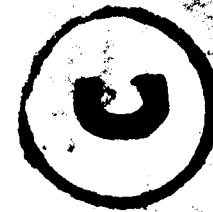


Indian Medical Journal

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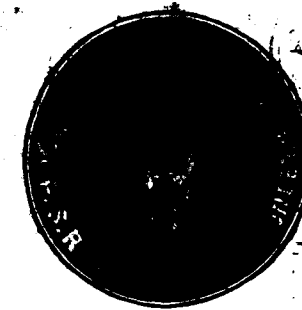
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THE
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Organ of The All India Medical Licentiates Association
(WITH WHICH Agra Medical Club Journal IS INCORPORATED)

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THE ALL-INDIA MEDICAL COUNCIL
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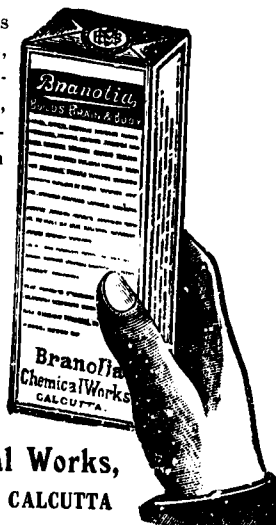
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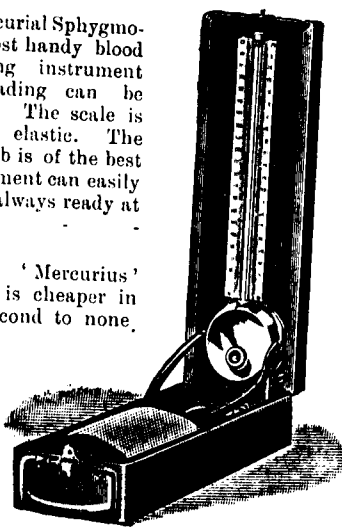
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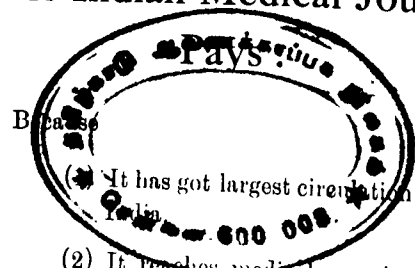
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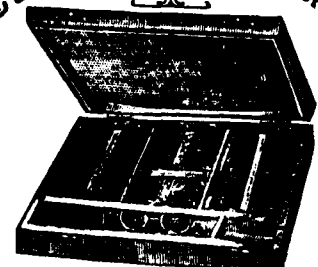
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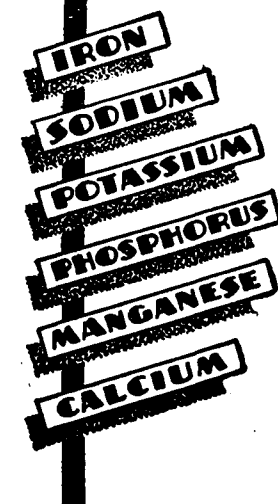
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Original Articles

ROUND WORMS—THE CAUSE OF VARIOUS AILMENTS

By DR. T. D. MUKHERJEE, M.B., D.P.H.

Health officer, Burdwan Municipality

The idea of serpent-like living creatures actually making their abode in our system and cradling from place to place in the intestinal canal of our body is awfully hideous and makes the laity shudder even to think of such creatures. But facts are stranger than fiction. The presence of such creatures in the human body concealed to external observation is responsible for many common human ailments. We call them pests of human life—Round Worms.

It is often found in the text books that Round Worms in the intestines may give rise to no symptoms at all and are only discovered when one or more worms come out with the stools. But experience shows that sometimes they cause grave symptoms even leading to a fatal result to the host. Generally the worm is a parasite found in the intestines of children, but it may be also often found in the intestines of adults. Children are often suspected to have worms when they present certain symptoms, but adults do not show any symptoms unless a worm is found accidentally in the passed stools; the worm giggles and the appearance is shocking even to the person from whose intestines the worm comes out. But serious danger to human life caused sometimes by the worm leads me to discuss the matter in some detail.

The round worm (*Ascaris Lumbricoides*) falls under the genus *Ascaris* of the family *Ascaridae* under the class of *Nematoda*. All the round worms belong to the class *Nematoda* and in this article, I mean by round worms only the *Ascaris Lumbricoides*. The life history of *A. Lumbricoides* is not very simple as was thought before. The sexes are separate. The males are smaller in size than the females. The males are from 5 to 8 inches in length, while females are generally 7 to 15 inches long. No intermediate host is necessary for the propagation of their family. Direct infection takes place but auto-infection is not impossible. From an infected person the eggs leave the body in the faeces and after a time become infective for man. During this time an embryo develops, which remains in the shell until swallowed by man. After

being swallowed the embryo comes out from the egg, pierces the wall of the intestines and through the portal system reaches the liver and from liver it passes into the venous circulation and goes to the right heart and it reaches the lungs, where sometimes due to the presence of large number of larvae lung troubles are produced. From the lung capillaries it reaches the air sac and thence to the bronchial tube, thence to trachea and passes out to larynx and thence to oesophagus and goes down the stomach. It then reaches the intestinal canal. Generally they live in the upper parts of the intestines, where the worms become mature. Males and females are developed, mating takes place in the intestines and the females begin to lay eggs which come out with stools. The number of eggs a female lays is innumerable. These eggs are not infective. They want a little time and other conditions for the embryo to develop when the eggs become infective and if now swallowed the life history begins. The passage of the larvae through the blood stream etc., seems necessary for the worms to be developed.

Round worms are parasitic to the intestines and get all their nourishment from the liquid contents of the intestines. They secrete a form of toxin and in a heavy infection symptoms are due not only to their presence in the intestines but also to bacterial infection from the abraded surfaces on the wall of the intestines. Generally pain is felt in the abdomen. As they live on the nutrient contents of the intestines the patient becomes thin. Grinding of the teeth is a symptom which is often referred to the presence of worms in the intestines. Bad dreams, picking at the nose, pouring out of saliva in the mouth, are the symptoms of reflex irritability. Hypertrophy of the fungiform papillae with scattered red dots may be found on the tongue. Sometimes diarrhoea is caused due to the irritation of the intestines. But generally they produce a series of vague symptoms and general weakness. Diagnosis is deferred until a worm is vomited or is passed out in an evacuation or during an examination of the stools the presence of the ova is detected. The ovum is large, 50 to 70 Micro Mille meters long, yellowish to pale straw in colour, and oval in shape. The ova are found enveloped with a brown albuminous substance with nipple like projections all over the surface. The ovum has got a distinct nucleus and is full of yolk granules.

Santonine with Calomel or oil of Chenopodium administered in proper doses, is the treatment for round worms.

These round worms may cause various ailments whose study is very interesting and at the same time very important. These ailments may be classified as follows:—

1. *Diarrhoea*.—Generally if diarrhoea is caused by the infection of round worms, it persists. No treatment can cure the diarrhoea. Severe colic may follow. If diagnosis is obtained a single dose of Santonine and Calomel cures the diarrhoea miraculously with the expulsion of the worms from the intestines. The diarrhoea becomes at times so severe that it may simulate CHOLERA. Purging and vomiting take place with cramps and collapse.
2. *Intestinal Obstruction*.—If there are a large number of the worms in the intestines, generally they are found to form a bundle. Peristalsis tries to evacuate the bundle and thereby the bundle becomes well shaped and may easily obstruct the intestinal canal. The symptoms of obstruction follow. There are reports of operation in such cases with the finding of a large lump of wound-up round worms.
3. *Abdominal Colic*.—The patient feels pain which becomes spasmodic. The abdomen may be slightly distended. The pain may be paroxysmal. The spasm is due to the irritation and bite by the worms. If proper diagnosis is obtained the condition disappears after the treatment for the parasite.
4. *Nausea, Vomiting, Anorexia*.—These are disorders of stomach and in the case of round worm infection they are caused by the visceral and sympathetic irritation, and the toxin secreted by the worms is responsible for the irritation. The nausea leads to aversion of food. Disinclination of taking any kind of food may occur. Gush of saliva may pour in the mouth. Wasting of body takes place. The patient becomes feeble day by day. At last the diagnosis is reached and if the symptoms are due to round worms the patient is cured by a single dose of Santonine.
5. *Dyspepsia*.—Small ulcerations of the mucous membrane of the intestines due to the bite of the worms and the toxin secreted by them give rise to

a neurasthenic condition of the gastric system. The patient complains of obscure ailments, suffers from alternate diarrhoea and constipation. The faeces is of offensive odour and contains undigested food particles. This state of affairs continues and the patient becomes disgusted with his life. He undergoes various sorts of treatment:—Allopathy, Homoeopathy, Kaviraji, Unani, etc., remains better under some treatment but the condition recurs and he becomes dejected. At last some physician advises the examination of stools. The ova are detected. Santonine is tried, the patient becomes cured of a long standing malady, regains his weight and leads a healthy life.

6. *Peritonitis*.—The adult worm has got a tendency to wander about. If it reaches the stomach it is generally vomited out. If it goes lower down the intestines it is generally evacuated. But this sort of wandering is not dangerous. Sometimes it perforates the intestines and comes to the peritoneal cavity and severe peritonitis results. Intense pain in the abdomen, rigidity of muscles, thready and rapid pulse, rise of temperature, coated tongue, anxious look with cold sweat and other symptoms follow. In the act of wandering it may reach different organs of the body. It may reach liver and may give rise to HEPATIC ABSCESS. It may reach bile duct, may cause obstruction and give rise to BILIARY COLIC. It is sometimes found reaching the Vermiform Appendix and inflammation follows and gives rise to APPENDICITIS. During its wandering lower down it may perforate perineal tissues and give rise to PERINEAL ABSCESES. It may reach the hernial portion of the intestines, cause inflammation or obstruction and may give rise to INFLAMED HERNIA. It may reach other organs of the body. Thus various pathological conditions arise and lead to Gastro-intestinal Surgery.
7. *Hiccough*.—Hiccough is caused by the spasm of the diaphragm. It is a form of neurosis of the phrenic nerve.

Persistent hiccough may follow a heavy infection from *Ascaris*. The irritation caused by the worms may give rise to hiccough which is not cured by any ordinary drug and the malady continues to the great distress of the patient. By chance the diagnosis is reached and a single dose of Santonine with some purgative cures the patient to the great relief of the doctor also.

8. *Dysphagia*.—The round worms cause various sorts of nervous symptoms. The worms secrete an irritating toxin which gives rise to those symptoms. Though very rare, round worms have been known to cause Dysphagia.
9. *Foul Breath*.—In a normal person breath should have no odour. It becomes foul either due to some disease of the mouth, nose, lungs, stomach, or due to some food or drug taken. The round worms in the intestines sometimes give rise to foul breath. It is due to the unhealthy condition of the alimentary canal.
10. *Asphyxia*.—The worms may cause respiratory embarrassment. It is also an effect of the wandering of the worms. Similarly a worm may block an Eustachian tube or may perforate lung tissue and may cause PULMONARY GANGRENE. Through the Eustachian tube it may reach middle ear and may cause perforation of the Tympanic membrane or due to the inflammatory blocking of the Eustachian tube inflammation of the middle ear may take place.
11. *Fever*.—Simple fever may be caused by the worms. The fever does not last long. Generally constipation is the predisposing cause. When the bowels are moved the temperature does not rise any further. This sort of fever is generally mistaken for Malarial fever. The fever may recur and anaemia may be profound. The fever is due to the toxin secreted by the parasites.
12. *Remittent Fever*.—This is very peculiar and in my article on "Remittent type of fever" published some time ago in the *Antiseptic* I had occasion to mention it. Fever continues with a little fall in temperature in the morning and a rise in the

evening. Alkaline Mixture, Quinine etc., have no result upon the temperature. No other prominent symptom is detected. Liver may be slightly enlarged; no enlargement of spleen is generally found, there may be slight tympanitis and it may be accompanied with liquid motions, 2 or 3 times a day. Diagnosis becomes very difficult and at last routine examination of stools or finding one day a worm coming out with stools leads to the diagnosis and after a dose of Santonine and Calomel temperature begins to take its normal course, generally by lysis. Sometimes these fevers have been mistaken for PARATYPHOID and even TYPHOID. I have seen such types of remittent fever on several occasions. Tenderness on pressure at the base of sacrum is a peculiar symptom generally found in this sort of remittent type of fever.

13. *Convulsion*.—Specially a child who has got a few round worms in the intestines suffers from convulsion with rise of temperature. Temperature is about 102°F, abdomen a little distended, constipation present, restlessness in bed, and semiconscious condition prevail and finally convulsion begins. Sometimes the convulsion leads to stiffness of the jaw and opisthotonos and is liable to be mistaken for a case of TETANUS.
14. *Pneumonia*.—The larvæ during their migration through lungs cause irritation, sometimes hæmorrhage takes place and inflammation of tissue occurs resulting in Pneumonia. Larvæ may be detected on the examination of sputum microscopically. Generally the sputum is found blood tinged.
15. *Night Blindness*.—It is a disease often found in persons of defective general health which symptom as mentioned before is very common in patients suffering from round worms.
16. *Paralysis*.—The bundle of worms resting at some particular site of the intestines may not cause actual obstruction but may cause pressure symptoms and the result is paralysis of the lower limbs. It may cause also retention of urine and diarrhoea or constipation.

17. *Chorea*.—Of the disorders of nervous system the round worms have been found to be the causative agents of Chorea. Irregular movement of the limb begins first and typical symptoms of the disease may then occur. Whenever there is any symptom of reflex neurosis of obscure origin advise examination of stools and if ova of *Ascaris* are found, cure is often obtained by the treatment for the worms.

18. *Coma*.—Sudden unconsciousness without any history of previous illness, injury, poisoning or any such condition may follow an infection with round worms. The diagnosis is very difficult. It does not fall into the common causes of unconsciousness. Sometimes the case is diagnosed only at *post mortem*.

19. *Headache*.—The causes of headache are numerous. That round worm is one of the causes of headache is not often mentioned in the text books. Persistent headache may be present, generally attended with constipation. It is lessened by evacuation of the bowels. The condition recurs and is cured after the proper treatment for the round worms. The cause of headache is reflex in origin and to a certain extent is neurasthenic. The condition may lead to Vertigo.

20. *Vertigo*.—The toxin secreted by the worms, the toxin absorbed through the ulcerated mucous membrane of the intestines and the indigestion, all caused by the worms, are responsible for Vertigo. Loss of equilibrium takes place and the patient feels dizzy.

21. *Hysteroid and Epileptiform Fits*.—That the toxin secreted by the round worms has got a great detrimental influence on the nervous system, there is no doubt. It may even lead to such anomalies as to cause fits of unconsciousness in patients. The stability of the nervous system is shaken, various motor and sensory disorders of the system follow, control over the will is lessened, neurasthenic condition supervenes and the patient suffers from various sorts of nervous ailments. When

(Continued at the foot of next column)

MODERN CONCEPTION OF ANÆMIA

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By the word anæmia is meant changes in the respiratory function of blood, which according to Dyke constitutes deficiency of hæmoglobin or of R.B.C. or of both.

Classification of anæmia on etiological basis (old view)

Anæmia of infants.

1. Anæmia gravis.
2. Infantile scurvy or Barlow's disease.
3. Van Jacks anæmia or anæmia splenica infantum.
4. Congenital heart disease.
5. Other causes as in adults.

Anæmia of adults.

A. *Primary*.—Pernicious anæmia and Chlorosis.

B. *Secondary*.

I. *Acute*.—Sudden copious bleeding, external or internal.

II. *Chronic*.

(a) *Mechanical*.—Slow bleeding as in Piles.

(b) *Toxins*.

1. Protozoal: Malaria and K. A.
2. Bacterial: Streptococcal infections as septicæmia; Pyorrhoea alveolaris; Rheumatism.
3. Helminthic Ankylostomiasis, Bilharzia, Dibothryocephalus, Tænia solium.
4. Spirocheta: Syphilis, Leprosy.
5. Mineral: Lead.
6. Chemical: Nitrobenzene group.

(Continued from previous column)

the condition is long standing without any diagnosis and treatment MENTAL DISTURBANCE may follow, leading even to INSANITY. MELANCHOLIA is common. The patient leads sleepless nights. It may be seen therefore what harmful effect the worms may cause. One must be careful to exclude the presence of round worms in the intestines before the physician comes to a diagnosis of the anomalies complained of by a patient.

III. Blood diseases.

1. Leukæmia, 2. Hodgkin's 3. Splenic-anæmia, 4. Achyluric Jaundice, 5. Scurvy, 6. Hæmophilia.

IV. Visceral diseases.

1. Alimentary: Sprue, Chronic Diarrhoea.
2. Renal: Albuminuria.
3. Liver: Cirrhosis.
4. Chronic aortic disease.

V. Cachectic states.

Tuberculosis, Malignant disease.

VI. Deficiency diseases.

1. Scurvy 2. Hypothyroidism 3. Addison's disease.

The above though an antiquated method of classification of anæmia is given here just to represent the various causal factors of this condition. Of late the primary and secondary anæmia classification has been dispensed with.

Modern classification of anæmia on morphological basis according to Wintrobe

I. *On Hæmoglobin standard*.—1. Normochromic, 2. Hyperchromic, 3. Hypochromic.

II. *With size of R. B. C. as standard*

1. *Macrocytic Anaemia*.—In this group the average size and Hæmoglobin content of the red cells are increased. The group includes pernicious anæmia, the anæmia of sprue, the "pernicious anæmia of pregnancy," the anæmia of chylous diarrhoea and of dibothryocephalus infections.

2. *Normocytic Anæmia*.—Here the average size and pigment content of the red cells is normal or only slightly increased. The anæmias included are aplastic anæmia, the anæmia following an acute hæmorrhage and that due to malaria.

3. *Simple Microcytic Anaemia*.—There is a slight decrease in the size and hæmoglobin content of the red cells. Such an anaemia may occur in chronic infections and in carcinoma.

4. *Microcytic Hypochromic Anaemia*.—The red cells are smaller than normal and their hæmoglobin content is considerably reduced. Examples of anaemias of this class are simple achlorhydric anaemia, the anaemia of the Plummer-Vinson syndrome, the anaemia resulting from chronic hæmorrhage or from ankylostomiasis, the simple nutritional anaemia of infants and chlorosis.

Modern classification of anæmias on etiological basis

I. *Loss or destruction of red cells*.—

- A. Massive hæmorrhage.
- B. Hæmolysis. Hæmolytic anæmia (malaria, achloric familial jaundice).

II. *Disturbance of hæmopoiesis*.—

- A. From deficiency of factors necessary for hæmopoiesis.
 1. Pernicious anæmia, 2. Sprue, 3. Anæmia of pregnancy, 4. Chlorosis, 5. Anæmia of infants, 6. Anæmia of hypothyroidism, 7. Anæmia of scurvy.
- B. By the action of deleterious substances.
 1. Microbic toxins as syphilis, tuberculosis, sepsis etc.
 2. Chemical poisons, as lead etc.
- C. From crowding out of red cell forming marrow by cells of other types.
 1. The leukaemias, 2. Malignant invasion of the bone marrow.
- D. Exhaustion due to small continued hæmorrhage, piles, menorrhagia, splenic anæmia etc.

Summarising from what has been said above, all hyperchromic anæmias excepting that due to hæmolysis are due to defective hæmopoiesis. This defective hæmopoiesis may lead either to shortage of red cells or to shortage of hæmoglobin. Pernicious anæmia and sprue form best examples of the former. Here, since the quantity of hæmoglobin remains intact the C. I., is more than one. Other examples where the C. I. is more than one are anæmia due to Benzol poisoning, acquired achloric jaundice, Dibothryocephalus anæmia.

Chlorosis, anæmia of pregnancy, and anæmia during infancy form good examples of the latter where defective hæmopoiesis leads to shortage of hæmoglobin with little disturbance in red cell formation. Here the C. I. is less than one.

Factors necessary for normal hæmopoiesis

1. Extrinsic.
 - (a) Inorganic: Iron, Copper, Manganese.
 - (b) Vitamins: Vit. B and Vit. C.
 - (c) Proteins of food taken.
2. Intrinsic.
 - (a) Endocrine: Thyroxin.
 - (b) Two substances in the whole liver:

Of these one is a nitrogenous compound, relatively small, heat stable and soluble in water. It is stored in the liver and is called the P.A. factor.

The other is an organic substance of a complex nature, 'a protein and an enzyme' called the hæmoprotein of Wilkinson and Klein. It is thermolabile and is contained in the stomach, but in very small quantities as such in liver.

Site of formation of intrinsic factor

Castle and his colleagues of Boston, by the action of healthy gastric juice on beef muscle, showed that the juice of healthy stomach contains some unknown ingredient, 'intrinsic factor', which acting on muscle protein *in vivo* or *in vitro*, is able to produce a mission in pernicious anæmia like that produced by liver extract. Following this initial observation of Castle, Sturgis and Isaacs published their observations on the anti-anæmic principle contained in dried hog's stomach. The same authors have demonstrated that while the muscle layer is quite inert and the mucosa only of minor potency, maximum response is obtained when the whole stomach is used in the preparation. This shows that the muscle as well as the mucus membrane has to be used in the preparation. The generally accepted view is that the normal stomach contains a substance, 'the intrinsic factor' of Castle, which reacts during digestion with an 'extrinsic factor' present in the protein of food, to form

an 'anti-anæmic' or 'hæmetenic' substance, which is stored largely in liver and to a small extent in kidneys and spleen. Dakin West and Howe claim to have isolated the specific anti-anæmic principle in liver as a crystalline dipeptide of B-hydroxylglutamic acid and γ -hydroxyproline.

Menlengracht treated cases of pernicious anæmia, with powdered extracts made from pars pylorica, fundus and cardia of pig's stomach. Defatted and dried preparations of the funds were of no use, when pyloric preparations were strongly effective. Hence one may now conclude that pernicious anæmia is a deficiency disease, due to the deficiency in the product of reaction between the intrinsic and extrinsic principle, for want of intrinsic or extrinsic factor, or inability to utilise the fully formed product.

So according to Stanely Davidson no evidence has so far been produced to disprove Castle's fundamental hypothesis that the essential cause of Addison's Pernicious Anæmia lies in a failure of gastric secretion. Certain types of individuals inherit a weakness of the stomach in secreting hydrochloric acid and enzymes. If the failure lay particularly in acid secretion the germicidal barrier to the entrance of pathogenic organisms would be lost, causing chronic gastritis which gradually destroys the power of secreting the intrinsic factor, and a magaloblastic anæmia would develop.

After such results from the above experiments, one is surprised to see that signs and

symptoms of pernicious anæmia can't be uniformly produced experimentally by gastrectomy in man. But as all the experiments were conducted on pig's stomach, one can support Menlengracht theory by putting forth the plea that perhaps the source of formation of intrinsic factor is not exactly the same in man and pig, yet one is surprised at the efficacy of pig's stomach in man. More work in this direction is needed.

Pathology of gastro-intestinal tract in pernicious anæmia

Since 1897, 151 autopsies on cases of pernicious anæmia have been carried out in various hospitals in Boston. A study of the material has been made by Madelaine Brown. Gross lesions of gastro-intestinal tract were found in 82 cases. The commonest source of infection was the gall bladder, since cholecystitis or cholelithiasis occurred 24 times. A microscopic examination of the histo-pathology of the intestinal tract was carried out in 42 instances. In 41, chronic gastritis was found. In 37, the acidophilic cells had disappeared. If this work is accepted it is understandable why a failure in the secretion of ferments, H.C.L., and intrinsic factor occurs in Pernicious Anæmia.

