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The Antiseptic

A Monthly Medical Journal

EDITED BY
Dr. U. RAMA RAU
AND
U. KRISHNA RAU M.B., B.S.

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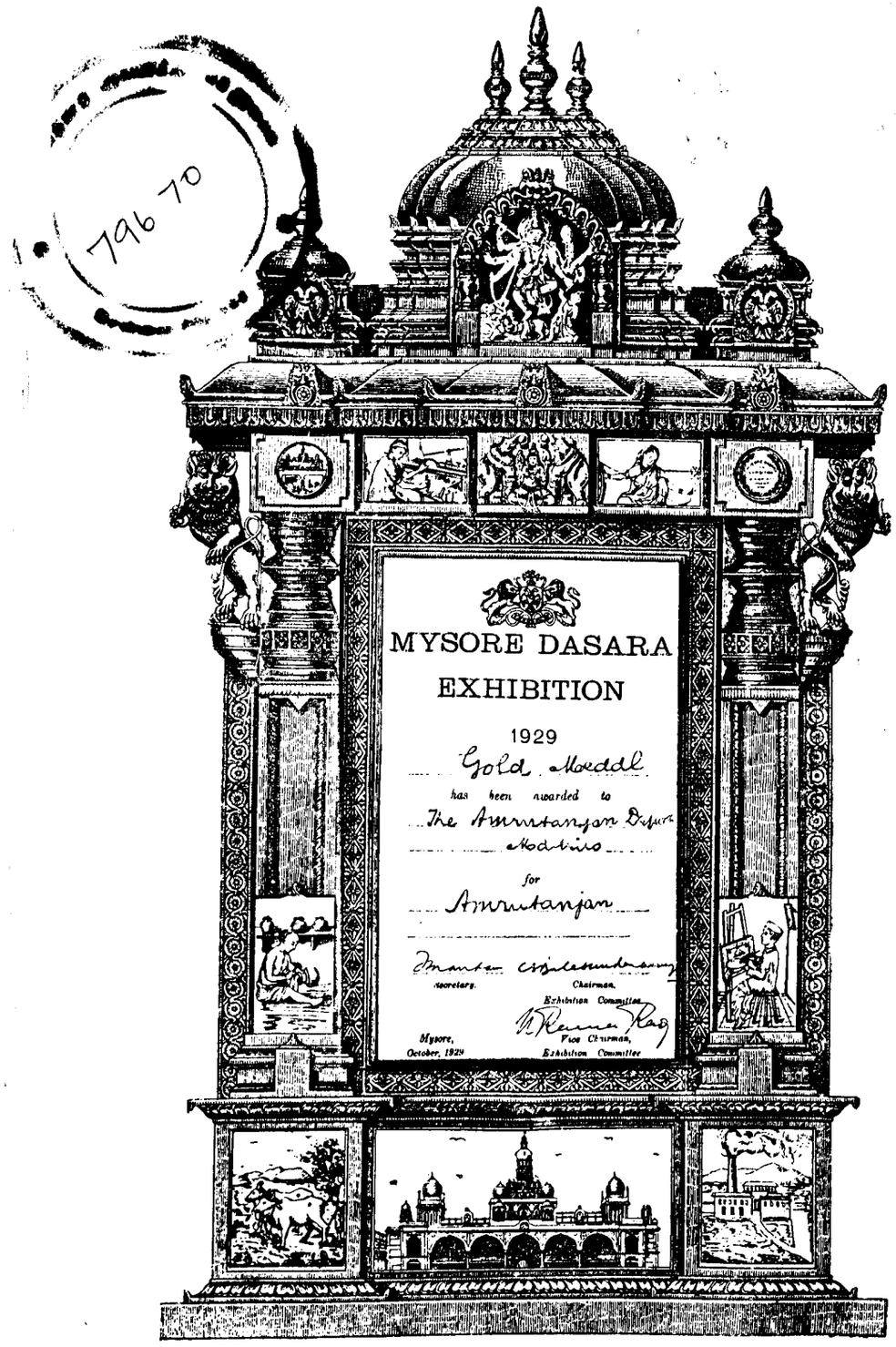

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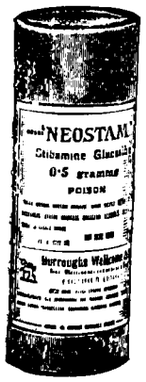

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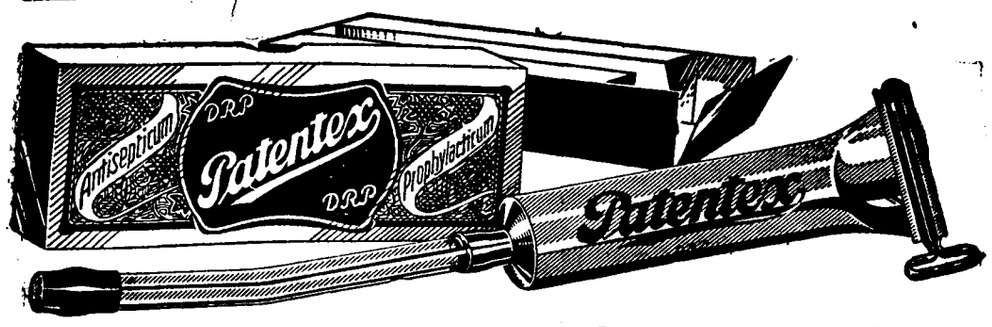

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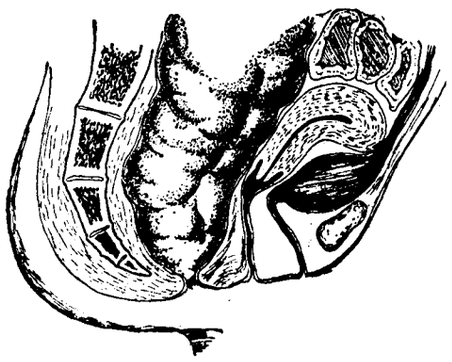

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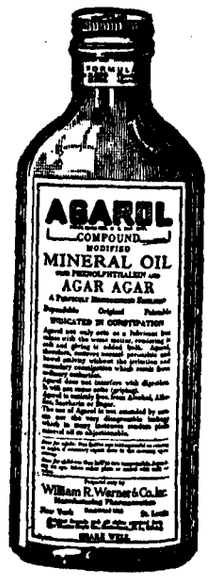

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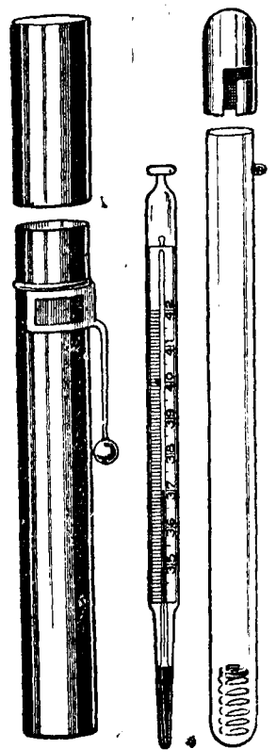

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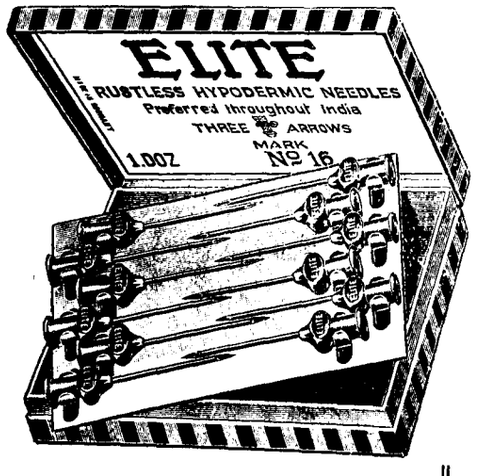

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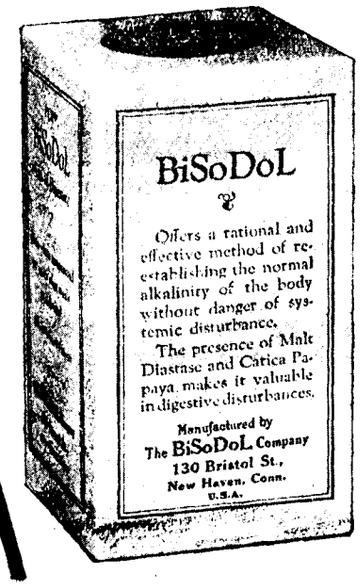

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MENTAL DISEASES IN CHILDHOOD.*

BY

DR. JAMES BURNET, M.A., M.D., F.R.C.P. (Edin.)

Lecturer on Diseases of Children, and on Practical Medicine, School of Medicine of the Royal Colleges, Physician to the Millar Clinic for Sick Children, Edinburgh.

At tne very outset we must bear in mind that the brain and indeed the whole nervous system of the young child is very unstable. It is readily upset by the most trivial causes. An attack of intestinal colic will easily cause convulsions in an infant, or a high temperature at the onset of an infectious or other fever. This is one reason why it is a mistake to send children to school at too early an age. Until the seventh or eighth year the brain is developing rapidly, and time must be allowed before any real strain is put upon it. By looking carefully after the nervous ailments of early childhood much misery may be saved in later life.

The causes of mental disease in childhood are very varied. Sometimes it is impossible to discover any ultimate cause. We can only briefly touch on some of the more important ones here.

In the first place *consanguinity of marriage* is a fruitful source of trouble. In England marriage with a diseased wife's children was forbidden by law, for which the church was largely responsible. This was a silly position, which fortunately has been amended within recent years. Strangely enough the marriage of first cousins

* Specially contributed to the Antiseptic.

has always been permitted. This, we venture to suggest, should be absolutely forbidden. Personally we are able to trace quite a number of mental cases to this cause alone. It may not be in the first generation, but it will certainly very often be found in succeeding families to the original union of two first cousins.

Then, again, prenatal conditions, such as fright, shock, accidents, severe illness, nervous strain and mental worry, are very liable to give rise to the birth of mentally defective children. Hence the importance of prenatal care. In this connection frequent pregnancies at short intervals may have a similar effect. Children born under such conditions are often badly nourished both bodily and mentally, while some are in reality defective. This sounds the slogan for birth control on scientific principles so as to prevent overworked and feeble women from incurring the risks of further pregnancies, and to prevent any increase in the number of the mentally defective population.

Alcoholism has been always credited with being a potent factor in the production of mentally defective children. Probably less than two per cent of all the cases of mentally defective children may be attributed to this cause. The moderate drinker runs no more risk of producing such children than the teetotaller. A steady soaker in alcohol may find that his children are mentally weak, but this is due not so much to the alcohol itself as to the home conditions of poverty and distress which over-indulgence in alcohol is liable to produce.

Epilepsy in one or both parents is a much more potent factor than alcohol, so too is a neurotic family history in the case of one or other parent. Tuberculosis acts pretty much as chronic alcoholism does, by creating a depressing and unhygienic environment. Syphilis is, of course, a cause which must not be overlooked. This disease has often a most marked effect on the nervous system and especially on the brain itself leading to grave mental defects.

The varieties of mental diseases in early life are numerous, but we do not intend at present to consider these seriatim. On some future occasion we may do so. Meantime we must be content with a review of some of the more outstanding features which may be presented by mentally defective children.

"Lateness" is a characteristic usually well marked in every child who is mentally defective. Such a child is late in walking and in cutting his teeth, and above all in learning to control the bladder and bowels. It is a fact well worth noting that a child who has no control over the bladder and bowels at the age of three is either mentally defective or suffers from a concealed spina bifida. Such children, too, are often unable to feed and dress themselves. They are apt to be dirty in their habits. The saliva often dribbles from

the open mouth, and the tongue in some cases is constantly protruded. The shape of the head may be abnormal, or the size may be greater or less than in the healthy child. Badly shaped ears, a spastic gait, lalling speech, or perhaps inability to speak beyond a few inarticulate syllables, may give a clue to the real condition present. Often the parents merely notice that the child is "queer" in its habits, not at all like its other brothers or sisters. It may be mischievous, cruel, vicious some times, or very inquisitive. In other cases such children are docile, affectionate, and easily controlled. Unfortunately parents are apt to mistake what they take to be "baby ways" for stigmata of mental defectiveness, and they sometimes resent it very much when the medical man tells them the true state of affairs.

The prognosis of mental disease in infancy and childhood is certainly by no means good. The reason naturally is that changes have taken place in the brain which cannot be remedied by any means within our reach. Improvement may take place, but only by patient training, institutional or otherwise. The child must be taught to do little things for himself, such as to feed and dress himself, or to read and write or draw. Some forms of mental defect are more amenable than others. In epileptic cases, for instance, the sufferers can be educated up to a certain point, and if the number of seizures becomes less then there is every hope of continued improvement taking place. Other cases, such as mongols, and microcephalic idiots, or quiet hopless. Fortunately such children tend to die off at a very early age.

As treatment is so unsatisfactory, prevention is of very great importance. The causal factors should be eliminated as far as possible. Marriage of first cousins, of epileptics, and the mentally weak should be prohibited by law. This raises the interesting question of the sterilization of the unfit, which we must not now pause to discuss. Antenatal care is all important, so too is scientific birth control. The time is rapidly approaching when women all over the world will have their health safeguarded to a much greater extent than hitherto. It will soon become possible for every woman who is unfit to give birth to children to be safeguarded from the great risks of child-birth. The selfish egoist, hiding himself behind the cloak of religion, still maintains that the "Garden of Eden" story applies today as it did then, and that women were made to bring forth in pain and sorrow. Women were created for better things, and it is our duty to see to it that suffering in all cases of our womenfolk is reduced to a minimum. By antenatal care mental defectiveness may be to a certain extent

reduced, and a great deal of unnecessary worry and anxiety thereby prevented.

As the etiology of mental disease in childhood] is often so obscure we have long recommended that in every district a central board of medical specialists should be set up. To these a full report of every case should be sent by the medical man in charge. In this clear particulars should be given of the parental history, of the number of pregnancies with dates, of the other children (if any), of any abortions or still births, and of the clinical feature presented by the particular case reported on. Such reports when collected along with others from other districts in any country should be forwarded to a consultative board who will thereby be enabled to gain much information as to the actual causation of mental defectiveness in childhood.

There is room for endless research in this field. In India there are opportunities for any medical man willing to undertake the work. It is a field which has so far been but little explored, and pioneer work of this kind, though at first it may not be very remunerative, is sure to bring *kudos* to anyone who is self-sacrificing enough to undertake it.

ANAEMIA*

BY

DR. RAMNIK H. DESAI L. C. P. S., NADIAD

Anaemia:—A reduction of the amount of blood as a whole or of its corpuscles or of certain of its constituents is Anaemia.

Anæmia may be local or general.

Local Anaemia:—Local anaemia of the brain causes swooning where the mesenteric channels capable of holding all the blood of the body are wide open.

Emotional stimuli reflex from pain etc., removal of pressure as after tapping in ascites may cause this. Anæmia from spasm of arterial walls is seen in Raynoud's disease, which usually affects the peripheral vessels; but it may occur in visceral vessels particularly of the brain and cause temporary hemiplegia, aphasia etc.

A marked pallor of the face may exist with normal corpuscles and hæmoglobin for example after drinking bout or of nausea in certain cases of heart disease, lead workers and in morphine habit. There are a few healthy people who are always pale, yet have normal blood count and colour index.

*Specially contributed to the Silver Jubilee issue (April '29) of the Antiseptic.

General Anaemia:—May be divided into secondary or symptomatic, and primary or essential.

Acute Secondary Anaemia:—

Etiology:—May be traumatic hæmorrhage or spontaneous haemorrhage from aneurism or peptic ulcer.

May follow haemolysis in certain infections as malaria, acute endocarditis, sepsis. Less often may follow toxic substances such as mercury, Nitrobenzol, and Carbon monoxide poisoning.

Symptoms:—Dyspnoea, rapid action of the heart and faintness are the important symptoms of an acutely produced anaemia. There is marked pallor of the skin, the pulse becomes small, the temperature becomes low, and the patient feels giddy and faint.

If the bleeding continues there may be nausea,—vomitting or even convulsions. There is decrease of R. B. C. and fall of colour-index. The leucocytes are increased, the watery saline constituents are reached to normal by absorption.

Chronic Secondary Anaemia:

Etiology:—(a) Inanition from defective food supply, or from defective intake of food in cases of cancer of the œsophagus.

(b) *Infections*:—In all acute fevers anaemia is produced, particularly in typhoid fever, rheumatic fever, sepsis, syphilis, and malaria. Chronic dysenteries, sprue and tropical fevers such as Kala-azar and malaria produce marked anæmia. Certain forms of animal parasites as the ankylostomas, and bothriocephalus latus cause a profound anaemia.

(c) *Intoxications*:—Inorganic poisons such as lead, mercury arsenic and certain autogenous poisons occurring in chronic affections such as nephritis, jaundice, and Hepatic disorder.

(d) *Haemorrhage*:—This if repeated may cause a severe anæmia, i. e., Hæmorrhoids, purpura and hæmophilia.

(e) Long continued drain upon the system as in chronic suppuration, prolonged lactation, and in rapidly growing tumours of all sorts, Tuberculosis and Leucorrhæal discharges.

(f) Insufficiency of the Hematopoictic functions such as splenomegaly, leukemias, and Hodgkin's disease.

Symptoms:—Loss of bodily and mental vigour, and loss of weight and obvious anæmia. Appetite is poor, digestion is faulty, and palpitation is complained of. There is feeling of faintness and as the anæmia progresses there is swelling of the feet. There may be slight fever. Retinal hæmorrhages occur. The R. B. C., are reduced, and the hæmoglobin is proportionately by low. The R.B.C., are irreg ular in shape. Nucleated forms are present. Leucocytes are increased in number.

Primary or essential Anaemia.

1. *Chloroasis*:—(Green Sickness).

Definition:—An anaemia of unknown cause occurring in young girls, characterised by a marked relative diminution of the hæmoglobin.

Etiology:—It is a disease of girls more often of blondes than of brunnettes. The age of onset is between the 14th and 17th years. There exists a lowered energy in the blood making organs associated in some obscure way in the evolution of the sexual apparatus in women. The disease is common among the ill-fed over worked girls of large towns. Lack of proper exercise and of fresh air and use of improper food are important factors.

Emotional and nervous disturbances may be prominent. It is thought by some to be due to some disturbance of the balance between the internal secretions.

Symptoms.—(a). General symptoms are those of anaemia, but the subcutaneous fat is retained or increased in amount. The complexion is peculiar. There is yellow green tinge and hence the name green sickness. Occasionally there are areas of pigmentation of the skin mostly near joints. Cheeks have reddish tint particularly on exertion. The patient complaints of breathlessness and palpitation. There may be puffiness of the face and swelling of the ankles. The eyes are brilliant and have a blue sclerotics.

(*b*) *Special features*:—Blood. The drop as expresssd looks pale. The corpuscles are normal in number but the haemoglobin is reduced markedly. In some cases there are poikilocytosis. Occasionally there may be normoblasts.

(*c*) Gastro-intestinal symptoms. The appetite is capricious and patients have a longing for unusual articles. There is hyperacidity of the stomach. Constipation is common.

(*d*) *Circulatory Symptoms*:—There is palpitation of the heart on exertion. There is increase of dullness transversly. A systolic murmur is heard at the apex or at the base, there may be continuous murmur at the right side of the neck over the jugular vein. The pulse is usually full and soft. Thrombosis of the cerebral sinuses and femoral vein is frequent. Chlorotic patients suffer from neuralgia and headache. There are menstrual disturbances such as menorrhoæa and dysmenorrhoea. Thyroid may be enlarged.

Diagnosis:—The green sickness is in many cases recognised at a glance. It is mistaken for the apparent anaemia of early tuberculosis. Chlorosis can be diagnosed easily by examining the blood after dropping a drop of blood on a piece of white blotting paper or linen. Thus a deficiency of hæmoglobin is easily appreciated.

The puffiness may suggest nephritis, and palpitations may lead one to the diagnosis of heart disease. But the blood examination corrects all doubts.

The disease is decreasing due to modern hygienic living.

Prognosis:—The disease is rarely fatal, but it is liable to relapse. Gastric ulcer may follow. Spurious hæmoptysis occurs occasionally.

2. *Idiopathic* or *Pernicious Anaemia.*

Definition:—A recurring and usually fatal anæmia of unknown origin characterised by hæmolysis and imperfect action of the blood making organs.

It is also called Addison's Anæmia.

Etiology:—It is a disease of middle life, more common among the males than females. It follows buccal and gastro-intestinal infections. Intestinal parasites may cause this variety of anæmia.

It is thought to be due to vitamin deficiency, blood changes and gastro-intestinal symptoms due to vitamin "A" deficiency.

Nervous symptoms due to vitamin "B" deficiency. Tendency to haemorrhage due to vitamin "C" deficiency.

Palhology and Morbid Anatomy:—

The body is rarely emaciated. There is lemon tint of the skin. The muscles are red, the fat is light yellow. Hæmorrhages are common on the skin and serous surfaces. The heart is usually large and flabby. There is extreme fatty degeneration of the heart muscles.

In some cases there is atrophy of the mucous membrane of the stomach. The liver may be fatty and iron may be deposited in excess around the lobules. Bone-marrow is usually red, lymphoid in character and showing nucleated red corpuscles. Spinal cord lesions are frequent. The exact nature of the disease is unknown. The disease can be produced by injecting Risin in animals. It may be due to lipoids of haemolytic nature. It is thought by some to be due to protozoal infection.

Symptoms:—There is pallor with good nutrition in pernicious anaemia. There is slight loss of weight. The disease has slow and insidious onset. There is at first feeling of langour, countenance gets pale, the whites of the eyes become pearly. The body is flabby rather than wasted. The pulse is large but remarkably soft and compressible. There is increasing indisposition to exer-

tion, with an uncomfortable feeling of faintness or breathlessness in attempting it. There is slight œdema of ankle joints. The patient dies of exhaustion. Cardiac pain complained of by some.

Gastro-intestinal symptoms:—Such as pain in the epigastric region and diarrhoea may occur. The hydrochloric acid is greatly diminished or absent. There may be sore-mouth, and marked glossitis. Pyorrhoea alveolaris may be present. Teeth are often bad. Frequently there are palpitations of the heart. Haemic and basic murmurs are common. Throbbing of arteries may occur.

The urine is pale, of low specific gravity with diminished pigments.

Nervous symptoms:—Numbness and tingling are common.

There is great depression and sometimes delusions. Sclerosis of the posterior spinal column leads to spastic features and increased reflexes. The picture may be rather of the tabetic type.

Haemorrhages in the form of small petichae in the skin are common.

Blood:—The total quantity in the body is diminished. There is great reduction of R. B. C. The Hæmoglobin though reduced is proportionately high. This is the distinctive feature of the disease. There is Poikilocytosis. There are found nucleated R. B. C., the chief variety being the Megalocytic measuring 8, 11, or even 17*U*. The R. B. C., count is generally below 2 millions per C. C.

Leucocytes are generally normal or diminished in number. Polynuclears are rarely reduced. Myelocytes are present. Icteric index or the Van Den Bergh reaction shows increase of pigment in the serem.

Aplastic anœmia: -It is a sub type of Pernicious anæmia with identical symptoms. But it runs rapid course without any remissions. There is atrophy or aplasia of the bonemarrow,

Adrenalin is the treatment advocated for this fatal disease.

Prognosis:—The ultimate prognosis in a great majority of cases is bad. There are frequent remissions. Generally the patient recovers from the first attack. The average duration is about one year. There may be 3 to 5 remissions.

Dignosis:—The lemon coloured tint of the skin may suggest jaundice, the anæmia, puffy face, swollen ankles, and albumen in the urine, Bright's disease; the pigmentation, Addison's disease, the shortness of breath and palpitation, heart disease, the pallor and gastric symptoms, cancer of the stomach. But the retention of fat, the insidious onset, the absence of signs of local disease and the blood picture are the important diagnostic points.

Anœmia in Children:—All forms of anæmia with the exception of Chlorosis, and pernicious anæmia may occur in children under 14 years by the same causes which affect adults, but there are present certain marked differences. The spleen is enlarged more frequently. In infancy there are marked changes in the blood picture.

Causes of secondary in children are defective nutrition, acute specific fevers, prolonged suppuration, syphilis, (congenital) tuberculosis and chronic diarrhœa Intestinal worms, and Bilharzia parasites are occasional causes. Children who have sucked too long may develop anaemia due to deficiency of proteid food.

Other causes are infantile scurvy (Barlow's disease), splenic anaemia infantum, congenital anaemia and Rickets.

Infantile scurvy:—The child becomes pale, and there is muscular weakness. The child cries when washed or dressed. Swellings appear over the spines of tibia. The swelling is symmetrical, and due to sub-periosteal extravasation of blood. The gums become spongy. The disease is due to water soluble, 'C' Vitamin deficiency.

Treatment by Vitamins in the form of Vitmar, Marmite and fresh orange juice is beneficial.

Splenic anaemia of children also known as Von Jaksch's disease. Occurs between the ages of 6 months to 2 years. There is anaemia, leucocytosis and enlargement of the spleen. The liver is moderately enlarged. There is irregular temperature and gastro-intestinal symptoms. The patient is not emaciated except in later stages. There are haemorrhages under the skin.

Blood:—The haemoglobin is diminished. The R. B. C's. are diminished in 2 or 3 millions. Poikilocytosis and nucleated red corpuscles are found. Leucocytosis are only present in the late stages, the chief variety being the Polymorph.

Diagnosis is difficult in early stages from Syphilis, and Rickets. But the marked greater enlargement of the spleen and blood changes are diagnostic.

Prognosis is good.

Treatment is by Iron. Arsenic and Codliver Oil, with fresh air and good food.

Congenital Anaemia:—Occurs occasionally. Cause is not known. Iron improves the conditions.

Splenic Anaemia.

It is a rare disease of adult life with great enlargement of spleen and a prolonged course of several years.

Etiology:—Men are more affected than women. Occurs in adult life. The cause is unknown.

Symptoms:—Spleen greatly enlarged. Liver also enlarged in late stages. There are hæmorrhages specially from the gastro-intestinal passages. There is marked anæmia, and leucopenia. There is marked pigmentation of skin.

Diagnosis:—The anæmia of chlorotic type with enlargement of the spleen and leucopenia are the chief distinctive features of the disease.

Prognosis:—The course is prolonged. Death ensues by astheina.

Treatment:—Arsenic is best. X rays may do good. Splenectomy gives good results.

Treatment of Anaemia.

Secondary Anaemia:—Traumatic cases do best with plenty of good food and fresh air. The blood is readily restored. Infusion of saline is beneficial. As fast as possible the cause of anæmia should be sought and treated accordingly. Such causes as Bright's disease, suppuration, and fever are difficult to remove for the well keeping up of the blood. In toxic cases due to mercury and lead the cause is easily removed. There are only 3 indications for treatment. Plenty of food, fresh air, and iron. In severe cases the patient should be at rest in bed. It matters little what form of iron is administered. Generally the Tincture Ferri Perchlor is the best if the stomach agrees; otherwise weak salts like Ferriet Ammo Citras do good. Arsenic in gradually increasing doses is very beneficial. Fowler's solution is the best drug. It should be given in 5 m doses after meals. Patent preparations of hæmoglobin, and pure hæmoglobin powder are inert. Sodium cacodylate may be given by mouth in 1 gr. doses, or can be injected subcutaneously. Iron and arsenic may be injected. There are many preparations for injection on the market. "Arsenauro" is best for oral administration. It is given in gradually increasing doses till the poisoning symptoms are produced. Dose begins from 6 minims. Zambelett's injections of iron and arsenic with strychnine, cyto-serum Fraisse's ferruginous ampaules, Histogenol "Naline" are all recommended.

