of 12½ percent. liquid extract of hemlock in wool fat, 60 minims (3.6 ml.) to the ounce (31 g.). Thyroid given internally in small doses sometimes helps, whilst testosterone is definitely valuable in those cases in which the pubic hair has straightened and thinned. It is remarkable, however, that most of these cases do not require the use of hypnotics; even when they have to be used, small doses suffice.

Biotripsis and Senile Warts

Biotripsis or 'life wear' is the name given by Cheatle to those changes seen on the exposed surfaces in patients whose work or hobbies or residence has involved undue exposure to sunlight. In this country it occurs most commonly in gardeners and fishermen. It is in fact the condition which was described by Unna as 'sailors' skin'. Those who live in the more tropical zones for any length of time hardly ever escape some changes, although the degree varies considerably; for example, in whites who have lived in India the changes are seen on the face below the level of shade cast by the topee. In Australia, on the other hand, where the heat and sun do not compel such protection except perhaps in the more northerly territories, the changes are seen over the whole of the face and neck. In all cases the backs of the hands become affected and the forearms too, can show these changes, mostly among agricultural workers whose sleeves have been permanently rolled up.

Senile warts.—As the skin gradually becomes dry, the general background becomes one of shining atrophy. At the same time there develop small lightbrown flecks of pigmentation which are rather less golden than freckles and which more resemble the dull brown of light coffee stains. These become more numerous, whilst individual patches become irregular and larger until some few attain the size of a shilling. Generally they vary from one-tenth to one-third of an inch in diameter. Some months or even years after the pigmentary changes have started there begin to develop small telangiectases, and even small bluish patches where the dilated vessels are deeper and cannot be clearly distinguished as individuals. At the same time small warts become obvious. Some of these later become definitely horny, hyperkeratotic and finely fissured. These warts form the best example of a true precancerosis, and gradually one or more of them may take on the characters of a squamous-celled carcinoma. This transition to malignancy occurs more rapidly where irritation of the wart continues, and it is for this reason that efficient treatment of all such warts is the therapeutic rule in Australia. In this country the incidence of malignant changes is much lower, but the chance is always present and must never be forgotten.

This effect of sunlight brings us back to the skin changes seen in the hæmatoporphyrin patients, which are identical. They are also seen in the rare congenital xeroderma pigmentosum, with or without porphyrin changes; the same changes are seen in radiodermatitis. In fact they are all biotriptic in type, and all seem to be consequent on overexposure to irradiations.

Once these changes have developed it is impossible to rejuvenate the skin, although rapid deterioration may be prevented by avoidance of sunlight and the use of protective ointments, such as yellow paraffin containing quinine salts or tannic acid.

Attention must be directed to the warts and, curiously enough, these will often disappear following radiotherapy. But although circumstances may compel such treatment, it is wiser to excise them. Because of the adjacent atrophy of the skin it is better to avoid local anæsthetics as they may interfere with healing. The consideration of the ultimate cosmetic results and scarring is rarely of importance in these cases.

These warts are 'senile warts', but such warts can also occur on exposed surfaces unaccompanied by the other biotriptic changes. The same rules as to prognosis and treatment still apply, however, although the solitary lesions sometimes show as flattened plaques in which the papillomatosis is only just visible. These can be destroyed by diathermy or carbon dioxide snow; in the later case a preliminary damping of the wart with water allows some of the water to penetrate between the irregularities so that penetration of cold is more efficient when the snow is used. Doses of between fifty and ninety seconds are necessary, according to the thickness of the lesion. Occasionally the thin early plaques can be controlled and even destroyed by the use of keratolytic ointments, e.g., 5 percent. salicylic acid in yellow soft paraffin, or simply by using Whitfield's ointment.