That the essential secretory defect in pernicious anæmia is of gastric origin is shown by the studies of O. M. Holmer, P. J. Fouts and L. F. Zerfas, in gastro intestinal enzymes in autopsy specimens in cases of Pernicious anæmia which showed that the gastric mucosa contained no pepsin or renin, when the duodenal mucosa and pancreatic tissues con-

tained normal amounts of enterokinase and tryptic, autolytic and lipolytic enzymes.

Treatment of anæmia

This is materially modified according as the anæmia is, Macrocytic or Microcytic which again means whether the anæmia is due to defective R. B. C. formation, or defective hæmoglobin formation. In the case of hyperchromic macrocytic anæmia the anti-anæmic principle of Minot, Strauss, and Castle has to be supplied to stimulate the marrow of long bones to throw off more of matured R.B.C. This activating principle is formed in the stomach and is stored in the liver and hence the rationale of liver and gastric tissue in the treatment.

Now taking the administration of liver, the route and the form of administration are of extreme importance. Formerly raw and uncooked liver were considered to be the only forms of administration in an effective way. But now highly potent preparations are marketed both for oral and parenteral use.

As far as possible parenteral administration must be the method of choice for the following reasons. Madelaine Brown's study of autopsies of pernicious anæmia cases done in Boston Hospital shows that there is chronic enteritis as well, in these cases. As one naturally expects a defective, alimentary absorption in these cases of Hyperchromic anæmia as Addisons's and that in Sprue, by oral administration of liver, enough is not assimilated to be effective. The chart appended shows the high potency of parenteral administration over the oral, from the clinical response produced in both the instances.

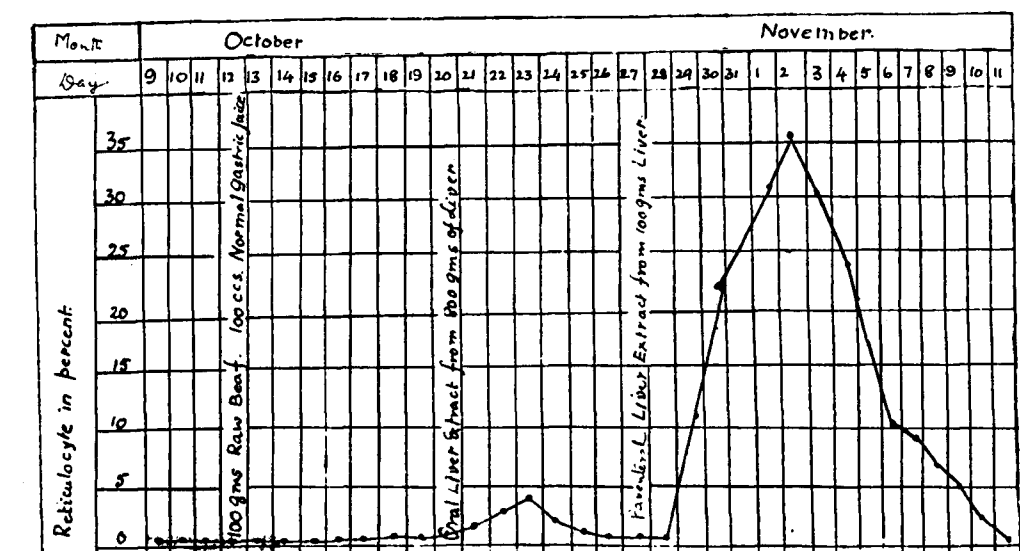
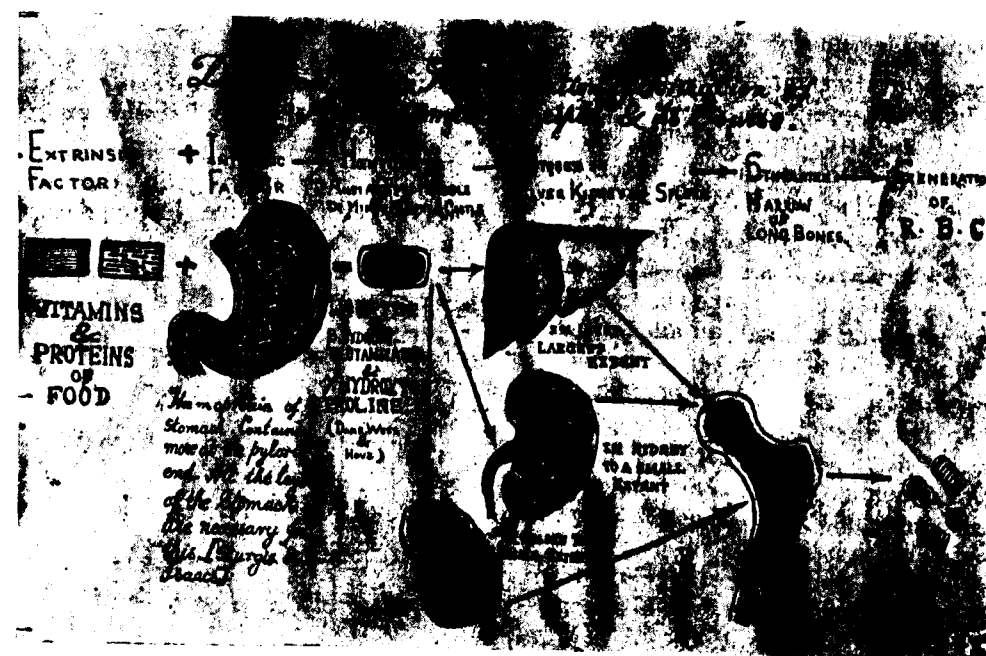


Chart showing the curve of Reticulocytes. No response from raw beef plus normal gastric juice. Only slight response to large amounts of liver extracts by mouth, but prompt and marked response to extracts of liver given intramuscularly. (From a paper by J. B. Connery, E. J. Gold water)

Another disadvantage of the oral administration is the cost. The average maintenance dose of liver extract is that got from 240 gms. of liver taken four or five times weekly, the weekly cost being about 15 rupees. But a fortnightly injection of 5 c.c. ampoules of Campolon is more effective and less costly, the cost of three ampoules of 5 c.c. being only about five rupees. Yet another disadvantage of oral medication is that after the preliminary enthusiasm resulting from the beneficial effects of the initial treatment had waned many persons cannot be relied upon to take adequate maintenance dose of liver. In consequence, the blood level not being maintained at the optimum, there is the danger of subacute degeneration of the cord setting in at any time. Murphy reports definitely encouraging results in a series of 100 cases treated intramuscularly from 100 grams of liver concentrated to 3 c.c. and injected at intervals varying from 1 to 6 weeks. If fortnightly injections are not possible the period can be prolonged to a month by getting the patient to eat reasonable helpings of liver on 2 or 3 days weekly. When parenteral treatment is refused the blood level is best maintained by taking alternately on 4 or 5 days in the week $\frac{1}{2}$ to $\frac{3}{4}$ lb of liver and a gastric tissue preparation—Pepsac—2 tablespoonfuls. At the present price oral liver extract is not practicable.

If raw liver is given, $\frac{1}{2}$ to 1 lb must be taken daily. There are two English preparations of liver for intramuscular use one contains 10 gms. per c.c. and the other contains 20 gms. per c.c. The course of injection of this product is as follows. Give 40 to 80 gms. on the first day, then 40 gms. each on second and third day. Then make R.B.C. count. If there is improvement 2 c.c. every 2 to 6 weeks is sufficient or start on $\frac{1}{2}$ oz. Pepsac gradually increased to 1 oz.

If ventriculin is given the initial dose in pernicious anæmia is 10 grammes daily for each one million reduction of R.B.C. below 5 millions. Maintenance dose is 10 grammes daily, five or six times a week. 10 grammes of the desiccated powder are equivalent to 120 grammes of fresh gastric tissue. No pepsin or H.C.L. is to be given along with this.

Funt, Walden and Clowes went a step further and by incubating subminimal amounts of liver and liver extracts with small quantities of fresh hog's gastric tissue produced a product which when given to Pernicious Anæmia patients had an effect by far greater than that obtained when given separately to patients on alternate days. This, Walden and Clowes's preparation, is sold under the trade name 'Extra-

lin' manufactured by Eli Lilly Co. in the form of capsules. The authors claim that 12 capsules daily produced a maximal reticulocyte rise and was adequate to maintain normal blood level.

Yeast, Autolysed yeast and wheat embryo have been tried in recent years with varying results. The announcement that these products contain potent anti-anæmic factor was made first in 1931 by Wills, Ungley and James, who tried these on 18 cases of which 8 cases failed to respond, when the remaining 10 produced sub-optimal hæmopoietic effect. Originally the anti-anæmic power was considered to be due to the Vit B complex content. But this has been disproved by the impotency of of the dried yeast, and watery yeast extracts and preparations of B Vit from other sources, as egg and rice polishings on cases of Pernicious anæmia. Also parenteral administration of yeast preparation is of no use. So now it is presumed that the potency of yeast preparation results from activation of extrinsic factor which occurs in such rich amounts in yeast products, by traces of intrinsic factor secreted by pig's stomach. But one must say that so far yeast can't be made to replace liver or stomach preparation. But it can be said that variations in the results obtained by yeast are due to the degree of failure in the secretion of the intrinsic factor.

Recently the utility of Iron in Hyperchromic anæmia has been shown, especially when the case is treated by parenteral administration of liver. When liver is given orally it contains enough Iron for Hb formation in the new R.B.Cs generated, and also the Iron store in the body can supply the metal for Hb when R.B.Cs are generated at a slow rate when liver is given orally. But the position is quite different when liver is given parenterally. As liver preparations for injection are Iron free and also the rate of R.B.C. formation is rapid by this method (100,000 per c.m. per day) the Iron store in the body can't keep pace and supply the necessary amount for Hb formation for the newly and rapidly forming R.B.Cs with the result that the C.I. falls below 1. Hence according to Murphy, Iron must be administered when liver is given parenterally. Also in such cases, as injection preparations of liver lack in vitamins, the same in the form of yeast, fruit juice and fresh vegetables must be given.

In microcytic hypochromic anæmias, Iron forms the basis of treatment. Here, that the defect lies in the Hb formation and not in the R.B.C. forms the basis of treatment.

Having discussed the utility of Iron one must know the form and method of administration

TREATMENT OF LEPROSY*

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Before discussing the treatment of Leprosy, I beg permission to make a few observations in general about the disease. As we all know, Leprosy is a contagious disease transmitted from person to person by direct contact. The causative organism of this disease is supposed to be Micro Bacterium Lepræ which is always found in all cases of the cutaneous type of the disease. I said above *the causative organism* because, to incriminate a particular organism

*Being a paper read before a clinical meeting of the Madras Branch, A.I.M.L.A. on 14-5-35.

(Continued from previous page)

of the same. About $\frac{2}{3}$ of the total iron in the body exists in the form of Hb. Administration of iron preparations in the case of anæmia not only makes good this deficiency, but acts as a chemical stimulus to the functional activity of the blood forming organs. It is for this reason that iron is considered to be a hæmatinic. Inorganic iron has been used till lately with several disadvantages. All inorganic preparations in whatever form they are taken orally, are mostly rendered insoluble by the action of the bacteria and the secretions of the intestines, and pass out as such in the faeces imparting to them the peculiar black colour. Another drawback of intensive inorganic iron therapy is its constipating effect. This constipation causes auto-intoxication and further increase the blood destruction.

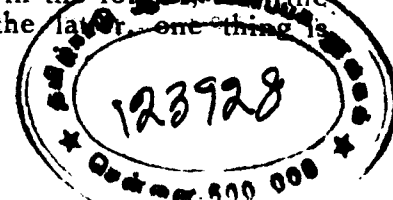
Scale preparations of iron must be used in massive doses unmindful of the B.P. dose. Iron is not absorbed by injection, hence oral administration must be the method of choice. Copper with iron is said to enhance the action of the latter by a catalytic action. Of this combination there are several patent preparations. In the light of the fact that the alimentary absorption is defective in most of the cases of Macrocytic anæmia one wonders whether iron could be expected to be absorbed, if given orally; but this metal is absorbed from the intestines and not from the stomach. So, though there is deficiency in gastric absorption a good bit of the metal is absorbed by intestinal route. In the case of sprue even this absorption can't be expected to occur.

Reference

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as the sole cause of any particular disease, it should satisfy all the 4 postulates of Koch. Unfortunately, Hansen's Bacillus does not satisfy 2 of the postulates, viz., 1. it cannot be cultivated outside the body. 2. we cannot reproduce the disease by inoculating this organism to another individual. Many attempts have been made and are still being made to cultivate the Hansen's bacillus and inoculate into human beings. Unfortunately till now, none were successful. This inability to culture it and failure of successful transmission have led some notable research workers to doubt whether the Hansen's bacillus is the real cause of Leprosy. Lieut. Col. Cook, I.M.S., Surgeon general of Bihar and Orissa has promulgated a theory that Leprosy is purely a deficiency disease just like Beri-beri, pellagra etc., due to the absence or insufficiency of some vitamins. He explains the presence of the organisms in the disease, not as organisms causing the disease but as resulting from metabolic changes produced in the tissues as the result of the disease; just as the presence of Negri bodies in a case of Rabies, is as the result of and not as the cause of the disease. Whatever may be the cause, there are certain definite facts about the disease which lead a majority of the workers to conclude that Leprosy is an infectious and contagious disease since we very often see cases of Lepers in families and small communities where free intermingling takes place.

As regards the severity of contagiousness of the disease also, opinions differ. I have personally known many cases among close relatives as husband, son, etc., of lepers not developing the disease, though they are in close and constant contact with them for very long periods. In this connection, it is interesting to note, that in a certain institution in Palestine for lepers, a few non-lepers were admitted into it for some other considerations; and these non-lepers remained with the lepers for nearly 15 to 20 years, sleeping with them in the same bed, eating with them and moving very closely with them in their daily avocations of life. In spite of such close contact for, such long periods, none of these non-lepers developed Leprosy. Of course, such things could be explained by saying that the Hansen's bacillus in Palestine is of such low virulence that it is not able to actively spread the disease in others. Contrary to the above experience, I have seen also many instances where the whole family has been affected from a single individual within a comparatively short time and even spreading to the neighbouring houses. What-ever might have been the reason for the non-infectiousness in the former and the infectiousness in the latter, one thing is



certain and that is, that Leprosy, as is found in India and especially in the Madras Presidency, is of low virulence and the risk of infection is very slight if ordinary hygienic precautions are taken by us.

Some controversy has been going on in the medical press, whether Leprosy is a bacillæmia or not. Some workers have found Leprosy bacilli in the blood of cutaneous types of Leprosy in a larger number of cases. Taking up this view, I had examined the blood of 50 cases of Leprosy of the cutaneous type for the presence of Hansen's bacillus, but I found it only in 5 cases. The antagonists of the bacillæmic theory, hold that Leprosy is not a bacillæmia at all, and explain the presence of bacilli in the blood of some cutaneous cases in this way: they are always present in the sub-cutaneous tissue, of such cases and hence they enter the blood drawn out from the site of puncture in the skin. The Calcutta school together with Dr. Muir, the chief Research worker in Leprosy, are of this opinion.

The course of the disease also varies. I have seen many cases with small hypo-pigmented and anæsthetic patches with alopecia for 20 to 25 years without any increase in size and without any further symptoms. It is very important to recognize such cases as it is always advisable not to undertake any active treatment for them since these have become self limited and arrested without any defect, due to sufficient resistance of the individual. On the other hand, I have had cases who have gone all the stages of the disease, N1, N2, C1, C2, C3 and N3, in the course of 6 months to 1 year. Generally, the course is very slow if sufficient resistance is shown by the individual concerned and rapid if otherwise.

Since we find by detailed examination, that there are many more cases of leprosy present in Madras than are thought to be or are shown in the official statistics, it is very important for us to be able to diagnose very early all cases of leprosy and accordingly institute the necessary treatment or keep those cases under close observation. Much importance should not be attached to the absence of Leprosy bacilli, since in almost all cases of nerve type they are invariably absent; and in all cases of cutaneous type they are present. It is suggested that the type of bacillus causing the nervous type may be quite different from that of the cutaneous type or that our present methods of staining are quite inefficient to find out the bacillus in the nervous type of the disease.

When we examine cases for leprosy, it is always a good plan to examine them in good

broad day light, making the patient quite naked if necessary, so as not to miss the slightest hypo-pigmented patches, which are the earliest signs. I am glad to note that the Corporation authorities in Madras are taking great interest in the matter of medical inspection of school boys paying special attention to this disease. The result is that many cases which were formerly diagnosed as cases of ring-worm, tinea versicolor, etc., are now definitely diagnosed as cases of leprosy and a close watch has been kept on them. There were as many as 50 boys undergoing treatment last year for leprosy in our hospital, sent in by the corporation schools in Royapuram and Washer-manpet only.

Now, before taking up the treatment of Leprosy, we will discuss whether we can cure a case of Leprosy, as there are different opinions about the same. In the first place, let me tell you that there is no specific cure for leprosy. Moreover in the present state of our knowledge there is no definite criterion on which we can rely to state that leprosy is cured in a particular individual or not. At the last leprosy conference held at Madras in July 1933, during which I was present, there was a lot of discussion as to whether we can use the term *cure* as regards Leprosy, both in the Scientific as well as in the lay press for purposes of propaganda or otherwise. After a prolonged and heated discussion, the Conference came to the conclusion, that though many cases of leprosy recover and do not recur, it is advisable not to employ the term, *Leprosy can be cured*, as a general statement. If the phrase is used it should be qualified, and care should be taken not to raise too exuberant hopes early in the treatment.

Now coming to treatment, let me remind you again, that self limited areas of long duration in a nervous case are best left alone. We may do more harm than good by treating such cases. But they should be kept under observation for long time to see for the extension of the disease or the flaring up of the old lesions.

General treatment.—Good nourishing diet, full of vitamins, is essential. Meat and fish are restricted if not prohibited. I do not know the reason for this restriction. But my patients who are accustomed to non-vegetarian diet, improve better with mutton and eggs as they provide sufficient physical strength to fight out the disease; accordingly I recommend such a diet to those accustomed to it and I have yet to see the folly of such an advice. At the same time, we advise plenty of vegetables and fruits, milk, etc., taking care not to give them in

excess. Overcrowding is avoided. Exercise is the most important item in the treatment of the disease. In this disease the skin is in a very low condition of vitality, and the sweat glands function very little. Sufficient daily exercise is required to stimulate the sweat glands. Besides, exercise helps in promoting absorption of the oily drugs, which form the main-stay of our treatment as will be seen later on. Thirdly, exercise helps in preventing the deformities. Iron and calcium are also useful. Very careful and discrete administration of Pot. Iodide internally in nervous cases and Thyroid extract in the cutaneous type of cases are also useful.

Local treatment.—Since there is no specific for Leprosy, the drugs that are used for the treatment of this condition are very many. But of all drugs, Hydnocarpus and chaulmoogra oils form our main-stay. They help us to a great extent in arresting the disease in the advanced types and more or less in curing the same if it is in the early stages.

The various preparations of the Hydnocarpus oils used mostly are:—

1. Chaulmoogra oil. It is used for intra-muscular injections. As it is very painful it is generally combined with Novocain and injected. Anyhow it is not so much used in India where we can easily procure the less irritating Hydnocarpus oil in great quantities.
2. Hydnocarpus oil. It is mixed with D.D. creosote, 4 %. This is injected intramuscularly and also intra-dermally. It is given in doses of 2 to 8 cc. The intra-dermal injections are given into the affected patches. The oil being a little thick, it is better to keep it in a hot water bath when used for the latter. Even then I found it very difficult to inject through the intra-dermal needle.
3. Sodium hydnocarpate, introduced by Rogers in 1916. This is in the form of a powder. It is made into a solution 1 to 2 % and given 1 to 5 c.c. intravenously and subcutaneously. Its disadvantage lies in the fact that it causes after a time endophlebitis and consequent blocking of the veins which will be unfit for further use.
4. E.C.C.O. ethyl esters of Hydnocarpus oil, camphor, creosote and olive oil. Intra-muscular injections are given twice a week from $\frac{1}{2}$ to 3 c.c. This drug was very popular once but

it is not so much used now as some have found it very irritating. It is completely given up by the Calcutta School of Tropical Medicine.

5. Chaulmugrin is the name given by the Bengal Chemical and Pharmaceutical Works, for H. C. Oil with D. D. Creosote, about which I mentioned above.
6. Ethyl esters of H.C. Oil with D.D. Creosote. It is given intra-muscularly, intra-dermally, and also subcutaneously in doses of 2 to 8 c.c., twice a week. As this oil is very thin it is of special use for the intra-dermal method. The esters must be of the undistilled variety as this is less irritating than the distilled one.

Instead of using the creosoted esters as above, some use, especially in the Phillipines, Iodised esters. They add $\frac{1}{2}$ % of Iodine to the esters. This Iodised esters has been found to be more irritating than the creosoted ones. D.D. Creosote is added with two objects. Firstly, to keep the oil aseptic; secondly to lessen the pain after injection. With a view to simplify the treatment, especially when treating a large number of cases as in institutions, I wanted to see whether the omission of D.D. Creosote will make any difference either in the efficacy of treatment or in the supposed advantages mentioned above. With this object in view, I purposely omitted the addition of the D. D. Creosote to the Hydnocarpus oil and also to the ethyl esters. In a consecutive series of 8,000 injections, spreading over a period of about 7 months, I did not notice any bad effect; and the so-called advantages mentioned above are more theoretical than practical. Of course we must always be sure that the preparation used by us is sterile when no bad effect will follow.

7. Alepol. This is a sodium salt of a selected fraction of lower melting point fatty acids of hydnocarpus oil. This is given from 3 to 5% solution, in doses of 2 to 8 c.c. subcutaneously, intravenously and also intra-dermally. In some institutions this drug is used most extensively to the exclusion of the others. In my experience I have found it very useful in the cutaneous

types of cases more than in the nervous type. It has also got the disadvantage of blocking the veins after sometime and render them unfit for further injections. The intra-muscular injections are more painful than those of the hydnocarpus oils. To keep the solution sterile, we add $\frac{1}{2}$ % carbolic acid.

8. Pharmasol Chaulmoogra oil (A. F. D.). 1 to 2 c.c. of this is given subcutaneously or intravenously. This is also effective.

We shall discuss briefly the mode of action of these hydnocarpus oils. The following theories are put forward by Dr. Muir: (1) These are supposed to have a direct action on the L. B. (2) They are supposed to increase the lipase content of blood and thus act on the lipid coating of the L.B. which is broken down and thus the antibody formation is promoted. When given intradermally, they act, firstly, as a counter irritant; secondly, by their local action on the bacilli; thirdly, by setting free antigens; fourthly, general effect on the body of the nature of protein shock, fifthly, by special action on the L.B. which other oils have not got. Unsaturated fatty oils of H.C. oils are the best since according to Col. MacCarisson, these oils stimulate the metabolic rate.

9. Other oils recommended for use are Cod liver oil, coconut oil and ground nut oil. I had tried all these preparations but they are not as effective as the others; besides they are also very painful and irritating on injection.
10. Dr. G. A. Ryrie of the Phillipines has recently introduced the method of treatment by the injection of certain dyes, viz., Brilliant Green, mercurochrome, fluorescein, Trypan blue, etc.

Brilliant green is given parenterally in the strength of 1 in 2500 to 1 in 3000 in doses of 2 to 15 or 20 c.c. The subcutaneous injections are a little painful. I have personally seen good results follow the use of this drug by the above methods in a series of 100 cases. But I personally see no special advantage over the Hydnocarpus oils.