Normal horse-serum hypodermically or by mouth in 10 c.c. doses is advocated.

Manganese preparations such as Collossol Manganese cum iron cum arsenic (crooke's) are effective.

Chlorosis—Good food, fresh air and iron are the important things. Iron in the form of Blaud's pill in 10 grs. doses is excellent. If bowels remain constipated open them by salines. Digitalin gives good response in some cases.

Pernicious Anaemia:—5 things are essential, 1. A diagnosis 2. Rest in bed for weeks or months, 3. Open air, 4. All the good food the patient can take, and 5 Arsenic.

Fowler's solution in increasing doses. Other forms of arsenic such as sodium cacodylate, atoxyl, Neo-salvarsan etc are all tried with little success. Oil innunctions are recommended. Bone marrow fresh or in tablet forms are given with little success.

Splenectomy is advocated on the grounds that the hæmolysis of newly formed R.B.C. is checked.

Intravenous injections of serum and defebrinated blood have been given in 10 to 20 c.c. doses.

Transfusion of blood in 100 to 350 c.c. doses is widely used nowadays.

After grouping of blood of the donor's, transfusion is done of whole blood citrated. Sodiciitras 3.8 % added to the blood in 1 in 10 proportion.

A simple test for agglutination of blood for grouping is as follows:—

A drop of patient's blood is mixed with a drop from the prospective donor on an ordinary glass slide. A cover slip rinsed with vaseline is put on the slide. If after 5 minutes there is no agglutination of red cells visible under the microscope the donor is suitable.

Transfusion of blood:—Method:—After constructing the vein at the elbow draw the blood into a flask containing citrated saline solution. Let every thing be clean and aseptic. Keep the flask warm at body temperature by immersing it in hot water. Let the recipient be prepared as for an intravenous injection. Inject the citrated blood (warm) into the vein by the funnel and tube method. In some cases a discomfort is felt immediately on injecting the blood. Sometimes there is rigor. If collapse ensues drop the injection. In urgent cases the blood may be drawn in a big serum syringe containing citrate solution. Mixture is immediately injected in the vein. There are many special methods and apparatuses for the transfusion of blood. Administer Acidum Hydrochloric dilute in 1 dram doses for achlorhydria,

Kefir taken by mouth has good influence over the disease in some cases. It is a milk fermented by bacterium caucausicum.

Mercurochrome:—1% solution in 15 to 20 c. c. doses injected intravenously showed good results in some cases. Streptococcal auto-vaccine prepared from the duodenum are tried with little success.

Vaccine treatment is dangerous. It may produce alarming reactions, because the blood has no power to produce antibodies.

Normal horse serum is injected or given by mouth in 10 c. c. doses. Remove any specific focus from the body such as teeth etc.

Liver Diet Treatment of Pernicious Anaemia.

Liver of calves beef or chickens is recommended by Minot & Murphy. Raw liver juice 8 ozs. with orange or lemon juice is administered daily in acute cases.

Method of preparing:—8 ozs. liver produces about 6 ozs. pulp & juice. Use only very fresh liver. Pass it thrice through the mincer catching every drop of juice. Then rub through a wire seive scraping the under part of the seive well. Pulp the pulp so obtained on ice for 1 hour to cool. Serve it with orange or lemon juice.

Effect:—The raticulated red cells are increased. The haemoglobin increases but to a less extent; so the colour index begins to fall. Leucocytes increase, chiefly the polymorphonuclears. With the increase of R. B. C. pigment from the serum of the blood disappears; so the Vondenbergh reaction becomes normal. With the improvement of blood the patient feels better and all subjective symptoms disappear. Neural lesions stop progression under the treatment. But Achlorhydria remains the same. The liver treatment shows its effects as long as it is continued. It is doubtful if its effects are permanent. The question cannot be decided for the present. Its action may be like Insulin in Diabetes. A non protein practically iron free dry extract of liver has been prepared. Its effect is the same. It is prepared by Lily & Co., and also B. W. & Co, in Tabloid form. The dose is 400 to 500 grms. Kidneys can be substituted for the livers with the same results.

Conclusion:—Hydrochloric acid, Fowler's solution, & liver juice are the 3 important things for a case of Pernicious Anaemia.

Anaemia of Pregnancy:—This is a condition of Anaemia for which no obvious cause can be found. It is distinct from Pernicious Anaemia as shown by its short duration, absence of remissions, and favourable termination when pregnancy ends. The disease is rare in England and other countries. The Anaemia starts generally with the second half of gestation period, and it is more common among the primiparae.

The disease may start with diarrhoea, fever œdema vomitting sore-tongue, epistaxix, enlargement of the spleen and liver. There is weakness and rapid pulse. The delivery is usually premature. The diarrhœic cases—are more fatal. The disease is generally more common among the Mahomedans due to Purda system. There is decrease of Haemoglobin, but the colour index is high about 1.4%.—Normoblast and Megaloblasts are present. The child's blood was normal whenever examined. Blood culture is sterile, except occasionally non-haemolytic streptococci may

be present. Kahn's test for syphilis may be positive in some cases. Urine is sometimes infected with Bacillus alkaligenus B Pyoscyanus, B Coli, and Strepto and Staphylococci. Faeces examination shows B Welchii, and Ova of round worm and hook-worm occasionally. There is not much post-partum—haemorrhage.

Treatment:—Iron and Arsenic should be administered, Plenty of good food, fresh air, and sunshine are indicated. Whole blood transfusion is dangerous. But intramuscular-injection of whole blood in 15 to 20 c.c. doses weekly are beneficial. As a last resort termination of pregnancy is recommended.

Prescriptions.

I. *For fever.*

℞

Soda Salicylas	gr xxx
Liqr. Ammonii Acetas	ʒiii
Aq. camphor	ʒiii

M. F. T. ⅓ T. D. S.

II. *For Sore-throat.*

℞

Iodum	gr vi
Pot Iodide	gr xx
Ol. Menthol pip.	m v
Glycerine	ʒi

III. *For early Rhinitis & fever.*

℞

Soda Salicylas	gr xxx
Chlorodyne	m xv
Ammo. Chloride	gr xx
Aq chloroform	ʒiii

M. F. T. ¼ part every 3 hours.

IV. (*Pigment for external use*).

℞

Quinin Hydrochlor	gr xvi
Aspirin	gr xvi

M. F. T. ¼ part in capsules.

V. *Heart Stimulant.*

℞

Liqr. Strychnine	m xv
Spt Amm. Arom.	ʒi
Spt Camphorae	ʒss
Aq Chloroform	ʒiii

M. F. T. ⅓ T.D.S. every 2 hours.

VI. *Tonic.*

℞

Ferri(et) quinine citras	gr xv
Liqr Strychnine	m xv
Aq mentha pip	ʒiii

M. F. T. ⅓ T. D. S.

VII. *For fever & pain.*

℞

Quinine Hydrochlor.	gr xv
Aspirin	gr xii
Pulv. Ipecac Co.	gr xv

F. Pulvis ⅓ part in capsules.

VIII. *For Influenzal Pneumonia.*

℞

Ol. Creosote	m iv
Mucilage	℥ qs
Tr. Iodine	m x
Soda Salicylas.	gr xxx
Ammonii carb.	gr xv
Aqua	ʒiii

M. F. T. ⅓ part T. D. S.

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A FEW OBSERVATIONS ON GONORRHOEA AND ITS TREATMENT.

BY

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The following are a few notes from my records concerning Gonorrhœa and its complications and I hope they will be interesting to the medical profession.

Gonococcus in the male urethric has found a peculiar hiding place and keeps to its strong fortification in the urethra in spite of all the attempts of medical men to meet and kill it. The recent researches by many prominent men in the field have found out many a drug and many a line of treatment for eradicating different diseases. Thus many diseases which were supposed incurable have been proved by experiments that it is in the power of man to tackle them and give a complete cure. Thus cholera, Tuberculosis, Kalaazar etc. in the same category are found to be diseases which can be cured. Let us hope one day a research scholar will find the means to cure this dirty disease (Gonorrhœa) also by some easy and radical method and help the public at large to be free from it.

At present I don't think any method is suggestive of complete cure. We might have succeeded in curing an acute attack. When once it becomes chronic, say gleat, means for a complete cure would appear to be impossible. Many a drug is used for killing the Gonococcus. Thus almost all the drugs that we use—say potassium permanganate $KMnO_4$. argyrol, silver nitrate $AgNO_3$. acriflavin and such similar drugs are very powerful

antiseptics in vitrio and they are really effective in killing gonococcus when once they meet it directly. Then why is it we are not in a position to radically remove this Gonococci from the urethra? A few irrigations with any of these drugs will give complete stoppage of the discharge for some time, but a month or two later we find that the disease again shows its active nature. If we study the anatomy of the urethra, we can understand why we are not in a position to directly attack the organism in this particular disease.

A study of the anatomy of the male urethral tract shows that there are innumerable openings branching off from the urethra throughout the whole extent. An enumeration of these side passages cannot be out of place in the study of the treatment of Gonorrhea since there are only few cases of Gonorrhea which are not complicated by an infection of one or more of these areas, the possible areas of involvement are :—

1. The para urethral ducts and in association with them the preputial sack.
2. Litter's gland—ducts and glands and in association with them the Lacuna of magnum.
3. Cowper's ducts and glands.
4. The sub epithelial connective tissues of the urethral tract.
5. The prostatic ducts and prostatic glands.
6. The common ejaculatory ducts and seminal vesicles.
7. The common ejaculatory ducts and vasdeferens and the epididymis.
8. The bladder and the whole upper urinary tract.

When the infection of the anterior and posterior urethra fails to react favourably to the routine treatment previously described, some local complications will almost in variably be formed. The anatomical areas mentioned are practically all inaccessible to local antiseptic therapy as applied by injection, irrigation or instillation. Hence the greater number of cases in which the infection resists successful treatment are those in which the infection has spread to one of these tracts. The Gonococus is not living merely on the surface of these crp, but they are intracellular. Any means by which we can instil some antiseptic drug into these particular areas may prove successful in the treatment of such complicated cases.

A suggestive treatment has been given by Dr. S. Rajagopal Naidu, B.A., M.B.B.S., (in B.M.J., 22nd January 1927, page 139. Heading Potassim silver iodide in the treatment of Gonorrhea). This double iodide of potassium and silver is a crystalline substance (K Ag I_2) readily soluble in a small quantity of water. On

dilution the solution begins to precipitate silver iodide (AgI_2), but the precipitation is not complete until a fairly high dilution is reached. The precipitated silver iodide is in a finely divided condition and a part of it is in colloidal state. It has a tendency to creep at and adhere tenaciously to the sides of a test tube and would presumably creep into the crypts and ducts of the urethra and adhere to them and to the Gonococci found there, The unprecipitated portion is still in the form of a double salt and in a state of molecular dis persion. In this condition it should presumably diffuse through the walls of the cells and on being further diluted by the tissue fluids would precipitate more silver iodide inside the tissues. This decomposition of the double salt on dilution tends to be reversed by the presence of excess of potassium iodide. It is on this property that treatment is based.

This particular preparation mentioned above has enabled me to treat a few complicated cases with satisfactory success. A few of these cases are noted below.

Patient A.—Admitted on 3rd May, 1928.

Complaints.—Discharge through urethra.

History.—Adult, Teacher aged 27, married.

Gives a history of gonorrhea for the last 3 years.

Examination made.—Penis was examined and no discharge was found. The inguinal glands were slightly enlarged. There was a slight thickening in the middle of the caverdous position of the urethra, by feeling from the prost up to the gland penis. The gland penis was slightly inflamed. A prostatic examination was made. Prostatic message was done and plenty of discharge came. A smear was taken for microscopic examination. Plenty of intracellular and extra cellular Gonococci were present.

Scrotum was examined. The epidemics was formed thickened and painful. A sound was passed and multiple structures noticed.

Blood was taken for Wasserman and found Negative.

Treatment.—Purgative.

Irrigation of double iodide of potassium and silver every other day. First 3 irrigations by 5 grs. of the mixture of potassium iodide and the double iodide of potassium and silver (vide B.M.J.) in 20 cc. and the next remaining 3 irrigations by increasing the doses by 2 grs. each time.

Discharge stopped after ten irrigations. The patient was given a few injections of Novargin. Again 3 irrigations were given with prostatic massage. The discharge stopped considerably. A prostatic smear was taken and examined. A few extra cellular Gonococci only were present. Three more irrigations were given

with prostatic massage. The result of prostatic massage was again examined. No Gonococci were present.

The patient was complaining of pain in passing urine. Six doses of alkaline mixture were given and those symptoms vanished. A month after the patient was given provocative treatment. A prostatic smear was taken and examined. Result was negative. The patient was under observation for 10 months afterwards. No symptoms throughout that interval. I have not had the good fortune to see the patient since.

Patient B.

History.—Student 21 years old-bachelor—Brahmin. He gives a history of Gonorrhœa continuously for a whole year. Throughout the year he has been under the treatment of medical men.

Examinations made.—

General Conditions.—Highly emaciated. Legs were getting exhausted when walking. Temperature was 101°—pulse 110. The patient had more or less the look of a tubercular patient. Weight was found to be 106 lbs. General examinations were made. Lungs and heart were normal. No enlargement of the spleen or liver. Blood was examined for malaria. Result was negative. Blood was examined for wasserman-also found negative.

Penis was examined. The glans penis was slightly oedematous. Profuse discharge was coming. The discharge had a very foul odour. The inguinal glands were not enlarged. A rubber catheter was passed and it was found impossible to push it in. A No. 7 sound was passed and obstructions inside were discovered due to multiple strictures. The scrotum was slightly swollen. On examination it was found that one testis and its epididymis were painful to the touch.

The smear was examined. Gonococcus both intra and extracellular were found in plenty. I was not able to find out the reason of the extraordinary foul smell of the discharge and so the smear was sent for culture suspecting bacillus colli infection also. The diagnosis was correct as the result showed bacillus colli in plenty.

Treatment adopted.

A purgative, with irrigations of double iodide of potassium and silver at usual dosage and usual intervals was administered. Capracol was given by mouth and an alkaline mixture also followed. After a few days' irrigation, the odour of the discharge considerably decreased. Temperature became normal. The pain in the scrotum was reduced to a great extent and the patient began to improve in his general health.

After twentyfive days of treatment, the discharge entirely stopped. Patient began to put on weight to 110 lbs. and he had

absolutely no temperature. His general condition was considerably improved. A full course of Gonargin was given along with irrigations. A month after the treatment, smear was taken after a prostatic massage. Gonococci were present.

The urethra was dilated by sounds and irrigations were given at intervals of three days. After a month again a prostatic massage was done and smear taken. A few extra cellular Gonoccocci again were found. But all this time the patient was considerably improving in health. After another month's treatment on the same lines, smear was again examined and not even a pus cell was seen this time.

Provocative treatment was given and smear was examined many a time. All showed negative results. The patient was under observation for a year. He has had no complaint up to now.

I have to bring to the particular notice of the medical men that this particular drug and line of treatment seem to be very effective in cases of Gonorrhœa which are accompanied by Bacillus Colli as a complication.

Patient C.—Admitted on June 20th 1928.

History.—Student, Burmese.

Complaint.—Chronic Gonorrhœa.

Examinations made.—Blood was taken for wassermann and was found strongly positive. He had a few secondary rashes and profuse discharge. Smear was taken and examined under a microscope. Intra and extra-cellular Gonococci were present.

First treatment was given for syphilis—a course of injections of neosalversan combined with alternate injections of Benzo Bismuth and mercurosol was given. Eruptions vanished. Blood examined for wassermann was found negative.

Then treatment for Gonorrhœa was done.—A purgative in the beginning and irrigations with double iodide of potassium and silver. Thirty irrigations were given. Every time irrigations were followed by a prostatic massage. Showed rapid improvements. After twenty irrigations smear was taken for Gonococci and found negative.

After the 30th injection a few vaccine treatments were given. The urethra was dilated, prostatic massage done and smear again examined.

Provocative treatment was given and again smear was examined. All results were negative. Patient was advised to report to me if there was any symptom as he was a resident of Madras.

He was further advised to get his blood examined every third month and his cerebrospinal fluid at the end of every year.

Patient D.—Admitted in June 1928.

History.—Aged 48 an excellent sportsman, well built. Gives a history of both syphilis and Gonorrhœa of ten years standing.

Complaint.—White shreds in urine. Severe back pain, palpitation of the heart, an attack of fever now and then and during those attacks severe pain at the precardial areas. Difficulty in breathing.

Examinations made.—General conditions were good. But he had bad pyorrhœa. Lungs were normal. Heart sounds were dull. Extra systole present. Noticed signs of endocarditis.

Urine was examined. No albumin and no sugar. Prostatic massage was done and smear was examined. Plenty of Gonococci were present. There was difficulty in passing urine. Urine was found coming in different stages. A catheter was passed. Stricture was found in the membranous portion of the urethra. Blood examined for wassermann and was found negative.

Treatment.—Purgative—Dilatation of urethra under local anesthesia and urethral irrigations with 5 grains to start with were given. The patient was a very susceptible individual. After the first irrigation he was complaining of severe pain in the stomach, fever and pain in the heart. I am unable to account for them yet. The treatment was stopped for a week and symptomatic treatment was given. The patient got better. Again the course of treatment for gonorrhœa was started. The patient used to get the previous attacks now and then. The treatment was stopped again for a time.

The treatment was given at the usual increasing doses up to 15 grains. Thus 25 injections were given. After 10 injections smear was found negative. Yet he was having threads in urine and pain in the back. The patient was usually constipated. Advised him to take molevac at bed time. This reduced constipation. Treatment for Gonorrhœa was again started. Besides a few injections of Gonargin were also given. Back pain became evidently better and palpitation stopped.

He was in the habit of playing cricket and during the play he used to have a catch in the chest and difficulty in breathing. After 20 injections he improved in health and the above troubles stopped. The threads in urine disappeared after 25 injections.

Provocative treatment was not given as the patient did not attend regularly afterwards.

"PSORALIA CORYLIFOLIA"

BY

J. C. GHOSH, B. SC. (MANCHESTER), F. C. S., PRINCIPAL

School of Chemical Technology, Calcutta

In the August 1928 issue of the "Antiseptic", an article on the treatment of Leucoderma with *Psoralia Corylifolia* was first published with the result that it roused an amount of interest in the subject and several inquiries were received. Dispite the particulars furnished in the article and in replies to enquires, an impression gained ground in some quarters that *Psoralia corylifolia* was claimed to be a specific for leucoderma. This was an entirely erroneous impression. Moreover, the article contributed was by a pharmacist and not by a medical man, and the subject was dealt with from a pharmaceutical point of view alone. It, therefore, seems necessary to re-state some of the facts connected with *Psoralia Corylifolia* and to ask, that those who are using the drug, as issued by the School of chemical Technology, P. 154, Lake Road, Calcutta may be good enough to send to the School a report on their trial.

The facts briefly re-stated are as follows:

Psoralia Corylifolia which commonly grows in the Deccan but generally throughout India from the Himalayas to Ceylon, is known by various vernacular names, such as *Bauchee, Babachi, Bowchang Bakuchi, Buchki, Buchkidana*, etc. These more or less allied names are derived from Sanskrit *Vakuchi*. There is, however, another plant, *Vernonia Anthelmintica*, which is also called *Vakuchi* in Sanskrit. This fact, as also the existence of apparently therapeutically inert varieties of *Psoralia Corylifolia*, render it difficult to identify the plant and to determine its efficacy in the treatment of *Leucoderma*, a dreaded skin disease hitherto considered incurable.

Both *Psoralia Corylifolia* and *Vernonia Anthelmintica* were known in India for centuries past as remedies for various skin diseases including *leucoderma*. There was, however, no precise information and the designation of more than one plant as *Bauchee* resulted in confusion.

There is another factor which adds to the confusion. In Sanskrit literature leucoderma is known as "white leprosy". No doubt leucoderma is depigmented skin, but it is not leprosy as understood in modern science. Moreover, the treatment in either case is not the same. The basis of leucoderma treatment under modern scientific methods is still chiefly *Psoralia Corylifolia*. But unless

sufficient care is taken at the outset to use the *right drug in the right way*, there are less chances of success. This aspect of the question was discussed in an article which the School of Chemical Technology, Calcutta, published in the "Pharmaceutical Journal", London, July 21, 1928 issue. p. p. 54-55, in the "Antiseptic," Madras, August 1928 issue, pp 473–77, and in the "Indian and Eastern Druggist," London, October 1928 issue, pp 232-33. Patients from London and elsewhere wrote to the Calcutta School of Chemical Technology, asking for supplies of oil from the seeds of *Psoralia Corylifolia* and their requisitions were complied with. It was never expected that the result would be uniformly encouraging in each and every case and this was clearly pointed out in the article referred to. Portions from that article may well be reproduced here for the information of those who have used the oil either with effect or without effect, and they may be reminded that in several cases a *prolonged* use of the oil with *patience* and *intelligence* is absolutely necessary, although there may be a few fortunate cases of rapid recovery from the use of the very first ounce of the oil as already reported to this school. The general experience is perhaps one of slow but permanent progress by the application of *deum psoralia Corylifolia* as just reported by the medical officer, Mwanza Hospital, Tanganyika Territory, East Africa, who has asked for a fresh supply of the oil. The facts to which particular attention is invited are:—

(1) *Psoralia Corylifolia* seeds are sweet scented—a fact indicated by its chief Sanskrit name *Sugandha* (lit. "scented"), their agreeable aromatic odour resembling that of the *bael* fruit, whereas *Vernonia Anthelmintica* seeds are not scented. There are other distinguishing features as well, namely:

Psoralia Corylifolia	Vernonia Anthelmintica
N. O. Leguminosæ.	No. Compositæ.
Leaves cordate both sides conspicuously dotted with black dots.	*Leaves* acuminate.
Seeds dark-brown or brownish black, kidney shaped, flat, oblong, about 2 m.m. long and aromatic.	*Seeds* black or dark brown, covered with whitish scattered hairs, cylindrical, tapering towards the base and with about ten paler longitudinal ribs.
Oil thick, reddish-brown, with an agreeable aromatic adour. S. G.....0.910 at 100° F.	*Oil* dark-brown and strong smelling. S. G.....O. 916° at 100° F.

(2) Confusion, and consequently inefficacy, arises from seeds of entirely different plants being known as *Bauchi* and inferior

varieties of *Psoralia Corylifolia* are often used with unsatisfactory and negative results. Further, the action of *Psoralia Corylifolia* often needs to be accelerated by *subsidiary measures*, such as emetine injection, internal use of some intestinal antiseptic, etc., according to the requirements of a case, and in all cases patients must either report progress or remain under observation of a local doctor for the treatment to be successful. These are important facts and may be carefully noted.

(3) In the event of the drug prescribed being of the required *strength* and *purity* (as is the case with the oil issued by the School of Chemical Technology, Calcutta,) the results observed are generally satisfactory, particularly when patients strictly follow instructions with patience and intelligence. The oil of *Psoralia Corylifolia* has an irritant action, its effect on leucoderma being specific. The skin becomes red, which varies in intensity according to individual tolerance and idiosyncrasy, the melanoblasts are stimulated leading to pigment formation and finally pigment is diffused into the de-pigmented leucoderma patches. Some patients get frightened at the first indication of irritation and discontinue applying the oil and some develop no irritation at all. In any case the patient should exercise intelligence and try to keep up the effect by either reducing or increasing the frequency of application, which normally consists of gently rubbing the oil over the affected part twice or thrice a day. It is sometimes necessary to dilute the oil with olive oil to suit individual tolerance and to apply an emollient as a soothing agent. With attention to these details progress is generally assured, although it is not claimed that a specific cure for *leucoderma* has been arrived at in the sense in which *salvarsan* is understood and used for syphilis.

Samples of oil from seeds of *Psoralia Corylifolia* were exhibited at the stall of the school of Chemical Technology during the Calcutta Exhibition of 1923 and from the way visitors to the stall were scared away by pictures representing different stages of *leucoderma*, it appeared that both *leprosy* and *leucoderma* were repugnant to all communities. Doubtless it will be doing a real service to science and to humanity if this school, which is very much interested in indigenous drugs investigation, is kept kindly informed of the results obtained by patients from the use of *Psoralia Corylifolia* oil, as supplied by the school. It is earnersly hoped that this request will not be lost sight of.

Leucoderma is called (though erroneously) "white leprosy" in Hindu medicine, there being several varieties of leprosy under that system of treatment, and although this ancient system, as it stands at present, generally lacks in what we call scientific procedure and precision, it is still described by several European

scholars "as a marvel to the modern scientific investigator" and provides, in many instances, materials of considerable value, as well as facts of close observation. Several of them have been scientifically tested and found to be of real value, for instance, modern medical science has so far failed to find better remedies than those of Indian origin for the treatment of either nodular leprosy or leucoderma, the medicine used in either case being entirely Indian in origin and in conception, and the knowledge handed down from at least 1,500 B.C. forms the basis of modern investigation not only in regard to leprosy, but also in several other directions.

In its last annual report the British Empire Leprosy Relief Association predicted that leprosy would be completely stamped out within the next ten years by means of treatment with oil extracted from the dried fruit of Hydnocarpus tree which grows on the Malabar Coast. It was announced that arrangements had been made for a deputation of doctors from all parts of India to undergo a course of training in the diagnosis and treatment of leprosy in Calcutta, thereby widely diffusing knowledge of the subject. A similar propaganda seems necessary for stamping out leucoderma by treatment with oil obtained from the seeds of *Psoralia Corylifolia*, the sufferers from this disease being presumably no less numerous and no less widely distributed than leprous patients.

The remedy for leprosy is popularly known as *Chaulmoogra*. In his pamphlet issued on the subject in 1917 the writer first indentified *Chaulmoogra* with *Hydnocarpus* from a chemical consideration of the oil extracted therefrom (*The Pioneer*, March 1st, 1928), all previous leprosy work having proceeded on *Gynocardia Odorata* and *Taraktogenos Kurzii*, as mentioned in the British Pharmacopoeia (1898 and 1914) under *Chaulmoogra*. There is a similar misunderstanding in regard to *Bauchee* (*Psoralia Corylifolia*) which may have definitely proven to be as efficacious for leucoderma treatment as *Chaulmoogra* (*Hydnocarpus Wightiana*) for leprosy. Both of these drugs are ancient Indian remedies and the misunderstanding arises from inaccurate identification, a fact which is often overlooked.

Cases & Comments

'ROUND WORMS SIMULATING SYMPTOMS OF GALLSTONES'

BY

DR. MANGHANMAL S. K., L.C.P.S. (BOMBAY)

Medical School, Hyderabad, Sind.