Seborrhœic Warts and Moles

Seborrhœic warts develop at or after middle age as multiple lesions on the trunk, their actual eruption often being accompanied by marked itching. They occur anywhere on the body, but are usually most marked on the upper part of the back. At times they are very numerous, varying in size from those having a diameter of one-tenth of an inch to those even slightly larger than one inch. Their colour shows all gradations from a pale dull yellow to a deep brown, almost black. Occasionally only one or two such warts are found, these then often developing on the waistline. They are all relatively soft to the touch and can be scrapped off the surface of the skin, if some vigour is used, leaving traces of pultaceous material mixed with the points of hæmorrhage. Although these are in some way connected with sebaceous glands they often erupt on skin which only rarely shows any

signs of gross greasiness, acne vulgaris or seborrhœic eczema. At times they undergo further cellular changes and become basal-celled carcinomas. Keratolytic ointments may to some extent control their exuberance, but treatment is generally restricted to the destruction of a particular lesion because of its size or site. Carbon dioxide snow applied for sixty to eighty seconds with moderate pressure is usually sufficient. Excision or diathermy can, of course, be used but is rarely necessary.

Moles are mentioned here because they can cause some confusion with the warty conditions. It is not generally realized that moles can appear and become clinically obvious for the first time late in life. Indeed it is not uncommon for them to develop as ordinary moles in either sex during the fifties. In women they commonly affect the neck or the skin round the eyes at the time of the menopause. They are then tiny, and are often extruded above the skin surface in a sort of caul of epithelium, the common 'skin tags'. These are, of course, also seen in much younger patients, but this fact does not allay the indignant surprise of the middle-aged matron. They can be simply snipped off at skin level, whilst the flat moles require no special treatment unless their presence is a real cosmetic disaster, when electrolysis may be used. Their development at this age does not mean that they are particularly liable to become malignant. In fact, the reverse is the case, melanocarcinoma being a disease of youth.

Malignant Growths

Malignant growths, that is squamous-celled and basal-celled carcinomas, do not require any particular description here and only a few scattered observations are therefore made.

Squamous-celled growths are much the less common, but their development from senile keratoses must again be stressed, and they may then be multiple. They can occur anywhere on the skin and are at times associated with chronic irritation in particular trades. Such a neoplasm can be very indolent, and indeed seven years may elapse before metastasis occurs. The absence of adenitis is therefore of no clinical significance in the differential diagnosis. What does matter is that the growth is rather softer to the touch than is the *rodent ulcer*, which is harder as it is composed of closely packed cuboidal cells with large nuclei. In the same way, telangiectases developing over a rolled edge are the result of mechanical pressure on the capillaries in stretched papillæ. The harder cell-mass of the rodent ulcer will cause such to occur more frequently, but they can be caused by similar pressure in squamous-celled carcinomas. As the epithelium normally grows from the basal layer it is obvious that pure growths of either of these two are unknown. All are mixed or metaplastic, the differences being merely those of degree. Ewing's work has proved that rodent ulcers are developed from latent hair follicle rests, and it is noteworthy that rodent ulcers never develop on the palms or soles, places where there are no traces whatsoever of hair follicles.

There has recently been yet another recrudescence of the old discussion as to the best lines of *treatment*, the protagonists of radiotherapy and surgery each betraying their respective enthusiasms. As always, the truth is between the two extremes. No form of radiotherapy can offer a guaranteed 100 percent. cure rate, and all are not without their own particular dangers. Surgery is often impracticable for a number of reasons. In deciding which of the two lines to adopt, the size, site and rate of growth must all be considered, as must also the ultimate cosmetic result. Where safe and wide excision is practicable it is obviously the method of choice, for the whole business is over and done with in a matter of a week or ten days. Also when the growth is spreading rapidly or deeply, or there are obvious cystic changes (in a rodent ulcer), surgery is preferable if it is feasible. For if radiotherapy should fail in any such case, the subsequent surgical interference is made much more difficult, and perhaps impossible. If radiotherapy is recommended the case must be reviewed at the very latest after three months. Should there not by then be obvious improvement or even complete regression, then the chances of the growth proving radio-resistant are high and the possibility of surgery must again be considered.

Other Conditions Due to Skin Changes

There are left two conditions which are the direct results of the normal skin

changes which occur with age. Reference has been made to the hyperplasia of the sebaceous glands. This can give rise to a *senile acne* in which comedone formation is dominant. Such blackheads can become quite large and are seen not only on the nose and cheeks but also on the eyelids. Actual manipulation and expression can be difficult on the lids, but this is the only form of treatment when the lesions are large. In the same way reference has been made to the growth of beard hair. *Hirsuties* in women is not really at all uncommon. In fact it is only when the hair growth is very marked that it can really be claimed to be abnormal. A careful review of cases in this country reveals a far higher percentage incidence than is realized, for women do not noise the matter abroad. A consideration of other white races shows that middle age is nearly always accompanied by the development of a slight and scanty beard, and we are all familiar with the scattered hairs on the chins of elderly women, rendered obvious because they no longer bother about extraction. Should treatment be necessary, electrolysis is still the method of choice.