Mercurochrome, 220 soluble. It is administered in 1% solution intravenously 3 to 15 c.c. It is more useful in the reactionary stage of the disease and also specially, when there are

any concomittant septic complications present. In the actual disease itself, I have not found it of any use. As regards **Flourescein**, it is administered in 2% solution in 2% sodii bicarb. It is given I.V. from 3 to 10 c.c. I have had occasion to use the drug in a selected number of about 50 cases. Though I found a certain amount of improvement in the leprotic condition, I found it of more use during the stage of reaction just like Mercurochrome. But Dr. RYRIE of Phillipines gives very encouraging reports about the successful treatment of the actual disease with this drug.

Trypan blue. It is used in the same way as the above. I have not had much experience about the same. It is said to be of more use in the eye complications occurring in Leprosy. While giving these dyes, one must not get alarmed if the urine or the skin of the patient turns into the same colour as the dye that is given, and the patients must be forewarned of the same so that they may not get upset.

As regards the methods of injections, I said above that most of these drugs may be given subcutaneously, I.M., I.V., or I.D. But the method of choice is the intradermal method and it is the best method of attacking the disease. Subcutaneous route is the most painful of all, next is the I.M. one. The least painful is the I.V. method. The maximum benefit is derived from the intradermal route. Dr. Muir advocates that 20 to 25 punctures should be made for each C.C. of the drug with a special needle which goes only into the dermis and not beyond. When the patient comes up to a dose of 5 or 6 cc. we have to give 120 to 150 injections; it is tedious both to the doctors as well as to the patients. I make only 10 to 12 punctures for each C.C. of the drug and I find no bad effects follow the same. These injections are given in the local affected areas. No area should be injected twice within 3 weeks. The injection can be made into the nervous as well as into the cutaneous type of patches. The nervous type of patches show early and marked improvement in the return of pigmentation, sensation etc.

The patches should be painted with Trichloroacetic acid in the strengths of 1 in 5 to 1 in 3, once in 10 days.

Treatment of Complications.—The commonest and worst complication is the trophic ulcer, mostly in the lower extremities and sometimes in the upper extremities also. In such cases we should first see for any necrotic tissues such as dead bone, and soft parts etc.

and they should be thoroughly excised and the wound be scraped; soaking the parts in hot antiseptic liquid is also useful; dressing the ulcer with H. C. oil and also infiltrating the base of the ulcer with the ethyl esters has been found useful by me. Recently, bilateral Lumbar sympathetic ganglionectomy and peri-arterial sympathectomy of the femoral artery in the Scarpa's triangle have been performed by some workers with the idea of relieving the sympathetic control. Very encouraging results have been obtained in those cases; but unfortunately, the ulcers recurred after 1 or 2 years. The problem of a permanent cure of a trophic ulcer is still a matter of speculation.

2. **Leprosy reaction.**—This is evidenced by a rise of temperature, increase in the number of patches, redness of the old existing ones, general malaise, etc. A certain amount of reaction is bound to occur in the course of treatment after every injection. In such cases no treatment is necessary. But if the reaction lasts more than 48 hours, then, suitable treatment has to be given—rest in bed, purgatives, stoppage of the regular treatment of leprosy if reaction is very severe, increasing the intervals between the injections and lessening the subsequent doses if it is less and alkalies and calcium internally. Intravenous mercurochrome 1%, 3 to 15 c.c. fluorescein 2%, 3 to 10 c.c. and Pot. antimony tartrate 1%, 2c.c., are all useful. Attend to any septic foci in the mouth, teeth etc.

3. **Eye complications.**—These range from simple conjunctivitis to iridocyclitis. In these conditions, preparations of gold are very useful. Solgonol A intravenously, or Solgonol B. Oleosum, intra-muscularly, Trypan blue, 1% in normal saline subconjunctivally, once in 1 or 2 weeks; 1% of the same in normal saline, intravenously 3 to 20 c.c. once in 1 or 2 weeks are always useful. Nasal complications, as ulceration, scabbing, epistaxis, destruction of septum, nasal myiasis etc., are treated by ordinary antiseptic methods. Frequent irrigations with saline and painting the inside of the nose with Iodised Hydnocarpus oil has been found useful by me. Nerve complications, as neuritis, wasting of muscles, deformities, foot drop, wrist drop etc., all these effects are mostly due to the concerned nerves being compressed and constricted by the thickened capsule. Therefore, decapsulation of the nerve in such cases, if undertaken sufficiently early before destruction of nerve and after locating the particular area of compression, has been useful to a great extent. Abscess of the nerve requires opening and drainage.

Let me conclude this paper with a note regarding what is called the Leprolin test which has come into prominence recently. The preparation of Leprolin will be described later on. This solution is injected into the skin and not under the skin in 2 c.c. doses. The reaction should be read off at weekly intervals for 6 weeks after the inoculation. The criteria are;

1. size of the red flush round the area of inoculation;
2. feeling of a raised area on passing the finger;
3. button-like feeling of induration on picking up the affected skin between the finger and thumb;
4. desquamation, vesication and pustulation, in more severe cases. The reaction is definite by the 7th day, but may also be delayed till 21st day. It takes 1 to 2 weeks to reach its maximum. The positive reaction is shown by an inflamed button-like induration at the point of inoculation. It does not appear if the result is negative.

The specific nature of the test is shown not by positive results but by the negative results obtained in leprosy cases of the cutaneous type. Leprolin gives positive results varying in degree in non-leprosy cases; more strongly positive in neural cases and negative in skin cases. Negative results are more common in children especially very young ones who are non-leprosy subjects. This shows that the young have weak resistance for leprosy and that is why so many cases of early leprosy are seen in children. Since leprolin gives more strongly positive reactions in neural cases and since it is also fairly known that nerve cases have got more resistance than the skin cases, the leprolin reaction may be taken to indicate whether a certain person has a strong resistance to leprosy or not. So a strong reaction indicates favourable prognosis. Therefore this leprolin test as is seen from effects it produces on injection, is more useful in estimating the progress and also the prognosis of cases rather than in the diagnosis of Leprosy. It shows whether a leprosy person shows increased resistance to the infection or decreased resistance by doing periodical tests with leprolin.

The rationale of the reaction is explained thus: acid fast L.B. when injected in suspension in healthy people produce at the site of injection, a raised indurated swelling sometimes followed by vesication, pustulation and loss of tissue. The general constitutional symptoms are few.

(Continued at foot of next page)

SUPPURATIVE OTITIS MEDIA—ITS DIAGNOSIS AND COMPLICATIONS*

By DR. C. V. C. RAO, (Diplomas of Vienna)
Broadway, Madras

This article is written not that the diagnosis of *Otitis Media* is such a difficult thing but to impress on the readers the importance of an early diagnosis of the trouble and its complications, which helps a long way in the successful treatment of the trouble, in the alleviation of the patient's suffering to a great extent and in not a few cases, saving of a human life. For example, if an acute *Otitis Media* with a bulging drum is diagnosed before the drum is ruptured the severe pain attendant on this can be at once relieved by a timely incision of the drum (Paracentesis). Again if an acute case is not showing any signs of abatement even after 2 to 4 weeks of treatment, while the discharge is profuse and purulent, with pain and tenderness over mastoid region, with or without fever, it portends spread of infection to the antrum and perhaps mastoid. If at this stage, one can persuade the patient to agree to an operation, there is every chance of a successful operation stopping the discharge and preserving the hearing. If on the other hand, due to carelessness or for any other reason, one persists in conservative methods, there is every likelihood of the infection spreading to the dura or sinus, in which case an operation even may not save the patient's life. Chronic otorrhœa may exist for years without any serious trouble except impairment of hearing. But it is always bristling with dangerous possibilities. It is a septic focus in the middle ear and there is no knowing when

*The second part dealing with *Causes and Treatment* will appear in our next issue. Ed. I. M. J.

(Continued from previous page)

Method of preparation of Leprolin.—The skin of the thickened ear of a case of leprosy is cut after due sterilisation; in the same way some others are removed from other patients. They are boiled in water for 4 to 5 minutes; then cut into very small pieces, dried in a vacuum dessicator; the dried material is ground up into a fine powder. 0.4 grm. of the dry powder is ground up with 10 c.c. of saline; fluid suspension is pipetted off, solid residue is again ground up with saline and thus repeated 4 or 5 times. The whole suspension is made to 100 c.c. by adding saline and 5% carbolic solution. The dose for inoculation is 2 c.c. The injection should be made into the skin. There are two varieties of Leprolin: i. H. Leprolin, ii. S. Leprolin.

it may flare up and spread to the neighbouring parts. Hence it is very important to find the focus of infection and eradicate it. A careful examination of the ear, in most cases, will give a clue and also will enable us to form a rough idea of the possibilities of its complications. Hence it is very necessary that one must be on his guard against this silent enemy. If there is an acute exacerbation of chronic case of Otorrhœa, one can be pretty sure that it is going to lead to some complication. Hence one should make it a point to try to elicit from the patient whether it is the first attack or it is an acute exacerbation of a chronic trouble.

Otitis Media is either acute or chronic. Again *acute otitis media* is either purulent or non-purulent. Severe ear-ache, with constitutional disturbances, redness, swelling and bulging of the membrane, though common in both types of acute cases, will enable one to diagnose a purulent *otitis media*.

The chief diseases likely to be confused with are *Myringitis* and *Furunculosis* of the external canal. It is not very easy to distinguish an *acute Otitis Media* from *Myringitis*. The outlines of the drum are obscured in both cases but the hearing is impaired in the former while it is not so in the latter; the drum is sometimes bulging prominently in the former if there is much exudation. But in all these doubtful cases, an early paracentesis is the safe method instead of waiting for the diagnosis. *Furunculosis* of the external ear can easily simulate *acute Otitis Media*, especially when it is attended with swelling and œdema of the mastoid region. But in all cases of *Furuncles*, the swelling is limited to meatal wall external to Isthmus while in middle-ear suppuration the swelling extends beyond Isthmus and to the superio-posterior wall and roof of meatus. This is known as *sagging* of the superio-posterior wall which portends some complication in cases of *Otitis Media*. If one can manage to get a glimpse of the drum with a narrow speculum in *Furunculosis* one will find the drum normal with all its outlines visible. Hearing is not affected in *Furunculosis* while it is considerably affected in *Otitis Media*. While pulling of Auricle produces pain in *Furunculosis*, the pain is felt in *Otitis Media* only on pressure over mastoid. One should also bear in mind that *Furunculosis* and *Otitis Media* can exist together. In those cases it is necessary to treat them both, paying more attention to the primary one.

The diagnosis of *Otitis Media* is not really very difficult in adults but is invariably over-looked in children due to the inability

of the child to complain. In fact, so many deaths in children are due to complications arising out of undiagnosed *Otitis Media* which are put down as due to some fever of unknown cause. Hence it cannot be too strongly insisted upon that a routine examination of the ear should be made in all cases of fever in children. The Otoscope is as essential as stethoscope in pediatric practice. A child crying always especially at nights with hands scratching the ear, lying always on one side, frequent colds and fever, will naturally arouse the suspicion of the doctor towards the ear, but it is only the Otoscope that should finally settle the matter.

It is not possible for me here to give in detail the diagnosis of all the complications of *Otitis Media*. Hence I propose to mention only the various complications. The complications are due to the direct extension of the infection from the middle ear to (i) inner ear (ii) cranial contents (iii) soft parts of the neck (iv) Mastoid. They can broadly be divided into Extra-Cranial and Intra-Cranial.

Intra-cranial complications are (i) middle

fossa: brain abscess (ii) posterior fossa: cerebellar abscess (iii) meninges: meningitis.

Extra-cranial Complications are (i) Sinus Thrombosis, if lateral sinus is affected (ii) Mastoiditis and Mastoid abscess (iii) inner ear—Labyrinthitis (iv) a descending abscess or pterygomaxillary and pharyngeal abscesses when soft parts of neck are also affected (v) facial paresis and paralysis of the sixth nerve are also not infrequent (vi) locally in the ear, one may find granulations, polypus and cholesteatoma.

Thus we can see that grave complications can arise from that innocent looking and sometimes painless *Otitis Media*. It is unnecessary to emphasise on the gravity of the prognosis of these complications and the prognosis need not always be bad, if an early diagnosis is made and the necessary operative interference is resorted to. If every practitioner keeps in view the importance of early care of these cases and enlightens his patients on the possible dangers and risk to their lives, there is no doubt that the consequent mortality in our country can be reduced to a great extent.

Clinical Memoranda

A CARNEOUS MOLE ASSOCIATED WITH A LIVING CHILD

By DR. DEBENDRA NATH
BANERJEE B.A., L.M.F.

P.O. and Village Pantihal, District Howrah

A Mohammedan lady, aged 18 years, second para, was under my observation from the 5th month of her pregnancy. Previously she had given birth to a female child in her ninth month after prolonged labour and that child is still living. After her first child-birth she was suffering from menstrual irregularities. It was sometimes profuse, sometimes scanty, while at other times it was totally absent for two to three months. Her general health was not satisfactory.

During the period of her second pregnancy there was no discharge of any kind till its termination. From the fourth month she felt much abdominal discomfort, complained of pain in the loins and occasionally suffered from hiccough. Loss of appetite and sleeplessness were also complained of. She came under my observation during her fifth month of pregnancy. The result of my examination may be briefly mentioned as follows:

- (1) Respiration, 30 per minute.
- (2) Pulse 90 „
- (3) Urine, Normal and there was not even a trace of Albumin.
- (4) The uterus extended midway between umbilicus and Xyphoid process.
- (5) Fœtal heart sounds were not audible.
- (6) She was anæmic and œdema of the foot was marked.
- (7) The whole abdomen seemed to be tender.
- (8) She complained of difficult breathing due obviously to the unusually big uterus.
- (9) She also complained of frequency of micturition.

In the sixth month her complaints became more pronounced. In the beginning of her seventh month labour pains started when I was called in to confine her. The midwife reported that the Os was about 3 fingers dilated. At about 10 P.M., after 5 or 6 hours of onset of labour pains, she delivered a living male child. But the size of the uterus was not appreciably diminished and the mid-wife thought it was a case of twins. We waited for half an hour

but nothing came out. I applied a gentle fundal pressure when to our astonishment a big fleshy mass came down together with the placenta. Examining this fleshy mass, it was found to contain a few big Vesicles. It was obviously a Vesicular mole. It weighed 8 seers, 10 times the weight of the child. The child was not much deformed except that it was short in size. The patient had an uneventful recovery.

A CASE OF HERMAPHRODITE*

By DR. L. P. KAPOOR, KARNAL

On the 15th June 1935, a case, apparently a woman, was brought to me from Panipat for an operation which her relatives thought necessary for setting right her troubles. The patient had a moustache and a beard, just as big as one gets at about the age of 23 or 24.

The patient gave the following history and the relatives vouched that it was true. She had an attack of small-pox 6 or 7 years ago, before which period her menstruation was regular. After this attack of small-pox, her menstruation stopped and—in her own expres-

sive language—*found herself being converted into a man gradually*. Even after this alleged transformation she gets menstrual pains at regular intervals but there is no actual menstruation.

With the help of a midwife I examined her and found as follows:—

1. *Breasts*.—looked like those of an adult female with a small nipple having a pinkish areola.
2. *Face*.—appeared masculine, pitted with small-pox scars.
3. *Genitals*.—Clitoris was $1\frac{1}{2}$ inches long and about the thickness of a finger, simulating that of a male organ of generation. There was a prepuce too freely movable over the glans. The urethra was a female urethra. The Vagina was about 3" long. On examination with a speculum, Cervix could neither be seen nor felt. The Vagina appeared closed up. Uterus also was not palpable.

She is married and it is impossible to believe the story of her transformation after an attack of small-pox. Obviously *she* was a case of Hermaphrodite.

* Being a case shown at a clinical meeting of the Karnal Branch of the A.I.M.L.A.

Practical Suggestions and Reminders

(Continued from the previous issue)

16. *Treatment of Varicose Veins by Injection*.—The common site for Varicose Veins is of course the lower extremities. Either Quinine Hydrochloride or soda Salicylas is selected for this purpose. The formula for each is as follows.—

(1) Quinine Hydrochloride	grs. 60
Urethane	grs. 30
Distilled water	oz. 1
(2) Soda Salicylas	grs. 96
Distilled water	oz. 1

N.B.—Urethane is added to Quinine to increase its solubility in water.

Technic of injection

- (1) Apply a tourniquet or bandage proximal to the proposed site of injection.
- (2) Clean the area with Ether.
- (3) With a No. 17 needle attached to a 5 c.c. syringe containing the solution, puncture the vein and when you are sure that you are in the vein remove the tourniquet.
- (4) At first do not inject more than 1 c.c.

and the rate of injection should be about 1 c. c. in 30 seconds. Larger doses, ranging from 2 to 4 c.c. may subsequently be employed which will thrombose 5 to 6 inches of a vein.

- (5) Commence the treatment from the most distal part and give the subsequent injection proximal to its predecessor.
- (6) The puncture is dressed with collodion and then firmly bandaged to avoid leakage and peri-venous inflammation.
- (7) It is immaterial whether the patient is made to stand or to lie down: the position convenient to him may be selected.
- (8) It is safer and better to allow the patient to rest for half an hour after the injection.
- (9) The injection is done once a week till the whole set of veins is thrombosed.
- (10) Some patients show a remarkable tolerance to Soda Salicylas, in which case the strength may be increased to 30 to 40 % or quinine may be substituted.

A. V.

The Indian Medical Journal

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SEPTEMBER 1935

THE ALL-INDIA MEDICAL COUNCIL— A RETROSPECT

The *Twentieth* day of *September* is the saddest day in the annals of The Indian Medical Profession. It was on that day in the year 1933 that The All-India Medical Council Act was passed by the Indian Legislature against the unanimous opposition of the profession. Not that it was or is against the formation of an All-India Medical Council but that the provisions of the Act were so grossly unfair, so miserably narrow in their application and so wanting in perspective and proportion as one may justifiably say that the Act has sold our rights for a mess of pottage. This Act has not given us an Indian Medical Council but has installed the General Medical Council of Great Britain in an Indian Garb and in Indian soil.

The profession will ever refuse to take this Act as a settled fact. Many settled facts of history have been unsettled by the kindly hand of Time. The Act carries in its own bosom the seeds of retribution. Once again, the Indian Medical men will meet in many gatherings in the nooks and corners of India on the 20th of this month to protest against this Act and continue their annual protest till this settled fact is unsettled and its provisions are so altered as to deserve and be entitled for the appellation which they now illegitimately bear.

Illegitimate it is, because, if the Act is called The All-India Medical Council Act why are the 30,000 and odd medical licentiates excluded from its ambit, scope and consideration? They form the largest section of the Indian Medical profession. They bear the brunt of medical administration. They are the first to volunteer in times of war. They are the men who, unmindful of personal danger, work during epidemics of which our country is ever full. They are the persons who are responsible for much of the efficiency in hospital work. Apart from emergencies of war and peace, apart from

their successful performance of ordinary hospital duties they are as much noted for high class medical and surgical work as any of their colleagues in India. It is not in a spirit of bombast that we write these words. The words are ours but the ideas underlying them belong solely to the high officers of state, medical and lay, whom we can quote chapter and verse in support of our statements. Yet, it is the self-same officers who had thrown us aside as despicable in talents, as wanting in education, and unworthy to be associated with the rest of the Indian Medical Fraternity. Who wanted them to praise us before and kick us afterwards out of existence when the critical time arrived. *This was the cruellest cut of all.*

But we are not perturbed. The Medical Licentiates have weathered many a storm and they shall successfully weather this storm of an All-India Medical Council also. They are sportsmen in the real sense of the word. They bear no ill will but shall fight for their rights and privileges by methods absolutely constitutional till they wring these out from unwilling hands.

Even before the G. M. C. or the Government of India thought of this necessity for an All-India Medical Council, the very idea of such a council emanated from men who are now banned from this new-fangled manifestation. It was Dr. Lohakare, in 1926, who moved a bill for an All-India Medical Council in the Legislative Assembly. It met with a strong opposition from the Government and before it took any definite parliamentary shape its sponsor died. Then, Dr. U. Rama Rao stepped into the breach. His first bill met with strong opposition from the Government and not desirous to jeopardize it by a possible rejection in *to-to* he changed it in such a manner as to soften the official opposition. The profession fully endorsed his Bill and even the *Indian Medical Gazette* warmly commended it. The usual tactics were played. It was circulated for public opinion. By

which time, there was reshuffling of politics in the country and Dr. U. Rama Rao resigned from the Council of State in obedience to the mandate of his party. From 1926 to 1928 none seriously talked about the formation of an All-India Medical Council. Is it not a strange irony of fate that the very Licentiatees who were responsible for the original idea of an All-India Medical Council should now suffer the ban?

What has transpired between the government of India and the G.M.C. before the inauguration of the first draft Bill "to establish a Medical Council in India and to provide for the maintenance of a 'British Indian Medical Register'" cannot possibly be chronicled, as these transactions were not placed before the Assembly in spite of the repeated requests from some of its members. But one can say in a general way that the government was much embarrassed by the *Obiter Dicta* of the G.M.C. on one side and a strong public opinion in this country on the other. There are also reasonable grounds to infer that the G.M.C. was much alarmed at the possible passage of Dr. U. Rama Rao's Bill into an Act which virtually would have meant the loss of its vested interests and supremacy.

We are not drawing these inferences from our imagination. Since 1892 the G.M.C. was recognising the Indian Medical Degrees as entitling their holders to have their names in the British Medical Register. The great War of 1914 came in and unsettled the political and economic conditions of almost all the nations of the world. When it ended in 1918 it left a legacy of unemployment. Some of our medical men tried to settle down in *practice* in Great Britain—and with much success. Quite a number of our men came out successfully in the competitive examination for the I.M.S. This meant a corresponding loss to our British colleague. They can neither be banished from England nor banned from sitting for the competitive examinations. There were the great and glorious proclamations of Queen Victoria guarding us from profane molestations and after the War India became the original member of the League of Nations.

The G. M. C. had therefore to find other ways and means to satisfy its hunger for supremacy over Indian Medical education and to prevent the increasing encroachments into the Indian Medical Service by Indians. The only way out of this tangle was to declare the Indian Medical Degrees as below the *necessary standard of sufficiency*. How it has success-

fully effected its purpose must certainly form one of the sorriest chapters in its history.

It was only after the year 1920 the G. M. C. became suddenly alive to the *discrepancy between regulation and practice in the teaching of Midwifery* at some of the Indian Universities and so pervaded with a sense of super-responsibility that it deputed Sir Norman Walker twice, once in 1922 and again in 1926 to examine our university standards. After him Sir Richard Needham was appointed as an *Inspector to report on the Examinations*. On the basis of such reports the G.M.C. continued its recognition till February 1930.

But the G. M. C. felt the times critical. It was during this period that the Montague—Chelmsford reforms were introduced and the Indianisation of the service became the accepted policy of the Government of India. It was during this period that the Indians appeared for the I.M.S. commission in greater numbers. It was during this period that two Medical Licentiatees had the impudence to move a bill for an All-India Medical Council in the Legislative Assembly and the Council of State. All these were too much for the sun-dried bureaucrats of the G. M. C. The Vested interests were thus in danger of being lost. The last constitutional weapon which it had was hurled upon the Indian Medical profession in the year 1930 and it was hurled in such a manner that it alienated the sympathy, the respect and the good-will of the Indian Medical Men towards the G.M.C. for good.