Gallstones are more common in women than men. Last month I had two interesting cases of so-called gallstones. Interesting because both of them presented such typical symptoms that one of them was operated for gallstones ; but no stone was detected and the other would positively have been operated if normal conditions had been present. The latter, being pregnant, five months advanced with endocarditis I had to postpone her operation after her confinement. This patient for the last three months has been getting such severe attacks of pain in the liver region that one always gets in biliary colic. The pain referred to the shoulder and back with localized swelling of the gallbladder during the pain and marked jaundice throughout, jaundice being more acute during the pain and with typically white stools. The jaundice was less, after the pain has passed off with certain amount of pouring of the bile in the stools for a short while ; the stools however keeping their clay color appearance all the while thereafter. The pain was so excruciating that premature delivery was always dreaded and the patient had either to be subdued with morphia or eukodal injections. Thus during the pain with Morphia between the pains with olive oil, salicylates pill cholelith (P. D.) etc, we dragged on for three months with absolutely no relief. Each succeeding pain was worse until the patient could suffer no more and asked for operation. The husband came to me one day and said his wife has passed a worm. I did not pay much attention to it until he came to me for the second time and said his wife had passed some more worms. I observed that ever since his wife passed the worms she never complained of pain again and was feeling very fit. To explain how the worms caused all these symptoms is very simple. The worms went and blocked the orifice of common bile duct in deuodenum ; thus producing all the obstructive symptoms of jaundice and the worms in their attempt to get through the orifice produced that excruciating pain so typical of the gallstone. From this I have

gained this experience never to open an abdomen for gallstones until a sufficient quantity of Santonin with purgation has been tried to exclude the existence of round worms in the vicinity of the Deuodenum.

A CASE OF ACCIDENTAL INJURY OF ABDOMEN WITH EXPULSION OF FOETUS.

BY

DR. J. M. SEN GUPTA, M. B., D. T. M., SIBSAGAR.

A woman was brought to hospital one evening in a most pitiable state for the treatment of an abdominal wound.

The history of the case was that she one day while going to her paddy fields was chased by a buffalo. She was pregnant at that time and was carrying about 9 months. The animal gored her and one of its horns perforated through the abdominal wall and the gravid uterus. The woman was raised from the ground and thrown at a distance. She was removed to her home where she suffered from intense and agonising pain in the abdomen for 4 or 5 days. The severity of the pain was, however relieved by accidental expulsion of the Foetus through the abdominal wound with the placenta. Since then, though she was relieved of her pain profuse offensive and purulent discharge began to come out through the abdominal opening. In this condition she remained in her village home for about 13 days when her relatives finding her condition daily getting from bad to wrose—brought her to hospital.

The condition of the patient at the time of her admission was :—

She was extremely emaciated and prostrated being hardly able to move in her bed or to utter words.

Tongue—was thickly coated, dry and fissured. Cardiac sounds were very feeble.

The abdominal wound was fairly big—being 6″ × 8″ about on the wall. The opening leading into the peritoneal cavity was nearly 4″ in diameter. Besides this, the skin was undermined for another one inch all round where a thick layer of greenish slough was present. Through the abdominal opening could be seen coils of intestines matted together. Adhesions were noticeable on all sides—especially on the upper part:

On a thorough examination—the fœtal skull was found lying on the left flank in pieces and were removed. The bones were covered over with hairs,

It is unfortunate that the vitality of the woman was so much undermined before being brought to hospital that in spite of careful treatment and vigorous attempts to nourish her up, she died in hospital after 5 days out of sheer exhaustion.

The point of interest in the case was that the uterus which was perforated and through which a foetus 9 months old was expelled, healed up completely and nicely. There was no trace left of the wound in the uterus. Involution was practically normal. Examination per vaginum and passing of sound in the uterus did not disclose any abnormal condition of this organ. From the fact that the skull bones of the foetus were left in the abdominal cavity of the mother it is evident that the body of the child underwent certain degree of decomposition inside the abdominal cavity before it was finally expelled out of it. During this period—ulcerations of the site of placenta and on the body of the uterus through which the child was thrown out—was unquestionably subjected to certain degree of bacterial infection, nevertheless, these ulcers healed up completely and nicely. This would surpass imagination of many who have found during their experience the amont of precautions necessary to avert sepsis in a case of difficult labour refusing surgical interference.

'A CASE OF PLACENTA PRAEVIA?'

BY

A. K. GHOSE, M. O., AMBARI, T. E.,

Carron, P. O., Jalpaiguri, Dist., (Bengal).

Mrs. S. R, a mother of one child (aged 2 years) was fairly healthy. In her previous engagement, which I attended there was no abnormality. She was about 18 years, and 8 months pregnant. On 1-5-30 at 7 a.m. she all of a sudden noticed that blood was coming out profusely from vaginal canal. I was at once called in.

Examination.—On palpation I came to know that it was a case of vertex presentation but was unable to ascertain what position the foetus was occupying. On auscultation I distinctly heard the foetal heart which was 140 p. m. No. P. V. examination was done. No other abnormality either in circulatory or respiratory system.

There was no history of accident or fall. Examination of urine revealed no Albumin.

Treatment.—I preferred conservative method of treatment.

(1) I strictly instructed her husband to give her absolute rest with the foot of her bed, raised,

(2) A low Glycerine enema was given to move her bowels which was constipated.

(3) The following mixture was ordered :—

℞

Pot. Bromide — gr. x.
Sodi Bromide — gr. x.
Tr. Hyoscyamus — m xx.
Ext. Viburnum Pruni. Liq — ʒi.
Aqua — ℥i.
T. D. S.

At night the discharge of blood decreased and in the next morning it stopped altogether. She was all right for the next 3 days. Then slight bleeding continued for 4 days probably due to her not taking perfect rest but it was not brought to my notice. On 9-1-30 at 9 am. I was sent for as bleeding had again started profusely.

This time she was much prostrated, her whole bed sheet was soaked in blood, 3 or 4 big clots, black in colour, also came out along with bleeding.

On auscultation I could hear the foetal heart sound, 150 per minute. She was complaining of excruciating pain in the lower part of the abdomen but there was no actual uterine contraction.

I made arrangement for P. V. examination.

P. V. Examination:- (I) The whole vaginal canal was filled with big blood clots which I gradually removed.

(II) The cervix admitted 2 fingers.

(III) The membrane was not ruptured.

(IV) The head was low down but not fixed.

(V) I felt something like Placenta on one side of uterine segment (lower).

I thought it to be a case of Placenta praevia but was not sure of my diagnosis.

I called in Dr. G. N. De. M. B. an experienced physician of this place for consultation.

He also suspected Placenta Praevia after P. V. examination.

Treatment:—I suggested cervico-vaginal pack as the only possible method of treatment under the circumstances: but Dr. De was of opinion that as the cervix had begun to dilate and as

some amount of uterine contraction was evident it would be better to leave the case to nature.

As the patient was feeling excruciating pain in the lower abdomen, she was injected one tab. Hyoscine Hydrobromide—gr. 1/150. gr. It produced the desired effect; she passed into a state of "twilight sleep" Soap water enema was given to move her bowels and remove any obstruction. The intensity of pain gradually increased. When the cervix was fully dilated the membrane was ruptured and at about 11 P.M. she gave birth to a dead child; the placenta was delivered naturally.

½ C. C. Ernutin (B. W. & Co.) was injected at once to check any P. P. Haemorrhage but luckily there was none.

The cause of death of the child:—

The child was fairly developed, it was alive—as ascertained by auscultation—15 min. before its birth. On examination it was found that the child had spina-befida. I presume that the thin membrane covering it got ruptured during the expulsive movement thereby causing its death from the sudden escape of cerebro-spinal fluid.

The patient made an uninterrupted recovery. I was unable to account for the sudden stoppage of bleeding at first in this case. Would any reader of your journal kindly enlighten me on it?

A CASE FOR TREATMENT.

BY

JAIPRAKASH JAIN, L. M. P.,

Medical officer in charge of Achanera Dispensary, Agra.

Will my professional brothers kindly let me know the recent and effective treatment of mastoid sinus two inches long without operation through the medium of this journal? A brief description of the case and treatment adopted till now is as follows:—

Previous History:—My brother is suffering from this sinus. He has got bleeding piles and used to get attacks of coryza every now and then. He is anemic and very thin and always constipated. He is 28 years old and married.

In the year 1926 he got an attack of coryza. After three or four days he got severe pain in his right ear. Morphia and cocaine

lotion and aspirin powders relieved him somewhat for the time being but no permanent cure.

After two months he was operated for mastoid abscess in Thompson Hospital Agra by a civil surgeon. After two months he was discharged with a mastoid sinus and a profuse discharge from the ear.

Then the sinus was again curetted by an assistant surgeon and carbolic acid touched. After two months daily dressing with antiseptic lotion and due precaution, no improvement was found in his sinus.

Now he is trying every kind of medicines.

Some surgeons are of opinion that the diseased bone may get loose after sometime and some are of opinion that it should be operated at once. But he does not agree to operation. Now, I daily dress him with 8% zinc chloride lotion.

The present condition of the sinus is:—there is somewhat thick semipurulent discharge, sometimes of offensive odour. He complains of ringing noise in the ear and some heaviness.

Sinus is about 2" deep and ½" broad and is in continuation with the middle ear. If a swab is put into sinus, it can be taken out through the ear.

If there is no treatment except operation then will anybody advise me where the patient can be operated best?

N. B.—I shall be much obliged if any body will throw light upon this subject and shall be glad to answer any questions put to me to know more about the disease.

GOROCHAN

BY

Dr. G. G. GATHA, L.M.S. C.M.O.

Mangrol, Kathiawar.

The word Gorochan may sound quite new to the readers who stick only to Allopathy and not take any interest in Indian remedies.

Gorochan is a concretion found in the Gallbladder of a cow or an ox and is preserved by the Dhedas on this side if they find it

while dissecting a dead cow; it is brownish in colour, gritty and can be easily broken by fingers; we can call it a gallstone.

In Ayurvedic literature it is mentioned as Antispasmodic, cooling, aromatic, very useful to reduce the heat of the body in a case of measles or smallpox, again it can be given in melancholia whooping cough, jaundice, green diarrhoea and other intestinal disorders of infancy; Nadkarni's Indian materia medica gives Fel Bovis as the other word for Gorochan and the actions of Fel Bovis mentioned in Hale and White, Ghosh and other materia medicas are limited; They say it is only a laxative, cholagogue and useful for Dyspepsia, not a word is mentioned about its Antispasmodic properties.

Now I found Gorochan a very useful remedy in a case of infantile convulsions and so I thought it my duty to inform my brethren who may try it and report their results.

My case was as under :—

A high class Mahomedan infant aged only two months got convulsions on the 11th May '30 at 10-30 P.M. I was soon called and attended the case throughout his illness; convulsions occurred every hour; the cause was Gastro Intestinal catarrh as was found by inquiries, the wetnurse partook of a very heavy and injudicious meal on the 10th Id festival day, and as the baby didn't get sleep at night the Ayah swayed the baby on the verandah in wind draughts to induce sleep; I tried calomel and soda which moved the bowels freely; castor oil Emulsion and Grey Powders were continued and the condition of the bowels was greatly corrected, but the convulsions lasted till 5 P.M. on the 12th when Gorochan was administered only ½ gr. in the mother's milk and it worked like magic stopping convulsions for the whole night, next day, only two attacks occurred and two more ¼ gr. doses of Gorochan stopped them for ever at the same time improving the pulse, respiration, the bowel and the general condition of the infant to a great extent; on the 14th the baby was quite fit."

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PREVENTABLE DEAFNESS

It is a matter of common knowledge that the incidence of deafness is very high, and the subject has not received the attention it deserves, either from the standpoint of individual or from that of economic national loss. A large number of these cases are due to 'otitis media' with which the patient has suffered sometime in his early life, and deafness due to this can be easily prevented by the recognition of the importance of more thorough and energetic treatment of suppurative middle ear disease, both during its acute and chronic stages. Not only deafness with consequent impairment of the patient's usefulness and happiness may be the sequelae, but serious complications endangering the life of the patient may result from a badly treated case of otitis media, and a great deal of responsibility lies on the medical attendant in the treatment of these cases.

One of the fundamental principles of treatment in medicine is to treat the cause, and not the symptom, of a disease. Unless the cause is properly investigated and attended to, it not only prolongs the course of the disease but favours recurrence also. Oral and naso-pharyngeal sepsis is the common cause of otitis media, and this has to be treated both as a prophylactic and curative measure. The Eustachian tube is relatively wider and shorter in children than in adults and lies more in a horizontal plane, allowing the tympanum to be more readily infected. A small pad of septic adenoid or tonsil may do as much harm as a large one. Not

only infection spreads up the Eustachian tube, but deafness may be directly produced by obstruction of the Eustachian orifice by a large tonsil or adenoid, or by swelling of the mucous membrane of the tube due to local infection. Attacks of ear-ache are indications for a careful examination of the throat and nose. In all infectious diseases special attention should be paid to cleaning of the mouth and throat, to avoid middle ear disease as a complication. A deflected septum or a hypertrophied turbinate bone may be as much a source of nasal infection as that of otitis media. If the throat and nose of every child were examined as a routine procedure, and treated when necessary, the evidence of suppurative otitis media and its sequelae namely deafness, can be easily reduced.

The establishment of surgical cleanliness is very important in the treatment of inflammations. Secondary infection is more serious than the primary in as much as it prolongs the course of the disease and favours chronicity. So one of the main considerations in the treatment of otitis media is to avoid secondary infection. With the first signs of the disease the external auditory meatus must be kept clean by syringing gently with a mild antiseptic and instilling a few drops of carbolic acid in glycerine daily, and closing the meatus with a plug of sterile cotton. The early and free incision, and drainage of any inflammatory exudation relieves tension and prevents the spread of inflammation and assists in early resolution. Paracentesis tympanum not only gives prompt relief to pain, but undoubtedly greatly assists towards early and complete resolution of the middle ear inflammation. This prevents much damage being caused inside the tympanum by the pent-up discharge, and also spreading of the disease to the mastoid cells, the affection of which is one of the main causes of chronic suppurative otitis media. The inadequacy of a spontaneous perforation may be responsible for a residium of fluid remaining, gravitating to the floor of the middle ear, and causing increase of deafness and tinnitus from cicatrization.

The running ear is a common complaint of a number of persons of all ages, but more so among the children of poor classes. There is no clear conception in the minds of many practitioners, the public, and some of the public authorities, of the true significance and seriousness of this condition. This not only eventually produces deafness, but at any movement cause such serious complications fatal to the patient. It is the duty of every medical practitioner to lose no opportunity to spot this condition wherever possible, and advise thorough and complete treatment. In some cases the source of continued otorrhoea may be due to infection of the mastoid antrum, and when such a thing is diagnosed no advantage is gained by delaying operation, and the antrum should be drained immediately by the simple conservative operation (Schwartz).

The other two common causes of deafness are the degeneration of the auditory nerve (nerve deafness), and ankylosis of the inner ossicle (oto sclerosis). In both these conditions little can be done in the field of preventive aspect of deafness. But the distressing sequela of middle ear disease can be easily prevented by proper treatment of the condition in its early stages. To achieve this, we would again stress the importance of: (1) an early paracentesis tympanum, (2) the avoidance of Secondary infection (3) searching for and treating the early causes for persistent otorrhoea and (4) the value of early antral drainage.—(*K. L.*)

MADRAS MEDICAL COUNCIL ELECTIONS.

At the elections held on 20th June '30 for filling up vacancies of Memberships in the Madras Medical Council, caused by efflux of time, the following results have been announced:—

		No. of votes obtained.
Group I.—	**Major J. A. Cruickshank, I.M.S. (Retd.)**	... **20**
	Captn. V. D. Nimbkar, F.R.C.S. (Edin.)	... 11
Group II.—	**Dr. S. Rangachariar, M.B.C.M.**	... **143**
	Dr. M. Kesava Pai, M.D.	... 109
Group III.—	**Dr. U. Rama Rau, L.M.P.**	... **928**
	Dr. V. Krishna Menon, L.M.P.	... 158
	Dr. M. Sitarama Sarma, L.M.P.	... 30
	Dr. G. Samson, Asst. Surgeon, (Hyderabad)	... 5

We heartily congratulate Major Cruickshank, Dr. S. Rangachariar & Dr. U. Rama Rau, on their successes at the polls and wish their tenures in the Council will be marked by fearless activity and unstinted service to the Medical Profession whom they represent.

Medical News and Notes

A REVIEW OF CURRENT LITERATURE ON LEPROSY.

BY

MAJOR LABERNADIE M.D. M.S., P.E.. (*Paris*)

In the past few months numerous papers dealing with leprosy have come out, which we will lay much stress on.

Bull. Societe de Pathologie Exotique.—(Nov. 1929). *V. Labernadie.* Treatment of leprosy by chaulmoogra oil added with U. V. "irradiated" ergosterine (vitamin D) or by chaulmoogra oil itself U. V. "irradiated".

The author reports the first attempts he carried on at Pondicherry.

The oil added with ergosterine has been found very active in cases being still unchanged in spite of a long treatment by plain chaulmoogra oil.

The U. V. "irradiated oil is also very active and, in addition to this, it seems to give rise to rare and mild general reactions.

The author reports an observation concerning a leper so easily affected by plain chaulmoogra oil, that the treatment had been given up. This patient could receive 52 injections (188) c.c. of "irradiated oil, without any shock, with but light local reactions whilst signs and symptoms were decreasing.

Bull. Societe de Pathologie Exotique.—Dec., 1929—*Mrs. Delancæ* M. D., in the Moracco, gives usually intravenous injections of N. A. B. to the lepers, and in the same time chaulmoogra oil or gynocardate.

She has got better results in giving N.A.B. intravenously plus intramuscular injections of B. C. G. (T. B. modified by Calmette and Guerin in allowing it to grow on bile-salt media).

Markianos.—Ultravirus of rat-leprosy. We know that the acid-fast B. Stefansky is inoculable in series to white rats and that it causes a disease of lymphatic glands at first, a general infection following this.—Rat-leprosy clinically resembles human leprosy and can shed some light on the Hansen's disease. So its study is full of interest. Markianos an assistant of Prof. Marchoux (Pasteur Institute of Paris) has shown by numerous experiments that the bacillar form is but a stage of the evolution of Stefansky's virus.

In fact, if one pounds in a mortar caseous lymph-nodes from a leprous rat and if one filters the fluid through a Pasteur-chamberland filter, one gets a filtrate without any visible germ. This filtrate, inoculated to new white rats gives rise to a genuine rat-leprosy, just like when B. Stefansky itself has been inoculated—one or two months after the inoculation, ordinary B. Stefansky (bacilli-shaped, acid-fast) are found in the lymph-nodes.

Bull. Societi de Pathologie Exotique.—(Jan. 1930). *Le Gac*—Botelho's Test in leprosy out of 87 cases (bacteriologically diagnosed) 72 were positive. Differential count: out of 37 nodular cases, 26 positive; out of 18 mixed cases 12 positive. Out of 32 Nervous cases 25 positive. So, in this last group the positivity rises to 78%.

Bull. Societe de Pathologie Exotique.—(Feb. 1930) *Markianos*—Treatment of rat leprosy and human leprosy by B. Stefansky rid of grease.

B. Stefansky lives inside cells and is covered by a wax-like coating.

So, there are two difficulties to be solved.

(*a*) To pound several Viscera rich in B. Stefansky, to subject them to the action of hydrochloric pepsin (in order to allow a diastasic digestion) for 48 hours at 50° c.

To filter on paper, to decant, to centrifuge, to rinse the deposit with water, with alcohol—So one gets bare B. Stefansky rid of any cellular proteinic matters.

(*b*) In order to dissolve wax-like matters, to subject the B. Stefansky to the action of boiling toluene, to evaporate, to rinse the deposit.

This latter is mixed with normal saline at the rate of 300 millions per 1 c.c. and put into phials.

Markianos has made 3 series of experiments:

1. *Curative attempts on rats inoculated with B. Stefansky* :—

At the dose of 1 c.c. of vaccine a week, subcutaneously, the rats under experiment got but a benign disease, while the controls showed severe signs and symptoms.

2. *Preventive attempts on rats before being inoculated with B. Stefansky* :—

Some rats received 8 injections of 0.5 c.c. of vaccine in a month; after this time, they were inoculated with B. Stefansky. The result obtained was not an immunisation, since the disease got developed, but the preventive infections hindered and delayed the progress of the lesions, as the controls showed.

3. *Curative attempts on man* :—A case of mixed, but chiefly nodular leprosy. During a year, the patient has received 40 subcutaneous injections of vaccine (from 2 cc to 8cc each) i.e. 181 cc in all. Never was there a general reaction. Once, one abscess. The author considers the latter as a local reaction similar to the Koch's phenomenon in experimental Tuberculosis.

After this treatment, the patient has considerably improved.

Bull. Societe de Pathologie Exotique. (Mar. 1930) —*Markianos.* Attempts for the treatment of rat-leprosy.

Very interesting experiments, for they are an introduction to new treatments of human Leprosy.

(*a*) *Timothy-bacillus Na-salt.* It is known that a para tuberculous bacillus has been found many years ago on the Timothy-grass (common cat's tail grass) and some attempts were carried on in Tuberculosis. *Markianos* has prepared a kind of antigen, in subjecting that para T. B. to the action of Na. So he has got finally a greyish powder which dissolved in normal saline and injected to diseased rats has improved, slightly, the lesions.

(*b*) *With ethylphenyl hydnocarpates and Meth oxyphenyl hydnocarpates*-no results.

(*c*) After this, *Markianos* used the products prepared by the great Chemist of the Pasteur Institute of Paris, Prof. Fourneau (and his assistants Baranger and Sivadjan)

1. He got no results with 580 and 581, sodium salts of a fatty acid of the oil of tortoise.

2. The esthers of the same tortoise oil (579 A. 579 B.) seem to be useful. [579 B. acts in melting nodules where B. Stefansky appear progressively destroyed.]

579 A—A rat inoculated 8 months before, by peritoneal way, is treated by 50 subcutaneous injections (in all 15 cc in 7 months). After this, it remained under observation without treatment during 4 months and a half showing no clinical lesions. Killed for post mortem examination, no macroscopic lesions were found, on smears, but few B. Stefansky were seen exclusively in tracheo bronchic lymph-nodes.

This leads to think that this latter drug could be used in human leprosy.

Ann. de Medicine et Pharmacie Coloniales.—Jan. Feb. March 1930.

Three articles of V. *Labernadie* and his assistants of Pondicherry.

1.—On KI treatment of leprosy The author has applied the Muir's method to numerous lepers at Pondicherry and, in spite of very high doses given during several months, he has got no results.

2.—(With *Srinivasan*, Medical officer, in charge of the Asylum). On the contrary, genuine Hydnocarpus oil (with 4% creosote according to Muir's formula) has often given improvements in nodular cases as well as in nervous cases.

3.—(With Govindarajassamy, Medical Officer, in charge of Ophthalmologic Dispensary.) The same pure Hydnocarpus oil, used by brushing conjunctival has improved many cases of Trachoma.

Bull Societe de Pathologie Exotigue.— (March 1930). V. Labernadie and Aubin—Oculo-cardiac reflex and leprosy

The authors have examined 100 lepers at Pondicherry by means of the oculo-cardiac reflex in order to prospect their sympathetic system.

Among lepers the normal reflex is rarer than among other normal individuals (in all 17% instead of 50%). It becomes rarer in proportion as the disease gets developed towards nervous forms=32% (nodular cases) 18% (mixed cases) 5% (nervous cases). Parallely, sympathetico tonic reflexes get more common (32%; 42%; 60%.)

Among lepers under treatment, at the beginning, the action of chaulmoogra oil seems to lead to an excitation of the nervous system, since the proportion of the different modes of oculo-cardiac reflex are at this stage, very near the figures obtained in

nervous cases (normal O. G. R.= 6%;—sympatheticotonic O. C. R. =63%) A few months after, in proportion as the treatment (Hydnocarpus oil) improved the lesions, the figures come back to the proportion of normal individuals.

NOTES

BY

COL. PROFESSOR FROILANO DE'MELLO, NOVAGOA.

THERAPEUTICS.

On the Prophylaxis of whooping cough by vaccination.—Von Bernuth (*Munch. Mediz. Wochenschr*, 76-1929).

Tuscosan is a vaccine prepared by the laboratories Gans-Oberursel, and containing for each c.c 2 to 20 millions of Bordet Gengou bacillus. Actually *tuscosan* contains 10 to 100 millions, and *strong tuscosan* 25 to 350 millions.

Good prophylactic value. Inconvenient: the number of injections (6). As far as concerns the duration of immunity it seems very weak, as one child contracted the disease 4½ months after vaccination, on account of a new contamination.

On the therapeutic value of intracardiac injection of adrenaline in the treatment of collapsus during anaesthaesia—Silveira Ramos (in *Bolda Assistencia Medica aos indigenase Luta contra a Doenca do Sono* Vol. III nº 2 Febr. 1929 Loanda Angola).

In 1896 Gottlieb saw the re-animation of the heart by intravenous injection of suprarenal extracts. In 1904 Latzko and in 1905 Winter injected adrenaline in human heart.

The author quotes two cases on his service of surgery in which the patients collapsed under anaesthesia, every treatment tried having proved unsuccessful (artificial respiration, intravenous injection of hexetone and caffeine, rhythmic tractions of tongue etc.)

1 c.c. of adrenaline (1/1000) given by intracardiac injection and the patients became normal some seconds after the injection.

Large discussion on the action of adrenaline,

Pyretotherapy by Neosaprovitan.—Minne (*Belgian Soc of Neurology* 25, i. 30 in Bruxelles Medical 17. 23. II. 30.

Neosaprovitan B is a mixture of bacterial albumins with living saprophytes. The ampoules have progressive doses. Contraindicated in cardiac, pulmonary or renal diseases. Results

P. G. 4 cases in beginning very good, 4 advanced nil. Tabes 2 cases a meliorated. Tabetic optic atrophy 1 case nil. Heredo luetic epilepsy. 2 cases ameliorated. Essential epilepsy 4 cases slight amelioration. Bradycinesia post-encephalitica 2 cases, 1 ameliorated; Psychoses 3 cases, 2 ameliorated. Dementia precox 3 cases, 2 a meliorated.

On a modern hypotensive therapy—G. Depetra (in *Rinnovamento medico* VIII nº 9 31. III. 30).

Coline is a neurinic leucomain, product of animal cells from the metabolism of muscles, blood neurlgia. Its hypotensive action is fully demonstrated by numerous experiments. A derivate from Coline is Pacyl which acts not only in lowering the blood pressure, but ameliorates the irritation and produces a strong vaso dilatation. Administration per os. its maximum dose 0.005, three times per day.

Success obtained by the author in arteritis, sclerodermia, intermittent claudication, trophic plantar ulcers, suprarenal hypertension and every form of hypertension including those of arterio-sclerotic and renal origin.

Serious infections and antivirus therapy—H. D. Henriksen (*Communications de l'Inst. Serotherapique de l'Etat danois. Act a pathologica et microbiologica scandinavica Supplementum* III XX 1930) Antivirus prepared according to the prescriptions of Besredka: cultures in bouillon at 37°, during 10–16 days, filtration on bougies. No heating. The author shows some cases of empyema, infected wounds, gangrenous appendicites, gangrenous cholecystitis, acute cholecystitis completely cured by this method.

Treatment of epilepsy by Treponema hispanicum—I, M. de Ayala (in *Prensa Medica Argentina* XVI. 28 10-III-30.)