Eczema

There are several factors which age introduces into the problem of eczema. In the first place there is the simple fact of a dried skin. This will, of course, more easily react badly to contact with such degreasers as alkalis soaps and sulphonated esters, whether they be soapless shampoos or powder cleansers. Even the question of drying the skin becomes important, for chapping can occur more easily. Fissuring of the tips of the fingers of elderly manual workers thus becomes almost inevitable. But increasing age necessarily results in increasing exposure to any potential irritant habitually handled either at work or at home. As Cranston Low originally and conclusively proved, repeated exposures can gradually sensitize the skin. It is for this reason that the phrase 'long-continued exposure' became of such importance in the old Workmen's Compensation Act. Then, too, there is the fact that the older the patient, the more likely it is that there is something wrong with his general health; this being an internal debilitating factor which also debilitates the skin and thus allows it to break down more easily when in contact with an irritant. A simple example is found in the washerwoman who has used large amounts of soda with impunity for many years. Then at last she gets a soda eczema; rarely because of local tissue sensitization through a cut, but usually because she is debilitated through general illhealth, or through absorption from such toxic foci as dental caries. Therefore apart from all questions of local contacts, idiosyncracy, acquired sensitization, and the like, the older the patient the more important it is to deal efficiently with the general health if real cure, and not mere temporary amelioration, of the eczema is to be achieved.

Varicose and Hypostatic Ulcerations are obviously more likely to be seen in the elderly, for the same mixed reasons. The sequence of stasis in a patient with a senile dry skin, pruritus, excoriations or other damage, low-grade infection, exzematous reaction, and later ulceration of the untreated leg, forms a familiar picture. Among the many local applications used in varicose eczema, special praise may perhaps be given to painting once daily for seven days with a lotion consisting of 1 percent. of silver nitrate in spirit, followed by a dry dressing. At the end of that period one of the two following ointments may be used: 3 percent. of calomel in a thin zinc cream; or 1 percent. of gentian violet, and 50 percent. Lassar's paste, in soft paraffin. In these preparations it may be advisable to substitute starch for the zinc, as it is not uncommon for zinc to prove a mild irritant on a senile skin.

Psoriasis

Psoriasis is another example of a common disease which may have special importance in the elderly. In woman, it not infrequently develops for the first time at the menopause; in men, at about the age of sixty or sixty-five. Thyroid internally is particularly useful in such cases. But it is necessary to stress that this is so only when the first known attack of psoriasis occurs at that age. Should the psoriasis by yet another relapse in a patient who first had the disease in early childhood, then arsenic is more useful; or if the first attack had occurred in the teens or early adult life, then creosote internally will be more efficient. Arthropathic psoriasis is somewhat rare but it does develop more

commonly in the elderly. Unfortunately thyroid administration does not seem to help such cases.

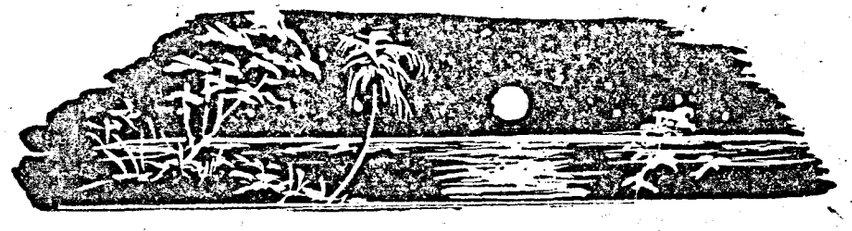
The Pemphigus Group

The pemphigus group of diseases, i.e., the rare *pemphigus vegetans* and *pemphigus foliaceous*, with the more common *pemphigus vulgaris*, of which they are probably but soil variants, occur only in the elderly. In fact pemphigus may be said to be a disease of old age. The closely related *dermatitis herpetiformis* is a disease of youth, but yet at times the two so tend to merge that many think their separation to be of clinical value only. Certainly middle age sees many patients whose eruption at one period is definitely diagnosed as pemphigus and at another period as dermatitis herpetiformis. Pemphigus always used to be regarded as an invariably fatal disease, although periods of temporary remission usually preceded the ultimate severe and intractable phase. This is probably still true, although there have of late years been many cases which suggest that recovery may occur.