The periodical inspection of our Examination Standards continued for some years till 1930 and on the basis of the reports of the Inspectors the recognition was continued. Our universities submitted to this humiliating condition of getting their examinations supervised by the omniscient representative of the G.M.C. Of what use such an inspection was to that Council it is difficult to say except to impose on us its aggressive sense of superiority and to make us feel in an ever increasing degree the indignity and insult of such an imposition over us. As Khan Bahadur Dr. E. S. Barucha, in his address at The Indian Medical Conference 1931, said:

"I was myself on one occasion subjected to one of these periodic supervisions as an Examiner of the Bombay University. I have never been able to make out what good it did and how it was possible for the supervisor to form an opinion of the standard by merely sitting with the examiner at the *viva voce* for a period hardly exceeding five to ten minutes."

Sir Austosh Mukharji found it impossible to tolerate the yearly perpetuation of such an insult and refused to allow the august representative of the G.M.C. to examine the medical standards of the Calcutta University.

This broke the straw on the camel's back. The vindication of self respect by the premier and progressive University of India was galling to the vested interests of the G.M.C. And it hurled the first open insult of de-recognising the medical degrees of that University.

This was as much a shock to the Government of India as it was to the medical profession and to the public of this country. It now became imperative that the Government of India should take some action in this matter to ease the situation.

The dead-lock created by the G.M.C. meant two things.

- (1) If the recognition was refused the Indian Medical men in Great Britain could not continue their practice.
- (2) Neither could they appear for the I.M.S. commission, as it required that the Indian Medical Qualification should be registrable in the British Medical Register for eligibility.

The correspondence between our Government and the G.M.C. had not seen the light of day. Judged by sequence of events, one thing was obvious that the former was fighting a losing battle. It could not have been otherwise. It behaved as if it was a subordinate body to the G.M.C.

The G.M.C. gave but two alternatives: either to have an Inspector of examinations appointed by itself but to be paid for by the Government of India to the tune of Rs. 39,000 per annum or to have an All-India Medical Council whose executive shall be responsible for the maintenance of standards as required by the yard-stick of the G.M.C. These, in its opinion, constituted the *necessary guarantee of sufficiency* of the Indian Medical standards.

By virtue of the 1920 reforms, the elected provincial ministers were in charge of medical administration. These ministers had therefore to be consulted before the central government could take any definite action.

In the year 1928, the government published its first draft Bill "to establish a Medical Council in India and to provide for the maintenance of a British Medical Register." This was circulated for opinion among the provincial Governments only, obviously to afford a basis for discussion.

In July 1929, the provincial ministers were called to confer at Simla and to decide whether to have an All-India Medical Council or to have an Inspector of Examinations. By a strange process of reasoning they decided in favour of the latter. What we wrote at that time in these columns (I.M.J. Vol. XXIII No. XI, p. 456) may now be quoted, as it is true even to-day:

"What are the reasons which prompted the Ministers to reject the proposal of an All India Medical council? Their powers will be curtailed; puerile reason! If they are so fond of their powers what have they done in their province to better the condition of the Indian Medical Graduates and Licentiatees? Had they fought and succeeded against the monopoly of the I.M.S. officers in taking not only the administrative headship but in practically usurping places and researches to which even the best of the Indian graduates cannot be admitted? Could they point to their credit one Indian Surgeon-General? Are not the Superintendships of the big general hospitals, Maternity and ophthalmic hospitals, the Directorships of research laboratories still reserved for the I.M.S. only? And still the Ministers feel powerful with a heavy portfolio!"

This decision of the Ministers betrayed their subservience to their medical advisers—the Surgeons-General of the provinces—and their indifference to the opinion of the Indian Medical profession. Under the umbrage of the opinion of the elected provincial ministers, the Government of India was emboldened to place the question of appointment of an Inspector of examinations for discussion in and decision of the then Legislative Assembly. The Finance member brought in a motion for a grant of Rs 39,000 for the temporary appointment of an I.M.S. officer as an Inspector of Medical education. Sir Fazali Hussain, to whose indecent haste and imperfect understanding of the temper of the Indian Medical profession we owe the present All India Medical Council Act, warned the House that if the appointment was not accepted by the legislature a serious constitutional issue would arise. His contention was, probably, that the decision of the elected provincial ministers was binding on the central government and it was unconstitutional to go against it. This was nothing short of a bullying attitude. The then president of the assembly twitted him out. The legislature voted against this motion. Pandit Malaviya said truly on this occasion:—

"I would rather close the university than submit to this insult. We would welcome one who came at our invitation. But an outside authority should not be forced on us. I do not want to have a place in an

university during my life time where such an inspection is forced on us."

Thus the Government of India was between the Devil and the Deep sea. It could not satisfactorily serve two masters. Its trouble was due to the tacit acceptance of the G. M. C. as the final and supreme authority over Indian Medical Education. Neither could it summarily ignore public opinion in this country.

Once again the government tried to find a way out of this tangle. It suggested the appointment of an All-India Medical Board, specialists in their own subjects, viz., medicine, surgery and midwifery respectively for the purpose of carrying out the inspection and reporting on the standard of medical education and examinations till a bill for establishing an Indian Medical Council was taken on hand. This was summarily rejected by the G.M.C. as not affording *the necessary guarantee of sufficiency*. Thus the G.M.C. had added insult to injury. That this was a most reasonable proposal of our government none but the prejudiced could deny. Yet this was rejected. If the G.M.C.'s purpose was really the improvement of the standards of medical education in our country it could not have failed to find an honourable solution without offending our sense of self-respect. Obviously, it wanted to be a dictator of the Indian Medical profession—and it had succeeded for the time being. It was said by a correspondent in the *B.M.J.* (1930) that "it might be possible that the extreme views were influenced by political and racial feelings as well as lack of acquaintance with facts." This was more applicable to the correspondent himself than to us. If he had been wearing the shoes we wear he would have known where it pinched.

The next epochal event was the conference of the Medical Faculties of Indian Universities during May 1930 at Bombay. They realised their position, discussed and decided on an agreed programme for the betterment of medical education in this country.

The Government of India was forced by circumstances to convene a second conference of ministers at Simla in June 1930. To this conference was invited the representatives of the Medical Faculties for the first time. The Independent Medical Profession still remained ignored and uninvited. The resolutions of this conference might be said to have shown some improvements on those arrived at previously. But they were far from satisfactory.

These conferences and confabulations resulted in the second Draft Bill in 1931. This was circulated for public opinion for the first time. The covering letter to this draft gave a succinct summary of events and difficulties which the Government of India had to face and in the light of which it had to redraft the bill of 1928. The following extracts from this letter will be found interesting:

The views which the Conference expressed upon the subject of establishing an All-India Medical Council are contained in resolutions passed at the meeting. The Conference unanimously resolved that the establishment of an All-India Medical Council is essential and acceptable in principle, and that a Bill should be drafted and legislation enacted to bring the Council into being as soon as possible. The Government of India thinks that the views which the Conference expressed upon the subject will command general approval, and that the establishment of the Council is the best and most practical way of affording relief to the Indian medical students who have suffered from the General Medical Council's decision. They have, therefore, gladly taken the first step towards giving effect to the Conference's view by drafting a Bill for circulation with a view to eliciting opinion. It will be observed that the Bill is not an amended copy of the previous bill but is a completely fresh piece of work, conceived on simpler and more suitable lines than the previous bill, and in general accordance with the views expressed at the Conference.

If clause 18 is adopted, licentiates will not be eligible for registration with the Council at the time that it comes into being. Nothing in the Bill specifically excludes licentiates permanently, but it does not appear likely that the Council would grant them recognition if it were applied for under clause 18 (2). The question of bringing licentiates within the scope of the All India Council has been raised; the opinions then expressed were, with very few exceptions, in favour of confining the Council to dealing with graduate qualifications. The Conference of June 1930, was also of opinion that the Council should, at any rate at the start deal only with such qualifications, and the Government of India think that in the present state of medical education in the country there is much to be said for that view. Organisations of licentiates have, however, petitioned the Government of India that they should be brought within the purview of the Council from the start.

So it was, that, in the first schedule of "recognised medical qualifications granted by medical institutions in British India" the diplomas granted by the Examining Boards and State Medical Faculties—institutions which are entirely run by the provincial Governments—and the medical degrees of the universities of Patna, Rangoon and Andhra suffered exclusion. It amounted to the exclusion of about

80% of medical men who were recognised by the British Indian Government as legally qualified and registrable in the provincial Medical registers already existing by virtue of provincial legislative acts.

This exclusion could in no sense be compromised with the preamble to the second Draft bill which ran as follows:

It is expedient to establish a Medical Council in India and to provide for the maintenance of a Register of qualified practitioners of modern scientific medicine in order to establish a uniform minimum standard of qualifications in medicine for all provinces such that persons attaining thereto shall be acceptable as medical practitioners throughout British India.

The opinions on this Draft Bill might be classified thus:

- (a) Those of the Provincial Governments.
- (b) " " Medical Councils.
- (c) " " Various Medical Associations and prominent medical men of India.
- (d) " " Public including the members of the Legislature.

The opinions of the provincial Governments were foregone conclusions. The differences, if any, were on minor points of detail rather than on the essentials of the Bill. The majority were against the inclusion of the Medical Licentiates. The opinions of provincial governments meant virtually the opinions of the Surgeons-General who could not naturally run counter to the wishes of the G. M. C.

The provincial medical Councils *dittoed*. The majority were against the inclusion of the Medical Licentiates with two honourable exceptions.

But the medical associations of this country entirely rejected this Bill. They expressed vehemently against the unjust exclusion of the Licentiates, the appointment of an official president, the one sided reciprocity, the meagre representation of the Independent Medical profession, the invidious exclusion of some of the universities and above all the undeserving and undignified subservience of the central government to the G. M. C.

For the first time in its history the Indian Medical profession became keenly alive to its own pitiable predicament. It is not an exaggeration to say that, but for the series of open insults by the G.M.C. it might have still continued its *Rip Van Winkle* existence. So it was, that Dr. Jivraj Mehta characterised these actions of the G. M. C. as a blessing *not in disguise but without disguise*. It was

wallowing before in inter-professional jealousies. It was content with crumbs of office here and there. Till then, it was unconscious of the truth that if the Medical graduates and Licentiates run counter to each other's purpose decay was inevitable. We write this, not certainly in a petty spirit of retaliation but in full sympathy with the graduates. Up to this point of our narrative the Licentiates had been fighting a lonely battle unaided by the medical graduates to assert their rights as fully qualified and registrable medical men. That the G.M.C. had not recognised the Licentiates even before this debacle was well known to the Medical Graduates. That the Provincial Medical Councils had a peculiar method of classifying the registrable medical men was also equally known. That the Government had been keeping them down from the brighter side of medical service was also known. That the Licentiates had been claiming equality of status and opportunities with the rest of the profession, that they had been insisting on better educational standards and increase of the course of training from 4 to 5 years are all facts beyond dispute. Yet, not many of the graduates, either from their official position or from their seats in the provincial Medical Councils ever seriously endeavoured to co-operate with the Licentiates in their attempts to unify the profession into a coherent and consistent unit. When the British I. M. S. officers were praising them, the graduates were laughing in their sleeves. They were not elated by the former nor depressed by the latter, but continued to fight, and God willing, shall continue to fight till their goal is reached. We assert with a full sense of responsibility that if only the Medical Graduates had rallied round our banner quarter of a century ago, if they had actively espoused our cause—which is after all common to both—with the same warmth and zeal as they rightly opposed and resented the unwarranted insults of a Medical Council, thousands of miles away, the history of the Indian Medical Profession would have been written differently and we would have been spared the ignominious treatment which that Council had rendered to us.

It required the electric shock of insults from the G. M. C. to our profession to have self realisation. Now it is no more divided. The unity between the medical Graduates and the Licentiates has become a settled fact.

There is now greater appreciation of each other's hopes and difficulties than before.

While such were the reactions within the the profession due to the Draft Bill and the events that led to it, the public at large, viewed it with much disgust and resentment.

The Government of India was in full possession of these opinions. It took the next step of placing the Bill before the Assembly in 1933. Before it was referred to the Select Committee, most of the elected and some of the nominated members subjected the bill to a strong criticism—and the strongest criticism was about the exclusion of the Licentiates and the *Amour-propre* between the Government and the G.M.C. Mr. Bajpai with his limpid eloquence tried in vain to cajole the House that the origin of the Bill was not due to the influence brought to bear by the G.M.C. Sir Fazali Hussain trumpeted that this Bill will bring to the profession *honour abroad and efficiency at home*. He had many good words to say about the Licentiates. *But his sweet words buttered no parsnips*. The Government admitted the competency of the Licentiates but denied the logical privilege of inclusion in the Indian Medical Council. Dewan Bahadur A. Ramaswamy Mudaliar, whose speech on this occasion was a classic contribution on the subject under discussion, attacked the Government with his relentless logic and put it under a quandry on many an occasion. He questioned.

"Why did the Government of India send the whole bill again with connected papers to the G.M.C. for their opinion. Such a procedure was unwarranted and showed servility to the G.M.C."

Again in respect of the farcical show of reciprocity which the Bill contemplated he said:

"Why, when in the bill all qualifications of British degrees were recognised the same reciprocity should not be given to Indian Council The reciprocity you talk of is a delusion and a snare. By this bill you give legislative sanction to the principle that anybody who possesses any British Medical qualification or diploma granted by the General Medical Council and that any new qualification that they may suggest for the future can become members. But on the other side our degrees are not recognised and let the Medical Council be first established and then would be the time for the new Council to see and secure recognition."

Nor the limited franchise and the official preponderance—the virtual results of this Bill—were left without strong criticism. The President was to be nominated by the Governor-General-in-Council from among the members of the I.M.C. The alternative solution in

respect of nomination was either a permanent nomination or a nomination for the first period of 4 years, after which period it will be on an elective basis. That was not so when the G.M.C. of Great Britain was first constituted by an Act of Parliament—it had an elected President. Out of the 28 members of this proposed Council, 12 are to be from the I.M.S., 8 are to be elected by the Universities all of whom will be gazetted officers of the government as a result of the imposition of teaching qualification; the rest of the 8 seats are confined to the registered graduates of the Provincial Medical Councils. The last is supposed to represent the Independent Medical Profession.

The temper of the legislature was very high. There was the imminent danger of the bill falling through. Realising this, Sir Fazali Hussain gave his ultimatum which in substance meant: *either have this Bill with all its imperfections or you will have no medical Council at all. The result would be disastrous to the Indian Medical Men practising abroad and to those who were to appear for the I.M.S. Commission*. This produced a flutter in the Assembly and the Members had now to think twice before rejecting this Bill, as such a rejection would mean ruin to those Indian Medical Men practising abroad and to the future aspirants to the I.M.S. Sir Fazali Hussain's ruse had the desired effect. The Bill was referred to a Select Committee.

Reference to a Select Committee means in parliamentary parlance acceptance of the principle and it cannot alter the fundamentals of the Bill. We consider this acceptance for reference to the Select Committee by the legislature, perhaps in an unguarded moment, as an act of weakness of spirit. It ought to have rejected the Bill and dared the consequences. The loss of career for a few Indians is too big a price to pay for the spurious advantages which this new Bill offered—in fact the advantages were all on the side of the G.M.C. rather than on our side. A few members asked whether, at the Select Committee, the question of including the Licentiates could be raised. The mover replied in the negative.

The Select Committee was constituted of 17 members. Much of its deliberations were not known to the Public. But from the report of the Select Committee, one thing was obvious that most of its members must have felt that the exclusion of the Licentiates meant that the preamble and the objects of the Bill had to be

modified, as without them neither the bill could bear justifiably the name of an All-India Medical Council nor could a satisfactory and comprehensive register of Indian qualified Medical Men be maintained. Here was the unconscious effect of public opinion which by weight of reason and force of truth compelled the select Committee to find a way out of this gripping sense of realities. For the first time in these series of sensational events that preceded the final enactment of the bill the inevitable and inescapable realisation dawned that without the Medical Licentiates no amount of convenience or sophistry could justify the preamble:

"Whereas it is expedient to establish a Medical Council in India and to provide for the maintenance of a Register of qualified Practitioners of modern scientific medicine in order to establish a uniform minimum standard of qualifications in Medicine for all provinces such that persons attaining there-to shall be acceptable as medical practitioners throughout British India. . . ."

But the night-mare of the G.M.C. seemed to have haunted this Committee. It had decided to exclude the Licentiates. In the prefatory remarks on the Bill, it wrote:

Most of the opposition to this Bill has arisen from the proposal that the British Indian Medical Register should be confined to graduates in medicine, to the exclusion of the large and important class of the licentiates. We considered whether the Register should be enlarged so as to include the licentiates and whether it should be divided into two parts, one for graduates and one for licentiates; but we are of opinion that this, apart from other objections, would entail a troublesome and expensive duplication of Provincial Medical Registers and unnecessary and invidious double appeals in disciplinary matters, and that the benefits to be gained would be negligible. We have, therefore, decided to recommend a different course and we propose that the All-India Register should be dropped entirely. We have accordingly deleted from the Bill all matters relating to the British Indian Medical Register. The scope of the bill is now confined to the establishment of an Indian Medical Council, whose functions shall be, broadly speaking, two only, namely,

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

Thus the so called All-India Medical Council became a coterie of men in control of the "higher medical qualifications" in this country. This Council cannot by any stretch of imagination be called by that name which it

apparently bears. We will refer to this presently.

The changes introduced by the Select Committee are no doubt an improvement. But they are far from satisfactory. The nomination of the President by the Governor-General-in-Council is now limited by the first four years. The permanent reciprocity is now replaced by *transitory arrangements for modifying the second schedule*. But the Qualifications contained there-in will be recognised for the first four years after the commencement of the Act during which period or after it the All-India Medical Council will enter into negotiations with the authorities of other countries concerned with a view to the framing of schemes of reciprocity. The confirmation or rejection of such a reciprocity, however, has to get the assent of The Viceroy whose decision is final. As regards the exclusion of the medical degrees of the Universities of Patna, Rangoon and Andhra the committee felt obviously awkward and had to write apologetically thus:—

"Their omission from the Schedule in no sense reflects on the present standards of their qualifications, and by the sub-section (4) we intend to impress on the Council that the removal of this anomaly must be placed by them amongst their most urgent duties. We trust that this provision will secure the inclusion of all suitable qualifications granted by these Universities before any one can be prejudiced in any practical way."

The committee had not made any alteration regarding the nominees of the Local Government and of the Governor-General-in-Council. As in the draft Bill, there will be one member from each governor's Province and three nominated by the Governor-General-in-Council. But it had improved *slightly* the electoral franchise. Instead of one from a governor's Province each British Indian university could send one representative; but the qualification of such a representative should be that he had at least 4 years experience as a Professor, Assistant Professor, Lecturer or Reader in a Medical College or School. Thus there would be no difference between the nominees and those elected by the university as the latter are invariably government servants. Then, each Provincial Medical Council will send one representative from its Graduate section. *These are the real elected elements of the council.*

While we are thankful even for these small changes made by the Select Committee, perhaps in deference to public opinion, they are not such as to restore the lost confidence of the

profession in the intentions of the Government. The alterations are not fundamental, as it ought to have been. The concluding words of the Select Committee bear out our statement.

We think that the Bill has not been so altered as to require re-publication, and we recommend that it be passed as now amended.

As amended, the bill became an Act on 20th September 1933 and the assent of the Governor-General was given on 23rd September 1933. The profession is thus shackled for the time being by the All-India Medical Council Act.

We do not hesitate to reiterate that the Act can in any sense be called The All-India Medical Council Act. Though we are not prepared to call it a "bogus" as Dr. T. S. S. Rajan characterises it elsewhere in this *Issue* we entirely agree with him when he calls it a "Misnomer." It is the result of adroit and audacious trespass of the G. M. C. into our precinct. It is but a costlier substitute to The Inspector of Examinations. It is not the result of our willing endeavour or acceptance.

It is a misnomer in name and purpose because the Act does not subserve the following four-fold functions of a real Medical Council.

- (1) The maintenance of a Register of Qualified persons.
- (2) Disciplinary Control.
- (3) Securing of uniform minimum standard of medical Qualification.
- (4) Arrangements for reciprocity of foreign degrees

The first three have been given up entirely and the last has been compromised. The *British Indian Medical Register* has become a dream, the disciplinary control has been relegated to the Provincial Medical Councils, the uniform minimum standard of Medical Qualifications has been given up in favour of uniform minimum standard of higher qualifications in Medicine and the British Medical Qualifications have been accepted tacitly, although for a term of 4 years only.

We are reluctant to advert again to the exclusion of the Medical Licentiates. They have ever been a red-rag to the G. M. C. The authors of the Bill and the members of the select committee had to sacrifice all the essentials of a medical council at the altar of this exclusion. Include, they cannot, because of

the Sword of Damocles: exclude, they did, but there is no Medical Council except in name.

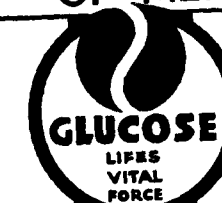
Almost all kinds of sophistical arguments had been advanced in favour of this exclusion. Sir Fazali Hussain had the unkindness to say that the Graduates did not like the inclusion of the Licentiates and that the Graduate members of the Indian Medical Association were overpowered by the numerically strong Licentiates. The I. M. A. protested immediately. There was also the alleged stigma of insufficient qualifications. Few attempted to question how this insufficiency arose when the medical schools are under the control and guidance of the Government and under the efficient lead of the I.M.S. officers who possess the British Standards. Fewer still questioned why, if the Medical Licentiates were insufficiently qualified, the Government has been employing them in its Service and the Provincial Medical Councils registering them as legally qualified to practice. To such questions there could have been no satisfactory answer as the record of service and attainments was well-known to the Government and to the rest of the profession. The only criterion on which they had been rejected was the capricious opinion of the General Medical Council.

But it has conveniently forgotten its own history. When it was first constituted by an Act of Parliament it included all those practising the then scientific medicine, whatever might have been their qualifications and set a reasonable time limit to such defective institutions whose degrees and diplomas were for a time only recognised. That was a reasonable step and the G. M. C. has not suffered up till now as a result of this preliminary inclusion. Its Quality of Mercy has obviously been much strained by the lapse of time and it is not prepared to be merciful to the infant All-India Medical Council. The Licentiates are hundred times better than the Barber Surgeons of the Victorian Age who were taken into the G.M.C. when it came into existence.

There can be no All-India Medical Council in the real sense of the term without the Licentiates. The present one is a mockery and a snare. Its abnormal birth and atrophied body are evidences of disease rather than of health.

The Medical Licentiates have practically exhausted all the methods of constitutional representation of this, their sorest grievance.

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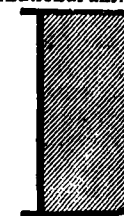
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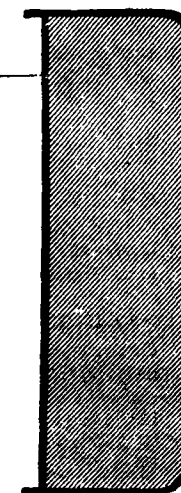
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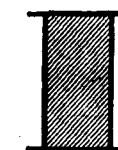
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We appeal once again to the Viceroy to set right this glaring injustice which the Indian Medical Council Act of 1933 has done to the Licentiates. They have a glorious record of loyalty and service to the State. It is depressing to think that this *state of untouchability*

has been the recompense to services rendered. We also appeal to the members of the Legislative Assembly, as we did before, to amend this Act in such a manner as to make it acceptable to all really concerned.

Col. H. W. Acton

As we go to the press, we learn, to our great sorrow, the death of Col. H. W. Acton, The Director of the Calcutta School of Tropical Medicine at London on August 26th, 1935.