The author is the first to try pyretotherapy in Epilepsy. Results in 18 patients: In 3 (17%) the number of accesses has increased during the 45 days of the treatment; in 14 (75%) evident amelioration, sometimes the accesses being in the form of slight myoclonism or giddiness; the epilepsy of infectious origin (meningitis, encephalitis etc.) give better results with the form of treatment than the traumatic or congenital epilepsis.

Experiments with Cibalgina in neuropsichiatry.—A. Salermi (in *Rinnovamento medico* VIII n°.9 31 III. 30).

Cibalgina is a combination of Dial with Dimetil-aminofenil dimetil pirazolone and may be administered to patients in injections, tabloids and drops. Very efficacious as analgesic and hypnotic, its action is durable, rapid and strong. Moreover there is no toxicity and so it can be used even in the case of babies. Insomnia, neuralgia cease rapidly. Cibalgina may be used as a succedaneous of morphine for the cure of morphinomany. In neurastheny, epilepsia and epileptoid stages it seems to have an elective action. In depressive anxieties, alcoholic delirium and some organic psychoses its action is superior to other similar drugs.

Protection against anaphylactic shock through magnesium hyposulphite.—A Lumiere & Mme Malespine (*Compt Rend de l'Acad des Sciences* CLXXXVII 22-X-28).

The magnesium hyposulphite prevents completely anaphylactic shock when it is given together with the anaphylactigen substance. When the accidents occur, they may be stopped, injecting immediately the same hyposulphite.

Note on the treatment of amoebic dysentery by auremetine Zoratti—(*Annales de la Soc Belge de Med Tropicale* IX. 4-31 Dec. 1929).

Auremetine contains 28% emetine, 16% auramine, 56% iode.

The mode of administration and dosage is as follows: *Acute cases*: (1) 0.065 in gelatine capsules. 4. times per day after meals; give these doses every two days and, after one week treatment, every day till 2,60 or 3,90 are ingested. (2) The treatment is according to Willmore and Martindale combined with daily ingestion of 0,25 of stovarsol, 3 times per day and with enema, of Emetine 0,065, ether 25. Olive oil 340 gr. Subnitrate of bismuth (4 gr.) is also given per os. *Chronic cases*: One day auremetine, the next day stovarsol. Bismuth every day. The specific and general result of such treatment is very favourable.

Iode and Iodides in the treatment of syphilis—Prof. Gougerot (*Bull Gen. de Therapeutique* 181. 1 Jan. 1930).

Iode finds its indication in the following stages of syphilis: tertiary lesions, secondary papules, massive chancres. Iodide should be employed in ulcerated phagedemic syphilis in S. tending to sclerosis (osteites, myelitis, tabes etc), in degenerative S. specially amyloid, in cephaleas and neuralgias of S. nature, in articular S.

Contraindication: lesions on larynx and pharynx; tendency to acute oedema of lungs, concomitant tuberculosis, intense vaso

motor re-actions (urticaria), nephretic patients (not the chronic S. nephritis). haemophylic syndrom, anaphylactic reactions, furunculosis, neoplasias.

Methylic antigen in some forms of tuberculosis—G. C. Trumbull (*Archivos de Tisiologia* Buenos Ayres n° 4 1929).

The author has tried the methylic antigen of Negre and Bouquet from the Pasteur Institute of Paris in the treatment of tuberculosis. Following a careful and progressive dosage, the treatment is really efficacious in every form of pulmonary tuberculosis, as it accelerates the sclerotic process and gives evident ameliorations of the general state of patients.

Association of ultraviolet rays and of calcium salts in the cure of pulmonary tuberculosis—G. B. Salvatori. (*II Giornale di Tisiologia* 10 31-X-929).

Ultraviolet rays, very wisely given in minimum doses associated with $CaCl_2$ intravenous injections, give very beneficial results in pulmonary tuberculosis, specially in fibrous forms without ulcerations. In ulcerative tub, even when torpid, such treatment may be dangerous.

SURGERY.

Calculosis of Wharton canal—N.C. Lapeyre (in *Arch de la Soc. des Sciences Medicales et Biologiques de Montpellier et du Languedoc mediterranean*).

Male, aged 70, great smoker, showing a large induration of the base of the buccal cavity and left submaxillary region, diagnosticated as neoplasia. Catheterism of the Wharton canal after careful medical examination of the whole region. Stone found and extracted by incision. Cure, after common antisepsy of the mouth.

Pyelography by intravenous injection of Uroselectane Schering—De Backer (Belgian Society of Radiology 9 III. 30 in *Bruxelles Medical* X. 22 30 III 30).

New method tried in America and Germany. On 132 cases 1 death recorded. The product is a iodoalbumin. Dissolved in 100 cc. of water is slowly injected and the radiography is immediately taken. Excellent results as far as concerns the function of kidneys: if they are well the bassinet are well marked and also the ureters. Double pyelogrammes may be obtained in this way.

New method of anaesthesia. The reviewer quotes the following words of Dr. M.N. Tuason (*Medical Impressions abroad in the Journal of the Philippine Island Med. Assoc* X n°1 Jan. 1930).

At the Hedwidge Krankenhaus I visited the largest service of Urology in Europe. Prof V. Lichtenberg has 160 beds for genito urinary cases in that hospital. In his service a new technique of general anaesthesia is being developed by means of avertine (a derivative of barbital) administered by rectum, which produces a narcosis lasting from two to three hours, without producing nausea and postoperative vomiting, but causes the same relaxation as ether.

At present it is in the experimental stage.

Contribution to the study of pulmonary tumours with special reference to primitive sarcoma—V. Serra (11 *Policlinico* XXXVII 3 March 1930).

Malignant primitive tumours of lungs are frequently recorded in the last years, showing a real increase in their incidence. The carcinomata are much more frequent than the sarcomas; among these the most frequent are those of fusiform type. The males are more attacked than the females. Pulmonary tumours may be observed in all ages. There is no pathognomonic clinical sign for diagnosis of such tumours. Clinically it is also impossible to diagnosticate the nature of the tumour, whether sarcoma or carcinoma. The presence of pleuretic haemorrhagic exudate is frequent but not constant.

Diagnosis should be made by cytological, radiological and bronchoscopic examinations. The presence of neoplasic cells in exudates or sputum is a sign of evidence, but not always found. Surgical treatment indicated. In inoperable cases, radiotherapy with very little success.

MEDICINE

On the existence of an inapparent form of typhus exanthematicus in man—Ramsine (*Arch. Inst. Pasteur de Tunis* XVIII 3-4-1929).

The author has discovered in an epidemic focus persons who do not show any sign of the disease, work normally, etc. and whose Weil-Felix is strongly positive (1/800) and whose blood inoculated to guinea pigs gives typical infections—a true case of inapparent infections.

Hallucinosis post malaria in general progressive paralysis—Gonzalo Lapora (*El Siglo Medico* LXXVII 85 5. IV. 30.)

The first descriptions of this syndrom are due to Gerstmann in 1922. Very few cases more are recorded in the literature (Blanc. Carrasco Martineg, Pons Balmes, Dattner, Grant and Slverston, Krayenbull). The author quotes 8 observations: under the malariotherapy in tabo-paralytic patients an hallucinatory syndrom is sometimes developed, often acute, ending many times by suicide. Such syndrom is frequent in taboparalytic having already acute mental troubles, becoming more acute after malaria injection. It is also observed after other forms of pyretotherapy and even after somnifene or neosalvarsan injections. It is curious to note that no such reactions are observed in other mental diseases where malariatherapy has been used (schizophreny, tabes purus, multiple sclerosis, epilepsy). The hallucinosis is manifested specially on acustic nerve, afterward in optic nerve and finally on tactile and cinestesic functions.

New technique of arterial Encephalography—Egas Moniz (*in la Presse Medicale* n° 44. 2 June 1928).

Prof. Egas Moniz from Lisbon has discovered a method of diagnosis of encephalic tumours by taking radiographies of encephalic irrigation through and during the injection in internal carotid of a solution of sodium iodide. The results have been wonderful since three years that the method has been largely employed in portuguese and foreign surgical centres. In the present paper the author, considering the deep situation of the internal carotid has modified his technique, injecting the solution of sodium iodide, (3%) chemically pure, in the primitive carotid with previous ligature of this vessel as well as of the external carotid.

Meningo-nephritis (latent infectious meningitis in nervous uremias of nephritis and icterias)—Savy and Thiers. (in *Annales Medicine* XXVII 1 Jan. 1930).

In patients showing symptoms of nervous uremia, in the ccurse of an acute or chronic nephritis or jaundice, the lumbar puncture have put into evidence the invasion of the meninges by the pneumococcus. Such meningitis is essentially characterised by its latency, clinically (no meningeal sign) and anatomically (no inflammation). To these meningo-nephritis should be attributed the thermic symptoms in some uraemias as well as the nervous symptomatology of some icteriacs.

On the virulence of blood in tuberculosis Play Armangol (*in Bruxelles Medical* X. 21. 23 III. 30).

In the blood of tuberculous animals and patients there is constantly a form of the virus able to produce the disease. The tuberculous agent under the form of Kochs Bacillus is found in blood only in 5% of cases. In majority of them the virus is found under the form of *bacterie d'attaque* of Raveltat-Pla (95%). The *bacterie d'attaque* of these authors comprises the filtrant forms of caseum and other pathological products described by Fontes and some filtrant forms of cultures studied by Vaudremer. They are not acid resistant and have strong phlogogen and toxigen properties, being almost devoid of tuberculigen action.

The intermediary or transitional forms between such *bacteries d'attaque* and the resistant form or the true Koch bacillus are the following: young forms non acid fast of Koch bacillus in cultures, Muchs granules, intracellular granules of caseum from Raveltat-Pla, some forms studied by Ferran, Vaudremer, D'Arrigo. Sweany.

The study of these mutations, confirmed by experimental inoculations, opens a new field for investigation.

The Symptomatology of medicamental insulin poisoning particularly with a view to the psychic disturbances.—Carl Sonne *Acta pathologica et microbiologica scandinavica supplementum III XX 1930.*

Fletcher and Campbell (1922) described as initial symptoms restlessness, fatigue, hunger, perspiration; later on profuse perspiration pallor, rapid pulse, co-ordination disturbance of extremities, giddiness, diplopia; in more advanced cases sensory and motor aphasia, dysarthria, delirium, mental confusion and finally loss of consciousness and collapse.

Sjogren and Tillgren (1927) quoted cases in which under the influence of insulin a man of 39 years cried out, laughed and behaved like a madman; in another case absence of mind and negativism were observed; in the third one acoustic hallucinations. Miller and Trescher described as insulin poisoning amnesia, tonic and clonic spasms and transitory hemiparesia.

In medical Polyclinic of the Rigs hospital of Compenhague the author notes uneasiness in 63%, dimness of vision 65%, perspiration 71%, hunger 69%, palpitation of heart 44%, fainting 43%, mental confusion 56%, confusion with complete amnesia 21%. Sometimes there is also difficulty of breathing and involuntary micturition.

Chronic Rheumatism. M. P. Weil *Bruxelles medical* X. 17. 23. II. 30. A very important study on the etiology of chronic rheumatisms. According to the hippocratic tradition the authors agree to separate in the large group of articular manifestations the gout and the rheumatism but they continue to classify under the last designation a series of diseases having no other common tie but the articular localisation. No etiological classification is followed by English authors. Sir Newmann in a remarkable report considers only the anatomical forms, and such are also the views of American scientists. French authors give an important place to etiology in the classifications of rheumatisms. Teissier and Roque divide the chronic articular manifestations into 3 groups according to the way they are caused by an anonymous infection, a definite infection or an intoxication. The first group is caused by a double morbid factor *viz.*, the rheumatic *terrain* and the anonymous infection. Chronic progressive polyarticular rh., and partial chronic rh., (morbus coxæ senilis, vertebral osteophytic rh.) belong to this group. In the second group are the chronic infectious rh., caused by known virus such as acute rh., tuberculosis, gonococcia, scarlet fever, grippe, pneumonia, puerperal infection, typhoid etc; the last comprises under the name of chronic and toxic rh. a lot of diseases, confusedly assembled *viz.* the chronic rh., of Besnier, the chronic osteoalgic rh., of Durand-Fardell, the toxic rh., of saturnism, alcoholism, or picric intoxication, the nodosities of Heberden, pseudoarthrites of Bouchard in stomach dilatation, the camptodactyly of Landouzy, the rheumatism by thyroid insufficiency etc., etc.

Such a classification is evidently insufficient. The school of Lyon has too much exaggerated the role of acute rh., and of tuberculosis in the genese of chronic rh., and the author states that such role is practically inexistant. Among the causes of chronic rh. the author gives the following: *Traumatic arthritis* proved by clinical and experimental facts. In this group one must also consider the professional arthritis and the *chronic arthritis of hemophylic origin*; *II-Infectious arthritis* of any bacterial infection. However some cases of infections by other parasites have been recorded such as *lambliases* (cases of Vincent and Lyon) amebiasis (Kofoid and Swezy) *chronic malaria* and *sporothrix* (hydnothrose and osteoarthritis resembling deformant rh., cases of Aime, A. Leri). Among these infections there are some particularly able to produce such lesions: gonococcus, b. of Kock, syphilis and some pyogenic; Eberth, dysentery, pneumococcus, meningococcus, and even scarlet fever; *III* among arthritis of metabolic origin the author notes the gout and another trouble which Virchow described under the name of *Ochronosis* (1866).

This is characterised by a grey brown or sepia colour of the cartilagneous tissues, due to combination of homogentic acid and chondroitin or chondromucoine as result of an abnormal desintegration of albumin, particularly of tyrosin. The urine in such cases is often brown acajou or black (alcaptonury). Allard and Gross have described alcaptonuric arthritis with pains and tumefaction of joints and virebord *osteoarthritis deformans* due to the same origin. This disease may be hereditary.

Gilbert and Lereboullet insist on the frequency of *rheumatisms of hepatic origin.* Lithiasis, obesity various enteritis give a large contingent to such states. Hyperuricemia, hyperalbuminia hypercholesterinemia are blood anomalies in such patients. *IV* Under the name *distrophic arthritis* the author describes those troubles dependent at the same time on the nervous system and endocrine secretions. A special place is made for thyroid rheumatism brought to evidence by Diamantberger, Sergent, Revillod, Hertogue. Sometimes the *ovarian* troubles are also joint to disthyrodism. In many of such patients the sympathic system is congenitally predisposed; on their anamnesis stigmata showing a senisbility for vago-sympathic troubles *viz.*, migraine, urticaria, acrocyanosis are frequently found. *V* In this group the author classifies the local troubles of vascular origin, able to give rheumatismal manifestation by their constant and long incidence. This knowledge is firstly due to Wollenberg who attributed them to arteriosclerosis of articular vessels. Thomson and Gordon give in dry arthritis an important role to atheroma of nutrient artery. Axhausen (1913) and Martenfel (1913) have given experimental evidence to the theory. Vascular troubles may be confined to veins (peri and endophlebitis obliterans) and to lymphatics. *VI* This group deals with *arthritis* of *proteinic origin.* Weill and Bezancon have shown the importance of this etiology. Arthur has reproduced them experimentally by repeated injections of heteroserums in rabbits as well as Moulounguet. Weintraul, Friedberger believe in an anaphylactic genesis in such cases. Some cases of rheumatism coming after the injection of sera justify this hypothesis. Clark thinks that in many cases where the rheumatisms are preceded by intestinal troubles, the genesis is probably of proteinic origin. *VII Rheumatism by deficiency.* Deficiency in the metabolism of calcium, phosphate, sulphur has been fully investigated by Leriche and Dalsace. The pseudorheumatism of menstrual period and of old women is often due to deficiency of Ca & Ph. *VIII* Many of these causes may be combined together and produce *mixed arthritis.*

These elements are very important for a scientific therapeutic of chronic rheumatisms.

Intracardiac injection of coramine in a new born infant. Vareilles (*Bull. Med.* 43 12-x-29 analysed in *Bull Gen Therap* 181. 1st Jan. 1930).

Baby in a stage of apparent death, after obstetrical intervention. All other means having failed, an intracardiac injection of coramine is given. The heart replies immediately, the respiratory rythmus is established. No consequences, not even the bulbar somnolence so often found in subsequent days. It seems that coramine, besides its stimulant action on the central nerve system has a direct and elective action on the fibre of the heart.

A new deficiency disease produced by the rigid exclusion of fat from the diet G. O. Burr & Mildred M. Burr. (*J. Biol. chem LXXXII May 1929* analysed in J. *de phys. et de path Gen.* XXVII nº 4 1929).

Regime extremely poor in fat and administered together with vitamines A. D. & B, produce in white rats a new disease characterised by necrosis of tail. These troubles disappear with the addition of 2% of acid fats to the diet. The non-saponifiable fraction of fat and the glycerine do not cure the disease.

Experimental hypervitaminosis of *rats with large doses of irradiated ergosterine of Windaus.* Collazo Rubino & Varela (*Riv. Ass. Med. Argentina* XLI July Aug. 1928).

5 mg of Vitamin D. given to rats submitted to a rachitogen regime produce a mortal cachexia which may be named hypervitaminosis. Such dose is at least 5000 times stronger than the average dose necessary to prevent the troubles due to rachitogen regime. The mechanism of hypervitaminisation is probably connected with the calcio-stabilisant action of vitamin D in the metabolism of animal tissues. This notion of hypervitaminosis is very important for the clinics in general.

Experimental hypervitaminosis D. Influence of the alimentation. Same authors (*Ibid* Sept.–Oct. 1928).

The ingestion of an excessive daily dose of Cod Liver Oil (25 drops of concentrated preparation) provokes on white rats submitted to the rachitogen regime of Mc. Callum the same cachetic troubles as above.

With 5000 to 50,000 times stronger doses of irradiated ergosterine than the therapeutic dose mortal hypervitaminosis is produced.

Anatomopathological records on such cases show precocious calcification of the cartilages; aneviysme and atheroma; nephrites

diffuse calcicosis; papilloma and adenoma in oesophagus and stomach tending to malignant degeneration.

A new element to calculate the degree of azotaemia. G. C. Lopez *Universidad Zaragoza* 4. 1929 in *El Siglo Medico* LXXVII 85 18-1-30).

Salivary urea may be utilised as a very important sign of diagnosis and prognosis as it is in full accordance with blood urea. The following numbers are given by the author: 0,20 to 0,30 for 1000 normal; 0,60 for 1000 very bad prognosis. The rate above 0,30/1000 may indicate renal alterations if the extrarenal causes are eliminated.

Investigation of Arvicola Amphibius for Tularemia in the Rayon of Astrakan:—Voronkowa (*Revue de Microbiologie d'Epidemiologie et de parasitologie* VIII nº 4 Saratow).

The investigation of a tularemia outbreak in the low Volga region in the summer 1926 showed that the majority of cases were in connection with water rats *Arvicola amphibius*. A careful investigation and experimental work confirmed these statements (in Russian, resume in English).

Clinical observations on autoserotherapy in pulmonary tuberculosis through vesication:—Fr. Cricchio (II *Giornale di Tisiologia* 11. 30-XI-29).

Results nearly always bad. Only in 2 cases over 12 slight amelioration, focal and general. In 9 cases fever after injection, in 1 case slight anaphylactic reactions. In 10 cases the disease followed its progressive course or remained stationary, independently of any interference or serum injections.

PATHOLOGY.

Immunisation of rats against plague through lysates of virulent plague bacilli treated by bacteriophage:—P. C. Flu (Nederlansch Tidjschrift von Geneeskunde 31 Aug. 1929).

Virulent plague bacilli may be dissolved by bacteriophage and utilised as vaccine. Such vaccine confers a very strong protection to white rats, specially when injected subcutaneously 2 to 3 times.

No reaction follows the injection. In man there is no general reaction. Local inflammation is very small.

Experimental researches on the sensibility of lower monkeys to the dengue virus. Blanc, Caminopteros, Dumas, Saenz (*compt Rend Acad. Sci* CLXXXVIII. 6-4 Febr. 1929).

In apparent dengue is conferred to lower monkey such as *M. cynomolgus* and *cerc. callitrichus*, some of which develop the virus after incubation of 4-5 days, as proved by retro-inoculation to man. The blood of monkeys becomes un-infective in 12 days. The immunity of those monkeys lasts at least 15 days.

Hibernation of Anopheles bifurcatus in the province of Venetia P. Sepulcri and E. Vidale (Rivista di Malariologia VIII 5 Sept. Oct. 1929).

A bifurcatus hibernates in Venetia in larval stage, but not as puppa. This phenomenon is in connection with adverse condition for the life of the insect and such hibernating larvae are able to live a very long life resisting to prolonged shaking, sudden variations of temperature and in a remarkable manner to asphyxia.

Gleanings from Medical Press

SURGERY.

Treatment of Adenitis by Diathermy.—P. Ravaut and Mlle Landowski (*Bull, Soc. Francaise de Derm. et de Syph.*, December, 1929, p. 1248), encouraged by the good results obtained in the treatment of actinomycosis and keloid acne by the diathermo-coagulant drain, have employed this method in numerous cases of chronic suppurating glands, some with and some without sinuses. When the glands were multiple, deep, and the patient sensitive, anaesthesia by ethyl chloride was used; the authors hardly ever employ local anaesthesia because the saline infiltration of the tissues modifies the conduction of the electric current and may harmfully widen the limits of the coagulating action. They generally operate without an anaesthetic; the pain is occasionally acute, but it only lasts a few seconds. If the abscess is enclosed the softest point is chosen, the needle attached to the apparatus is inserted so that the centre of the collection is reached, and the current is turned on. As a destructive action is desired they begin with a weak current, which is progressively increased if necessary. The cavity quickly swells up and bulges at the sur-

face; a zone of white coagulation appears round the needle on the skin which increases while the contents of the gland are raised to boiling point. The needle is then briskly withdrawn. In small lesions one insertion only is made, but in extensive cases several attacks may be necessary. Sinuses are treated in the same way. During the following days there occurs a copious discharge; in about ten days the scab is detached, carrying with it skin and coagulated gland tissue, so that a wound is formed lined by gland and dead cellular tissue. Healing is said to be surprisingly rapid; the scars are small and continue to diminish. The authors state that for several years they have had excellent results with this treatment of numerous cases of tuberculous glands of the neck and axilla, and notes are given of successes obtained in other parts of the body.—*B. M. J.*

Early Diagnosis of Pulmonary Tuberculosis.—N. G. Bentsz endeavours to clarify the early diagnosis of pulmonary tuberculosis as he finds many of the signs approved by scientific authority to be fallacious. Among these he enumerates the presence of unilateral granular conjunctivitis, the reaction to subcutaneous injection of saline above the pulmonary lesion, and persisting hyperæmia of the skin after friction, all of which are likely to occur as frequently in the sound as the phthisical. Bentsz has been able to detect congested streaks upon the gums only in a very few of the patients with more marked indications; but he endorses the reliable suggestions of muscular hyperaesthesia and fibrillation on percussion over the suspected area, as also of the less frequent intolerance of pressure on the neighbouring vertebrae. Neither local engorgement of the vessels nor drooping of the shoulder are of special value in early diagnosis, but Bentsz commends tenderness of the external auditory meatus, dilatation of one pupil, and the less common signs of unilateral sweating and pallor (all on the affected side) as more valuable. (*Amsterdam: Nederlandsch Tijdschrift voor Geneeskunde*).—*Medical World.*

Diagnosis of Appendicitis.—E. Konig insists that no operation for the relief of appendicitis is justifiable unless the condition is present beyond any possible doubt, his personal experience being that 18 per cent, of the diagnoses of the acute and 35 per cent. of the chronic disease are mistaken. And these errors are more particularly made in women since pelvic troubles constantly reproduce the symptoms, and especially the pain of true appendicitis; hence a vaginal examination should never be omitted in the suspected condition in a woman. A common pitfall is that

although salpingitis usually causes pain on each side, appendicitis may accompany it. Colitis often gives rise to mistakes, but its pain extends throughout the colon and is distinctive in character. Where the temperature is unusually high for appendicitis, enteric, or in children pneumonia, are more likely to be the cause despite the other symptoms, and the presence of headache in the one and the absence of the "abdominal face" in the other are almost conclusive proof against appendicitis. Lastly in neurotic children colics and abdominal spasms have often induced operations quite avoidable, had the temperature been carefully evaluated. (*Berlin; Medizinische Klinik*, xx).—*Medical World.*

Arterial Embolism and Embolectomy.—In six cases of arterial embolism of the extremities reported on by Jacob Lerman, F. R. Miller and C. C. Lund, Boston (*Journal A. M. A.*, April 12, 1930), the embolus was located in the axillary artery in one case, in the brachial artery at the profunda branch in one, at the bifurcation of the brachial artery in one, in the femoral artery at the profunda branch in two, in one of which both femoral arteries were obstructed, and at the bifurcation of the aorta in one. In four cases cardiovascular disease was the underlying cause of the thrombus and in one an aneurysm of the subclavian artery; in one the cause was not definitely established. The result from embolectomy in two cases was good so far as the circulation of the affected extremity was concerned. One of these patients, however, died thirteen weeks after operation as a result of myocardial disease. The other three patients operated on died from one to five days after embolectomy, in spite of postoperative improvement in the circulation of the extremities involved. They conclude from their observations that the success of embolectomy depends on various factors, particularly on the time elapsing from the onset of symptoms to operation and on the location of the embolus. Narcotics may mask the symptoms in embolism of the extremities thus jeopardizing the chances for early operative treatment.—*Northwest medicine.*

Primary Cutaneous Gonorrhoeal Infection.—V. Genner and P. Schultzer report the case of a medical practitioner who, while retracting a gonorrhœal prepuce, was slightly scratched by the patient's thumb; the hand was washed in soap and alcohol. Thirty hours later there was slight lymphangitis along the arm, followed by a small infiltration on the thumb, which on being incised two days later, gave vent to some serum. As the lymphangitis spread larger incisions were made, and some pus was found containing

intracellular diplococci resembling gonococci. Later on severe articular pains set in affecting the shoulder; these were followed by involvement of the knees and considerable fever. Examination of the blood for the complement deviation test confirmed the existence of a gonococcal infection. As soon as the active joint symptoms ceased massage was used, and in spite of a long illness (from October to February) full use of the joints was recovered. There was never any suspicion that the disease was a septicæmia properly so called. The joint affections were typically blennorrhagic in character, being monarticular at the onset, spreading secondarily to other joints, muscles, and bursæ, and finishing as a resistant serofibrinous arthritis of the knees.—*Ann. de Derm. et de Syph.*, p. 856, August 1929.—*Canadian Medical Association Journal.*

Nasal Fractures.—L. W. Jessaman (*New England Journal of Medicine*, April 1 1929) thinks that information regarding these fractures in our textbooks is, on the whole, very inadequate. All cases of fractured nose should be treated as early as possible, as it is usually comparatively easy to replace it in normal position, and obtain an excellent result unless the bones have been too badly comminuted. After a broken nose has become united in a dislocated position, it is often very difficult to replace it in its former position and secure a satisfactory appearance. Proper support is essential to hold the fragments in place until they have become re-united. A method of splinting which the author has employed for a period of more than ten years is that of using strap iron about three-fourths inch wide and somewhat less than one-sixteenth inch thick and of sufficient length to mold about the nose and over the cheek. The strap iron is really a heavy loop iron, readily bent with forceps and yet having a sufficient resistance to exert all the pressure that may be needed at the side of the nose; this pressure may be placed wherever required. Because of the difference in the size and shape of faces it is necessary to fit the splint in each individual case. The splint needs to be readjusted when swelling has decreased, and this can be done without disturbing the patient.—*I.J.M.S.*

Hernia of diaphragm in children.—P. E. Truesdale, Fall River Mass. (*Journal A. M. A.*, Nov. 16, 1929), summarizes his paper as follows: A normal diaphragm is essential for perfect physical endurance. The vast majority of defects discovered during life are of congenital origin. Congenital hernia involving the stomach alone and revealed in infancy or early childhood demands surgical treatment only when disturbing symptoms persist. Hernia of the

diaphragm, congenital or acquired, and involving the transverse colon, should be dealt with by the two-stage operation without regard to the age of the patient. While children withstand operation surprisingly well, risk of shock will be reduced by the use of a mechanical respirator with intertracheal anaesthesia. Truesdale's series of six operations on children with intestinal obstruction is too small to serve as a criterion of the surgical mortality. All survived with the two-stage operation, which in each instance converted what would have been a complicated major endeavour into too relatively safe and simple procedures.—*Illinois med Journal.*

The Indications for the Surgical Treatment of Pulmonary Tuberculosis.—*E. J. O'Brien, American Review of Tuberculosis November, 1929.*

The various surgical procedures are as follows:—

1. Crushing of phrenic nerve.
2. Exairesis of the nerve.
3. Artificial pneumothorax.
4. Artificial pneumothorax and phrenic exairesis.
5. Extrapleural pneumolysis (open and closed methods).
6. Thoracoplasty (upper stage only) without phrenic operation.
7. Thoracoplasty (upper stage only) with preliminary phrenic crushing.
8. Thoracoplasty (upper stage only) with preliminary phrenic exairesis.
9. Thoracoplasty (lower stage only).
10. Thoracoplasty (complete;) upper stage first.
11. Thoracoplasty (complete); lower stage first.
12. Thoracoplasty; parasternal,
13. Extrapleural pneumolysis.
14. Thoracoplasty with traction wires.
15. Resection of intercostal nerves.