The introduction of the more modern antibiotics, sulphonamides, penicillin, aureomycin and streptomycin, have not affected treatment and prognosis. Although a few cases do seem to have done well on aureomycin, others have been completely unaffected by its administration. The widespread eruption, pain, and possible secondary infections all involve big dressings. Such make the picture particularly distressing in these elderly and often helpless patients. Although such cases have occupied hospital beds for many months at a time, it is really necessary that such a sacrifice of beds be made, for it is quite impossible for relations and friends to carry out the nursing efficiently and indefinitely. As with all forms of chronic and incapacitating sickness in the elderly, these patients present a problem which cannot possibly be solved until far more bed accommodation is provided in hospitals.

Conclusion

In conclusion, it is possible to indicate certain routine methods of care which may help the skins of both the healthy and the sick. Soaps should be as bland as possible and used as little as is consistent with cleanliness, for they have a degreasing action. After washing, rinsing must be thorough and preferably with fresh clean water from the tap. Drying must be equally thorough to avoid chapping, and the use of a simple toilet powder as a final dusting agent must not be despised. The extra powder can be brushed off at once. If the hands are dry and the fingers tend to fissure easily, then the routine use of fats or oils is indicated, e.g., pure unsalted lard or a vegetable oil can be rubbed in each night and the hands covered with cotton gloves. When fissuring has occurred a hard thick ointment is needed to protect the lesions from further damage and to act as a waterproof sheeting under which healing can occur. Such can be made from equal parts of soft paraffin and lead plaster base, or by adding 10 per cent. of wax to the soft paraffin. Pure wool against the skin is contraindicated, for it can prove mechanically irritating and is relatively non-absorbent of moisture. The thin elderly person feels the cold easily and so it is better to wear a cotton slip under the woollen vest. The wool and cotton mixtures are devised with the same end in view. Excessive exposure to direct sunlight should be avoided if the skin shows any signs of biotripsis. But even this must be adapted to the habits and pleasures of those whose declining years should earn respect.



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(continued from 2nd cover page)

The Reception Committee of the 29th All India Medical Conference, Patna, earnestly appeal to you to contribute useful papers, demonstrate interesting cases and put up illuminating exhibits on the occasion and to take part in the symposia.

Reception: There will be Reception office at the Patna Junction Rly. Station just opposite the First and Second Class booking office. There will also be a Reception office at the ærodrome for persons travelling by air to Patna. Volunteers will be available at these reception offices who will give necessary informations and arrange transport. Arrangements for lodging and boarding will be made if previous intimation is received by the General Secretary not later than 15th November 1952.

Railway concession: Delegates and visitors wishing to attend the Conference should apply for necessary certificate to the General Secretary, on the production of which at the nearest D. T. S. Office, single fair double journey concession authority slip for any class will be obtained. Production of this authority at the railway booking office will enable them to issue concession tickets.

Registered No. M. 4839

ODDS & ENDS

A study of 46,000 men has shown that short men seem to live longer than tall ones.

♡ △ ♡

Cure for toothache: Take a mouthful of cold water and sit on the stove till it boils.

♡ △ ♡

The ugly wife who was watching over sick and unconscious husband for sometime met the doctor and informed him that her husband was better and had called her "darling angel". The doctor remarked that the worst complication in this illness was delirium.

♡ △ ♡

A Scotsman who had a terrific nose bleed hurried to the nearest hospital. When one of the doctors in the free clinic examined him, said, "we can stop that in a few minutes. Don't be alarmed." "But before you stop it" suggested the Scot, "Isn't there any one in the hospital who needs a blood transfusion? I read in the papers that you pay Rs. 5/- in such cases."

♡ △ ♡

The young wife handed over to the chemist a letter she had received from her husband and said "I cannot decipher what he has written, but since you have done up so many of his prescriptions, you can help me."

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