Born in 1883, educated at Bedford, he received his medical training at Middlesex Hospital and entered the Indian Medical Service in 1907.

He succeeded W. F. Harvey, I.M.S., as the Director of the Pasteur Institute of India at Kasauli in 1912; was appointed as Professor of Pathology, Bacteriology and Helminthology at the Calcutta



School of Tropical Medicine in 1921; and became the Director of that School in 1928. He fell ill in 1933 and proceeded on leave to England. Up till the summer of 1934 it was hoped that he would return to

the field of his former activities. But the inscrutable fate has decreed it otherwise.

His was a most notable career of service and achievements and lent lustre and brilliance to the medical profession in this country. His contributions to Tropical Medicine are well known and have laid the profession under a deep debt of gratitude.

We shall give a brief biographical review of his life and works in our next issue.

Notes and News

Amendments to U. P. Poisons Act—A protest

A meeting of the all medicos organized by Dr. G. K. Kulkarni, Provincial Secretary of the All-India Medical Licentiates' Association was held under the joint auspices of the All-India Medical Licentiates' Association and C.P. and Berar Medical Association on Sunday, the 7th July 1935 at 8-30 p.m. in the Rajaram Library Hall to protest against U.P. Government's order which requires the medicos to maintain register of poisonous drugs and to keep the same open for inspection of an excise inspector at any hour of the day and night, Dr. N. B. Khare, B.A., M.D., M.L.A. presiding.

The following resolution was unanimously passed:

"This meeting of the Medical Practitioners of Nagpur convened under the joint auspices of the All-India Medical Licentiates' Association and C.P. and Berar Medical Association after considering the new poison-rules promulgated by the U.P. Government and published in the U.P. Gazette of 18th May 1935 records its opinion that these rules are a direct slur, disgrace and insult to the qualified Practitioners and an encroachment upon their rights and therefore registers its emphatic protest against them."—*From our special correspondent.*

Heavy Toll of Cholera in the Bombay Presidency

There were 1054 attacks and 444 deaths for the week ending 3rd August. It is on the rise in Bijapur, Nasik and Sholapur districts. The usual preventive measures are being vigorously adopted by the District Boards and Public Health Department. There were 8 attacks 2 deaths from Cerebro-Spinal fever. Poona, Larkana and Bombay contributed one each. (*From our special correspondent.*)

The National Medical College Old Boys' Association, Poona

We have before us the Annual report of the above association for the year 1934-35 and it is a short document of extreme interest. Though the association was started only 4 years ago, its important and all-round activities have attracted much local attention. Its Secretary, in the course of the annual report, says:

"This Association is a great asset to the city of Poona where other Medical Associations and Societies are

leading a precarious existence. During a short space of 4 years it has earned a name for itself and lived up to the traditions set before it at its inception. Its aim is to create unity in the Medical profession and to do nothing which will be prejudicial to it in general. The credit of restarting the Poona Medical Licentiates' Association goes to us. It has successfully organised annual trips as a sort of relaxation to the over-worked Medical Men. These trips are a great success from all points of view. During the year under report 8 monthly meetings were held and were well attended. The most important work of the year is the starting of a Clinical Laboratory on behalf of our association. Dr. Vaidya has kindly donated Rs. 51/- in memory of his beloved wife, late Mrs. Kamalabai Vaidya, for this purpose. The Clinical Laboratory is entrusted to the care of Drs. Karnik, Sathaye and Kale who are straining every nerve to make it a success."

Lt. Col. A. D. Stewart, C.I.E., I.M.S. Retires

With the retirement this month of Lt. Col. Stewart, the All-India Institute of Hygiene loses its first Director and the Calcutta school of Tropical Medicine one of the most pains-taking and brilliant of its professorial staff. After retirement, he takes up the appointment of superintendent of the Royal Infirmary at Edinburgh. It was from the university of that City that he graduated in the year 1906 and entered the Indian Medical Service in the same year. Till his reversion to civil employment in the year 1919, he had a distinguished military service in various war zones, Egypt, Suez Canal area, Gallipoli, Mesopotamia, Etc. As the Medical Officer of Health, New Delhi, between the years 1919 to 1921, he contributed much to the sanitary side of the Lay-out of The Imperial Capital. As Director of Public Health, Bengal, (1921), Professor of Hygiene in the Calcutta School of Tropical Medicine and Principal of the Calcutta Medical College (1926-1928), he had a strenuous time and served with brilliance and success. But of all his contributions to India, the successful working of The All-India Institute of Hygiene and Public Health will stand supreme. His first Annual Report of this Institute, which we have reviewed elsewhere in this Issue, is a document of extreme interest and reveals the true man. He has the inspiration of a genius and the perseverance of a practical worker.

We wish him all happiness and a further career of usefulness in the Royal Infirmary of his own city.

Special Article

THE ALL-INDIA MEDICAL COUNCIL*

By DR. T. S. S. RAJAN, M.R.C.S., L.R.C.P.,
Member, Legislative Assembly

The All-India Medical Council is a misnomer. Like many other All-India official bodies in our country it does not convey the true meaning of the name it bears. For instance, the Indian Medical Service is neither wholly or predominately Indian in its composition nor wholly medical in its functioning. The Indian Civil Service is neither wholly or predominately Indian in its cadre nor is it very famous for its civility. The Indian Police Service is no better than the rest of them. It is only British Police overlordship in India.

If a headless trunk or an amputated leg or arm be called and could in reality represent all the human body, then, this Medical Council could style itself as the All-India Medical Council. It is All-India in its constitution in the sense that it has medical men from the various provinces of India and is supposed to be under the direction and control of the central Government, working under a legal Statute called the All-India Medical Council Act. The provincial Medical Councils have come into existence in the various provinces long long ago under the sanction of local Legislatures and Governments. But both these Councils differ in their function in more ways than one. The Provincial Medical Council differs from the All-India Medical Council both in its constitution as well as in its function. The Provincial Medical Council maintains a register of Allopathic practitioners of all grades and qualifications. It runs elections for its Council as and when occasion arises. But as a registered medical man I am not aware of what it has done so far for the medical profession or for the medical science in this country. Years ago the Madras Medical Council made itself notorious by launching a charge of professional misconduct against the late Dr. M. Krishnaswamy Iyer, M.D., for being on the Board of an Ayurvedic College and taking active part in the encouragement of Ayurveda. The late Dr. T. M. Nair of Madras sponsored the Bill in the local Legislature and brought the Council into existence. If I am not mistaken, the Madras Medical Council was the first of its kind in India. Since then other provinces have followed suit.

* Specially contributed to The Indian Medical Journal.

But the All-India Medical Council has a different history of origin. A stream of medical students began to flow from India into British Universities and hospitals for the sake of getting English qualifications and get a chance for competing in the Indian Medical Service examinations conducted in England. Besides, the preference given to English qualifications even in the provincial services was an incentive to our men to go to the British Universities. With the growth and development of education in India, Universities multiplied and demanded recognition of their courses of study and curricula at the hands of the General Medical Council of Great Britain. The General Medical Council in turn assumed the role of a superior organisation and arrogated to itself the right to appoint an Inspector of its own; in fact their Agent came to India to inspect and report on the nature of the medical education given in Indian Universities. The Calcutta University stoutly refused to put up with the humiliation of an inspection by the General Medical Council with the result that the General Medical Council refused to recognise Indian University medical degrees, particularly of Calcutta and some other provinces.

There was a furious agitation over this question both in the press and on the platform for over two or three years and self-respecting people of our country demanded retaliatory measures against the General Medical Council of Great Britain. The Indian Government were in a dilemma and so, sought an escape from the awkward situation by bringing in an All-India Medical Council Act. A supine Indian Legislature passed the Act with all its glaring defects. A big official majority, a nominated official President, in fact, a packed official body of medical men came into existence at the behest of the Government of India to control, guide and decide the fate of medical education and medical standards in this country. The elected minority was unable to be effective, if ever they had a will and the heart to do so, against this official majority presided over by the Director General of Medical Services in India.

The real unrepresentative character of this body became manifest when the Act declared that the full provincial medical registers will not be accepted for voting even for this minority of elected seats and that only men with university and foreign qualifications alone would be eligible for vote. The

largest body of medical men, the L.M.Ps., were thereby excluded from the panel of voters. The provincial Governments silently acquiesced in this disgraceful omission of the bulk of the profession. The All-India Medical Council became an Act and was placed in the Statute book.

The question arises as to the exact nature and functions of this body—the All-India Medical Council. It is supposed to control medical educational standards in this country. An Inspector or two nominated by the Council are sent out to those Universities that confer medical degrees. They inspect the provisions made by the University for imparting knowledge and then certify to the Council. The All-India Medical Council recommends the education given by that University as being up to the standard demanded by the General Medical Council of Great Britain who in their turn recognise the courses of study. The whole thing simply means this—that the All-India Medical Council acts as the agent of the General Medical Council of Great Britain in India. But apart from this function with which it seems to be solely concerned for the time being, there is the possibility and in fact, it has got the right to speak in the name of the medical profession in this country.

But curiously enough there is only one body of men who could at all be called an organised medical profession in this country, those that are practising the Western system of medicine as taught in our medical schools and colleges and possess a right to practice medicine as qualified medical men. If out of this class a good seventy-five per cent are excluded by the very powers that confer on them the right to practice as qualified medical men, the term All-India Medical Council becomes a misnomer—a *bogus*. It can only be called a Council of University qualified medical men with a sprinkling of foreign qualified men—though the qualifying examination of the latter be the meanest in their respective countries like the L.S.A. of England. Inferior qualifications of Great Britain can become eligible to vote because their Medical Council is fair and generous to them and confers on them the privilege of qualification and membership and this is merit enough in the eyes of the All-India Medical Council to make even the holders of small diplomas eligible as voters. But the Government of India's own qualifying examinations and a registrable qualification and membership in the provincial medical registers are not

enough qualifications for a franchise for the All-India Council.

There seems to be neither logic of facts, nor ethics of self respect in this self stultifying piece of legislation. The L.M.P. is qualified to practice the art of medicine in this country by statute. His knowledge is found to be safe enough for entrusting into his hands thousands of Indian lives but he is barred from the franchise to the Medical Council in his own country which claims to call itself by the high sounding name of an All-India body. The Sub-Assistant Surgeons have in season and out of season protested against this injustice. Nor are the authorities unaware of it. Conferences have been held in the various provinces under the presidency of the medical satraps of the respective provinces and the Sub-Assistant Surgeons have unanimously claimed their right for fair treatment. This inferiority complex has been forced upon this helpless class of men, a majority of whom are under the service of the Government and the various local bodies.

Madras province, in particular, has treated this deserving class of medical men very badly—men who are really the backbone of the medical profession in this country both by virtue of their numbers as well as by the meritorious services they have rendered both to the governed and the Government. They are given a five years' training after passing the entrance examination and judged by the standard of the tests they have to undergo they need not be ashamed to walk erect conscious of their knowledge. That thousands of them should be declared unfit for voting to the Medical Council which is supposed to represent medical opinion in this country is unworthy of any civilized Government. No reasons seem to be forthcoming for this wanton exclusion—in fact there cannot be any valid reason which any sane man or Government could ever bring forward in support of this shameful omission.

The woes of the Sub-Assistant Surgeons in this country are manifold. Originally they were told they were only cheap recruits to play the part of under dogs in the medical services of this country which is one of the costliest in the world. The under dogs became self conscious and began to bark. They said they were willing to stand better tests even at poor wages. Their standard of knowledge was raised, their years of study increased but their status remained the same. The Government said that they stand firm to their contract at the time of recruitment. The Government has

been adamant. The wages of subordinate medical labour still remain cheapest. One can justly maintain that the terms of the contract has been fulfilled and no one should grumble. If you do not want the wages do not accept the labour. That is fair enough as it goes. But to say that you are a registered, qualified medical practitioner, your name should be found in the medical register of your province and yet you shall not claim to be represented in the All-India Medical Council is neither reason nor fair play. It will be well if the Government would say: *You L.M.Ps. are good enough for India. But the All-India Medical Council is not meant for India though nominally it is for All-India. We really meant it to be the agents of the General Medical Council which think it beneath their dignity to recognise your studies. They find the Indian Universities troublesome enough. They do not want to be bothered by this indentured medical coolies. That would be speaking the truth with a vengeance. But that is what our Government would not say.*

As far as I could see I do not see any way out of this wanton perpetration of injustice which is a calculated and deliberate insult against thousands of medical men. It is a matter of honour with us and we must fight to the bitter end. But how to fight? We are disunited, we are service men, most of us are in the subordinate ranks, we cannot afford to dare the displeasure of the Gods above us. There are some of the difficulties.

Firstly there is the All-India Medical Licentiates' Association. Make it numerically strong. Let every L.M.P. make it a point of honour to be a member of the body. Then you would have taken the first step towards establishing your self respect.

Secondly you have a journal solely devoted for your welfare. You are entitled to get a copy free if you are a member and pay your subscription. So you have an organ of your own.

Thirdly you have a platform in your annual gatherings and monthly meetings. Give expression to your feelings without fear or favour and speak out the truth.

Fourthly I fully appreciate your decision to declare a day, as a day of All-India protest and declare to the world the injustice meted out to you.

Fifthly we have a Legislative Assembly this time which is fighting bravely a stubborn battle with the

Government on behalf of our people. Put the members in possession of facts regarding your case. There are five medical men in it including the nominated member from Bombay. Do not give peace to all elected members till every one of them espouses your cause and bring to bear pressure on the Government till this injustice is removed. These perhaps exhaust all methods of constitutional agitation. If these fail we shall wait and see.

OEDEMA*

BY DR. M. R. GURUSWAMY MUDALIAR, B.A., M.D.

*Professor of Medicine, Medical College,
Madras*

LECTURE I

The subject that has been selected for these lectures is Oedema and though we are all familiar with Oedema, the more I look into it, the less clear it is. If you go into the history of Medicine, you find that there is mention of oedema and its treatment by Hippocrates. Of course we always think that Hippocrates is the oldest and we take him as the starting point of medicine. Galen was the next person who has dealt with the subject of oedema and apparently he knew something about dropsy and knew how to treat it. If we come to later literature, we find Aëtius has mentioned about the hardening of the kidney in cases of oedema—that was in the 6th century A.D. So, while Hippocrates and Galen are not connecting dropsy with kidney, the first man to so connect dropsy and kidney was Aëtius. Later on, in the 18th century, Saliceto made a similar remark that the kidney was damaged in cases of dropsy; but this is all history—perhaps an individual observer making an observation which others immediately following did not take note of—to be rediscovered centuries afterwards.

But the systematic study of oedema started only about the 19th century. In this series, the first man's name that comes in is one Cotugno. He had noted that the oedema fluid coagulated, and having noted that it is the albumin in it that coagulated, he

* Published by special permission of the Author—being the first of a series of lectures delivered by him under the auspices of the Madras University Extension Board (1934). His other lectures will be published serially in the I.M.J.

wanted to know whether the urine also had the same coagulating quality. So the first man to systematically search for albumin in the urine was Cotugno—that was in the beginning of the 19th century. Shortly after him the study of albuminuria and oedema was taken up by Cruickshank, Wells and others; and the whole of their study culminated in the masterly publication of the first volume of "The Reports of Medical Cases" in 1827 by Richard Bright, where he has given his own personal observations on his own cases and a few cases picked out from others. So, 'The Reports of Medical Cases' in 1827 was, we may take, the culminating point of the study; and thus we have Bright's disease, named after Richard Bright. But between Bright's days and the present day, a lot of new work has been put in and in recent years the chemical and physico-chemical methods of investigation have advanced the knowledge of oedema to such an extent that we are obliged to view the whole thing from a different angle altogether.

After all these recent advances in the investigation of oedema, we find that the definition of oedema is yet a bit obscure. Fischer writes about oedema as follows:—

"A state of oedema is induced whenever in the presence of an adequate supply of water, the affinity of the colloids of the tissue for water is increased above that which we are pleased to call normal. The accumulation of acids within the tissues brought about either by their abnormal production or through the inadequate removal of such as some consider normally produced in the tissues, is chiefly responsible for this increase in the affinity of the colloids for water through the production or accumulation of substances which affect the colloids in a way similar to acids or through the conversion of colloids which have lent little affinity for water into such as have a greater affinity must also be borne in mind."

Writing more recently Fishberg defines oedema "as a condition in which the volume of the tissue fluid is preternaturally great, and the factors involved in the production of oedema are those which are concerned in the maintenance of the delicately adjusted dynamic equilibrium between the tissue fluid and the blood, as well as those between tissue fluid and the cells and lymph." It is very simple and concise—but really certain points are debatable. It is put down that the fluid secreted is preternaturally great. Now when one looks into the question, one

would like to say that there is a certain amount of doubt here. Under normal conditions the tissue fluid is found only as an ultra-microscopic layer of fluid around the cells and this fluid cannot be seen under the highest magnifying microscope. This tissue fluid is supposed to be increased and this increase is the basis for the oedema according to Fishberg. This fluid, according to Ephinger and Scott is poor in proteins ~~is~~ disturbing the aqueous humour and cerebrospinal fluid in this respect.

These are some of the latest definitions in the light of modern chemistry and physico-chemistry, but before these were introduced, you will find that there were other views which could not be considered to be absolutely incorrect, but which in the present state of our knowledge of oedema could be interpreted in such a way as to make it appear that some of the earlier writers also knew something about it. First of all, let us take the question of how much water is there in the body; and its effect on the production of oedema. About $\frac{1}{2}$ of the water in the body is in the blood and we have all the changes coming in oedema as a result of changes in the blood. About two-thirds of the weight of the body is water, a small portion of it being freely movable fluid and even then always associated with more or less colloids;—that is the view given by Wells in his "Clinical Pathology." Now what have been the earlier views? Two schools of thought have been fighting for mastery in the solution of the question of oedema. One has been the mechanistic school, and the other, the vitalistic school. The mechanistic school has held that oedema is mainly the result of filtration, while the vitalistic school has held that it is mainly the result of secretion. The chief proponent of the filtration theory was Ludwig, and according to him, it is the blood pressure that was the main factor in producing this filtration. He carried out certain experiments and showed that by dilating the arteries, oedema could be produced. Now modern writers have shown that dilating the veins does not produce oedema, unless there has been an injury at the same time. So later writers have, on the very same grounds, come to the conclusion that it is not filtration alone but something else that causes oedema; and later this school showed that adrenalin could prevent this. Conversely, sudden lowering of B. P. as in haemorrhage produced oedema. This is explained in the modern light, as due to dehydration of the tissue which brings about a plethoric condition of the vessels (with blood poor in proteins) which brings about an increased pressure, which brings about a filtration. So, there are two things—one is plethoric condition, with its

increased pressure; the other is the diminution of protein contents of the blood in such vessels. Some of the extreme types of oedema are seen however in tissues where arteries have been occluded completely; you find extreme oedema in cases where the artery has been completely ligatured. Why? If it is the lowering of the B.P. which brought about the oedema, why does it occur here when there is no blood at all? Then again, how do the glands secrete? Is it not always due to increased pressure? How then is the fluid produced? These were some of the issues raised to belittle the filtration theory; and the chief among those that fought down the filtration theory and put up his own was Hedenheim, who is the advocate of the secretory theory. He said that the endothelial cells in the capillaries secrete lymph and that the lymph, when it comes out, causes the oedema. He showed that lymphagogues could excite secretion e.g., peptone and other tissue extracts which produce excessive lymph flow. We will see how this experiment of Hedenheim is interpreted in modern light, but at that time he held his own. Similarly crystalloids also produce the same result e.g., sugar or urea or other salts; but this lymph was poor in protein; and along with this, he found that urine was increased. In modern language, perhaps it will be put down that crystalloids produce results by increasing osmotic pressure. Hedenheim believed that crystalloids were secreted in the lymph spaces by capillary endothelium and they increased osmotic pressure and so increased the fluid. But a pertinent question would be: why did not these crystalloids act in the same way, while they were within the capillaries? So the present view is rather against Hedenheim's secretory theory.

Another view advocated mainly by Starling is that oedema is due to permeability of capillaries. He tried to explain away Hedenheim's previous experiments by using the same material. The first class of lymphagogues (peptone etc.) is tissue poison which produces an injury to the endothelium; the injured endothelium permits more fluid to pass through; so Starling started a theory favouring the filtration theory, filtration probably due to the injury of the vessels. The second class of lymphagogues increases B.P. by hydræmic plethora and causes increased filtration, so that one cause was tissue poisons causing injury to permit of filtration and the second was crystalloids increasing the hydræmic plethora and therefore increasing blood pressure. So Starling really came back to the filtration theory and he believed that there were pores in the capillary walls. One cannot deny or affirm this view. He thought that these pores were surrounded by endothelial cells

and by the action of these endothelial cells, these pores could be made wider or narrower; if they became wider, then fluid passed through, if they became narrow, then fluid was retained and did not pass through; very simple—only question is whether there are pores? Anyway it has not been proved that there are no pores, nor has it been proved that there are pores, but, people do not believe very much in these pores. Presently, a new view was put forward. Now, take the capillary wall and its permeability. So far as salts and water are concerned, they easily pass from one side to the other of the capillary wall, and hence they cannot have any influence in the production of oedema or in its non-production. But, while crystalloids can pass through, colloids cannot pass through easily, the normal capillary wall being practically impermeable to this; the only exceptions being the capillaries in the liver and the intestinal mucosa, where the colloids can pass through the capillary walls. Krogh found that the normal capillary wall cannot allow even very fine particles of soluble starch to pass through; a soluble starch whose size is 5 millimicrons is not allowed to pass through the capillary wall; that is to say, Starling's pores seem to be so small that they could keep back even 5 millimicrons—sized starch granules but when the capillary is strongly dilated, particles much bigger than soluble starch can pass through, e.g., Indian ink which is 200 millimicrons in size; so that the maximum that has been reached by the biggest dilatation of capillaries has been something like 200 millimicrons, while normally particles of 5 millimicrons size cannot pass through. Plasma-proteins can pass through the capillary wall in an inflamed area. Landis, however, believed that it is merely the dilatation that permits the passage of these particles to pass through; so Landis is one of those who agree with Starling and think that pores are opened out and therefore the protein particles also pass through; but this opening out of the pores he thought was due to some injury. So we are getting mixed up, a certain amount of that theory and a certain amount of this theory; everybody who has gone before has uttered some truth, but not the whole truth.

According to the present theory, the capillary wall is thought to play only a passive role in the fluid transport. Krogh says that there is no trustworthy evidence of the capillaries having any power of hindering or favouring the passage of diffusion of all kinds of crystalloids through the endothelium. From a study of the earlier writers, Fishberg concludes that the passage of water and crystalloids in and out of the capillaries is determined by forces on either

side of the capillary wall and not by any active function of the latter. So he definitely sets himself against the secretory theory. If it is only a passive role, how is oedema to be accounted for? Ashley and others showed that the proteins and salts of oedema fluid on the one hand and those of blood on the other observe the characteristic proportions that were enunciated for simple membranes by Donnan and which are known as "Donnan-equilibrium." In other words, Fishberg found out that "the distribution of crystalloids between blood and transudates is the same as it would be if they were separated by an inanimate, semi-permeable membrane" and this view has shown itself to be correct. By placing blood serum of an oedematous portion on one side of a membrane, and the serum of the same patient on the other side, it has been found that there is no change in the equilibrium. The conclusion therefore is that the capillary wall acts only as a passive semi-permeable membrane in the formation of oedema. Fishberg maintains that increased permeability plays a part in oedema only in those cases where oedema fluid contains considerable quantities of protein, e.g., in acute nephritis; but in chronic nephrosis and other conditions where there is a dearth of protein in oedema fluid, it cannot be due to increased permeability. There you will see there is some other force working and then we come back to filtration theory.