This is the sequence in which the author thinks these procedures should be placed. It is his opinion that practically every demonstrable unilateral tuberculous lesion should have some form of compression therapy and that almost none of them be left to bed-rest alone.

The age, patient's general condition and the presence of complications elsewhere in the body must be taken into consideration.

Phrenic nerve operations are done to cause paralysis of the diaphragm. He recommends simple crushing in exudative lesions with light infiltration and localized nodular forms of productive lesions without cavitation which are not active or progressive. If

this same lesion be more extensive, though not more active, a phrenicectomy should be done.

In predominantly exudative lesions that are rapidly progressive and active, a greater amount of compression is needed and artificial pneumothorax should be given at once.

Tuberculous pneumonia, if seen early, should be combatted at once with artificial pneumothorax.

When considering compression of a diseased lung and there are suspicious lesions in the contralateral lung which we wish to test out, artificial pneumothorax should always be tried first.

Patients with uncontrollable hemorrhage, even if the disease is markedly bilateral, should have compression by air, if possible, on the side from which the bleeding occurs, if this can be determined. If this cannot be done, crushing of the phrenic nerve is indicated.

If thin adhesions are present preventing sufficient collapse, frequent refills of small amounts of air often bring about the desired result, but if this fails, an attempt may be made to cut the adhesions, either by the closed method of Jacobaeus or by the open method.

Thoracoplasty is used when the more simple procedures fail. It is indicated in the process of repair after destruction has taken place and civitation and fibrosis have resulted. The age of the patient, chronic nephritis and heart complications most frequently decide us against radical surgical procedures. Intestinal and laryngeal tuberculosis should not discourage compression as a rule, but rather encourage it, for they often clear up after compression of the diseased lung.

In those patients in whom thoracoplasty seems too severe because of age or other complications, phrenicectomy and resection of the intercostal nerves, will often be of value. Alexander has reported favorable results from this procedure.—*Journal of the Oklahoma State Medical Association.*

The Prevention of Spinal Anesthesia Fatalities.—In the *New England Journal of Medicine* (May 23, 1929) L. F. Sise, calling attention to the comparatively high death rate from spinal anaesthesia in Boston (approximately 1 in 100) sates that at the Lahey Clinic their rate has been only 1 in 950. This he attributes to a definite plan which they follow out and the essential points of which are the following: Very poor risks should be avoided, particularly where bodily vigor is very low. Fluids given before the anaesthesia adds to its safety; wherever there is any doubt saline should be given intravenously or by hypodermoclysis. The last administration just befor e the anaesthesia. They give at this time 1,500 c.c. saline and 50 grams glucose by hypodermoclysis. Ephedrin is an excellent prophylactic but caution must be used about overdosage. One hundred mg. should not be exceeded. For an abdominal operation in Trendelenburg position 50 mg. is usually enough. Care must be taken in placing the anaesthesia. It must be remembered that spinocain is lighter than the spinal fluid and tends to rise to the highest point. If vascular depression starts, early treatment is important. This means that the patient must be watched so closely that early symptoms of trouble are detected. The author believes that not only blood-pressure and pulse but also the respiration and color for cyanosis should be watched. In treatment the Trendelenburg position is the simplest and quickest thing that can be done to benefit the patient. Epinephrin has been found most effective. When there is good circulation in the tissues ¼ c.c. of the 1 to 1,000 solution is recommended. If more rapid action is desired, part of this may be given intramuscularly. If the blood pressure falls very low intravenous medication is necessary to get quick response. A good way to give epinephrin intravenously is in salt solution. The epinephrin should be injected through the rubber tubing of the infusion apparatus near the needle by means of a hypodermic syringe. In this way small amounts of epinephrin may be added to the salt solution from time to time as required. The author stresses the importance of every minute in emergencies and the necessity of a definite plan of action. His own plan is as follows:

If a grave emergency suddenly arises, the anaesthetist gives the alarm and immediately tips the patient into high Trendelenburg position, and gives, as indicated, oxygen, carbon dioxide, or artificial respiration. He maintains an open airway, watches the condition of the patient, and reports on progress. When he gives the alarm the operating nurse immediately fills the syringe on the instrument table with epinephrin and hands it to the surgeon; and the surgeon injects some epinephrin into a vein in the operative field. All these various actions can easily be completed within one minute from the time the alarm is first given. In this way a prompt and vigorous attack is made on the circulation and respiration at the same time, which should be effective in checking any but the most drastic collapse. This gives opportunity for starting saline infusion if it is thought necessary.

If the heart has stopped beating, intravenous medication would be futile. Under these circumstances the surgeon should inject epinephrin into the heart, starting with a few tenths of a c.c., and follow this with cardiac massage if the heart does not

promptly start beating.—*International Journal of Medicine and Surgery.*

Giant appendix weighing one pound six ounces.—The appendix in the case reported by E. Dunbar Newell, Earl R. Campbell and J. Marsh Frere, Chattanooga, Tenn. (Journal A. M. A., June 15, 1929), an enormous bent pear-shaped cystic mass, measured 7 by 8 by 16 cm. and weighed 659 gm. The lumen at the site of removal from the intestine was 3 cm. in diameter. No acute inflammation was seen and the lumen was open from end to end, neither stricture nor stenosis being present. Microscopic examination revealed a thick dense wall composed entirely of fibrous tissue. No lining membrane was found, and only a flat, scant, serous coat was present. A diagnosis of mucoid cyst of the appendix was made.—*Journal of the Oklahoma State Medical Association.*

Prevention of Deformities in Chronic Arthritis.—Loring T Swaim and John G. Kuhns, Boston (*Journal A.M.A.*, April 12, 1930) assert that when spinal arthritis has been found or is strongly suspected, the most effective measure for preventing deformities is rest in correct positions. This means complete rest in bed, for a matter of weeks. Any extensive experience with this disease makes it evident that no patient can become cured of the malady and continue at his work at the same time. Recumbency is indicated to afford rest to the patient, to give an opportunity to raise his resistance, to allay pain and muscle spasm and, above all, to prevent the forward deformity. This recumbent rest must be so arranged that positions are not assumed which induce the spinal and thoracic deformity described. The patient's bed should not sag in the middle; there should be but one small pillow under the head; often no pillow is better. It is less fatiguing and less likely to cause deformity to have the patient sit in a straight-backed chair than to have him bolstered up in bed with its certain flexion of the dorsal spine. At intervals of about one-half hour several times during the day a pillow should be placed under the dorsal spine and the hands should be placed under the head. This pulls the thoracic cage into the fullest possible expansion. When deformity has already occurred, complete recumbency for a period of weeks is required. Heat applied to the spine in any form gives comfort and decreases muscle spasm. The patient is placed in a hyperextended position at short intervals during the day to mobilize the spine, to increase chest expansion and later to correct deformity. The patient is first taught to lie with a pillow under the knees to flatten the lumbar spine. No pillow is permitted under the head

at these times, thus making for full extension of the cervical and dorsal spine. When this becomes comfortable, a pillow is placed under the back at the apex of the bowing for short periods; later this may be replaced by a sand bag or half shell plaster cast, in which the patient may lie for short periods or even all night. A more vigorous measure is to have the patient lie on a firm hair mattress, which is gradually raised by means of inch boards placed from day to day under the apex of the deforming spinal curve. Not all deformities yeild readily to such treatment but all will improve to an encouraging degree; sometimes, however, only after months of persistent treatment. When such therapy cannot be followed and stiffness increases, the spine should be allowed to ankylose only in the best functional position; with the chest in full expansion and the spine in the full extension with no increase in the normal curves. Exercises play an important part in the treatment of spinal arthritis. These are given several times daily in the recumbent position. As the patient becomes more comfortable and stronger, he is given sitting or standing exercises. They should be designed to mobilize the stiffened spine, to improve chest expansion, and to strengthen the atonic abdominal wall and the weakened spinal muscles. These exercises should be continued until the patient is well. With the disappearance of muscle spasm and improvement in special and adominal musculature, the patient should be provided with apparatus which will help to prevent deformity and yet not restrict the chest. Torticollis, a rotation of the head due to cervical arthritis, is one of the most unsightly as well as obstinate deformities that involve the head. When the head is pulled to one side by the protective muscle spasm, it should be put at complete rest with the neck in the normal erect position and the face looking straight forward. This position should be held by a posterior plaster shell or sand bags. Heat applied to the back of the neck and fraction from 3 to 10 pounds (1.4 to 45 K.g) on a head sling often help relieve the muscle spasm. As the muscle spasm decreases, the position of the head should be permitted to become stiff only in a good position, with the head facing directly forward and balanced well on the torso for the upright position. Involvement of the temporomandibular joints occurs in a large number of arthritic cases. A certain amount of correction can be secured by the use of soft wood wedges between the upper and lower teeth. Various operative procedures have been devised for securing motion when the joint is ankylosed.—*North West Medicine.*

The Effect of Parathyroid Extract and Calcium Upon Calcification and Healing in Pulmonary Tuberculosis. Burgess Gordon and A. Cantarow. American Review Tuberculosis, December, 1929.—Since calcification of a tuberculous lesion is considered an indication that the process is healed, numerous attempts have been made to promote calcification of such lesions by the administration of calcium salts. It is significant, perhaps, that the majority of favourable reports are the result of clinical observations since striking data have not been obtained from experimental studies, although Pelouze and Rosenberger found that the combined administration of parathyroid extract and calcium to animals resulted in a gain in weight and limitations of the extent of the tuberculous process.

Despite the fact that evidence has not been obtained in support of the theory that tuberculosis is associated with demineralization and that no increase in calcification of tuberculous lesions in patients has been noted following calcium administration, the salts are still widely employed in the treatment of pulmonary tuberculosis. In addition to the use of calcium salts in disturbances of mineral metabolism parathyroid hormone has been widely employed.

In an investigation undertaken at the Chest Department of the Jefferson Hospital, Philadelphia, in 1925, parathyroid extract was administrated to 60 tuberculosis patients (10 units twice daily) to determine the effect upon symptoms, calcfication and the course of the desease. The following data were noted: In most instances an increase in blood-calcium (1-3 mgm. per 100 c.c. of blood) was maintained (normal variation 9-11 mgm. per 100 c.c. of blood). There seemed to be a favourable influence upon strength and on vague muscular pains, and a transient sensation of warmth and dryness of the skin and mucous membranes were noted, Cough and amount of sputum were diminished in 34 patients; those patients with nonproductive cough experienced marked discomfort, due apparently to the increased dryness of respiratory passages; pain of acute pleurisy was relieved in 14 patients and in several instances a decidedly favourable effect upon hæmoptysis occurred. There was no evidence of decalcification or increased calcium deposition in the lungs.

Since the use of parathyroid extract failed apparantly to influence calcification, further studies were undertaken. Parathyroid extract (20 units every 48 hours) and calcium lactate (30 grains three times daily) were administered to 14 patients with pulmonary tuberculosis for a period of one to six months. The results were similar to those noted in the first group. Roentgenographic studies failed to reveal any change in calcification of the lung-

fields or bones of the hands and there was no visualization of the blood-vessels.

The authors say: "It appears that diseased or potentially diseased tuberculous tissue is not influenced directly by hypercalcæmia and that parathyroid hormone and calcium should not be administered with the expectation of inducing calcification."—*Journal of the Oklahoma State Medical Association.*

Tobacco Smoking and Gastric Symptoms.— I Gray made a study of the relation of gastric symptoms to tobacco smoking in 400 individuals, who were divided into two groups. One group consisted of 300 patients who had functional gastric disturbance and gave a history of tobacco smoking, and the other of 100 patients with organic gastric disease who also gave a history of tobacco smoking. The ages in both groups ranged from 25 to 65 years, and there was a history of tobacco smoking for at least five years. Of the entire group 5 per cent were women in whom the gastric disturbance was of a functional nature. Most of the patients were cigarette smokers. About one-fifth smoked cigars only, some smoked cigar and cigarettes' and very few smoked pipes. Gray concludes that tobacco smoking is an etiological factor in gastric disturbances, but individual sensitivity rather than the amount of tobacco consumed is the determining factor in the symptomatology. The secretory and motor responses in individuals with gastric disturbances due to tobacco smoking vary in spite of similarity in clinical symptoms. About one fourth of those patients with functional gastric disturbances attributable to tobacco smoking show hyperacidity, and about one-fifth subacidity. In peptic ulcer tobacco smoking usually causes an increase of gastric secretion during the fasting stage, and hyperacidity in about one-third. Clinical improvement in some of these patients with ulcer occurred only after cessation of smoking. The therapeutic test, and not the clinical and x-ray findings, determines the conclusion whether the person should smoke or not.—*Ann. Int. Med.*, p. 266, Sept. 1929.—*Joul. Conadian Med. Association.*

The Diagnosis of Tuberculosis of the Tracheobronchial Glands.—Armand-Delille P., and Lestocquoy, C., *Am. J. Dis. Child.* 38. 1125. Dec. 1929.

The authors stress the importance of early recognition of this condition and the unreliability of many of the usual diagnostic criteria. "Pretuberculosis does not exist; a child is or is not tuberculous." They attach prime significance to a history of exposure, a tuberculous environment serving as the basis of con-

trol for the diagnosis of tuberculosis of the tracheobronchial glands. Their evaluation of the usual symptoms and signs is based on a study of transverse sections of the lung and mediastinum in diagnosed cases which came to autopsy. Percussion cannot demonstrate enlargement of these glands; if parasternal dullness is present it is produced by lesions of the subjacent pulmonary parenchyma; interscapular dullness, if found, cannot be due to the adenitis. Auscultation is of no real diagnostic value. The D'Espine sign is of value here only if found below the level of the fifth or sixth dorsal spine.

Diagnosis can be made only by careful roentgenography of the chests of children from tuberculous environments. Plates taken with an exact technique, by a very short exposure, in the frontal and in the lateral positions, must be compared with films made from other cases in which the roentgenographic findings have been checked at necropsy.—*Canadian Med. Association Journal.*

On the theory of Infantilismus dystrophicus universalis S. Chetivismus. Ad. Oswald (*Schweiz. med. Wchnesch.*, 56: 1926).

Description of a case which concerned a child backward in his general development owing to prolonged digestive disorders, in whom no symptoms of hypothyroidism were to be noted. Thyroid therapy was, nevertheless, introduced by way of trial; under this treatment, the child took on 4 cm. in body length within five months, with simultaneous disappearance of digestive disturbance.

In a second case, concerning a 7-year-old child, digestive disturbances and constipation were very frequent in the first three years. Since the third year of life a striking standstill of growth appeared. The child showed the characteristics of universal dystrophic infantilism, but presented no pronounced myxedmatous characteristics. For hypothyroidism, only coarse skin dry hair and chronic constipation could be brought into the question. Here the thyroid medication had an important result also and there appears to arise from these observations the thought that dystrophic universal infantilism may be the expression of an infantile myxedema. It is recommended to introduce thyroid medication in cases similar to the ones described and to continue this treatment for at least three months, before giving it up as unsuccessful.—*Illness Med. Journal.*

The Causes of Baldness.—The problem of common baldness is still more or less unsolved, and in its treatment we have made scarcely any progress of importance since Unna attributed the condition to infection by the organisms of seborrhœa. This explanation is evidently not the whole story; protracted and conscientious application of sulphur, which remains our most potent remedy for seborrhœa, is rarely successful in promoting a cure, although it is of undoubted value if begun early in life when excess of scurf is first noticed. In a recent post-graduate lecture* in Vienna, R.O. Stein pointed out that seborrhœa is common in African natives, and yet the bald man is seldom seen among them. Clearly there are other factors at work besides infection, and no one can fail to be struck by the close association of the state of the hair and the state of endocrine metabolism. In his first Lettsomian lecture last year, Dr. H.W. Barber† said that "virility tends to loss of hair on the scalp with its increased luxuriance on the beard and body; feminism to a converse distribution." Sabouraud states that eunuchs are seldom if ever affected by the male type of baldness, and women, of course, show a similar immunity, which can be disturbed by endocrine disease. Dr. Barber mentioned a case in which a woman with a suprarenal tumour grew a beard and moustache, and went bald like a man. When the tumour was removed the hair on the face fell off, and the scalp regained its covering, but the signs of virility again returned with recurrence of the tumour. It is, perhaps, something of an anti-climax to recall that popular belief attributes baldness to the wearing of a tight hat—a view which is shared to some extent by dermatologists. W.A. Pusey has lately remarked that "in the common occurrence of baldness we have a manifestation of a transitional stage in man's evolution. . . . Man now uses a hat instead of relying upon a shock of hair as his ancestors did. . . . This does not mean that we can save our hair by discarding our hats. We are a result of our ancestors, and to save our hair we should have to discard the hats of all our ancestors for scores of generations back." There is a certain amount to be said for this "vestigial" etiology of baldness, but it has to reckon with a persistence of the axillary and pubic hair, which has survived in spite of all our clothing. Every theory yet devised has its weak spots, and at present it looks as though alopecia presenilis would long continue to embarrass the profession and enrich the advertising quack.—*The Lancet* 1: 36, Jan. 4. 1930.

Correspondence.

TO THE EDITOR "*The Antiseptic*"

DEAR SIR,

Will you be good enough to give publicity through your esteemed journal, to the following resolutions passed at an emergent meeting of the Standing Committee of the U. P. Provincial Branch of the above Association held at Agra.

Resolution No. 14. "Resolved that the Standing committee supports the bill for the formation of an All India Medical Council as recently proposed by Dr. U. Rama Rau of Madras in the Council of State."

Resolution No. 15. "This committee welcomes the resolution of the G.M.C. of Great Britain to refuse recognition of Indian Medical Degrees as it has opened the eyes of the medical graduates of India who have hitherto depended on foreign recognition and enjoyed the glorifying and proud privilege of being entitled to registeration under the British Medical act and thus did not care to identify themselves with Indian Registerable qualifications which covered only the Licentiates of India and to secure due dignity and status for Indian Registerable qualifications.

This association records with satisfaction that the resolution of the G. M. C. though flung at India as an evil has proved a blessing in disguise in so far as it has caused an awakening amongst the Indian Medical Graduates and they are straining their nerves to secure and reserve that diginity for Indian Registerable Qualification which hitherto is the momopoly of British Registerable Qualifications."

Resolution. No. 24. "The Provincial Branch strongly supports the resolution of Dr, S. L. Sharma, the Provincial Branchs' representative at U. P. State. Medical. Faculty for the extension of the present 4 years course at the Agra. Medical School to 5 years so that the standard of the medical education in the United Provinces may be in confirmity with the regulations of the British medical act as recommended by the U. P. Medical Council. This committee requests the members of the State Medical Faculty to pass the resolution, and further urges upon the Govtt. to bring it into effect."

Yours sincerely,

JHANSI.
1—6—30

INDRA NARAIN SATENER,
Joint Provincial Secretary U. P. Branch.
All India Medical Licentiates Association,

PURNA MEDICAL SWARAJ FOR INDIA

Nationalisation of all Medical Services of India

DR. DADACHANJIS FIGHTING SPEECH.

At the public meeting of the Medical profession of Bombay, held the other day to condemn the arbitrary decision of the General Medical Council of the U.K., withdrawing the recognition of the Medical degrees of the Indian Universities, the following fighting speech was delivered by Dr, Kaikhusru K. Dadachanji in moving the fifth Resolution.

MEDICOS' SHARE IN NATIONAL LIBERATION.

I have pleasure in moving and commending the following Resolution to your unanimous approval:—

That this meeting of the Medical Profession of Bombay is of opinion that admission to all the Medical Services of the country should be restricted to Indian Nationals holding Medical qualifications registrable in India, and urges upon the Government of India that recruitment to the I.M.S. hereafter should not be by nomination but by a competitive examination to be held in India alone."

We have been and may be asked the pertinent question, "What is the share of the medical profession in the national struggle for the liberation of our Motherland from the thraldom of abominable alien domination? We can reply with a clear conscience—"We, the medical profession of Bombay, who always take a pioneer share in leading the medical profession of all-India, are assembled here to-day, to proclaim our Purna Medical Swaraj, or complete Independance of the Medical Profession of India from all alien domination, and we have actually forestalled by a day the glorious National Swaraj Week to be observed by the whole of self-respecting India from tomorrow onwards. Thus, the medical profession of India is not a whit behind the other sister professions such as the legal, in its determination to achieve Swaraj for India.

My Resolution is in fact the logical sequence of the four preceeding Resolutions, so ably moved by our colleagues, e.g.; the Ist resolution condemns the decision of the G.M.C. based as it is on Anti-Indian bias, the 2ud urges the appointment of an Inter-University Medical Board; the 3rd urges the formation of an All-India Medical Council; whilst the 4th demands the abolition of the privileges conferred by the existing Provincial Medical Acts on persons holding qualifications registrable under the British Medical Acts. Whilst finally, this 5th Resolution caps all, as it seeks to restrict to Indian Nationals only admission to all the

Medical Services of the country, and demands the institution of a competive examination for I.M.S. to be held in India alone.

This Resolution is divisible into two parts, the first of which demands that admission to all the medical services of the country shall be restricted to Indian Nationals holding medical qualifications registrable in India, i.e., such qualifications as may be approved by the All-Indias Medical Council, adumbrated in the 3rd Resolution, and which Council will we may take for granted abolish the unfair privileges conferred by the Provincial Medical Acts of India on the holders of British Medical Qualifications, as proposed in the 4th Resolution preceeding. So far as we know, there is no country in the world, where the sons of the soil are so outrageously and shamelessly deprived of their *inherent right to preference* in the national services of their motherland, as in India, under the British aegis. Here in India, only the low and subordinate posts in the National Medical Services are open to the Indian Medical men, however high their attainments and qualifications. Whilst all the higher and higest posts and plums of the services are reserved for aliens – however low their attainments and qualifications.

THE FRAUD OF INDIANISATION

Take, for instance, the Indian Medical Service' so-called. To call it 'Indian' is a contradiction in terms. It certainly is not Indian, as it is mostly manned by non-Indians, who are animated by Anti-Indian spirit—as reflected in the decision of the G. M. C. condemned in the 1st Resolution. The I. M. S. is not a 'Service' in any sense of the term,—it is really a 'Mastery' or in other words, it is a British Medical Mastery or Domination imposd upon India, without its consent and against its will. As some of you may remember, I had exposed and condemned the farce and fraud of so-called Indianisation of the Commissioned Ranks of the Indian Army, and which did cause a great stir, at one time, in the military circles in India and in England. The same type of fraud of Indianisation, under the euphemistic excuse of "maintaining the ratio," i.e. the arbitary proportion of Indians to Europeans, is being perpetuated in the case of the I. M. S. as of other All-India Services. My Resolution implies that such fraud shall, once for all, be suppressed, and that no longer, shall we speak of 'Indianisation', of an Indian Service—a self-evident absurdity, but that we demand a complete cent per cent Nationalisation of all Medical Services of India, including the I. M. S., meaning thereby that only Indian Nationals shall be eligible and hold posts in the Medical Services of India—whether Central or Provincial.

PROVINCIAL AUTONOMY IMPLIES PROVINCIALISATION OF SERVICES

We are told that soon, under a second "instalment" of the fraud so-called Reforms.—one need not debate on the first instalment of 1919, as you all know so well—'Provincial Autonomy' will be granted to India. If that be so, I submit that the autonomous Provinces will have their own autonomous Provincial Services (including the Medical), and so, they will and must sack all officers of the Central Services like the I. M. S., imposed upon them at present by the Government of India. Hence, the implication is clear. Yet, under the latest Reorganisation Scheme for the I.M.S., on the Civil side, there will be 302 Officers in civil employ, out of whom 65 i.e., 27½ p.c. will constitute the Leave and Study Reserve, and the rest 237 will be actually in harness. For these 237, soft and lucrative jobs must be provided, and so 59 posts are Central and reserved under Government of India, and 178 posts are Provincial and reserved under the Provincial Governments! Only 90 of these 237 will be open to *both Europeans and Indians*, i. e., practically the Indian I.M.S's will be sent to superintend jails and unhealthy spots! And the other 147 reserved for Europeans only.

Under Provincinl Autonomy, the 178 posts reserved for the I.M.S. in the Provincial Medical Services must go. and the Central Service de-centralised and provincialised, and the I.M.S. shall have no lien on these 178 jobs. Like the R.A.M.C., the I.M.S. must be restricted to its proper function. i. e., be a purely *Military Service*, as so often urged by us as well by Royal Commissions and Committees. To-day we are not concerned with the grant or otherwise of Provincial Autonomy, but we have met here to demand that all our Medical Services whether Central or Provincial shall henceforth be nationalised and manned by Indian Nationals, and that the 178 high medical posts in the Provincess shall no longer be reserved for the I.M.S., but shall be decentralised, and no membor of I, M. S. shall be eligible for same: and that each Provincial Government shall have the power to appoint only Iudian Nationals holding suitable medical qualifications registerable in India to these 178 prize posts, and the same rule shall apply to all other existing Provincial Medical Services.

THE COMPETITIVE EXAMINATION IN INDIA FOR THE I. M. S.

The second part of this 5th Resolution viz. that recruirment to the I. M. S. shall no longer be by the backdoor of nomination, but by the front door of competitive examination held in India alone, expresses the view held by the whole Indian Medical Profession, and supported by the distinguished

members of the Indian Central and Provincial Legislatures, and by intelligent public opinion. Nomination is a device of the weak, to outwit the strong,—conscious of their inability to succeed in any competitive contest with the strong. Whatever be the plausible reasons given for continuing this rotten device, we may take it that in addition to inability of the English medicoes to compete with us in open examination, the device is meant to preserve all the best jobs for Europeans and to exploit and exclude Indians,—the policy consistently followed by our alien rulers of the shop-keepers caste for 150 years. If the I, M. S. were really Indian in fact and not in name, the examinations must be held in India by Indian examiners, and be practically reserved for Indian Nationals only. In fact, we can safely throw out a challenge to the English medicos to come to India, and compete with our students, trained in India by Indian teachers in an open competitive examination, and abide by the result! Such an examination will also prove the falsity of the position taken up by the G. M. C., viz., that medical education in England is superior to that in India. The Carnegie Report showed English medical education to be so defective as to be 50 years behind the times. An examination held in India alone would support, by results, the conclusion of the Carnegie Report, and expose the hollowness of the claim of superiority of British to Indian Medical education. Finally, I would suggest to the whole medical profession of India to adopt the slogan—"All Medical Services of the country must be nationalised cent per cent, as early as possible, and no member of the I. M. S. admitted to any Provincial Medical Service."

Book Reviews

The Expectant Mother and Her Baby.—By Bodh Raj Chopra M. B. Ch. B. Pages 148. Price Rs. 5-10. Published by W. Green & Son Ltd., Edinburgh.

The maternal and infant mortality is still very high in India, because of the ignorance of the general public in the care of the expectant mother and the new born child. A book of this kind is long overdue, which teaches the mother how to maintain her health during and after pregnancy, which is responsible mainly for the normal growth of the offspring, and how to take care of

the new-born infant. The author discusses the causes of infant mortality, and lays down the rules of health and hygienic life for an expectant mother. Prevention and treatment of diseases and complications that may accompany pregnancy are expressed in a concise and simple language so as to be understandable to all. The chapters on the care of the infant and infant feeding are very interesting and instructive and deserves special consideration. Many mothers are ignorant of the art of infant feeding, the general principles of engaging a wet-nurse, when to begin weaning a child, and the proper methods of artificial feeding, which are all discussed at great length and in a practical manner in this book. This is a subject of vital human interest, and of national importance for India, and as such this book deserves to be widely read by all mothers and maternity nurses. The book also contains valuable informations and advice to medical students and general practitioners.—*K. L. R.*

New Light on Malaria Causation.—By Dr. C. M. Thomasz. Ceylon:—

The above is the title of a valuable and interesting book by Dr. C. M. Thomasz of Ceylon. In this book the significant point is raised whether a mosquito sting has ever caused an outbreak or epidemic of malaria at any time in any part of the world. Dr. Thomasz emphatically answers this in the negative and as emphatically states that soil disturbance is another ætiological factor of malaria and explains that it is more diffusive and virulent and this conclusion of his is the product of his researches and observations extending over a period of thirty-five years in the most malarious regions of Ceylon recording in relation to malaria soil changes, weather changes, water, food, air and the anophiline career which Dr. Thomasz, states is extremely slow as a cause of malaria. He fully agrees with the Malaria Commission of the League of Nations that "it is an unwise policy to destroy mosquitoes to control malaria". The book contains the anti-malaria measures he recommends which are efficient and workable. The chapter on quinine administration has very valuable instructive points, shows the conditions under which it has to be given and when to stop its use instancing cases of quinine poisoning. It is a book for the profesion and while the author does not disbelieve Sir Ronold Ross's Mosquito—cum—malaria theory of the year 1897 says that malaria is invariably followed by soil disturbance apart from mosquitoes or puddles.

An Introduction to the study of the Nervous system.—By E. E. Hewer D. Sc. & G. M. Sandes, M.B., B.S., M.R.C.S., L.R.C.P. 104 pages. illustrated 1929. (William Heinemann Medical books) Ltd.), London. Price 21.

For a proper understanding of the functions of the human body it is necessary to have a clean knowledge of its structure. In no system of the body is this more essential than in the Central Nervous system. In this volume the text and diagrams are the outcome of teaching, clinical and laboratory experience and it gives this much needed information in a form which will always be appreciated by all students. We recommend it to all students working for their examinations and to those in general practice who are interested in the nervous system.—*U. K. R.*

The Elements of Medical treatment.—By. Robert Hutchison, M. D. F. R. C. P. 1929. Reprinted, 163 pages. Price 7/6 a net [John Wright & Sons Ltd., Bristol]

This book contains the lectures given at the London hospital on elementary therapeutics. It is no use denying the fact that in the wards the student is not taught much about treatment of diseases. Much stress is laid on diagnosis and the equally important subject of treatment is hurriedly dealt with. Dr. Hutchison's book supplies this deficiency. Principles of treatment are discussed and their practical application illustrated by typical diagrams in such a manner as to leave a clear impression on the minds of anyone who reads the book. The most important thing in treatment is to know what not to do and in certain well known diseased conditions which are discussed in the book, these points are saliently brought home to the minds of the reader. The prescriptions given in the book are very good. The book is written in an easy style and is bound to appeal to all those who read it. We recomend it to all students, resident medical officers and practitioners.—*U. K. R.*

The Principles of Infant Nutrition and their application.—By K. H. Tallerman, M.E.M.D., M.R.C.P. (Lond.) and C. K. J. Hamilton M.C.B.M. M.R.C.P. (Lond) 1928 P. p. 175: London. William Heinemann (Med. Books) Ltd. Price 10sh net.

The principles underlying infant nutrition during infancy and the practical application in feeding at this age are fully discussed in this book.

The physiology of infant nutrition is explained fully and the authors stress the value of vitamine in the infant Nutrition, as a necessary factor for proper growth and development of the child.

Some of the common disorders arising out of improper feeding, unbalanced diet &c. are given together with their proper treatment.

The chapters on the management of the premature infant, and artificial feeding, are highly practical, and full of useful suggestions.

The appendix contains many useful receipes for some of the foods recommended in the text and a table showing the caloritic value obtained by adding sugar to various volumes of milk mixture. A notable feature of the book is the addition of bibliography at the end of each chapter, which will greatly help those interested in higher studies on infant Nutrition. It is a practical and uptodate, volume and we heartly commend it to all our readers, and to those engaged in the problem of infant Nutrition.—*V.C.S.*

Diseases of the Throat, Nose, and Ear.- By Dan McKenzie, M.D., F.R.C.S., (Edin.) Second Edition: 1927: Pp. vi + 677; 254 figures, 3 plates. London; William Heinemann, (medical books) Ltd.: Price Sh. 45 net.

The second edition of this already popular book has been considerably enlarged and brought up to date.

The book deals exhaustively with otolaryngology and will be found usfeful by all those who wish to specialize in this branch of Surgery. A notable feature of this edition is the inclusion of pictures illustrating the various types of operation, on the throat.

Many of the common diseases of these regions are discussed fully with their proper treatment. The section on tuberculosis of the larynx is well written, and contains a concise review of the results of various observations of other workers on this field, together with the author's own experience.

The book has been based mainly on the author's own personal observation and experience, and the various views held by the author are well supported by sound arguments.

No reader will fail to find in this book, any information and advice that is within the limits of otolaryngology.

The book is well and profusely illustrated and we confidently recommend to all our readers.—*V.C.S.*

A Treatise on Materia Medica and Therapeutics,—By R. Ghosh, 12th edition by B, N, Ghosh, F.R.F.P. & S. Page xii, 763. 1930 (Hilton & Co Calcutta). Price Rs. 7-8 or 12/6.

This treatise on Materia Medica is too well known to require any introduction. Since the last edition which appeared in 1927 many new drugs are in general usage and these find a place in this latest edition. Sanocrysin, Novasinol, Crardiazol, Kurchi Bark, Plasmochine, Stovarsol, Butyn, Ephedine Hydro-chloride,

Sodium Tetra-iodophenolpthalein and Sodium Thiosulphate are a few of the now drugs that are described in this book. The portion on light therapy has been revised and its usefulness, limitations and methods of administration have been thoroughly discussed. The entire text also has been carefully revised and a large number of non-official preparations of doubtful value have been deleted to make room for the above mentioned new drugs. We have no doubt that these changes will enchance the usefulness of the book and that it will continue to be *the* book for students and practitioners.—*U. K. R.*

Diathermy its Production and uses in medicine and Surgery:—By Elkin P. Cumberbatch. M A., B.M. (oxon) D.M. R. E. (Camb) M. R. C. P.

1927. Second edition P. p 331 with 87 Illustrations Price 1/1 net.

London: William Heinemann (medical books) Ltd.

The present edition has been completely revised and a good deal of new matter added to keep up with the progress made in recent years in the uses of diathermy in medicine and Surgery.

The book opens with a short historical account of the discovery of high frequency current and its thrapaeutic value.

The physiological properties of this current, and principle and working of the various makes of machines capable of producing these currents are discussed at some length.

A separate chapter is devoted to explain the action of diathermy current on the body in health.

The section on medical diathermy is divided into four main parts. In the first part medical diathermy is defined and its mode of action in the treatment of disease, its therapaeutic properties and the contraindications against its use are considered.

In Part II are described the various methods of applying diathermy to the body, both locally and generally.

In Part III the subject of the dosage is considered. Part IV deals with the therapeutic field of medical diathermy. Under the headings of the different systems of the body, the maladies which are suitable for diathermy-therapy are described.

The use of diathermy in surgery is given in the following section. In this section a brief account of the origin and development of the present day methods of using High frequency and diathermy corrents in surgery are given. Treatment of malignant diseases affecting the various regions of the body are well discussed with illustrative cases.

The book is highly practical, and will be found most useful by all those practising Electro therapy :—*V.C.S.*

Home Pests and destruction :—By J. S. Bainbridge. M. Sc. 1929. P p. 94 with 20 illustrations.

London. William Heinemann (medical books) Ltd, Price Sh. 3/6 net.

This little hand book is an expansion from the articles contributed by the author to "New Health" "The Quiver", and the "Woman's Pictorial". In this book the author deals with most of the common home pests that are found in India as well.

A complete chapter is devoted to each of these pests, which are arranged in alphabetical order.

The life history of the insect is given at the beginning of each chapter followed by effective methods of controlling the pest.

The book is written in a very plain language and may be understood by all.

It will be specially found helpful to health propogandists, while its usefulness to others cannot be over emphasised. We recommend it to all our readers :—.*VC.S.*

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Age Profession	Illness	Duration of cure	Weight of Body		Amount Hæmoglobin		No. of red Corpuscles.		Pressure of the Blood	
			on entering	on leaving	on entering	on leaving	on entering	on leaving	on entering	on leaving.
B. M. 30 years Sempstress.	Anæmia Tumor adnex	6 weeks	kg 58	kg 63½	60%	75%	421	5735	25 mm	11 mm
P. I. 19 years, Sempstress	Chlorosis	7 „	42	46	20%	45%	4060000	5040000	110 „	120 „
P. L. 34 years, Smith	Anæmia Ulcusventric	4 „	51	64	30%	45%	2400000	3240000	9 „	90 „
H. E. 21 years, Servant giri	Anæmia Perimetritis	5 „	53	62½	40!!%	40%	180000)	3280000	——	——
V. M. 24 years Accountant's wife	Chlorosis	5 „	36	43	20%	60%	——	——	——	——
S. E. 23 years, Saleswoman	Chlorosis	4 „	49	51½	35%	60%	——	——	——	——
E. M. 16 years, Servant	Chlorosis	7 „	43	47	50%	80%	——	——	——	——

From the above figures, it will be seen that the patients show an increase in the quantity of Hæmoglobin, in the number of red corpuscles, therefore that the change which are generally produced by treatmet with Iron are also produced by giving **"Serravallo's Tonic"**

I must however remark that this mixture was willingly taken by two patients, to whom other Iron mixtures had been given, but who could not stand them, that therefore this must be mentioned as an advantage which this mixture has over others: it never caused any disturbance to the stomach.

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The Antiseptic

A Monthly Medical Journal

EDITED BY
Dr. U. RAMA RAU
AND
U. KRISHNA RAU M.B., B.S.

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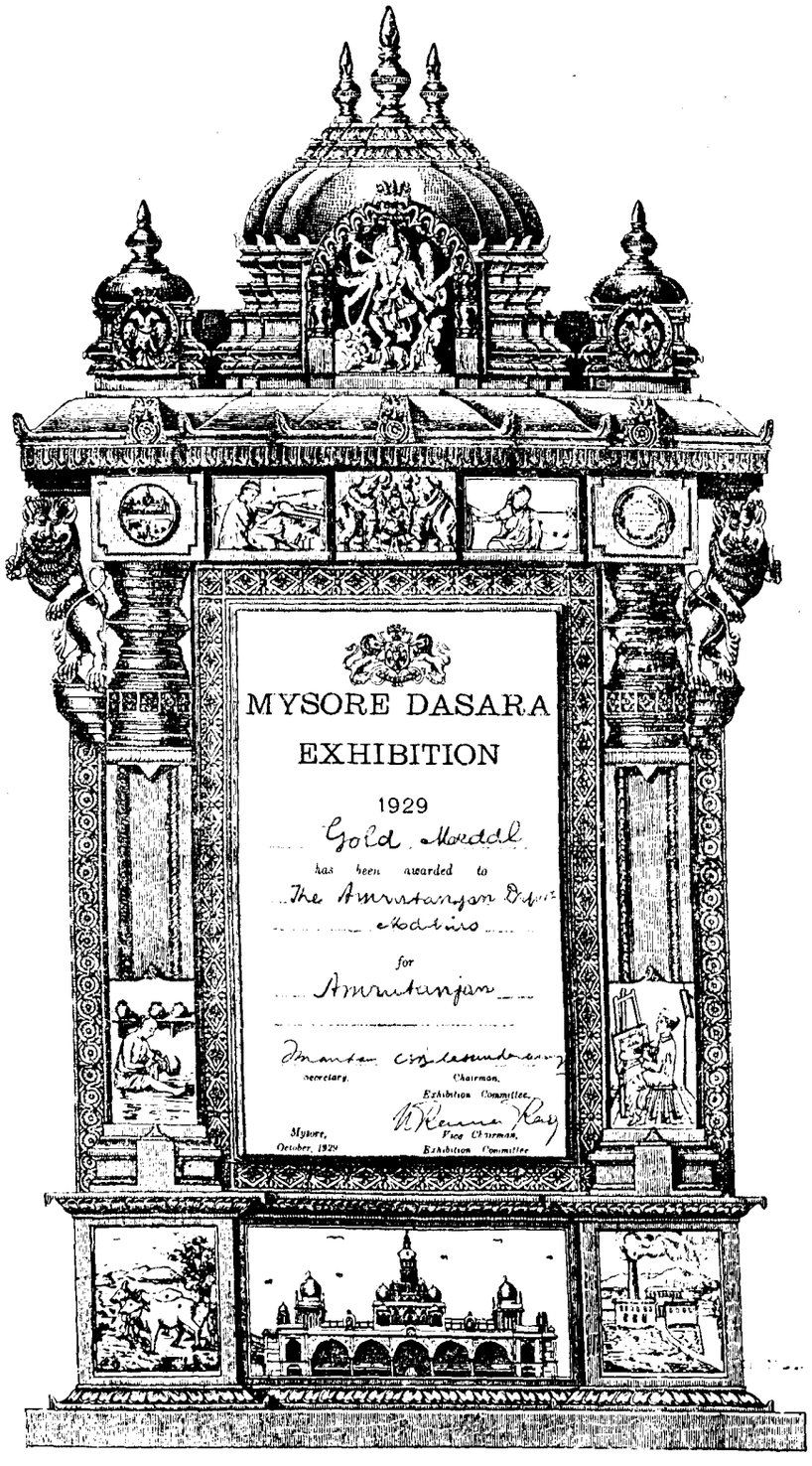

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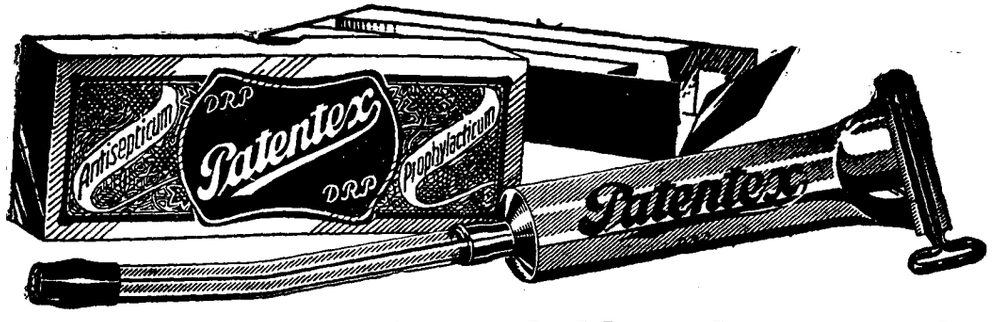

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Original articles

THE VERNES' METHOD IN GENERAL AND IN SYPHILIMETRY IN PARTICULAR.*

BY

MAJOR LABERNADIE M.D., M.S.P.E. (*Paris*)

The Wassermann's and its derived tests make use of a hemolytic system, the colorimetric variations of which constitute a scale whereon results can be expressed. Everybody agrees that such a scale can be divided into only about ten degrees extending from the strong positive to the complete negative.

At the time of the discoveries due to Bordet, Wassermann, and of the researches made by Ehrlich, the theory then prevalent was a kind of serum-chemistry in which antigenes, amboceptors, alexine united according to certain laws.

During these last twenty years, investigations have pointed to colloidal states and their floculation, so that to-day's opinion is

*Specially contributed to the Antiseptic.

Note:—The Verne's method is being adopted in Pondichery and any information regarding this can be obtained from Dr. Z. Andre Jeganaden, Asst to Dr. Labernadie. Apart from the apparatus now at work at Pondichery, two other apparatuses are working at Bangalore and Bombay.

that the reaction formerly called "fixation of the complement" is chiefly of a physico-chemical order and of a colloidal nature.

The *Vernes*' method is based on the direct observation of the colloidal disturbances occuring in sera and pathological cerebo-spinal fluids—this, no longer through the medium of a hemolytic system varying on ten degrees, but by means of a photometric apparatus of great precision and perfect sensibility with a scale counting 150 divisions.

Moreover, colloidal conditions have been studied with the greatest care; and suspensions, as well as the adjustment of the reactives, have been submitted to such an accurate control, that we are enabled to render rigorously comparable series of reactions in the same physical order. Let us now recall, on the contrary, how the Wassermann is inconstant and often paradoxical, and how difficult it is to be regulated in its diverse biological elements.

Briefly, the principle of the *Vernes*' method is as follows:—The reactive chosen is an extract of. horse heart made by extraction first with ethylen perchloride, after, with alcohol—hence its name " perethynol ". Prepared in the laboratories of the "Institut Prophylactique" it is a standard product of unvarying composition. It is used after having been by special manipulations, mixed with twice-distilled water in the proportion of 1 to 5'5. Such is the colloidal suspension, in which, sera previously decanted, centrifugated and warmed during 30 minutes up to 55° C will provoke turbidity, a fact sometimes perceptible to the naked eye, and always measurable by means of the photometer. The adjustment of the reactives is such that the perethynol serum mixture keeps the same optical density if the serum is sound, but, on the contrary, it becomes floculent and hinders the passage of the light, if the serum is syphilitic, and only in that case.

The technique of the test is simple. In a small test tube, to 0.8 cc. of warmed serum we add 0.4 cc. of perethynol suspension (see above). In another test tube, the same serum (0.8 cc.) mixed with alcoholised water (0.4 cc.) constitutes the control—for the dilution of alcohol has been chosen in such a way that it has the same optical density as the perethynol suspension, and that it does not cause any floculation in the sera.

After 4 hours' rest, at the temperature of 25·C, the reaction tube and the control tube are looked at in the photometer. The difference between the two optical densities gives "the syphilimetric index" That figure varies from O to 150 and even beyond. It gives precise informations for the diagnosis, the finding out of old cases insufficiently treated and last of all and chiefly for the control of the treatment.

A monthly test is necessary to maintain an exact control of the treatment. The figures set up on a graph form a curve giving precise enlightenings as to the intensifying of doses, the going on with, or the changing of the drugs and so on. If after a well-controlled treatment ending with arsenical injections, the patient shows a Vernes equal to O in his serum, 8 months in succession, and, at that time, if his cerebrospinal fluid is normal—then, from the results of experiments carried on for 15 years, in 700,00 cases, we ought to consider the patient as cured.

Such is the *Verne's* method, such its great interest for the diagnosis of syphilis in serum. But we know that a more or less old syphilis may be localised in nervous centres leaving often no traces in the serum. A slight modification in the technique above described, will allow us to find out floculation in the C.S.F. with the same apparatus. Also, an old syphilis will give no other symptoms but hyper albuminorachy: The *Verne's* photometer, once more, enables us to measure the quantity of that protein.

The same set of apparatus allows, thus, to find out all humoral symptoms of syphilis. But this was not enough for A *Vernes* and after long studies in collaboration with *Bricq* and *Gager*, he succeeded the serological diagnosis of tuberculosis, by means of a colloidal suspension of resorcine (with always the same apparatus). And now he is on the way of finding out the diagnosis of the cancer.

Such are the immense services rendered by the *Vernes*' method for the use of which the French Government and the Department of Science, as well as the Municipality of Paris have ordered a big building to be erected (The Prophylactic Institute) the purpose of which being to carry out the extinction of syphilis in France. In the Managing committee are seen political, judicial, scientific and literary members bearing the greatest names and also financial, industrial, civil and military delegates as well as notabilities among clergy and laity. Large subsidies are allocated and are necessary, for, the prophylactic institute examines and treats all patients free. During these last 10 years, one million of consultations have been given and 700,000 serological tests performed, either at the P.I. or in the 26 dispensaries of Paris and suburbs (without taking into account 40 large towns in France having similar plant).

The French colonies and more than 25 foreign countries have followed the example creating about 60 dispensaries-laboratories. This is due to the fact that the *Vernes*' method is applicable everywhere and in tropical countries particularly, with some modifications in the details while mounting the apparatus and with the use of iced water.

Why should not these precise methods of diagnosis and control spread more and more? It should be worked everywhere in the same way as in the Prophylactic Institute of Paris of which to quote an obviously impartial testimony, the promoter of syphilis serology Wassermann himself said in 1923 "There is no plant throughout the world, which even from afar can give statistics comparable to these, both as to the number of patients, and as to their prolonged and far-reaching control."

CARDIAC FAILURE AND ITS TREATMENT*

BY

DR. JAI GOPAL, LYALLPUR.

In deference to the wishes of the Editor of "The Antiseptic" I put before the readers, the various ways by which death takes place by heart failure and its treatment. In doing so, I do not claim any originality, but I have tried to put together, the thoughts, the research work and the differentiation of various conditions associated with cardiac failure in a presentable form for the benefit of those who cannot devote much time in studying a detailed description.

It is a matter of common knowledge that people prominent in public eye usually die suddenly of heart failure, be they of any nationality or in any country of the world. It appears as if Providence favours them by granting them a peaceful end and thus eliminating, the pain, the misery and troubles—the usual accompaniments of death; and at the same time does not wish them to become a burden and intolerable to those around them. This explanation does not appeal to the imagination of a scientific mind, who will not rest content until he has expounded a really scientific theory in support of this fact. This is to be found in the fact that in the case of all prominent persons, be they men of high literary attainments, great thinkers, social or religious reformers, politicians, statesmen and great administrators engaged in the difficult task of inaugurating various schemes for the progress of their people, inventors and research workers, there is one underlying principle governing their lives. That they have risen to prominence by dint of laborious application aided with penetrative insight in their sphere of activity. To be successful in any progressive achievement, one has to put in a great struggle to fight out the ignorance and to win the key to the secret treasures of nature. Read the life of any great man or woman it will be generally observed that seldom a personality has risen to the top,

*Specially written for the Silver Jubilee issue of the Antiseptic, April '29.

merely by chance or luck or by favours. Every one has to work his or her way upwards; and in doing so has to cross many an obstacle and to face many a trouble. In their onward march discouragement and disappointments are to be tolerated, attended usually as they are with their necessary evils in the form of worry and anxiety and their depressing influences on the nervous system. The physical and mental strain together with worry and anxiety makes the nervous system hypersensitive and therefore becomes disproportionately excitable to even ordinary stimuli and in course of time the over-sensitive nervous system breaks down. The heart consists of a complex nervous and muscular mechanism, the proper functioning of which depends on its component parts. In the event of excessive mental and physical strain, bringing about condition of nervous breakdown under the influence of emotions, the combined effects of these is to derange the action of heart.

Under normal circumstances the contractions commence in the Sino auricular node situated in the right auricle near the entrance of the Superior venacava. The stimuli then pass on to the Auriculo Ventricular node situated in the wall of right auricle. From this auriculo ventricular node a special band of muscle fibres, called the auriculo Ventricular bundle of His originate which pass through the interventricular septum and then divide in left and right branches terminating in Purkinjes fibres, situated beneath the endocardium in the walls of the right and left ventricle respectively. The excitations from auriculo Ventricular node spread down the auriculo Ventricular bundle and its branches to the Purkinjes fibres and then the Ventricular muscle. Lesions of this complex neuro muscular arrangement alter the rythm of the heart and different types of irregularities of cardiac action originate.

The failure of the heart may occur either in the whole of the organs every part of this showing signs of failure. or the process of decompensations may begin in the right or left Ventricle. The description of failing heart has therefore been discussed under the following three headings:—

FAILURE OF THE WHOLE ORGAN.

The failure of the whole of the heart occurs in various conditions. The death generally takes place suddenly or it may be associated with a brief period of illness.

(a) *Angina pectoris*—sudden and complete heart failure some times occurs in a severe attack of true Anginapectoris. Here the word *true* denotes its differentiation from the Pseudo Angina which is a nervous pain in the cardiac region, commonly occurring in weak nervous girls and is never fatal.

(*b*) *Adam stokes disease*—Sudden death may be due to a paroxysm of heart block. This may be due to the lesions of or impairment in the conducting power of Auriculo Ventricular node or Auriculo Ventricular bundle of His. It is generally due to myocardial degeneration associated with rheumatism or syphilis. Some cases occur in elderly people. The block may be artificially induced by the use of Digitalis and it is in view of this action that Digitalis is beneficially employed in auricular flutter when the auricular stimuli are occurring very frequently. The myocardial degeneration may be treated according to its cause, but the Ventricular rate can be increased by giving adrenaline in ten drop doses.

(*c*) *Coronary disease*—In arterio Slcorosis of the coronary arteries there is defective nourishment of the cardiac musculature. Embolillodged in the coronaery artery may bring about its occlusion resulting in sudden and complete cessation of the heart's action or the patient may die within half an hour to two or three hours.

(*d*) *During convalescence*—After any severe illness, particularly those depending on serious infections *i.e.* Influenza, Diphtheria, Pneumonia, Smallpox, Typhoid, the heart is usually very weak and in a condition of infective myocardial degeneration. The patient though appears well, progressing favourably in convalescence, sometimes under the effects of emotion, depressing influence or exertion dies suddenly due to the stoppage of heart.