These are the various theories that have been propounded about oedema. With all these various definitions, we may define "oedema as a condition in which fluid accumulates excessively in the intercellular spaces and in the tissues and serous cavities of the body."

Oedema occurs in very many diseases; and a correct knowledge of how it is caused in each disease is essential for the treatment of the condition. It matters very little to the practitioner as to which is the correct theory, so long as it serves the purpose of enabling him to cure the condition. Perhaps there may be mistakes about theories; but his only viewpoint is whether it answers the purpose so far as effect is concerned.

Therefore, to understand the causation of oedema, one has to study the conditions which bring it about viz:—

- (1) Increased capillary blood pressure;
- (2) Increased capillary permeability;
- (3) Impaired lymph drainage;
- (4) Decreased colloid osmotic pressure of serum proteins;
- (5) The specific ionic excretory function of the

kidney and other deficiencies which react on some one or more of the above conditions.

1. Increased capillary blood pressure.—Direct observation has shown that fluid filters out of the capillaries when the capillary pressure is greater than the osmotic pressure and that absorption into the blood stream depends on the osmotic pressure being greater than the capillary pressure. It has to be remembered that capillary pressure is not uniform all through. That is a thing which usually escapes our attention. We talk of blood circulating, but we forget that when there is a continuous flow of a liquid, it always means that the pressure is decreasing gradually, getting less and less, and the motion ceases altogether at a point; and when we talk of blood circulating, we so little think of the capillaries having different pressures at the different places in the capillary circulation itself. If we begin to think of that, then we realise that the B.P. at the arterial end of the capillary must be higher than at the venous end. Somehow that goes out of our mind; we get a rough idea that the heart has done its work by propelling the blood to the capillaries and we look upon the capillaries as if they were a stagnant pool. The blood is moving in the capillary, because the pressure at the arterial end is much greater than at the venous end; and if you remember that, then you can understand how to connect all the old theories and make the whole appear as one, and explain many of the difficulties.

It has been found by direct measurement that the pressure is 7 to 8 cm. of water higher than the colloid osmotic pressure at the arterial end. When you compare osmotic pressure and arterial pressure, you find the B.P. is higher by 7 to 8 cm. of water, while it is 19 to 20 cm. lower than the colloid osmotic pressure at the venous end. The normal colloid osmotic pressure of blood being about 85-86 cm. of water, you will find that the capillary pressure at the arterial end is 86 plus 7 = 93 cm. of water; while at the venous end, it is 86 minus 20 = 66 cm. of water. Krogh and Landis have shown that the fluid accumulates in the tissue spaces when the venous pressure is between 15 and 20 cm. of water. So, that being the minimum, if it is more than 16 cm. of water pressure at the venous end, the fluid has to stagnate. Generally, the rate of filtration is directly proportionate to the increase in venous pressure. That has got to be very clearly borne in mind; the greater the venous pressure, the greater the amount of fluid filtration; therefore less absorption, which means oedema is likely to result.

That is how we find increased venous pressure, (let alone the lowered arterial pressure) causing stagnation of fluid in the tissue in cases of heart failure. The rate of absorption generally depends on the quantity of fluid in the tissues, it being certainly more rapid when the fluid is large in quantity. The fluid will accumulate in the tissue spaces when the average venous pressure is above 17 cm. of water. The greater the venous pressure and venous congestion, the less steep the pressure gradient in the capillaries, and hence less slowly can absorption of tissue fluid take place at the venous end of capillaries. Landis has shown by direct measurement that the average capillary pressure in the arterial end is 43 cm. and at the venous end, 16 cm. Hence, under normal conditions, absorption of fluid from the tissue is favoured. Only when the venous pressure rises considerably, can the fluid absorption fall below the filtration and oedema result. Now, that is so far as blood pressure is concerned in the production of oedema.

2. Increased Capillary Permeability.—I have already given you various views. Summing them up, we find the normal capillary wall does not permit more than 0.1% of proteins to diffuse out. If we produce an abnormality in the capillary wall by, say the application of urethane, it is found that little or no fluid escapes at the venous end; the capillary permeability is so increased that entire plasma and colloids of blood filter out and the corpuscles accumulate in the vessels and come together blocking the capillary. So the action of urethane is to prevent any filtration at the venous end altogether; the circulation in the parts stops and so no oedema could occur. But in minor degrees of injury to the capillary endothelium, the blood proteins are allowed to escape, due to increased permeability: e.g., anoxaemia increases capillary permeability and allows more proteins to pass through. This lowers the osmotic pressure of the blood as compared with that of tissue fluid and hence this fluid is seen to accumulate. This effect is seen in heart failure and in various inflammatory conditions. If blood is more dilute than normal, as after haemorrhage, its holding power for water is diminished and then even a slight increase in intra-capillary permeability results in oedema.

Lewis has shown that injury to the tissue liberates a histamine-like substance which dilates and increases the permeability of the minute vessels and causes exudation in the vessels, showing itself in urticaria. It would appear that the precursor of histamine is excessively unstable under certain conditions such as ingestion or production of certain poisons which produce anaphylaxis: hence urticaria is the commonest

under these conditions. This increased permeability is diminished by calcium salts: therefore the efficacy of calcium in cases of albuminuria.

3. Impairment of Lymph Drainage.—This is another cause of oedema. When a certain amount of fluid has accumulated in the tissue spaces, it gets under a certain pressure and is partly drained by the lymphatics. Landis has shown that the fluid in tissue spaces passes into the lymphatic vessels at a rate which could exceed the rate of infiltration produced by the venous pressure of 20—30 cm. of water; hence lymphatic drainage has a great controlling effect in the production of oedema.

4. Decreased Colloid Osmotic Pressure of Serum Proteins.—The normal amount of plasma proteins is between 6 and 8%; of this about 60% is serum albumin and 40% serum globulin. When the total protein falls to 5% or less, and serum albumin to 2.5%, oedema occurs. At the Yale School of Medicine, Peters observed that oedema is usually present when serum protein falls below 4% and is never present when it exceeds 5%. Bruckman, observing cases of oedema in malnutrition, showed that when the serum albumin falls below 3%, oedema is seen, and seldom when the serum albumin exceeds 4%. Weech took the critical level as close to 5% in ankylostomiasis. Swarz found the average serum protein was 5.5% and the average serum albumin 3.6%. Thus, we see the serum albumin is apparently changing in different diseases. Serum albumin is osmotically more active than serum globulin; hence a diminution of serum albumin is readily followed by a reduction of colloidal osmotic pressure. When the pressure is reduced to 20 to 25 cm. of water, oedema usually occurs because the filtration of fluid is greater than the power of the lymphatics to carry away the fluid from the tissues, and fluid accumulates. As a rule, then, oedema increases, as the serum protein and colloid osmotic pressure decreases and with the disappearance of oedema, colloid osmotic pressure increases. There are however exceptions to this rule.

5. Specific Ionic Function of the Kidney.—A number of observers are of opinion that the kidneys normally eliminate certain electrolytes and under diseased conditions, this elimination process is interfered with, especially of sodium and chloride; this is not necessarily true with regard to potassium, ammonium and calcium. Ammonium chloride produces diuresis. Loeb maintains, however, that the difference between normal and nephrotic kidneys is not so much qualitative but quantitative. This quantitative difference is attributed largely to the differences in the serum protein concentration of the blood. There is no doubt that extra-renal changes are also involved, but not much is known at present as to their nature.

Our Contemporaries

MEDICINE 1910—1935

By JOHN A. RYLE, M.D., F.R.C.P.

Physician to His Majesty's household

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I

To have lived the more active part of one's life within the first 25 years of the present Georgian era observing and sharing, in however humble a degree, its manifold changes and reactions, confers on review a deep sense of privilege. For medicine it has been an eventful era. The medical sciences, in concert with other sciences, have registered a proud succession of discoveries, while medical practice has been both enriched and embarrassed by the rapidity of progress and accumulations of new method.

Beside me as I write I have the edition of "Osler's Medicine" and a modern text-book. The first remains a classic and a rich mine of clinical information, but, lacking wide tracts and chapters embodied in the second, which relate especially to developments in the diagnostic fields of radiology and biochemistry, it has become inadequate. In 1910 I was a clinical clerk in the wards in which I now teach. The reports which we handed to our teachers then were rarely weighted with the sheaves of documents from chemist, bacteriologist, haematologist, radiologist, and clinical specialist which my own clerks now assemble. I am grateful to have lived and to have been taught in that easier period by men trained in the tradition of the physician-pathologists for which my school is famous, and I still believe, as they and Osler believed, that the bedside, the out-patient department, the dead-house, and the practice which comes later must continue to provide the chief foundations of our medical art. The problems of man in disease will always require for their solution processes additional to strict scientific assessment. I commiserate the present generation of students on the score of the size and complexity of their curriculum and the difficulties which they must experience in combining and applying their departmental knowledge. I envy them, on the other hand, for their superior endowments in chemical understanding and for the inspirations of the times in which they live. Between them they have already witnessed the introduction of insulin and liver therapy; the much more effective handling of the secondary

anaemias; the more certain and earlier recognition and control of many disease-processes with the aid of blood chemistry; the more intelligent applications of psychology, supplanting the electricity, bromide, and valerian of an earlier day; and many advances due to better medico-surgical co-operation.

It would also, I believe, be fair to say that the relationships between teacher and student have become more free and friendly. Instruction is less didactic and authoritative and open discussion is more commonly encouraged. Rapid increments of knowledge, for all the help which they have given, have however made new difficulties by increasing the number of possibilities and inquiries to be reviewed in the problematic case. Certainty and completeness in diagnosis appear less easy of attainment than they did when precise checks and controls were lacking. On the whole there is more humility both among teachers and students. In therapeutics, conflicting views, especially where there are medical and surgical alternatives, complicate judgement, while the multiplicity of theories and remedies which infiltrate the mind by way of individual teaching, the journal, and the advertisements of the proprietary chemists are a constant embarrassment.

The growing habit of intensive specialisation has been good for the special subjects and has brought benefits to countless patients, but for the time being its influence upon medical thought and practice as a whole and upon undergraduate teaching has not been altogether good. Inevitably it has encouraged men to ignore that close interdependence of part and whole and environment to which the biologists and the philosophers have become increasingly attentive in recent times.

II

It is impossible to estimate our indebtedness where diagnosis is concerned to modern radiology, endoscopic methods, and biochemistry, or to the many therapeutic improvements in the fields of special surgery, pharmacology and dietetics which the past quarter of a century has brought. *We are, however, an impatient profession and liable to queer crazes and misapplications of our science. I do not wish to overstress the abuses which have followed new knowledge and technical advantage; but be it remembered that within the era under review, and especially its post-war phase, we have witnessed the misapplication of bacteriology in a*

riot of ill-considered vaccine therapy; the arrival, and let us hope, the departure of unhealthy experiments in amateur psychiatry and analysis; and the rise and fall of a crude mechanistic surgical epoch leading to excessive operating especially in the abdominal field. It is, however, remarkable and gratifying that within this same brief era we are already observing the return to sanity and balance. We are testing our new tools and using them to fuller and fuller advantage. We are more frequently allowing science to correct our art, and more rarely permitting our art to bring discredit on our science.

It becomes daily more apparent however, that something more than a revised curriculum will shortly be needed to set our professional house in order. The standards of general medicine must be improved even if it requires such educational changes as the postponement of the more specialised studies until after qualification, or the addition of a few months spent in apprenticeship to experienced general practitioners before qualification. Better facilities are needed for obtaining qualified hospital appointments both before and in conjunction with practice. To balance the inevitable and necessary multiplication of specialists we require, as a leaven, a larger proportion of well-trained general physician and a higher average of culture and attainment in the coming generations of students destined for general practice. *The public has been partly to blame for present dissatisfactions by reason of its own ever-insistence on specialist advice; credulous and avid of the newer mode it is not aware that the maladies and problems of our forbears were commonly far better handled by general practitioners of the old humane, if less scientific, school than they are to-day by multiple tests and X rayings and visits to a succession of consultants. Important innovations in municipal and State medicine have added to the difficulties of practice by a gradual withdrawal of much work, with its attendant experience, which formerly belonged to the family doctor.*

III

The last 25 years of medicine may conveniently be divided into three periods, 1910-1914, 1914-1918 and 1918-1935. In the first period teaching was predominantly broad and clinical, soundly backed by morbid anatomy and histology and the valuable additions to diagnosis which bacteriology had supplied. The Wassermann reaction had recently arrived and the arsenical treatment of

syphilis had been discovered. Laboratory medicine and diagnostic radiology, as we now employ them, were in their infancy. There had been no big changes in the medical systems of the country apart from those due to the Insurance Act, which brought both advantages and disadvantages in its train.

In the second period those who were so situated as to gain their war experience in hospitals and clearing-stations received what was in fact a new medical education. The treatment of wounds and fractures, intensively studied on a vast scale, was improved beyond belief. The pathology of wound infection and the treatment of chest and head wounds received combined study at the hands of surgeons, physicians, radiologists, and pathologists with the happiest results. The protective uses of typhoid inoculation and of the early administration of tetanus anti-toxin were proved and justified to the hilt. Blood-grouping and transfusion came into their own. Tropical diseases, the effects of gassing, and "new" diseases such as trench fever, trench nephritis, and spirochaetal jaundice were subjected to intimate investigation by team-work of a highly productive kind. At home the study of the "soldier's heart" gave a new impetus to cardiology, and the study of the war neuroses laid the foundations of much that is good in medical psychology in this country to-day.

Where all else was destructive it is something to remember and be proud of that the medical services did not fail in any part of the reparative work allotted to them and that, simultaneously with the performance of arduous humane and military duties, they advanced knowledge by patient observation and research and added important chapters to British medicine.

One of the most effective developments of war-time medicine was what came to be known as team-work. Unhampered by any considerations of career of livelihood, and stirred alike by the spirit of the times and enthusiasm for their patients and their subject, the members of medical, surgical and mixed teams at work on the various fronts applied themselves unanimously to their tasks in a manner which seldom seems possible in civilian medicine to-day. An historic example of the benefits of applied "team-work" was provided by the King's illness in all the details of the investigation and conduct of which reminders were forthcoming of the combined medical and surgical treatment of chest wounds with pathological controls which took place in the clearing-stations and base hospitals in France.

In the medical schools and special hospitals it is difficult, where it might seem easiest, to secure this intimate and happy co-operation. The claims of teaching and practice and other routine problems of administration militate against full success. The Medical Units which have brought new motives into teaching and have given facilities for full-time workers, have other concerns and are not, as units, sufficiently representative or full time. An approach to the system has been attempted in certain private clinics whence valuable publications are occasionally forthcoming, but still the spirit and achievements are not comparable and the field of opportunity is too confined. If ever there were an opportunity to recapture the team-work spirit under suitable conditions this should, to my thinking, be found in the newly organised hospitals of the London County Council and the larger municipalities. Whole-time workers, relief from the necessity of practice and teaching, and unlimited material, with facilities for segregation of groups of cases, are the main essentials. In closely collaborative team-work is to be found the best answer to the artificial separation of medicine, surgery, and the ancillary sciences.

Of the post-war period I have already written partly in praise, partly in criticism. Medical philosophy has not prospered commensurately with medical science and technique. During the awkward years of reconstruction between 1918 and 1935 misdirections of thought and energy inevitably occurred, but they are already being remedied and British medicine, as compared with the medicine of other countries, has maintained its general high level and has recorded significant gains. The yearly reports of the Medical Research Council make important reading. Neurology, psychiatry, cardiology, and paediatrics have registered steady progress. "Clinical science" has been launched. There is scarcely a branch in which advances have not been made. Even in the difficult cancer problem new ground has been consolidated. The incidence of preventable diseases continues to fall. The toll of human life and suffering in acute and chronic diseases, formerly beyond efficient aid, has steadily diminished.

The year of the King's Jubilee, which has provided a fitting occasion for review, may well mark the initiation of a further phase of eager effort and fruition, affecting alike the science, the art, and the teaching of medicine throughout these islands and the dominions, overseas.

SURGERY 1910-1935

By A. JAMES WALTON, M.S., F.R.C.S.

(Surgeon to His Majesty's household)

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I

When a man's opinions become fixed his progressive work is finished. Vanity, which increases with age, shows a constant desire to prove that views expressed long ago, are still correct. Only as long as a man is prepared to admit that his previous conclusions have been shown by the light of more recent knowledge to be incorrect his mind will be young, active, and receptive. No surgeon therefore can ever feel that his knowledge is complete, for ever he must keep abreast of new knowledge and must be analysing his own results and comparing them with those of others. He must be altering his views and his treatment in accordance with these observations. It is often stated that surgery has now reached its limits and affords but little chance for progress, that treatment and investigation have become standardised and almost beyond discussion. If those who are depressed by such views would realise that even to-day there is hardly a single statement in surgery which can be made without fear of contradiction they would again take heart and feel that they also have a surgical knowledge. Perhaps nothing offers greater encouragement than to look back over a period of years and to observe the changes that have occurred during that time. Some of them may not be regarded by all as moves in the right direction and many of the older methods that have gone may be regretted, but there can be no doubt that more has been gained than lost for the common good.

The present time of his Majesty's Jubilee is a fitting one to look back and observe what progress if any has taken place during His Majesty's reign. Such a review reveals the fact that the changes have been very extensive, as they have been in every branch of civilisation. The whole period has been one of flux. As H. G. Wells, makes one of his characters say, "This here progress, it keeps on. You'd hardly think it could keep on." It is so interesting a period in the history of the human race that even the most weary and jaded of us could almost hope for great prolongation of life to see in what direction we are moving. Much of the present may be depressing and unpleasant but there

is also much to make us believe that we are not rushing to destruction and dissolution but are ultimately reaching to a higher and brighter life. In surgery this certainly seems to be the case and many lives that were doomed to a rapid termination or to years of misery are now saved, and their owners have been given years of comfort and happiness.

II

It is in the atmosphere and life of a large hospital that the changes are most in evidence, and that which would perhaps, be most noticeable to one who has not visited his hospital for 25 years is the status and attitude of the surgeon not only to his patients, but to his colleagues, medical officers and students. In the first years of this century surgeons were regarded with awe and almost with reverence. They were individuals ruling their own departments with an almost regal authority. Their knowledge was omniscient and their views infallible. On their arrival they were met in state, and in state they progressed round the wards. *Their teaching was a combination of dogma and sarcasm concerning the views of others.* They laid down the law with great authority but produced little proof of their statements. Their opinions were never questioned and to admit an error was considered as evidence of lack of knowledge. As a result they often came to believe in their own infallibility. They rarely met their colleague, of whom they were often bitterly jealous and although treating them with formal courtesy in their company were only too willing to belittle their work in the presence of students. They regarded all workers in the few laboratories that then existed as their servants. Theirs were the patients and all who worked among the patients were under the surgeon and his was the credit of their work. With such an attitude there was a grave risk that all work by others should be neglected and that when the surgeon retired his knowledge of surgery might be but little altered, from that which he held on the day of his appointment.

III

Gradually and almost imperceptibly this has all changed. The individual surgeon is treated with much less awe and his work is subject to the keenest criticism both during his clinical teaching and in the medical press. He is expected to produce proof of all statements in his writings and he must be prepared to be questioned on his remarks by any audience. His operation theatres are open to medical men from all parts of the world and while operating he must be ready to answer all questions on his technique and to state why he adopts one form of

operation in preference to others. It is the presence of this critical environment which perhaps above all else compels a surgeon to keep up to date and to study his own results in comparison with those of other surgeons. On the other hand his colleagues on the clinical staff, in the laboratories and in the special departments, and his assistants in the wards are all his personal friends. He treats his colleagues with very little formal courtesy but he knows that he can rely on their help even in the slightest difficulty. And he no longer feels that it is derogatory to admit others know more on one subject than himself; the advice of the most junior colleague is as eagerly sought as that of the senior. It is still to-day the greatest compliment to be asked advice by one's colleagues, but is also the greatest satisfaction to seek it from others. Not only are the laboratories freely at the disposal of any surgeon wishing to work in them but the greatest help and advice is willingly given by the heads of these departments. Young men working under a surgeon have every opportunity of making use of his clinical material and are encouraged in every way to carry out research work and to publish it under their own names. The surgeon realises that he can learn more and obtain more encouragement from the keenness and enthusiasm of younger men than from any other source. The present day surgeon may have lost much of the old formality but what he has lost in formality he has gained in friendship. He is no longer an individual worker for his own advancement, but a member of a large team working for the common good. This growth of team-work is becoming more and more necessary in private as well as in hospital work and surgeons are finding it essential, especially in the larger operations, not only to operate in the same theatre but to employ the same anaesthetist assistant, and theatre sister. The greatest admiration must be expressed for the older surgeons who worked with no skilled aid and with no conveniences, but the best results can only be obtained in the modern extensive operations with the help of a skilled and highly trained team.

IV

In the ordinary practice of surgery much advance has been made. Certain diseases which had a more or less hopeless outlook are now successfully treated and the patients' lives are saved. Tumours of the pituitary gland were rarely operated upon. Nothing was known of the surgical cure of hyper-parathyroidism. Hyper-thyroidism was only rarely treated by operation and not only was the mortality very high but the value of operation was disputed by

many. I once heard a famous physician state that it was as sensible to operate upon a thyroid for Graves' disease as to remove a kidney for diabetes. Splenectomy was rarely performed, and gastrectomy and colectomy for carcinoma were in their infancy. Perhaps however the greatest changes are those seen in the nature of the hospital population. Before 1905 the wards were filled with patients suffering from large ulcers of the neck due to tuberculous glands which had been opened and scraped. Excisions and amputations for tuberculous joints and bones were to be found on the operating list nearly every day. To-day such cases have almost disappeared and the majority of students pass through their whole career without seeing a case of operation for tuberculous glands or joints. Acute appendicitis was with us then as it is now, but the mortality with acute cases was nearly 80 per cent. The use of surgical gloves had only just been introduced and suppuration or even fatal sepsis was not uncommon after clean operations. But although we hear so much to-day of the marvels of modern surgery, there can be no doubt that the greatest progress has been made in what is the real aim of medicine, namely, preventive medicine. Not only has surgical tuberculosis greatly diminished but typhoid fever which was so common before 1910 is now rarely seen in hospital. In the summer months of that period 40-50 children a day were sent away from a hospital to die, being already moribund with epidemic diarrhoea and vomiting. To-day these cases are rarities. Such great advances have been made owing to control of food, water, and sanitation that one can be certain that the disappearance of other diseases will follow in their wake. In days to come surgeons will look back with astonishment at the modern operations for appendicitis, for gastric, and duodenal ulcers, and for carcinoma, and when the cause of the hyperactivity is known and prevented it will seem inconceivable that the enlarged thyroid of Grave's disease was ever removed by surgery. Medicine will ultimately progress so that surgery reaches its true aim—that of its own abolition. Already surgeons have ceased to be mere technicians and are physicians in their own speciality, and it would seem that one day the cleavage between medicine and surgery will cease and men will become specialists covering every branch in their own subject.

V

The progress of medical education is as great but is less well-defined and probably in a few years will undergo considerable further change.

On all sides this subject is bristling with difficulties and is exercising the minds of teachers. Unfortunately in many respects the most satisfactory treatment of the patient is conflicting with the teaching of the undergraduate student. Throughout medicine and surgery the introduction of more detailed methods of investigation and the increase of technical skill in treatment have led to the wide growth in specialism, so that more and more departments are established which the already overworked student has to attend. An undergraduate working for a pass degree requires to know *when* to operate and not *how* to operate and yet a great deal of his time has to be taken up attending and assisting at prolonged and complicated operations which he ought never to be called upon to perform in general practice. Probably in a short time this part of his work will be delegated to post-graduates specialising in surgery. The enormous growth in clinical laboratories has led to much more reliable and intensive investigations of a biochemical and pathological nature which to-day has become essential for the investigation of most diseases; but it has removed from the student and the resident medical officer the feeling of responsibility. It has also added to his difficulties in that special classes have to be arranged for his training in clinical pathology. With the appointment of officers of higher training as skilled assistants his opportunity of carrying out minor operations has been lessened, so that post-graduate appointments have become increasingly important until they are now essential. It is difficult however to see how this can be avoided. Increased knowledge necessitates increased training.

Although there is therefore still much in surgery that is unstable and is bound to change, the many improvements that have occurred in the last 25 years show great progress. Surgery is international, and team-work has replaced individualism. Every man has increased powers of learning from those in his own country and abroad, powers which have been enormously enhanced by the growth of travelling, surgical clubs, and of medical societies, where all branches meet for free discussion, so that even the humblest worker who has no opportunity for research may throw a side-light on a subject which may lead to most valuable results. Every student who enters surgery to-day may feel that, although his income may be less than in the past which will give greater happiness in life than financial profit, he has interesting and joyful work; and that he has more than ever before, opportunities of making new discoveries and adding to the general progress of medicine.

Reviews

Laboratory Methods.—Bacteriological, Pathological, Serological and Chemical by Dr. P. Murugesan, Hony. Bacteriologist (Research), Govt. Pathological Institute, Medical College, Madras, 2nd edition, revised and enlarged, price Rs. 3-8-0.

The first edition of this much useful hand-book was published in 1917 and the present one, under review in 1932. Between these years much progress in the laboratory methods has been made and is found incorporated in this edition. In the introductory note to this book, late Dr. M. S. Krishnamurthi Ayyar, M. B. & C. M., Retired Sanitary Commissioner to the Govt. of Travancore and Editor, *The Medical Practitioner* wrote in 1932:

"Dr. Murugesan is well-known and is a practical bacteriologist of several years standing. Besides, his experience is long and wide under all conditions in India from Asansol in the north to Coonoor in the south and Madras in the east. He has held important and responsible appointments in Hospitals, Colleges, Research Institutes, Research Investigations, etc. His book is a highly practical one and an epitome of all important matter contained in bigger treatises. It is written in a simple and clear style and can be read and understood by all medical practitioners, however low their qualifications may be. I think the book should find a place in the consulting room of every medical practitioner."

We have gone through the book very carefully and we find the above remarks quite justified. We may, however, point out that the book is without an index. No modern book can be said to be complete without it. We wish the author adds it to his future edition. A bibliography may also be usefully added which will assist a medical man in his search of original works for greater details.

Medical Case-Taking.—By Bidhn Bhushan Pal, L. M. S. Bengal Medical Service, Upper; Teacher of Medicine at Dacca Medical School; Physician, Mitford Hospital, Dacca; with a foreword by Captain R. Linton, M. B. Ch. B., B. Sc., I. M. S., 1935 edition, price, cloth bound, Rs. 2-8/- paper cover Rs. 2/-.

Systematic examination of the patient is one of the secrets of success in correct diagnosis. It is a habit which has to be cultivated assiduously. It must begin in our student life and continued in our future career as medical practitioners. The author

has written this book for students; but we believe it to be as useful to the general practitioners as to the former. The treatment of the subject is intensely practical. The book is handy, get-up is good and the price moderate. We heartily recommend this book not only to the students to whom it is mainly intended but also to the practitioner as a refresher.

Annual report of All-India Institute of hygiene and public health, Calcutta, 1235.—This is the first Annual Report of the Institute and it forms a most interesting reading. It is under the efficient and devoted management of Lt. Col. A. D. Stewart. It is both a teaching and research institute. For a long time the necessity of such an institution was felt but could not be taken on hand owing to financial and other considerations. In 1914, Sir Leonard Rogers conceived the idea of an All-India Institute of Hygiene, not with a view to replace the training given in Public Health by the Universities of Bombay, Madras, Calcutta and Lucknow, but to provide in this new Institute training on a wider basis and combining it with research, so that the qualifications given by this institute may be held sufficient by the Government for the appointment of first class Health Officers with Indian experience. Preliminary troubles and difficulties stood in the way. "Dr. W. S. Carter, M. D., Associate Director of the Rockefeller Foundation in his periodic tours of India and the Far East met General Megaw and General Graham on various occasions and became deeply impressed with the necessity of establishing an All-India Institute of Hygiene". He felt that Calcutta would be the best and suitable place owing to the already existing Tropical School of Medicine, as this would avoid duplication of work and staff. As a result of discussion with General Megaw and others he immediately addressed the Government of India offering to provide the cost of site, building and equipment and requesting the latter to give their assurance that they would meet the recurring cost of staff and maintenance after the building was handed over to them.

Thus the site was acquired in 1930, the building was completed in 1932 which was formally opened by His excellency Sir John Anderson. "The building practically adjoins the School of Tropical Medicine with which it harmonises in design and appearance". The scientific control of the Institute is vested in the Governing Body of the Indian Research Fund Association, which in turn vested the control in a comprehensive committee. It was originally proposed to have six sections, viz.,

- (1) Public Health Administration.
- (2) Malariology and Rural Hygiene.
- (3) Epidemiology and Vital Statistics.
- (4) Nutrition and Bio-chemistry.
- (5) Sanitary Engineering.
- (6) Maternity and child-welfare.

But "owing to the sudden financial crisis at the end of 1931, however, the Government of India found themselves unable to shoulder the financial burden of Rs. 3,50,000 per annum which the 6 Sections required and decided to allot the sum of Rs. 2,00,000 per annum, agreeing to restore the original sum when monetary conditions improved". Thus the last two sections were put in abeyance.

Functions and purpose of the Institute are:—

- (1) Practical application of scientific research.
- (2) Conferring of post-graduate qualification which will be considered by the Government as equivalent to the foreign degrees which are at present required for the post of first class Health Officers and Directors of Public Health.
- (3) Research and investigation.

We owe the present successful working of the Institute to the labours of Col. Stewart. There was for a time the acute question of admission of the Sub-Assistant Surgeons into the course of this Institute. We believe that they would have been banned but for the broad-mindedness and fore-sight of Col. Stewart.

"Most of the post-graduates under training proceed to take the Diploma of Public Health of the Calcutta University. This is open only to graduates, however, and it is recognized that there are many workers in public health in India, both in military and civil employ, and in Indian States, who would benefit greatly by a thorough training in public health, and who could proceed to a career in public health and in sanitary departments if they also possessed a diploma in public health. This question was very carefully considered by the Government of India and the Government of Bengal, and it was agreed that a Diploma in Public Health and Hygiene should be granted by the Faculty of Tropical Medicine and Hygiene of Bengal. This Diploma will be essentially of the same standard as the D.P.H. of the Calcutta University. Candidates for training for this Diploma will be specially

selected. *They may be Sub-Assistant Surgeons who have done health work, or they may be holders of medical diplomas who have shown special aptitude in health work or research, or military assistant surgeons not holding a university degree.* Applications for this course are carefully considered by the Selection Committee and only such applicants accepted as are considered suitable by education and achievement, to benefit by the course."

The same breadth of vision is evident when he writes on the qualifications required by Provincial Governments of candidates for Provincial Sanitary Staffs:—

"With the provision of facilities for training now available in the School of Tropical Medicine and in the Institute of Hygiene specially devoted to teaching and research in the public health problems of India, it is obvious that the situation has changed, and it may be opportune to take stock of the position at the present time. The main point for consideration is whether the possession of a D.P.H. obtained in the United Kingdom or abroad should be considered essential to a candidate for appointments to the superior or other staff in provincial public health departments. It may be pointed out that the course of training for the D.P.H. in the United Kingdom is largely and purposely designed to turn out capable assistant medical officers of health for work in the United Kingdom and not elsewhere. Instructions in the problems of the epidemiology and prevention of tropical diseases such as malaria, cholera, and kala-azar must, if given at all, be largely theoretical. The value of training (and the same applies to experience) in a country where environmental sanitation is of a high standard should of course be great. It is a matter for consideration however whether the possession of a D.P.H. obtained in the United Kingdom or elsewhere is of itself still an essential for an officer in any appointment of a provincial sanitary staff, taking into consideration the facilities now available in India for instruction and practice in public health problems.

In my opinion the Diploma of Public Health acquired at the School of Tropical Medicine

and at the Institute of Hygiene should now be considered as actually preferable to a D.P.H. obtained abroad."

The report gives also a summary of the work done by the various departments of the Institute. It is so full of interest to the medical profession that we shall be publishing extracts from the same in our subsequent issues. It may quite justifiably be considered as *Recent Advances* in the subject in which the department deals.

Information Bureau

(This column is specially opened to give such information as will be useful to the medical licentiates of India. For more detailed information, write to Dr. U. B. Narayan Rao, General Secretary, A. I. M. L. A., 94, Girgaum Road, Bombay 4, who will respond to enquiries promptly (Ed. I.M.J.).

STATEMENT SHOWING THE LIST OF LICENTIATES WORKING IN HONORARY CAPACITY IN THE BENGAL PRESIDENCY

Campbell Hospital

1. Dr. Abdul Balaq Hosamal Hoque, Ear, Noes and Throat Department, Campbell Hospital, Dhaura, P. O. Nagirhat, Dt. Jessore.
2. Dr. Sunil Kumar Das, Campbell Hospital, Khalipur, Balikhole, Khulna.
3. Dr. Ranendra Nath Bose, New Ergin Pavilion, Saidpur, Taki P. O., 24 Pargs.
4. Dr. Mohammad Matiar Rahman, Woodburn, A. Ward, 133/1 Corporation Street, Calcutta.
5. Dr. Pushpati Mandal, woodburn B. Ward, 18, Upper Circular Rd, Calcutta.
6. Dr. Pramath Nath Sen, Mackenzie A. Wad 82, Shambunath Pandit Street, Calcutta.
7. Dr. Anil Kumar Sinha, Cholera Ward C/O A.C. Sinha, Bongeon, Jessore.
8. Dr. Motilal Ash, Baker C. Ward, Balurghat, Dinajpur.
9. Dr. Khior Mohan Chakravarty, F.A. and B.B. Wards Nonnor, P. O. and Vill. Raghunathapur, Dacca.
10. Dr. Bejan Behari Chatterjee, Surgical Ward, 21, Radhanath Bose Lane, Calcutta.
11. Dr. Sudhindra Kumar Chatterjee, Surgical Ward, Sorna, Khulna.

12. Dr. Jatindra Nath Mukherjee, 10, Neogipukur Lane, (Surgical ward) Culcutta.

Mitford Hospital, Dacca

1. Dr. Santipriya Bose, Operation Theatre, Mitford Hospital Dacca.
2. Dr. Harendra A. Paul, Operation Theatre, Mitford Hospital Dacca.
3. Dr. Sachindra Nath Bagehi, Surgical Ward, Mitford Hospital, Dacca.
4. Dr. Arabhinda Roy Choudhury, Surgical Wards, Mitford Hospital Dacca.
5. Dr. Sachindra K. Bose, Eye Ward, Mitford Hospital, Dacca.
6. Dr. Bonod Behari Malik, Eye Department, Mitford Hospital, Dacca.
7. Dr. Digendra Mohan Sarkar, Eye Ward, Mitford Hospital, Dacca.
8. Dr. Jatindra Chandra De, Eye Department, Mitford Hospital, Dacca.
9. Dr. Sudhendra Nath Bose, Eye Department, Mitford Hospital, Dacca.
10. Dr. Santhi Priya Mittra, Medical & Infectious Wards, Mitford Hospital, Dacca.
11. Dr. Pratap Chandra Bhattacharjee, Medical and infectious Wards, Mitford Hospital, Dacca.
12. Dr. Sundra Lal Panday, 2nd Medical Wards, Mitford Hospital, Dacca.
13. Dr. Profulla Chandra Dass, 2nd Medical Wards, Mitford Hospital, Dacca.
14. Dr. Nagendra Nath Bose, Research Ward, Mitford Hospital, Dacca.
15. Dr. Gouranga Chandra Das Gupta, Clinical Laboratory, Mitford Hospital, Dacca.
16. Dr. Bama Charan Banik, Mitford Hospital, Dacca.
17. Dr. Sham Pada Bose, Mitford Hospital, Dacca.
18. Dr. Ashoka Chandra Choudhury, Out patient Department, Mitford Hospital Dacca.
20. Dr. Mirza Ashraf Ali, Out patient Department Mitford Hospital Dacca.
21. Dr. Kamakaya Chandra Roy, out Patient Department, Mitford Hospital, Dacca.

S. K. Hospital, Mymensingh

1. Dr. Muhammed Abdul Razaque, Surgical Ward, Nur Medical Mess, Mymensingh.
2. Dr. Nirmal Chandra Datt, Medical Ward, Bagmara Road, Mymensingh.
3. Dr. Bhupendra Kumar Goswami, Isolation Ward, Bagmara Road, Mymensingh.

Association Notes

CIRCULAR NO. 14

To all Secretaries,

SIRS,

On 20th September 1933, The Indian Medical Council Act of 1933 was passed into law in spite of the strong and unanimous opposition of the Licentiates and the Indian Medical Profession in general. Both the All-India Medical Licentiates' Association Conference and The Indian Medical Association's Conference have passed resolutions condemning the bill. The Indore Conference has by its resolution No. 7 (vide I.M. Journal May, 1935, page 279) reiterated the demands of the Licentiates in this connection.

It is our duty therefore to act up to the resolution in right earnest this year and put up a strong constitutional fight for the repeal of the Act in our favour, on which our status and position in the Medical world and before the public depends. This is an affair in which the whole Medical profession in India are at our back. I would therefore request you to observe the 20th September 1935 as an "All-India Anti-Indian Medical Council Day" and to hold a protest meeting on the day under the auspices of all the Medical Associations of your place.

The next sessions of the Imperial Legislature will probably be assembling by the time and as such I suggest that our branches should arrange a deputation and wait on all the members of the Assembly, both official and non-official, residing in the district, explain to them in detail the grievances of our class as regards the Act and enlist their sympathies. Their opinion should be informed to me.

(N.B.—The two pamphlets published by our Association regarding our claims in this connection has been already sent to you by our Ex-General Secretary. In case any branch has not got the copies they are requested to write to me immediately. These pamphlets explain the whole position.)

Each Branch should also join hands with other Associations and the Medical Men of the place and arrange for the meeting on the 20th September. The protest resolution should be sent to all the local papers, to the members of the Assembly interviewed by the Branch and to the Government. The local press should be requested to take up the question. Our Editor is being moved to write an editorial in extenso on the subject in the September issue and send marked copies to each and every member of the Assembly. Other Medical Journals also will be requested to do the same. I am sure that a vigorous propaganda on the above lines will bring about the success of our righteous cause.

Yours sincerely,

U. B. NARAYAN RAO,
General Secretary. A. I. M. L. A.
BOMBAY, 1st August 1935.

NOTICE TO ALL SECRETARIES AND OFFICE BEARERS OF THE ALL-INDIA MEDICAL LICENTIATES' ASSOCIATION'

It has been now decided by the Finance Committee to allow old members to rejoin the Association on payment of Rs. 4/- only. So, all are requested to collect subscription from old members who wish to rejoin at Rs. 4/- only per Annum, without any additional admission fees as required by Rule 50 of the Rules and Regulations of the A.I.M.L.A.

Resolution No. 324 of the Finance Committee is given below for the information of all concerned.

"Read and considered the letter No. 5156/35 from the G.S., forwarding a copy of the relevant portion of a letter from the President regarding the slight modification of Rule No. 50 together with the remarks of the General Secretary and then the following resolution was passed unanimously.

As following the rule No. 50 of the Association strictly this year is not in the

Association Accounts

MONTHLY STATEMENT OF ACCOUNTS OF THE ALL-INDIA MEDICAL LICENTIATES' ASSOCIATION FAMILY FUND

June 1935

Receipts				Payments			
	Rs.	A.	P.		Rs.	A.	P.
Balance brought forward from last Month's Acct.	17	2	9	Office establishment	20	0	0
By deposit to call No. 159	4	0	0	Postage	5	0	0
By deposit to call No. 160 and 161 @ Rs. 5 each call	10	0	0	Money order Commission charges	4	4	0
By deposit to call No. 162	4	0	0	Stationery	0	6	6
By deposit to call No. 168	12	0	0	Miscellaneous charges	8	11	0
By deposit to call No. 164	85	0	0	Propaganda work	6	0	0
By deposit to call No. 165	84	0	0	Printing charges	87	0	0
By deposit to further calls in advance.	10	0	0	Death calls paid	618	11	8
By deposit to calls arrears	20	0	0	Deposit returned	2	0	0
By deposit Admission fees	8	0	0				
By deposit Cost of certificate	0	8	0				
Withdrawn from Post Office S. B. account	445	0	0				
Interest in deposits	175	0	0				
Total	769	10	9	Total	692	0	9
				Balance in hand	77	10	0
				Grand Total	769	10	9

(SD.) G. V. MOTIWALE,
Secretary
A.I.M.L.A. FAMILY FUND

(SD.) M. R. FADNIS,
Manager
A.I.M.L.A. FAMILY FUND

interest of the Association, this Committee agrees with the recommendations of the President and the General Secretary and resolves that the old members of the Association be allowed to join the Association on payment of Rs. 4 till the next Conference. And further resolved that the President, General Secretary, Joint General Secretary Treasurer and the Managing Editor be informed accordingly and the General Secretary be authorised to publish the same in the I.M.J. for the information of all the office bearers and members of the Association."

(Sd.) U. B. NARAYAN RAO,

General Secretary

A. I. M. L. A.

Dated, Bombay 28-8-35.

Madras Branch

Proceedings of the meeting of the Managing Committee of the Madras Branch of the All-India Medical Licentiate's Association held on the 21st of January 1935 (re-written as per the resolutions of the committee dated the 23rd of February 1935 and 31st of March '35.)

The following members were present :—

Dr. Ramanjulu Nayudu, Dr. D. V. Venkappa, Dr. K. Venkat Rao, Dr. C. Narasimhulu Nayudu, Dr. G. Narayanaswami Nayudu, 6. Dr. K. S. Sivaramakrishna Iyer, Dr. G. Subbarayudu, Dr. C. S. Mohanarangam, Dr. P. C. Ramachandra Raju, Dr. T. V. Regunatha Rao, Dr. Y. Suryanarayana Rao, Dr. K. S. Sivaramakrishna Iyer was "at home" to the members.

After the minutes of the Managing Committee meeting of 7th December 1934 were read and before they were put to vote, Dr. G. Subbarayudu, the Provincial Secretary, raised an objection saying that this managing Body had no power to confirm the proceedings of the previous meeting since this body was not properly constituted in as much as certain members of the association did not receive the notices for the Annual General Body Meeting held on 18th December 1934 at which the office-bearers and the members of the present committee were elected. The provincial secretary then pointed out the names of some members who complained to him about the non-receipt of the notice and placed before the house the letters of complaint received by him from them. The Joint Secretary who despatched the notices for the said General Body Meeting said that the list of members which he had with him did not contain these names. The Secretaries expressed their regret for the above occurrence and the general sense of the house was that the present Committee was properly

constituted. Thereupon, the Provincial Secretary tried to walk out when Dr. K. S. Sivaramakrishna Iyer intervened and pointing out Rule No. 24, last para, of the existing rules and regulations of the Association regarding the conducting of the meetings, proposed the following resolution which was accepted by the Provincial Secretary and was unanimously passed and the letters of the Provincial Secretary and of the complaining members were recorded.

"The Secretaries while regretting the non-receipt of the invitations for the General Body Meeting of the 18th December 1934 wish to invite the attention of the Provincial Secretary and the concerned members to Rule No. 24 last para regarding the conducting of meetings of the Association and request the concerned members to send in a proper requisition to convene a general body meeting if they still think that the proceedings of the general body meeting of 18th December 1934 are not acceptable to them."

A copy of the above resolution is to be communicated to the concerned members through the Provincial Secretary.

2. The minutes of the meeting of 7th and 18th December 1934 were then read and confirmed.

3. The accounts of the Honorary Secretary and the Joint Secretary for the month of December 1934 amounting to Rs. 8-8-9 were gone into and passed.

4. The Secretary then requested the house for the sanction of about Rs. 8 for getting the letter heads of the branch printed.

Dr. G. Subbarayudu, the Provincial Secretary, objected to the same pointing out that the Central authorities of the Association are printing common letter heads applicable to all Branches and that necessary stock may be obtained from them instead of spending additional amount. The item was then put to vote and it was carried by a majority. Dr. Subbarayudu only voting against.

5. A sum of annas eight was sanctioned for the purchase of four office files for the use of the Secretary's office.

6. The following correspondence was then placed on the table :—

(a) Letter from Dr. V. Ramakamath thanking for the congratulations sent in by this branch at his election to the local Medical Council.

"Recorded."

(b) Letter from the Provincial Secretary, Madras, forwarding a letter from Dr. Brahaspathi sending an extract from the Burma Medical Journal about the appointment of the All-India posts in the Mother Association by rotation in all the provinces.

"Resolved that a committee of three members consisting of Doctors A. Viswanathan, G. Subbarayudu, and Y. Suryanarayana Rao, be appointed to go into the matter and to report before the next meeting of the branch."

(c) Letter from the Health Officer, Madras Corporation giving the information called for regarding the appointment of Licentiatees as Medical Inspectors of Madras Corporation Schools in the city.

"Recorded."

(d) Letter from the General Secretary in reply to resolutions of this Branch Nos. 4-A and B. of 7th December, 1934.

"Recorded."

Budget estimate sent in by the General Secretary, Bombay, for the opinion of the members of the Standing committee, was placed on the table by Dr. Y. Suryanarayana Rao for the opinion of the Branch.

"Resolved that a committee be appointed to consider the same and the committee to consist of the same members as appointed in the above Resolution. 6 (b).

(e) Letter of resignation from the Honorary Secretary Dr. Y. Suryanarayana Rao to take effect from the 22nd January, 1935 on account of personal reasons. The house requested him to withdraw his resignation, but he did not. His resignation was then accepted and the Joint Secretary Dr. K. Venkata Rao was requested to look after the duties of the Honorary Secretary also till another was appointed.

The meeting then terminated at about 8-30 p.m., with a vote of thanks to the chair and to the host of the day, Dr. K. S. Sivaramakrishna Iyer.

COPY OF REPRESENTATION BY THE PROVINCIAL SECRETARY, MADRAS TO THE SURGEON-GENERAL WITH THE GOVERNMENT OF MADRAS

From

The A. I. M. L. A., Madras

To

The Surgeon General with the Govt. of Madras,
MADRAS

Sir,

On behalf of the above Association we beg to make the following representation, regarding the affliction caused to Sub-Assistant Surgeons obtaining higher qualifications in not getting higher scale of pay.

As an instance, we beg to quote the case of Dr. S. M. Natesa Mudaliar, L.M.P., M.B., B.S. Assistant Lecturer, Stanley Medical School, Madras, who in spite of possessing higher qualifications, is not given the selection grade pay.

Kindly permit us to trace the history of the grant of higher scales of pay to S. A. S. under different conditions.