RIGHT VENTRICULAR INSUFFICIENCY.

Causes. The Rt. Ventricular insufficiency is due generally to loss of pulmonary area, consequently the circulation of blood through the lungs is impeded and the right Ventricle in its efforts to overcome the resistance is overstrained and passing through the stage of hypertrophy; the exhausted pump begins to show signs of failure. It is therefore associated with the following conditions:—

1. Chronic pulmonary affections *i.e.* Chronic Bronchitis, emphysema, bronchial asthma &c.
2. Pulmonary Tuberculosis particularly the late stage.
3. Pneumonia—when large portions of both the lungs are consolidated.
4. Congenital Heart disease.
5. Mitral stenosis.
6. Aneurysm of the arch of aorta by its pressure effect.

Signs and symptoms (1) In early stage of hypertrophy compare the first sound in the pulmonary and aortic areas. The pulmonary first sound is accenuated because the right Ventricle is beating forcibly to overcome the intrapulmonary resistance.

(2) Thrill is seen in the epigastric region :

(3) Dilatation of the right Ventricle--percussion dullness extends on the right side of sternum.

(4) Systolic murmur is heard at the costo Xyphoid angle

(5) Diastolic murmur is present in the pulmonary area.

(6) Venous pulsation is usually visible in the veins of neck.

(7) Pulse rate is quickened i.e. 90—120.

(8) Dyspnoea is the main feature of the disease which in later stages becomes constant and there is markedly increasing cyanosis.

The reserve power of the right Ventricle is comparatively less than that of left Ventricle, therefore it fails rather early, death usually takes place wi'hin a few months of failing compensation. Patients die of a severe and prolonged attack of cardiac asthma; Oedema of the feet and legs is a late manifestation. The cardiac tonics have very little influence on the disease or in slowing down the pulse rate.

LEFT VENTRICULAR INSUFFICIENCY.

Causes. (1) Valvular diseases of aortic and mitral orifices. The chamber of the heart behind the diseased valves becomes hypertrophied in its efforts to propel the blood through the obstruction in cases of stenosis of the orifice. In case of a leaking valve the blood regurgitates in the chamber behind and there is defective circulation beyond the valve. The over filled chamber contracts forcibly in order to compensate for the defective circulations beyond the regurgitant valve. In both cases the result is that owing to increased output of energy, its walls begin to dilate and show signs of failing compensation.

(2) *Endocarditis* (*a*) acute endocarditis is generally seen as a complication in general infectious disease or supervening on a case already suffering from valvular disease. The common causes are rheumatism Pneumonia, Scarlet fever and Typhoid fever. Sometimes it complicates chronic illnesses such as Bright's disease, diabetes, gout and Phthisis. The onset of endocarditis in any severe illness may be indicated by a smart rise in temperature above the previous level, increased rapidity of pulse, dyspnoea and praecordial distress. Absolute rest in bed should be continued for several weeks, overstimulation of heart must be avoided. Digitalis should only be used if there are signs of failing heart not otherwise,

(*b*) *Malignant endocarditis*—The causative organism in this disease is streptococus veredans which is a highly virulent organism, therefore the disease is always associated with severe toxaemia. The local signs of the disease depend on the invasion of the organism on various organs of the body. Vascular changes

accouut for petechia retinal, renal and cerebral hæmorrhages. High fever extreme pallor and anaemia are present. It is highly fatal. Sodium cacodylate gr 3 intramuscularly given daily for about a week or ten days has been advocated.

(c) *Subacute endocarditis*—The predisposing causes are (i) physical or mental overstrain combined with anxiety or worry (ii) Exhaustion due to starvation, exeessive sexual indulgences and injuries (iii) prolonged illness—malaria, dysentery, Typhoid influenza, Pneumonia and rheumatic fever. J Gracie in reviewing thirty cases reports the following points to be borne in mind in diagnosis (1) clubbing of fingers (2) pallor (3) Slight irregular intermittent fever followed by an epyrexial period (4) increased pulse rate (5) Splenic enlargement (6) Valvular disease and recommends prolonged rest, and careful supervision during illness.

(3) *Aortitis*—It may be of rheumatic origin but its occurrence in syphilis is also very common. Cases are in record in which the patients were having cardiac treatment for months or years with only increased crippling of the heart until the blood was tested for Wasserman's reaction and antisyphilitic treatment instituted. A critical review on the syphilitic envolvement of the heart would serve useful purpose in emphasizing the need for an early diagnosis of syphilitic disease of the heart and blood vessels. "In syphilitic autopsis on 412 cases Etinna found 50 per cent with aortitis, while Joltrain records 60 per cent. In 463 cases of aortic regurgitation. 167 were syphilitics". The cases of syphilitic aortitis suffer from cardiovascular symptoms e.g. dyspnoea palpitation and cardiac pain which may in some cases amount to severe anginal attacks. In advanced stages aortis regurgitation with its associated physical signs takes place. F. A. Willins & A. R. Barnes in an article on syphilitic aortitis emphasise the importance of early diagnosis and of intensive prolonged treatment of aortic syphilis in order to prevent gross and permanent damage.

(4) *Myocarditis* may be acute due to Rhuematism or in the course of any severe infectious illnesses *e.g.* influenza, Pneumonia and acute septic involvement of throat. The chronic myocardial degeneration may be fatty or fibroid, the usual causes being coronary Sclorosis bringing about a condition of defective nourishment of cardiac muscle. Thrombosis of coronary vessels may occur due to Syphilitic endarteritis obliterans of coronary vessels causing anaemia, in fact leading to aneurysm or rupture of heart, and if an embolus is set free, sudden death may take place.

Myocardia is another form of gradual development of left Ventricular insufficiency occurring in old people over fifty years,

without having any relation to hypertension and is probably endocrinic in origin.

Physical Signs—These may be considered under two headings–

(a) *Local cardiac signs*—The most common condition is mitral regurgitation. In this the cardiac impulse is displaced downwards and outwards. The systolic murmur is audible at the apex. From here it is propagated outward and is heard in the axilla and then at the apex of the left scapula. The murmur of mitral stenosis is also heard best at the apex, but is propagated inwards towards the sternum and there is often a palpable vibration or thrill.

In the aortic disease, the common form is that in which there are evidences both of obstruction and regurgitation. Therefore the double aortic disease, both systolic and diastolic murmur common known as "to and fro" murmur is heard at the aortic area. In aortic lesion there is in early stages hypertrophy of the left ventricle, which drives the blood with great force into the arteries. Therefore the percussion wave in the arterial tracing is very high. In regurgitation, the column of blood raised during systole cannot be sustained, therefore the subsidence of pulse is sudden which gives a peculiar sensation to the fingers. This kind of pulse is called the water hammer pulse.

(b) *Vascular Signs*—During decompensations owing to the working incapacity of the left ventricle, there is slowing of arterial circulation and the pulse pressure becomes low. The ill effects of the imperfect circulation in various organs is as follows:

Liver:—The liver is imperfectly supplied with arterial blood. The force of the heart being insufficient to drive the circulation through the liver capillaries the organ becomes slightly enlarged and tender, there may be a slight icterus tinge. This kind of liver is commonly known as cardiac liver.

Kidneys—Diminished arterial circulation through kidneys results in diminution of urine and urea retention.

Brain—Diminished supply of blood to brain causes anaemia of the brain and therefore sleeplessness.

Systemic circulation—The most important and noticeable feature of the defective arterial circulation is the peripheral oedema and pallor of skin. The oedema commences from the lowest and dependant parts of the body and extends upward *e.g.*, from the ankles to legs and then in the genital organs to the abdomen. The evolution of oedema due to left sided failure should be differentiated from the oedema due to passive venous stasis resulting from right ventricular insufficiency which occurs exactly in the opposite order and is accompanied with cyanosis.

The two cardinal symptoms of left ventricular insufficiency are dyspnoea and cardiac pain.

Dyspnoea—In early stages there is slight breathlessness, but ater on the dyspnoea is severe and of grave anxiety to the patient and his relatives. It sometimes comes on in paroxysm and is therefore called cardiac asthma.

Cardiac pain—This is usually localised in the precardial region and is sometimes intolerable and agonising.

TREATMENT OF CARDIAC FAILURE.

Most cases of the failing heart, no matter what part of the heart is diseased and whatever is the nature of its cause, die either of severe fit of dyspnoea (cardiac asthma) or general anasarca involving the whole body depending on passive venous congestions, combined with orthoponea. The death though due to any one of these two causes, the need for definite cause is very essential for the purpose of efficient treatment; merely to label the disease as aortic regurgitation or mitral stenosis is not sufficient and the cardiac diagnosis does not end here. What is really desired is to decide whether the nature of the lesion is rheumatic in origin or due to syphilitic invasion or has developed after an attack of any severe infective illness *i.e.*, influenza, scarlet fever, pneumonia and septic throats; and lastly to decide whether the heart was affected by any undue overstrain before showing signs of failure. In several cases, I have known from the histories, that individuals though in full vigour and enjoying good health and some of them best athletes not knowing the ill effects of overstrain had over done themselves, and thereby ruined their future life. The settlement of all these points is essential in order to decide the specific line of treatment, and other measures to be adopted to postpone or prevent failure.

GENERAL MANAGEMENT.

Posture—In all cases where the pulse rate exceeds 90, the best course is to put the patient in bed, as the pulse rate is lowest during recumbency and it is desired to diminish the amount of work on the heart. In the cases of serious respiratory embarrassment and orthopnoea the patient should be propped upon pillows in an easy chair. A table should be placed in front of patients and a pillow near its edge. The patients like to lean forwards and sometimes sleep there, by placing their heads on the pillow on the table in front.

Diet—The diet should be liquid and an easily assimilable one. Milk is an ideal food, and it should be taken in small quantities 6 to 8 oz every 4 hours. Large amount of food at any one time is not permissible, with a view not to overdistend the stomach

and thus to lessen the pressure on the heart. The diet should be such that it does not ferment, to avoid flatulence. The total quantity of liquid intake should be limited so as not to increase the volume of blood and the blood pressure. Two pints in 24 hours is maximum which should seldom be exceeded. In tropical heat the patients are generally very thirsty and want to drink a lot of water. In order to quench the thirst lime juice mixed with soda should be given in sips. In severe dropsy the diet should be salt free, highly nitrogenous foods should be avoided as these cause a rise in arterial tension and peripheral resistance. When milk does not agree, Dalia or porridge may be given. Toasted bread, boild fish, stewed apples and juicy fruits are allowed. Tea, tobacco and alcohol are to be taken in moderation though it would be preferable to avoid them.

clothings—Extremes of temperatures, due to their depressing influences on the body should be avoided. In winter flannel under garments and warm stockings should be worn and patient should live in a warm though well ventilated room. In summer he should be kept in a cool room or in a passage where cool drought runs through.

MEDICINAL TREATMENTS.

The medicinal treatment of Cardiac Failure varies according to the condition in which the the patient is found:—

(I) *In serious forms of failure when the life is in danger*, the following four methods are relied upon.

(a) *Digitalis*.—Professor J. A. Gunn in delivering his presidential adress at a meeting of the section of therapeutics and pharmacology of the Royal Society of Medicine on October 9th, 1928 "Cardiac stimulants" emphasized the necessity of a proper and accurate classification of Cardiac stimulants and asserted regarding digitalis, that opinions were definite as regards its reliability of action. In view of its definite and reliable pharmacological properties this drug is commonly used in Cardiac Failures. The only Cardiac condition in which its use is contra-indicated is aortic regurgitation, the objection being that the prolongation of the diastolic period enhances the regurgitations. Cushny speaking against this view recommends "that when heart is slowed by digitalis its beat is also strengthened and there is an increase in the output per unit of time, which would more than compensate for any slight increase in the regurgitation". It is also argued that "less favourable results obtained in aortic than mitral disease are explained partly by the greater frequency of associated myocardial changes". In short its use in aortic regurgitation should be carefully observed and

should be used when the patient is confined to bed and the Ventricle is acting feebly and irregularly. If heart's action is slow and forcible, digitalis should not be used. Another fact, that should be borne in mind is that digitalis takes at least two days to come into action, but once it has come into action, the effect is a stable and progressive one without any variation from hour to hour.

The drug is now used in apparently massive doses in order to completely digitalise the patients. The point at which further administration should stop is the occurrence of nausea vomiting, diarrhoea or severe headache or pulse below 60 and coupling of beat *e.g.*, one beat strong followed by a weak beat. The cumulative effect of digitalis, when prescribed in large doses for a long period is the cause of much apprehensions; but in practice, it does not appear to be dangerous as is generally considered. The method suggested by Eggleston is generally adopted when failure is serious and dangerous to life. In the modified course, 1½ drachm of tincture digitalis is given as the first dose, the second dose after six hours is one drachm; and third and last dose given six hours later still is half drachm completing the total required by the heart for the time. In this way after the patient is well digitalised, further treatment is to give 15 to 20 drops every 4 hours. In a case seen for the first time, if no digitalis has been used previously the treatments may be commenced by an intravenous injection of strophanthus grs $\frac{1}{200}$ repeated after 12 hours. In the meantime digitalis is given orally till its effect is produced in 2 days.

(b) *Removal of fluid.*—There is severe dyspnoea due to accumulation of fluid in the abdomen and chest. There may be general anasarca. Removal of the fluid from the chest and abdomen will afford comfort to the patient and there is reduction of breathlessness. Slight incisions are made on the lower extremities to remove the dropsical Fluids; the method is described under treatment of special conditions on page 518.

(c) *Venesection.* The principle is to reduce the amount of blood and thereby to relieve the exhausted pump. The prominent pulsating vein (media Cephalic or Jugular is selected and made prominent by tying an elastic band above the elbow. The point of a small bistoury or knife is inserted into the Vein and is made to cut outwards. About 20 oz. of blood are removed, the immediate relief is pronounced in reducing orthopnoea and extreme cyanosis. Another method is to bleed the vessels in their own capillaries by dilating the peripheral vessels. Thus a severe case of dyspnoea endangering life, was relieved in 8 hours by giving spt. ethers and spt. amo arom in 20 drops doses of each every 2 hours.

(d) *Oxygen.* This may be inhaled through a soft rubber catheter connected to the tube. The oiled catheter is inserted into the nose for about 3 inches. Oxygen should be inhaled continuously or for varying periods according to the needs of the patient. It reduces Cyanosis and dyspnoea.

TREATMENT OF FAILURE WHEN THERE IS NO IMMEDIATE DANGER TO LIFE ALTHOUGH THE SYMPTOMS ARE SERIOUS.

(a) *Rest.*—Complete rest in bed must be enjoined till all symptoms of circulatory failure have disappeared.

(b) *Digitalis.*—Tincture of digitalis m X every four hours i.e. one drachm per day should be prescribed. A note of warning here will not be out of place, that digitalis should be given alone without combination with any other cardiac stimulant, although there is a tendency on the part of the physicians to add another stimulant with it. Strychnine, it may be pointed out, does possess no cardiac stimulating properties, it is in fact a vaso-motor and respiratory stimulant and increases the excitability of the nervous system. Under its influence the peripheral vessels are contracted, and the heart in order to propel the circulation through the increased resistance offered by the contracted vessels begins to work forcibly, provided it has the reserve power and strength to do so. Therefore its use in a case of cardiac failure is directly harmful by throwing an extra-amount of work on the cardiac muscle. It is useful only in a condition where heart is healthy but there is circulatory failure due to vaso-motor paralysis and it is required that the peripheral arterioles should contract to maintain the circulation efficiently.

Digitalis given alone does not raise the blood pressure, therefore it is not necessary to use nitrites with it.

When digitalis is used in one drachm doses, of the tincture, Mckenzie finds that "adequate concentration is reached after 5 to 8 drachms, but when larger doses are prescribed e.g., 2 drachms daily, the quantity requisite is smaller". In view of this, it must be borne in mind that smaller doses as ordinarily prescribed may have no effect though the case may be a suitable one for a cure. The tincture, if possible, should not be diluted until the time of administration; otherwise loss of potency may occur from decomposition of the glucoside. After the digitalis has been continued for sometime and pronounced improvement has been established by disappearance of œdema, reduction in pulse rate *i.e.*, 60 to 80, increase in the amount of urine and lessening of dyspnoea; the dose may be reduced to ten minims thrice daily.

Exercise.—As the patient, during all this period, has been in bed, we have to decide when he may be allowed to be out of it

and fit to take moderate exercise. After the disappearance of all symptoms of circulatory failure, the enlargement of liver persists for a long time. I have noticed this to persist for several months and it only gets reduced with improvement in circulation. This may now be brought about by graduated exercise. Carey thinks that lack of exercise may have something to do with the increased incidence of cardiac and arterial degeneration; therefore he thinks exercise as a curative agent. In bed case after all the signs of circulatory failure have disappeared for sometime, massage of the extremities and body should be commenced and later on passive movements should be started. The active movements later on, should only be done in bed, slowly and gradually, the patient is ultimately allowed to be out of bed. The exercise within limits imposed by breathlessness will do no harm. John Parkinson has appropriately called the "breathlessness on exertion" as nature's brake when the heart is limited in power.

Occupation. Any form of employment entailing moderate and mild exertion should be taken up by the patient such as clerical, tailoring and other forms of sitting occupations. He should spend one day in a week on bed.

Tea, tobacco and alcohol should be taken in moderation or may be avoided.

TREATMENT OF SPECIAL CONDITIONS.

Insomnia.—Paraldehyde 30 minims in a capsule in one drachm doses may be given at bed time and in case there is no sleep, an equal amount may be given two hours later on. Some patients go to sleep well with a moderate dose of whisky. The cause of insomnia is defective blood supply of brain and when the circulation has improved by the method of treatment already mentioned, the patient will begin to get good sleep.

2. *Vomiting and diarrhœa*—Sometimes it is due to irritating effect of digitalis. In one of my cases, the patient, when put on digitalis folia, had severe and incessant nausea for 2 days, which stopped on withholding the folia; but tincture digitalis well diluted was well tolerated.

3. *Obstinate dropsy*—In cases where rest, use of digitalis, and salt free diet has failed to remove the dropsy, Diuretics may be tried. The best diuretic that can be safely recommended is tincture apocynum Cannabinum half to one drachm doses three times a day. It is popularly known as vegetable trocar. It is a cardiac stimulant and irritates the kidney cells. Sometimes the amount of urine passed under its influence exceeds the bounds of expectation. Theobromine sodium salicylete B. P. in 10 grain doses in a tablet form three times a day is also a valuable

diuretic. The use of diuretic may be supplemented by hydragogue purgatives in order to eliminate the liquids. Blue pill at night followed by salines in the morning may be used for about a week. The milder recipe is Pulvis Glycyrrhiza to one drachm and Pulvis Jalap Co. one drachm combined may be given at night and can be continued for a longer time. Guy's pills consisting of blue pills, digitalis folia and squill is a combination possessing diuretic, purgative, and heart stimulating properties, and is also used.

If inspite of all these measures, the dropsy persists and is causing dyspnœa the fluid may be withdrawn by tapping the abdomen, aspirating the chest if there is hydrothorax and by punctures on legs and feet. For the last purpose the patient is seated in an easy chair propped up on pillows for about 24 hours, so as to allow all fluids to gravitate into the legs. The legs and feet are scrupulously cleaned with a mild non-irritating soap after shaving the parts and are painted with weak solution of Iodine. The patient's skin is sterilised very carefully. Small tiny punctures skin deep may be made with a knife in front of the leg and dorsum of foot fifteen to twenty in number. The leg is then placed in a sterilized tin. The patient keeps sitting for about 2 days, during which practically the whole of fluid will ooze out slowly and gradually. In this way, in one of my cases 15 pints of fluid were withdrawn. It is very important to bear in mind that this procedure should be undertaken under strict aseptic condition. The clothings and the surroundings of the patient should be quite clean so as to eliminate all risks of sepsis. The sepsis once introduced finds favourable environments to develop and get established in a highly albuminous fluid and tissues which are already low in vitality. These punctures, after 2 days, by which time the fluid has ceased to ooze out, are dressed up with a sterilized gauze and wool and bandaged. The dressing sometimes gets soiled through some of the leaky punctures, therefore it should be renewed twice daily. The patients after the removal of fluid feel very comfortable, the dyspnœa lessens, and the circulatory improvement is sometimes brought about in a manner beyond expectation.

PHYSICAL EXAMINATION OF THE CHEST*

BY

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A thorough examination of the chest demands, Inspection, Palpation, Percussion and Auscultation in their classical order. Being infected by the hurry and worry of modern times, we are apt to skip over each of these without recalling to our mind the various causes operating and the significance of each. It is the accurate observation and correct interpretation of facts that will enable us to penetrate into the cause and diagnosis of a malady. We will consider each in detail.

INSPECTION.

Inspection cultivates the power of observation which is a valuable asset to our profession. Here, we will make use of our eyes alone, reserving our hands for Palpation and Percussion and our ears with the Stethoscope for auscultation. Let us see first what our eyes can teach us about the shape and size of the chest.

A chest laid bare for examination may show a bulging or shrinking in any part of it. *Bulging* or protrusion may be :—

(*a*) of a diffused type as in :—

(i) Chronic pleural effusion (ii) Emphysema of the lungs (iii) Empyema (iv) Haemo-or Pneumo-thorax (v) Sound side in cirrhosis of the lung.

(*b*) of a limited area as produced by :—

(1) Aortic Aneurysm causing pressure or erosion of ribs (2) Scoliosis—lateral curvature of the spine, (3) Pericardial effusion (4) Mediastinal growths or abscess, (5) Empyema—pointing, (6) Abscess chest—wall or liver, (7) Necrosis of ribs, (8) Cardiac hypertrophy in early life before ribs fully developed, (9) Subcutaneous emphysema or any localised oedema, (10) Sometimes congenital deformity, (11) Callus formed by vicious union of fractured ribs, (12) Pleural effusion or enlarged liver or spleen will cause bulging of lower ribs on the right or left as the case may be.

*Specially contributed to the Antiseptic.

EYE, EAR, NOSE & THROAT

Special Number of the Antiseptic Oct. 1930.

In lieu of the ordinary issue of the Antiseptic for Oct. 1930, the above special number will be issued. The Editors hope to publish the following contributions in that Special number. Subscribers to the Antiseptic will get the Special number free. For others the price will be **Rs. 2.**

Notes on the occular manifestations of the affections of the Para Nasal Sinuses by Dr. J. M. Damany M.B.B.S., F.R.F.P.S.G., D.L.O. (Lond.) D.O. (Oxon) D.O.M,S. (Lond.) Hon. Aural Surgeon. G.T. Hospital, Bombay.

The Surgical Removal of Tonsils and control of Hæmorrhage by Dr. P. V. Cherian M.B., D.L.O., F.R.C.S.E., Ear, Nose and Throat Surgeon, General Hospital, Madras.

Keratomalacia and Small-Pox by Dr. E. V. Sreenivasan, M.B.C.M. Eye Surgeon Hon. Ophthalmic Surgeon, Govt. Royapetta Hospital, Madras.

Aetiology of Senile Cataract by Dr. Ram Kishan Handa B.Sc., M.B.B.S., Sir Gangaram Free Hospital, Lahore.

Some Vagaries of the Common Cold by Major A. K. Nandi. M. B. Burdwan.

Cataract Extraction with conjunctival Bridge by Dr. R. P. Ratnakar D.O., Oxon D.O.M.S. Lond. D. Cho. (L'pool) F.C.P.S. (Bom.)

Suppurative Inflammation of the accessory sinuses of the nose. by Dr. H. B. Mylvaganam F.R.C.S. Bangalore.

Leprosy as it affects the Ear, Nose and Throat by Dr. G. Raghunatha Rau D.M.O. D.T.M. Medical Officer, Leper Asylum, Cuttack.

Surgical treatment of the affections of the Pharynx and Fauces by Dr. Suresh Chandra Das Gupta L.M.S. Senior Surgeon and offg Chief Medical Officer, Bir Hospital Nepal.

Cataract Operation as performed at the Mayo Hospital by Dr. Jwala Prasad B.A., M.B. House Surgeon, Mayo Hospital, Jaipur, Rajputana.

Some Common Diseases of the Ear Part I by Dr. S. V. Nathan L.M.P. Madras.

Notes Concerning Cataract Instruments by Dr. Raghuber Saran Agurwal, Ram Eye Hospital, Buland Sahr.

Gonorrhœal Ophthalmia by Dr. J. C. Basu Chowdhary L.S.M.F. Formerly House Surgeon Thomson Eye Hospital Agra, now Medical Officer I/c of St. John's School Dispy., Agra.

Nasal Discharge and its treatment by Dr. Kali Gati Banerjee, Suri, Birbhum Bengal.

Praecordial bulging may be due to :—

(1) Aneurysm. (2) Pericardial effusion. (3) Cardiac hypertrophy or dilatation. (4) Mediastinal tumour. (5) Pyo-or pneumo-pericardium. (6) It is more marked in children than in adults.

Bulging in the Right Hypochondrium is due to :—

(i) Hepatic abscess. (ii) Enlarged liver. (iii) Right sided pleural effusion. (iv) Hydatids.

Bulging of the intercostal spaces is seen in :—

(1) Pleurisy with effusion. (2) Empyema. (3) Haemo-or hydro-thorax. (4) Mediastinal tumour or abscess pointing. (5) Pneumo-thorax.

Note.—In all these, resistance will be felt to the percussing finger.

Shrinking in or depression of any part of the chest may be due to :—

(1) Contraction of old pleural adhesions. (2) Collapse of one lung. (3) Chronic interstitial pneumonia or fibroid phthisis. (4) Previous empyema. (5) May be caused or simulated by Scoliosis. (6) Aneurysm or mediastinal tumour occluding bronchus. (7) Flattening in the infraclavicular region in phthisis.

Praecordial retraction of spaces is seen in : —

(i) Pericardial adhesions. (ii) Aortic Regurgitation (iii) Mitral Stenosis (iv) Retraction of lung.

Retraction of intercostal spaces (Sucking in) with inspiration is seen in :—

(1) Diphtheritic laryngitis. (2) Foreign body in the air-passage. (3) Asthma-spasmodic. (4) Emphysema. (5) Collapse lung. (6) Occlusion of a bronchus. (7) Oedema of the larynx. (8) Paralysis of the diaphragm. (9) In thin patients with prominent ribs.

Following are the principal *abnormalities* of chest with their characteristic features :—

(*a*) "Alar chest" of phthisis.

(1) Antero-posterior diameter especially upper two-thirds reduced. (2) Anterior surface flattened or hollowed in.

Note :—Normally it is slightly convex

(3) The flattened upper part scarcely moves on inspiration but the lower third which is bulging moves markedly as also epigastrium. (4) Shoulders very sloping.

neck anteriorly recedes at the episternal notch, but springs forward towards the Adam's apple and the chin. (5) Ribs fall downward towards the belly from their point of origin instead of coming forward in a normal curve. (6) Is vertically too long and too round on cross-section. (7) Scapulae stand out from the back like wings. Hence the name "Alar chest",

(*b*) "Barrel shaped" chest of Emphysema.

(1) Chest bulges both anteriorly and posteriorly, so that it looks unduly circular on section.

Note.—the normal chest is elliptical with longer diameter from side to side.