The S. A. Surgeons were granted new scales of pay from 1-8-1921 higher than what obtained previously, the new scale being Rs. 75-5-175 and the Selection Grade Rs. 200/- for a select percentage; so that men of special merit were automatically, even without any higher qualification, being given the selection grade on Rs. 200/- provided they completed ten years of service as stipulated by G. O. 911. P.H.D./2-8-1921. Subsequently G. O. No. Mis. 887. P. H. D./22-6-22 was passed granting selection grade pay of Rs. 200/- to permanent S. A. S. who obtained L.M.S. or higher qualifications without absorbing any of the appointments in the usual selection Grade. S. A. Surgeons in service were raised to the rank of Civil Asstt. Surgeons as and when the 1st vacancies arose provided they had completed 15 years service. The grant of the study leave to S. A. S. gave better facilities to those aspiring to improve their knowledge and their prospects as well.

When the retrenchment came into force in the year 1931, the grant of study leave was withheld and S.A. Surgeons could not proceed to the United Kingdom. So, some of them took long leave and joined the Madras Medical College in July 1932 in order to earn higher qualifications. In August 1932 G. O. No. 1700 P.H.D/11-3-32 was passed restricting the grant of selection grade pay to such Sub-Assst. Surgeons as would earn the very highest qualifications viz., M.D., M.R.C.P., F.R.C.S. etc. Those who had higher qualification, already earned, and were due to be raised to the rank of Asstt. Surgeons were also barred though they had been given the selection grade pay of Rs. 200/- even prior to the passing of the above G.O.

Our Association realised the plight of S. A. Surgeons and waited on deputation on the then S. G. on 7-11-32 and represented the grievances caused by the application of the G. O. Among other things, the association represented to him that it was totally unfair to apply the G.O. to such of the S. A. S. as had already taken leave and begun to prosecute higher studies prior to the passing of the above G. O. The then S. G., among other assurances, positively assured the association that he would make a strong case on behalf of those who had already taken up higher studies and see that the G. O. No. M. S. 720 P. H. Local Self-Government D/29-3-33 cancelling the application of the G.O. No. 1700 P. H. S. /11-8-32 is applied to "Nine" Sub-Assistant Surgeons who were on study leave prior to the issue of the order.

The Association felt very grateful to the Surgeon General and to the Government for having acceded to the request of the Association and felt satisfied that the "9" included the Sub-Assst. Surgeons who had taken to higher studies by joining Madras Medical College in July 1932. When Dr. C. Raman, L.R.C.P., M.R.C.S., returned to India after earning higher qualifications and rejoined duty on 12-9-33 the association was immensely gratified to realise that the G.O. No. 720 P. H. S/29-3-33 was practically enforced as he got the selection grade pay of Rs. 200/-. The Association fervently hoped that

the S. A. Surgeons who were prosecuting higher studies in the Medical College would also receive similar benefit. But it is regretted that this benefit has not been conferred on Sub-Asstt. Surgeon Dr. S. M. Natesa Mudaliar, who took the M. B., B. S. degree in Dec. '34 and rejoined duty immediately. The Association is unable to know the reason for this and apprehends whether the S. A. S. who had begun to prosecute higher studies along with him would get it either. It is not known why the concession granted to Dr. C. Raman has been withheld in the case of Dr. S. M. Natesa Mudaliar. It has been thought that the S. A. Ss. who prosecute higher studies at their own cost in India undergo greater expenses than those who proceed to the United Kingdom at Government cost and so deserve equal concessions.

Under the circumstances, the Association earnestly requests you kindly to sanction or recommend the grant of Selection grade pay of Rs. 200/- to the S. A. Surgeons who were on leave and were undergoing a course of studies in the Medical College Madras, before the passing of the G. O. No. 1700, P. H. S/11-8-32 and thus justify the spirit of the recommendation made by the then Surgeon-General as an outcome of which the G.O. 720 P.H. Local Self-Government d/29-8-33 has been passed.

This Association is ever grateful to you for your kind and patient hearing and feels sure that the objects of its deputation are achieved.

We beg to remain,
Sir,

Your most obedient servants,
(Sd.) G. Subbarayudu.

Provincial Secretary,
Madras Branch.

(Sd.) U. D. Gopal Rao,
Honorary Secretary,

Madras Branch,
For the A.I.M.L.A., Madras.

Proceedings of the Managing Committee meeting of the A.I.M.L.A. Madras branch held on 7-5-35 at 6 p.m. at No. 8, Raja Hanumanthala Lane, Triplicane, Madras.

Members present:—Drs. Ramanjulu Nayudu, A. Viswanathan, Y. Suryanarayana Rao, U. D. Gopal Rao, C. S. Mohanrangam, G. Subbarayudu, T. V. Ranganatha Rao and D. V. Venkappa.

Dr. T. V. Ranganatha Rao was "At Home" to the members.

Dr. Ramanjulu conducted the proceedings.

The following items of the agenda were gone through:—

The minutes of the previous meeting were read and confirmed.

The Secretary placed on the table the proceedings regarding the deputation to the Surgeon-General

with the Government of Madras on 12-4-35. Dr. Subbarayudu, one of the deputationists, described briefly the various points discussed during the above interview and pointed out the sympathetic attitude of the Surgeon-General towards the grievances of the Sub-Asstt. Surgeons expressed in the memorandum.

Dr. G. Subbarayudu read before the house a brief summary of the proceedings of the recent Indore Conference in the matter of rules and regulations, T. A. of delegates and the office of the Editor and Manager of the Indian Medical Journal. He further expressed his gratefulness to the unique services rendered in this direction by Dr. A. Viswanathan who was mainly responsible for the above changes in the constitution of the Association. The house while appreciating the services rendered by Dr. A. Viswanathan was proud to note that Madras had taken the lead in the matter of Medical politics of the Association.

Resolutions:—The following three resolutions were moved by Dr. G. Subbarayudu in connection with the changes in branch finance and passed unanimously.

1. That a local fund be raised to meet extra expenditure by collecting a subscription of annas four only from each member of the branch.

2. That the house shall record with great pleasure the voluntary contribution of Rs. 10/- per month by Dr. A. Viswanathan towards the expenses of the branch.

3. Consequent on the transfer of Dr. P. C. Ramachandraraju, Joint-Secretary of the branch, from Madras, Dr. K. S. Sivaramakrishna Iyer be elected as a Joint-Secretary and in the vacancy thus caused in the committee Dr. V. Vijayaraghavan be co-opted as a member in place of Dr. Sivaramakrishna Iyer, the Joint-Secretary.

The following resolutions were then moved from the chair and passed unanimously.

4. That Dr. G. Subbarayudu be a member of the managing committee.

5. The managing committee of the Madras Branch of the A.I.M.L.A. offers their congratulations to Dr. T. Satagopan M.D. Hony. physician of the General Hospital, Madras, on his success at the recent election of the All-India Medical Council from Madras Constituency. Further, the committee earnestly hopes that Dr. T. Satagopan's services in the All-India Medical Council would be of immense benefit to the medical profession in general and to the Medical Licentiates in particular by doing the needful to include the latter within the purview of the All-India Medical Council.

The Secretary then informed the house of the correspondence regarding the points raised by the deputationists referred above.

Some of the grievances of the Medical Licentiates working under the Madras Corporation with particular reference to their prospectus and status were also brought to the notice of the house.

6. The accounts for the month of April were gone through and passed unanimously.

The meeting terminated with a vote of thanks to the chair and the host.

Jorhat Branch

A meeting of the Jorhat Branch of the All-India Medical Licentiates' Association held on the 4th May 1935 at 7 p.m. in the premises of the B. B. Civil Hospital, Jorhat.

The following were present.

Lt.-Col. C. H. P. Allen, Civil Surgeon, Drs. B. N. Sen, Assistant Surgeon, A. L. Hazarika, D. K. Mitra, Khashubali Hazarika, M. R. Das Gupta, D. R. Den, D. B. Dutta, S. Sen Gupta, R. C. Dey, F. Haque, B. B. Sen Gupta, Miss N. Shulai.

Lt. Col. C. H. Allen was in the chair.

1. Col. Allen gave a nice speech bidding farewell to Dr. M. R. Das Gupta who has been transferred from this place. Dr. B. B. Sen Gupta also spoke a few words and offered thanks on behalf of the members to Dr. M. R. Das Gupta for the good work he has done as a secretary of this branch.

A tea party was given by Dr. B. B. Sen Gupta on account of the farewell to Dr. M. R. Das Gupta. A vote of thanks was given to the chair.

The proceedings of the Branch were then carried on and Dr. B. B. Sen Gupta was in the chair.

2. Read and confirmed the resolutions of the last meeting.

3. Dr. S. K. Sen Gupta spoke about the annual conference held at Indore and submitted his T. A. bill.

4. T. A. Bill for Rupees one hundred and thirteen and annas ten only submitted by Dr. S. K. Sen Gupta has been scrutinised by the Hony. Auditor Dr. K. Hazarika and unanimously passed by the house.

5. Dr. M. R. Das Gupta being transferred from this place relinquishes his office as secretary of this branch.

6. Lady Dr. Miss N. Shulai has been proposed to be the secretary of this branch by Dr. R. C. Dey and supported by the house and elected.

The meeting closed with a vote of thanks to the chair.

Nainital Branch

A meeting of this branch was held at Kashipur (Dr. Pant's Medical Hall) on May 17th 1935 at 9 a.m. when Dr. H. S. Pant was in the chair.

The following members were present:—

Drs. H. S. Pant; Bal Mukund; R. S. Garga; R. S. Shrivastava and Dr. Mod. Amin (Proxy).

Resolutions passed:—

This branch notes with regret the murder of Dr. Jiv Ram in the Ferozabad Tragedy, prays to the Almighty to give rest to his soul and sympathises with the bereaved family. The copy of this resolution be sent to his relatives.

This branch requests the Director of Public Health, U. P. to consider favourably the question of increment in pay of the new entrants to the cadre of L.P.H. officers which should not be less than the increment given to the P.S.M.S. officers. The copy of this be sent to the Director of Public Health, U. P. through the Provincial Secretary, A.I.M.L.A.

The contingent bill of the branch from 1-4-35 to 16-5-35 be passed.

The T. A. bill of Dr. R. S. Garga who attended the Indore conference in April 1935 as a delegate of this branch is passed for Rs. 47-7-0 which shall be forwarded to the G. S. for favour of early payment.

Then the host served the members with Sherbat and Pan and with a vote of thanks to the chair, the meeting terminated.

Ahmedabad Branch

Extracts of the proceedings of the General meeting held on the evening of the 9th March 1935 at Dr. Joseph Benjamin's Dispensary.

The following 10 members were present.

Drs. Joseph Benjamin (in the chair); R. S. Dr. Sankerlal; K. Vyas; M. K. Pandye; J. B. Desai; S. P. S. Mehta; P. R. Trivedi; C. T. Bherwala; N. S. Shah; P. K. Mody; and J. J. Vyas.

The proceedings of the last meeting were read and confirmed.

The following resolutions to be moved in the next conference (27th) at Indore were passed.

1. Resolved that the Finance Committee need not necessarily be appointed from the place where the conference is held and that a finance committee once appointed shall be allowed to continue if its work is found satisfactory. This committee shall however be re-elected at every conference.

2. This conference notes with regret that the Bombay Government have reduced the scale of pay of Civil Sub-Asst. Surgeons from Rs. 60 rising to Rs. 200 to Rs. 50 to Rs. 170, plus a cut of five per cent, so that a new entrant will only get Rs. 47-8-0 instead of the present of pay Rs. 60 and requests the Bombay Government that they may take into consideration the onerous and hard duties which Sub-Asstt Surgeon have to perform and to kindly keep the scale of Rs. 60 to Rs. 200 in force.

3. This conference urges upon the Government of India the necessity of amending the present provincial medical council Acts so as to give the Provincial medical licentiates proportional representation in the Provincial Medical Register.

4. This conference urges upon the Government of India the necessity of amending without any further delay the Indian Medical Council Act, so as to include Indian Medical Licentiates within the scope of the Act and requests the present members of the said council and press upon the Government of India to remove the injustice which has been done to the deserving class of the Indian Medical Licentiates by their exclusion from the scope of the act.

5. That the course of study in all recognised Medical schools in India be raised to five years and

that there should be uniform standard of education therein and that only experts should be appointed as teachers who should not be frequently transferred.

6. Resolved that as suggested by Dr. Viswanathan, the Indian Medical Association should be requested to incorporate in its rules among its object that it shall work for statutory equality of the Medical Licentiates with the Medical graduates of the Indian Universities before federation of the associations is agreed upon.

This branch is further of opinion that our association should for the present co-operate with the Indian Medical Association in all matters pertaining to the welfare of the Indian Medical profession as a whole, and of the Indian Medical Licentiates in particular.

This branch is also strongly of opinion that the Indian Medical Journal should remain as a separate entity to guard the interests of our class, to prove that our class is able to conduct a journal, and to be an incentive to members of our class to contribute original articles, etc.

This branch is of further opinion that there is no objection to conferences of the two associations meeting at the same place but they shall both hold separate sittings and pass separate resolutions. Resolutions of common interests can be passed at a joint meeting of both the conferences. Lastly, this branch is of opinion that there is no objection for a joint scientific exhibition being held by both the Associations and for scientific papers being read jointly, provided the responsibility of cost is borne by both the bodies.

7. The contingent bill of the Provincial Secretary, No. Nil, dated the 18th November 1934 amounting to Rs. 1-15-6 be passed and sent to the General Secretary, Bombay, for payment.

8. Resolved that the contingent bill of the branch Secretary from 17th July 1934 to 8th March, 1935 amounting to Rs. 7-11-9 be passed and forwarded to General Secretary, Bombay, for payment.

9. Resolved that since Dr. P. R. Trivedi shows his inability to go to Indore Conference as a substitute delegate, it was resolved that Dr. M. K. Pandya be elected as such and that timely information be given to him to prepare himself in case Dr. Nagindas D. Shah cannot proceed to attend the Indore Conference.

With a vote of thanks to the chair the meeting terminated.

Bombay Branch.

Minutes of the special urgent General body meeting of the A.I.M.L.A. Bombay branch, held on the 18th November, 1934 at 8-30 p.m. (S.T.) at the Office hall.

Agenda:—

1. To read and confirm the minutes of the last general body meeting.
2. To take disciplinary action against the Branch Secretary, Dr. Talati, for defiance of Managing Committee.
3. To elect a delegate to the ensuing Conference.

At the outset, as there was some difference of opinion on the point of the President Dr. Tarapore occupying the chair on this occasion, a vote of confidence on the President was taken and the same was passed by a majority. But Dr. Tarapore at the request of a member offered the chair to Dr. N. R. Karandikar, the Ex-President of the Branch, and was proposed to preside over the meeting. This proposal was duly seconded by Dr. Baliga and was passed by the house unanimously.

Dr. Karandikar then occupied the chair.

The minutes of the previous meeting were read and confirmed.

The Chairman then called upon Dr. Tarapore to give an account of the Secretary, Dr. Talati's actions.

Dr. Tarapore stated as follows:—

The Honorary Secretary, Dr. M. M. Talati without the knowledge and consent of the Managing Committee circulated the nomination and voting paper for the purpose of election of a delegate to the ensuing Conference. This was an error on his part.

On coming to know of this, seven of the members sent in a requisition protesting against the procedure adopted by the Secretary, requesting the President to convene a meeting to consider the question.

Accordingly, a Managing Committee meeting was called on 30-9-34. After hearing the requisitionists and the Secretary the matter was discussed at length; finally the president ruled the procedure adopted by the Secretary out of order in accordance with Rule No. 26 of the Association and directed the Hon. Secretary to call a fresh meeting of the M. C. for arranging the election of a delegate.

The Secretary accordingly convened the meeting on the 7th October 1934. As there was difference of opinion in the interpretation of Rule No. 26, it was resolved at this meeting that an authoritative interpretation of the same should be obtained from the office of the General Secretary, before proceeding with the work. Further, the Honorary Secretary was directed to write officially to the General Secretary in this connection.

The General Secretary's reply dated (?) '34 on the subject under reference was to the effect that the Hon. Secretary's action was wrong and that the Hon. Secretary had further infringed rule No. 5(c) in addressing a letter in this connection direct to the President of the Association. General Secretary also enclosed a copy of the letter containing interpretation of Rule No. 26 from the President and an information of having received direct communication from Bombay Branch Secretary on the same matter in contravention to Rule No. 5(c).

The committee was surprised to note that the Secretary had deliberately infringed Rule No. 5(c) in spite of the committee enlightening him on this point in their previous meeting and directing him to write to the General Secretary.

Not being satisfied with this, the Secretary sent a legal notice through his solicitors to the President of

the Branch asking him to withdraw the ruling given in the M. C. Meeting of 30-9-34, failing which further action was threatened.

To consider this legal notice the President convened a meeting on 11-8-34. The Secretary absented himself from this meeting without permission. The committee after reviewing the whole matter unanimously suspended the Hon. Secretary from his post until the General body meeting and referred to the General body for final disposal.

In the meantime, the Secretary sent another notice through his solicitors imposing on the President to assume the validity of the voting paper and insisting upon him to elect Dr. M. N. Talati as delegate for the conference.

Dr. Tarapore thus pointed out that—

1. The Hon. Secretary erred in sending the above referred circulars without the consent of the M.C.

2. The Honorary Secretary deliberately infringed the rule 5(c).

3. The Honorary Secretary defied the ruling of the branch President as well as that of the President of the Association in sending the legal notice to that branch President.

4. The Honorary Secretary's actions are, hence, against the rules as well as the best interests of the Association.

After hearing the opinion of the members, the Chairman directed the house to consider all the points laid before them and to decide whether the Honorary Secretary's actions were defiant or not.

The Secretary's actions were defiant. This was put to vote and was passed by a large majority.

The Chairman in summing up the subject expressed that the Honorary Secretary, Dr. M. N. Talati had begun with a wrong procedure in circulating the nomination papers and voting papers without the consent of the M. Committee. He, the Secretary, infringed Rule 5(c) and defied the President's ruling. The Chairman denounced the conduct of the Secretary in serving legal notice to the President of the branch.

Having found Dr. Talati guilty of defiance of authority, the following vote of censure was proposed against him and was passed by a majority.

"In view of the defiant actions and wrongful conduct persistently followed by Dr. M. N. Talati as a Secretary of the branch, I propose that a vote of censure be passed by the House and that he (Dr. M. N. Talati) be dismissed from Secretaryship."

Passed by a large majority.

Resolved that the resolution be communicated to Dr. Talati through his solicitors.

Resolved that Dr. R. R. Tavargiri, the Joint Secretary, be the Secretary of the Branch.

It was also resolved that all these resolutions and the proceedings should be communicated to the office of the General Secretary with the recommendation that the branch should be financially helped to meet the court expenses, should Dr. Talati still persist to take odd measures.

The following members were then elected to represent the Bombay branch at the ensuing conference to be held at Indore.

Dr. Meherjee—delegate; Dr. R. R. Tavargiri—1st. substitute; Dr. U. S. Rao—2nd substitute.

The chairman then read a letter of resignation from Dr. M. N. Talati. The letter was directed to be filed as he had already been removed from the Secretary's post.

Dr. Meherjee then thanked the house for electing him as a delegate and assured the members of his best services.

With a vote of thanks to the chair the meeting terminated after a light refreshment.

(Published under the authority of the Publicity Committee, A. I. M. L. A.—Vide G. S. No. 2769/35, dated 23-5-35. Ed. I.M.J.)

Jhansi Branch

Resolution No. 11. as passed at a meeting of the Jhansi branch of the A.I.M.L.A., held on February 28th, 1935, at the residence of Dr. Amir Ahmed, President, Jhansi branch:

This meeting of the Jhansi branch strongly condemns the action of the Editor and Manager, I.M.J. in not publishing this Branch resolution No. 2, (i); (ii); (iii) and (iv) passed at its meeting held on 26th June 1934, while giving publicity to the rejoinder of Dr. S. L. Sharma on the resolution of this branch referred to above. The attention of the general secretary of the Association is invited to this high-handedness on the part of the Manager and Editor of I.M.J. and he be requested to make an enquiry in the matter and inform this branch at an early date.

(Following is the omitted portion of the resolution of the Jhansi Branch. It is published under the authority of the G. S. letter No. 3609/35 dated 21-6-35 and in obedience to rule No. 211 of the Memorandum, Objects, Rules and Regulations of the A. I. M. L. A.) Ed. I. M. J.

Resolution No. 9.—The question of 5 years' course at Agra Medical School was considered in the light of H.E. the Governor's observations, and the branch after full consideration of the situation resolved as follows.—

- (i) That the memorandum presented to H.E. The Governor of U.P., on behalf of the U.P. Medical Licentiates' Association contained certain demands

- which were really absurd and extremely unreasonable.
- (ii) That the matter contained therein, apart from the demand of introducing 5 years' course at Agra Medical School, was inopportune and undesirable.
- (iii) That Dr. S. L. Sharma, the author of the memorandum, did great disservice to the cause of 5 years' course, by including other unnecessary demands in the memorandum, and thus gave a set-back to our scheme

of having a 5 years' course at Agra.

- (iv) That no attempt was made to publish the Governor's reply in the Medical Press up till now and no reply to the adverse comments of H.E. was given on behalf of or by the author of the memorandum. This omission on the part of Dr. Sharma weakened our case for 5 years' course and created a wrong impression on the Public about our claims for the same.

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I.M.J. Vol. XXIX, No. VIII Page 489. 56 0 0

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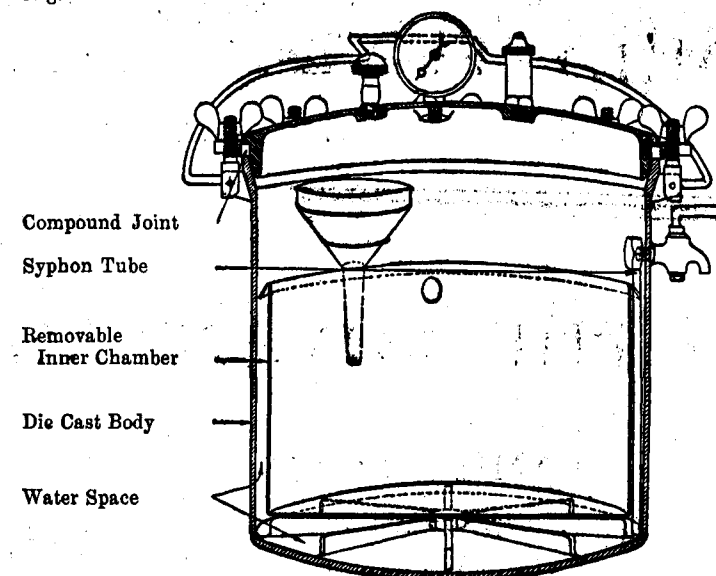
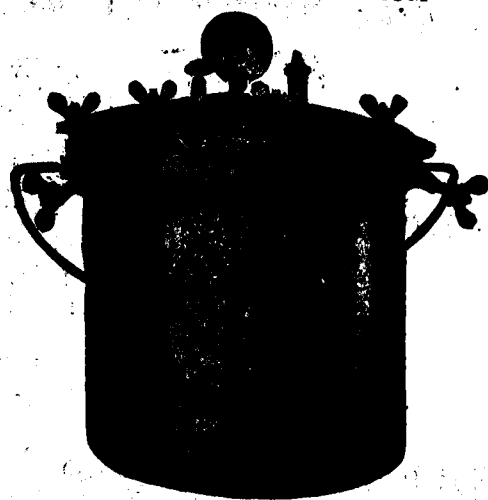
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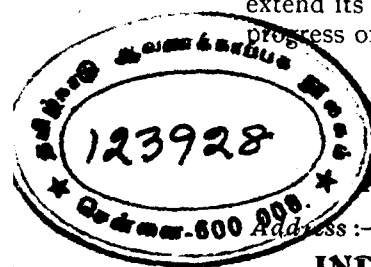
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