(2) The upper ribs are crowded together while lower ones are farther apart than normal. (3) Epigastric angle very wide. (4) Neck looks abnormally short due to permanent elevation of the shoulders and clavicles. (5) Chest becomes fixed in a position of permanent inspiration and expiration is incompletely performed. (6) During inspiration chest becomes merely elevated but there is no lateral expansion. (7) The back is rounded. (8) Sternum becomes curved, the lower part being drawn in.

(*c*) "Pigeon - breast":—

Features—(1) Cross-section almost triangular. (2) Protrusion of the sternum. (3) Ribs meet the sternum at an acute angle.

It is commonly seen in children with chronic obstruction to respiration during the time chest is capable of being moulded e.g., (i) Adenoids. (ii) Whooping cough. (iii) repeated catarrhs (iv) rickets (v) Enlarged tonsils (vi) Predisposition to phthisis.

(*d*) Rachitic chest-seen in rickety children with repeated catarrhs, asthma or other impediments to inspiration. Features:—

(i) "Ricketty rosary"—beaded junction of ribs with costal cartilages on both sides, most marked in the lower ribs. (2) Just outside this on each side of the sternum is seen the Vertical groove. (3) "Harrison's Sulcus" extending from the Xiphoid cartilage obliquely backwards to the midaxilla along the costal arch.

(*e*) "Funnel or foveated" chest—(*sinking in*) is due to:—

(1) Enlarged tonsils. (2) Adenoids. (3) Pericardial adhesions. (4) Naso-pharyngeal growths. (5) Old pleurisy. (6) Rickets. (7) sometimes seen in shoe-makers.

(*f*) Flat chest shows:—

(i) Predisposition to phthisis. (ii) Progressive muscular atrophy.

Let us now observe the respiratory movements without the patient's knowledge and consider them under the following three divisions:—

I Character of breathing—whether rapid, slow, shallow or irregular.

II Respiratory rhythm.

III Movements of the chest-wall and ribs.

I.—Normal respirations 16 to 20 per minute in a healthy adult. During quiet sleep it may fall to 12 or so. In a new born healthy infant, respirations may be as high as 44; and in a child of 5 years about 26. Normal Pulse-respiration ratio is 4 : 1.

Note whether it is altered as in Pneumonia. Respirations become temporarily increased on recent excitement or exertion.

(*a*) Rapid and laboured breathing (Dyspnoea) may be due to primary or secondary lesion.

(i) Primary lesion:— Causes.

(1) Lobar Pneumonia. (2) Chronic bronchitis-whoofing noise heard. (3) Asthma—paroxysmal dyspnoea. (4) Emphysema. Here it is expiratory dyspnoea due to fixation of chest in a position of inspiration. (5) Phthisis. (6) Pulmonary abscess or tumour.

(ii) Secondary causes:—

(1) Naso-pharyngeal catarrh—nasal bubbling heard. (2) Pulmonary oedema due to nephritis. (3) Pressure on or spasmodic contraction of the trachea or larynx. Here the respirations are stridulous and the lower costal cartilages and epigastrium may be drawn in. (4) Pleural effusion interfering seriously with free action of the lungs. (5) Hypostatic exudation—result of failing circulation. (6) Pulmonary embolism. (7) Ascites, abdominal tumours, loaded stomach or enlarged liver pressing upon the diaphragm. (8) Mediastinal growths pressing upon the blood vessels and causing exudation

into the lungs. (9) High fever acts as respiratory excitant. (10) In hysterical patients, breathing is chiefly costal and the diaphragm moves very little. (11) Anything interfering with the proper oxygenation of blood or blood diseases especially anaemia. (12) Toxic condition of blood due to uraemia, diabetic coma, apoplectic seizures. (13) Cardiac disease producing passive congestion.

Note:—The patient may have to sit up in bed propped up with pillows and bring into play the accessory muscles of respiration.

(*b*) *Stertorous breathing or snoring*:—It is nasal when the soft palate impinges against the back of the pharnyx and oral when it remains in contact with the tongue. Causes:—

(1) Adenoids. (2) Narcotic poisoning. (3) Coma. (4) Paralysis of soft palate. (5) Concussion of brain. (6) Asphyxia. (7) Epilepsy—3rd stage. (8) Chronic nasal catarrh. (9) Quinsy. (10) Oedema of the lungs.

(*c*) *Stridulous breathing*:—Hissing or whistling due to laryngeal or tracheal obstruction "leopard growl" caused by:—

(1) Diphtheritic laryngitis. (2) Occlusion of the bronchus by aneurysm or enlarged glands. (3) Foreign body. (4) Hysteria—but it ceases during sleep. (5) Laryngeal spasm. (6) Laryngismus stridulous 'child-crowing.' (7) Tetanus. (8) Strychnine poisoning. (9) Enlarged thyroid.

(*d*) *Sighing breathing in*:—(1) Emotion. (2) Dilatation of the Heart. (3) Collapse. (4) Shock. (5) Meningitis. (6) Tobacco in excess. (7) Anaemia of the brain.

(*e*) *Shallow breathing in*:—(1) Fractured ribs. (2) Acute pleurisy. (3) Intercostal paralysis or rheumatism. (4) broncho-pneumonia. (5) Collapse of lung. (6) lead-poisoning. (7) Acute peritonitis. (8) Angina Pectoris.

(*f*) *Slow breathing in*:—(1) Coma. (2) Collapse. (3) Spasmodic asthma. (4) Hot stage of ague. (5) Shock. (6) Poisoning by—Aconite, Antimony, Chloral, Chloroform, Opium. (7) Toxæmias of uræmia or diabetes.

II.—Rhythm in respiration is the relative time taken by inspiration, expiration and the pause.

If the respiratory cycle represents 10, inspiration will be 5, expiration 4 and the pause 1.

Most remarkable irregularity in rhythm is the "Cheyne-Stokes" breathing-gradual increase in rapidity and depth of respirations and after reaching an acme of hurried respirations (Stage of hyperpnoea) gradual dying away till there are no respiratory movements during the pause (stage of apnoea). It is common at high altitudes and is always associated with high tension pulse. Seen—

(1) During sleep in healthy infants. (2) Towards the end of life in patients with cardiac trouble. (3) Is compatible with healthy old age. (4) Is of serious importance when it occurs in apoplexy. (5) Tubercular meningitis (6) cerebrospinal fever. (7) Uræmia. (8) Brain-tumour. (9) Arterio-sclerosis. (10) Aneurysm. (11) Sunstroke. (12) Diabetes. (13) Severe haemorrhage. (14) Acute or chronic nephritis. (15) Rarely in acute fevers pneumonia, typhoid, Septicaemia. (16) Cholera.

III.—Biot's respiration commonly seen in irregular pauses of varying length occuring periodically in:—

(i) Tubercular meningitis. (ii) Perforation of bowels. (iii) Medullary lesion. (iv) Shock. (v) Apoplexy. (vi) Chorea.

IV.—Movements of the chest and ribs:—

In *males*, the lower ribs and the abdominal wall move more than the upper part so that as the diaphragm descends, it pushes the abdominal contents down causing bulging of the abdomen. This thoraco-abdominal breathing may be absent in males when—

(1) movement of the diaphragm is impaired by pressure of ascites or large abdominal growths. (2) Peritonitis causes fixation of diaphragm due to pain. (3) Massive enlargement of the liver or spleen. (4) Subphrenic abscess or hydronephrosis.

In *females* breathing is chiefly costal in type-upper two thirds of the chest moving more than the lower. Absence of this is due to:

(1) faulty development. (2) Phthisis. (3) Acute pleurisy causing pain. (4) Old pleural adhesions binding down chest-wall.

Thoracic breathing is marked in:—

(1) Acute peritonitis. (2) Paralysis or tonic spasm of the diaphragm. (3) Perforation or rupture of abdominal viscous. (4) Diaphragmatic pleurisy. (5) Pericarditis with or without effusion. (6) Ascites, abdominal tumour or meteorism. (7) Pregnancy. (8) Emphysema.

Mobility of the chest may be impaired by :—

(1) Pneumonia. (2) Phthisis. (3) Pleurisy with effusion or adhesions. (4) Fractured ribs limiting movement by the pain caused. (5) Dry pleurisy causing stitching pain. (6) Emphysema. (7) Occlusion of bronchus. (8) Intercostal paralysis or rheumatism. (9) Massive enlargement of liver or spleen. (10) Pneumo—or hydro—thorax (11) Tetanus. (12) Strychnine poisoning. (13) Spasm of the glottis. (14) Pericarditis.

Note:—Here the respirations will be chiefly abdominal.

For examination of the *heart*, we will here confirm by palpation all that we actually see on inspection of the praecordial area.

Visible pulsation :—

(*a*) To the left of the sternum may be due to :—

(1) Normal apex-beat in the 5th left interspace about 3 inches from the midsternal line. It is limited to one square inch.

(2) Apex-beat displaced downwards by :—

(i) Emphysematous lung. (ii) Left-sided pleuritic effusion. (iii) Any thoracic growth pushing the heart from above. (iv) Hypertrophy of the left ventricle. Here the cardiac impulse is forcible and heaving and is displaced both downwards and outwards. (v) Dilatation of the left ventricle. Here the impulse is diffuse, wavy and feeble and is displaced more outwards. (vi) Aneurysm. (vii) Pericardial adhesions. (viii) Old age.

(3) Apex-beat displaced upwards by :—

(i) Pericardial effusion, (ii) Retraction of fibroid lung (iii) Retraction of pleura which has become adherent to the pericardium. (iv) Ascites, tympanites or other abdominal tumours pushing up the heart. (v) Massive enlargement of the spleen. (vi) Distended stomach. (vii) Pregnancy.

(*b*) to the right of the sternum :—

(i) Left sided pleural effusion. (ii) Mediastine—pericarditis. (iii) left-sided hydro-pneumo-or pyo-thorax. (iv) dilated right auricle. (v) Aneurysm. (vi) Dilated aorta. (vii) Dextro-cardia-displaced heart.

Note:—Empyema pointing or mediastinal abscess will pulsate on the right or left as the case may be.

(*c*) Epigastric pulsation may be seen in :—

(1) Hypertrophy or dilatation of the right ventricle. (2) Displacement of heart downwards by pleural effusion or emphysema. (3) Transmitted pulsation of abdominal aorta or pyloric tumour. (4) Pulsation of the engorged liver secondary to passive congestion. (5) Abdominal aneurysm. (6) Anæmia. (7) Distension of the stomach. (8) Hepatic abscess. (9) pericardial effusion. (10) Severe haemorrhage. (11) Neurasthenia. (12) Short Sternum.

Telangeiectases—plainly visible dilated Subcutaneous veins on the chest seen in :—

(i) Emphysema. (ii) Phthisis. (iii) Chronic bronchitis. (iv) Alcoholism.

Cervical vessels are seen distended in chronic bronchitis and Emphysema.

PALPATION.

Reveals:—(1) Contour of the chest and its elasticity.

(2) Tenderness of broken ribs or pointing empyema.

(3) Surgical emphysema-cracking sensation under the skin.

(4) Degree of resistance in the intercostal spaces. (See bulging of interspaces under inspection).

(5) Bronchial fremitus as felt in :—

(i) Bronchitis. (ii) Asthma. (iii) Incompletely plugged bronchus. (iv) Bronchiectasis.

(6) Friction fremitus felt in

(i) dry stage of pleurisy—it ceases when breathing is stopped. (ii) pericarditis.

(7) Tussive fremitus as felt on making the patient cough.

(8) Tactile Vocal fremitus (V. F.) denotes ability of the thoracic viscera to transmit vibrations produced by Voice. It is more marked in men than in women and greater on the right than left side.

It may be decreased in :—

(1) Presence of fat or highly developed muscles.

(2) Pleural effusion.

(3) Pneumo-thorax by causing collapse of lung tissue.

(4) Aneurysm, intra-thoracic tumour or mass of mucus occluding a large bronchus.

(5) Emphysema.

(6) Thickened pleura.

(7) Empyema.

(8) Oedema of lungs.

It may be increased in :—

(i) acute pneumonia. (ii) tubercular cavity or consolidation. (iii) any thoracic tumour touching the chest-wall. (iv) Bronchiectasis. (v) congestion or collapse of lungs.

(9) Position, force and extent of cardiac impulse. (also see inspection).

(*a*) Impulse decreased in force in :—

(1) Dilatation of the heart without compensatory hypertrophy. (2) Myocardial degeneration especially fatty heart. (3) Pericardial effusion or adhesions. (4) Projection of emphysematous lung covering the apex. (5) Thick pad of muscles or adipose tissue. (6) Aneurysm of the heart. (7) Cardiac depressants. (b) Prostration.

(*b*) Impulse increased in force in—

(i) Hypertrophy of the left ventricle-heaving impulse. (ii) Acute endocarditis, (iii) Albuminuria. (iv) Mitral regurgitation. (v) Aortic stenosis. (vi) Palpitation—"Knocking" impulse. (vii) Pyrexia.

(*c*) Diffused impulse :—

(i) Dilatation of the left ventricle. (ii) Fatty degeneration of the heart. (iii) Adherent pericardium. (iv) Pericardial effusion—undulating. (v) Aortic regurgitation. (vi) Beer drinker's heart.

(10) *Thrills* :—Sytolic thrill indicates—

(1) Aortic aneurysm. (2) Aortic Stenosis—2nd right space, (3) Mitral regurgitation—at the apex. (4) Pulmonary Stenosis—2nd left space. (5) Profound anæmia. —2nd left space. (6) Exophthalmic goitre—2nd left space. (7) Atheroma.

In the 2nd right interspace thrill indicates :—

(i) Aortic stenosis. (ii) Aortic aneurysm. (iii) Aortitis. A wide spread thrill is seen in pericardial effusion.

PERCUSSION.

Normal percussion note depends upon :—

(i) Amount of air in the chest. (ii) Tension of chest-wall.

(iii) Condition of pulmonary tissues.

(*a*) Hyper-resonance or tympanitic note may be elicited in:—

(1) a large tubercular cavity near the surface, (2) Emphysema. (3) Asthma—spasmodic. (4) Bronchiectasis. (5) Relaxed lung bordering consolidation or above pleural effusion. (6) Pneumo-thorax If there is fluid, the note changes with posture. (7) Collapse lung.

(*b*) Skodaic resonance :—is the drumlike tympanitic note elicited on percussion over healthy lung just above a large area of dullness.

(i) Pleural effusion. (ii) Basal pneumonia. (iii) Pericardial effusion. (iv) Compression of lung by abdominal tumours. (v) Hepatic or Subphrenic abscess.

(*c*) "Cracked-pot sound"—is produced by sudden expulsion of air from a cavity through a small opening by force of percussion stroke.

(1) In a crying infant. (2) Large tubercular cavity. (3) Pneumothorax with a fistulous tract opening externally or into the bronchus. (4) Bronchiectasis. (5) Rarely in acute pneumonia where an islet of relaxed lung tissue is surrounded by hepatisation.

(*d*) Percussion note *dull* in :—

(1) Acute pneumonia. (2) Pleurisy with effusion or thickened pleura—wooden dullness. (3) Phthisis—consolidation stage at apex. (4) Empyema. (5) Much overlying fat or muscles. (6) Hydrothorax—fluid gravitates with change of position. (7) Aneurysm. (8) Enlarged bronchial glands. (9) Hypostatic congestion of lungs—dullness at the bases. (10) Mediastinal tumour or abscess. (11) Pericardial effusion—dullness triangular with apex above.

(*e*) Cardiac fullness :—

(i) *Increased by*:—(1) Pericardial effusion. (2) Cardiac hypertrophy or dilatation, (3) Consolidation or encysted empyema near the heart. (4) Acute endo—or myocarditis. (5) Fatty degeneration of the heart. (6) Aortic aneurysm.

(ii) *Obscured by*: (1) Emhysematous lung. (2) Pleuritic effusion. (3) Left pneumo-thorax. (4) Retraction of left lung.

(Also see the remarks under inspection and palpation).

AUSCULTATION.

Observe:—(1) Character of vesicular or respiratory murmur (V. M.) (2) Relative length of inspiration and expiration.

(3) Presence of any adventitious sounds within or outside the lungs. Vocal resonance (V. R.)

I. Normal vesicular murmur is of a soft whiffing character produced by air entering and leaving the air vescicles. Expiration is inaudible and normally there is no pause between expiration and inspiration.

Variations in V. M.

(1) "Puerile" breathing commonly heard in children is loud, clear and harsh because of the great elasticity of the lungs and thinness of chest-wall. When present in adults it usually indicates some irritation of the bronchial muouus membrane or over-functioning of one or part of the lung due to cirrhosis, collapse or compression of the opposite lung. When found in the apices with prolonged expiration, it is a fairly sure sign of early phthisis.

(2) "Cog-wheel" respirations—jerky or wavy from irregular expansion of the lungs. Common in a healthy sobbing child.

Heard with expiration in:—

(i) Fractured ribs. (ii) Acute pleurisy. (iii) Intercostal neuralgia.

With inspiration in:—

(i) Spasmodic asthma. (ii) Laryngismus. (iii) Hysterical women. (iv) Bronchial catarrh.

(3) Bronchial or tubular breathing heard:—

(i) Normally over upper segment of the sternum or in the diamond-shaped space near the 4th dorsal vertebra at the back. It bears the following features:

(*a*) Inspiration and expiration are both rough.

(*b*) Are of equal length and character.

(*c*) Have an interval between them.

(*d*) Are hollow in quality and higher in pitch.

(ii) Consolidation of pneumonia or phthisis. (iii) Collapse or compression of lung above pleural effusion. (iv) New growths lying between the larger bronchial tubes and the surface. (v) Tubercular cavity. (vi) Bronchiectasis. (vii) In the healthy lung by compensatory action.

(4) Cavernous breathing—is an exaggerated type of tubular breathing heard in a dilated bronchus or empty patent cavity.

(i) Phthisis 3rd stage. (ii) Bronchiectasis. (iii) Abscess of lung-breaking down.

(5) Amphoric breathing—due to a smooth superficial cavity of moderate size, resembles the sound produced by blowing over the mouth of an empty bottle.

(i) Large tubercular cavity.

(ii) Pneumo-thorax communicating with a bronchus.

(iii) Bronchiectasis.

(6) Breath sounds may be weak or absent in:—

(i) Pleural effusion. (ii) Adherent or thickened pleura. (iii) Spasmodic asthma. (iv) Emphysema. (v) Retained bronchial secretion. (vi) Foreign—body in bronchus. (vii) Pneumo-thorax. (ix) Mediastinal tumour.

II. Inspiration is three times longer than expiration and there is no pause between them.

Expiration may be loud and prolonged when lung tissue loses its elasticity as in

(1) Emphysema. (2) Spasmodic asthma. (3) Phthisis Ist stage. (4) Bronchiectasis. (5) Obstructed bronchus. (6) Chronic bronchitis. (7) Commencing consolidation.

Inspiration is prolonged when there is difficulty for free entry of air *e. g.*, Spasmodic group.

III. Adventitious Sounds.

(*a*) Crepitant Rales or Crepitations—resembling crackling of salt when thrown into fire are produced by separation of vesicular walls previously made adherent by exudation.

(1) Croupous pneumonia 1st stage—fine dry crepitation during inspiration. Redux Crepitations of a similar character are heard during resolution. (2) Pulmonary Oedema. (3) Collapse or compression of lung. (4) Phthisis I and II stage at the apex. (5) Whooping cough 1st stage.

(*b*) Bubbling Rales, produced by the passage of air through accumulated mucus or fluid in the bronchial tubes. They are coarse or fine depending upon the size of bronchioles affected. They become altered in character on coughing.

(1) Bronchitis. (2) Hypostatic congestion due to prolonged stay in bed. These are heard best at the base posteriorly. (3) Breaking down of tissue from phthisis. (4) In convalescence from asthmatic attack. They are to-and-fro tinkling in character.

(c) Rhonchi or dry sounds are produced by passage of air through partly inspissated or sticky mucus in larger or smaller bronchial tubes. They are sonorous or sibilant and are not separated by any pause but face into the other.

(i) Bronchitis acute or chronic. (ii) Emphysema. (iii) Measles. (iv) Spasmodic asthma. (v) Whooping cough. (vi) Aneurysm or tumour pressing on the bronchus. (vii) Influenza.

(d) "Metallic Tinkling"—heard on formation of fluid in a cavity as in:

(i) Phthisis III stage. (ii) Pneumo-thorax.

(e) Friction sound is produced by two inflamed or rough surfaces rubbing against each other. It is heard best at the end of inspiration, is not *modified* by coughing, is intensified by pressure and is *limited* to a narrow area.

Present in:—

(1) *Pleurisy*—dry stage and after absorption of effusion. (2) Pericarditis. (3) Perihepatitis—heard at the right side. (4) Early sign of phthisis—at apex. (5) Hepatic abscess. (6) Fractured rib. (7) Peritonitis.

IV. Vocal Resonance (V. R.)—Variations:—

(1) Bronchophony is increased in V. R. It is generally associated with bronchial breathing in:—

(i) pneumonia—acute. (ii) Phthisis II stage. (iii) Bronchiectasis. (iv) Emphysema, (v) Syphilitic or cirrhosis lung.

(2) Pectoriloquy—very exaggerated heard best on whispering over large *smooth*-walled cavity in lung communicating with bronchus.

(3) Aegophony—resembling the bleating of a goat, heard best at the angle of the scapula and near the margin of a pleural effusion, probably due to partial occlusion and compression of the bronchus.

(4) V. R. *diminished* or absent in:—

(i) Pleural effusion. (ii) Pneumo-thorax. (iii) Emphysema. (iv) Empyema. (v) Thickened pleura. (vi) Bronchial obstruction.

"Hippocratic Succussion" is the splashing sound heard on shaking a patient with pyo—or hydro—pneumothorax, or large thin-walled phthisical cavity.

While auscultating the heart observe:—

(a) whether either sound is unduly shortened, accentuated or reduplicated.

Note:—Normally the 1st sound is long and dull while the 2nd is short and sharp.

(b) Presence of a Cardiac murmur with reference to:—

(i) Its time—whether systolic, presystolic or diastolic. (ii) Position of *maximum* intensity. (iii) Direction in which conducted. (iv) Quality as regards roughness

Haemic or functional murmur may be due to:—

(i) Anaemia, chlorosis. (ii) Severe haemorrhage. (iii) Convalescence from acute fevers. (iv) Exophthalmic Goitre. (v) Wasting diseases. (vi) Cachexia.

Note:—There is no structural lesion in the heart or its valves. It bears the following characteristics:—

(1) It is always systolic and harsh in quality. (2) loudest in the Pulmonary region—2nd left interspace. (3) traceable outwards to the left clavicle. (4) best heard in recumbent position and diminishes when patient stands up. (5) It is temporary and yields to treatment. (6) There is often a systolic murmur in the carotid artery in the neck.

Cases & Comments

PRIMARY CANCER OF LIVER

BY

KALI GATI BANERJEE M. B., SURI, BENGAL

It is said that 95% of all cases of cancer liver are secondary and mainly secondary to primary growth in the breast, throat, stomach, rectum, kidney and so on; (Tice) but primary cancer of liver is not too rare. In Bengal, it is not few and far between and stranger is the fact that it is commoner among high class Hindu elderly widows. Alcohol and Syphilis have not played any part in our series of cases. Perhaps the diet of widows containing too much carbohydrate and starch strain the liver too much—'the tropical liver' which may be damaged by amœbiasis or cirrhosis. The following is a list of 7 cases of Primary cancer of Liver during my short practice.

(1) :—A Brahmin widow aged 55—had history of chronic dysentery for a year who was said to be cured without injections or proper medication a few months ago. She saw a small lump growing within 1 month and it was most painful. The inferior border reached down about 4" below umbilicus when she was examined and the topmost border was in mammary line (7th costal interspace). There were two huge hard lumps on the swelling. She was extremely jaundiced and her pain and nausea was intense. She had never haemetemesis or malinæ.

(2) A Brahmin widow aged about 58 was suffering from hectic pyrexia with an enlargement of Liver. She had no dyspeptic troubles before. The upper border of Liver dullness dropped down to the 7th costal interspace midclavicular line and lower border was felt about 3" below the costal cartilage. There was no pain and she was treated as a case of hepatitis with a course of 'Emetine'. Doctors in Calcutta diagnosed it to be a case of hepatoptosis—but the lady died within 2 months—her lump increasing and she growing more cachectic. She never complained of much pain in her life.

(3) A Hindu widow aged 58 cachectic came to our notice with irregular lumps on the liver. She had seen this growing for about 1½ years and was having a hectic rise of temperature. There was dull pain over the swelling—which extended up to the umbilicus. The upper border was the same as in other two cases. There was systolic soft murmur in the apical Heart sound. She complained more of constipation, but never of Dysentery.

(4) A Brahmin widow aged about 62 was treated for vomiting and acid-dyspepsia for a month—when severe pain was felt in the hepatic area where a lump increased in size enormously within a month and clinched the diagnosis. The patient had jaundice and left supraclavricular glands increased and she succumbed within 3 months from her start of dyspeptic symptom.

(5) A Hindu male aged 45—cachectic- came with the constant pain in liver and right shoulder for 6 months. He was suffering from 'a flatulent' type of dyspepsia. Liver seemed to be atrophic. Its upper border extended ½" above the costal cartilage. There was one gland in the left supraclavicular region. The patient vomited after each feed and had history of hectic fever for last 2 months. A hard nodular growth about 4" in height extended over the liver. It was a clear case of Primary carcinoma.

(6) A Hindu male aged about 40 suffered for a year from (i) intermittent pyrexia, (ii) Jaundice (iii) enlargement of liver and spleen. He came for treatment for 'his fluid in the abdomen' which had grown within a month, He was tapped and bilious, sanguineous

fluid came out. The tapping was stopped and the patient died of cholaemia within a week. He was Post-mortemed and his liver showed Primary carcinoma.

(7) A Mahomedan male aged about 40 was brought for treatment for several lumps in his abdomen and for Jaundice. They were extremely painful and arose out of an enormously enlarged liver. He was given massive doses of Pot. iodide as his W R was found to be positive but he succumbed within a few months from the start of his pain.

It is generally said that in the primary form of disease there is a single tumour, jaundice is rare, ascites is rare, emaciation is less (Tice—Loose leaf Medicine page 210 Vol. vii.)—but in our cases facts were otherwise. Therein is also stated that primary malignancy is more frequent among men and secondary malignancy among women—in our series reverse was the case.

These cases are of interest because (1) Primary cancer of liver is very rare in literature. (2) These show variations from classical symptoms.

Let us now find out the cause. Perhaps the cirrhosis of liver is at the root. And some gastro-intestinal toxin is the factor working there. 'Tropical' Liver is heir to changes of variation of temperature and a Hindu liver is strained most by cellulose and carbohydrate. This tells upon the glycogenic function of liver and thus the resisting power against infection is much impaired. Amœbiasis, which is not regularly and properly treated here may count directly in these cases for cirrhosis. And cirrhosis means strangulation of heptic cells with chronic inflammation of fibrous tissue which is another form of chronic irritation. A vicious circle runs on and the poor individual—an already prey to intestinal stasis and visceroptosis falls an easy victim to the felt ultramicroscopic virus.

A CASE OF INTESTINAL OBSTRUCTION

BY

CAPTAIN. SHYAM LALL, CIVIL SURGEON, BALLIA.

Jian, a Hindu male aged 50 years of Villave Janari. Dist. Ballia, was admitted to the District Hospital Ballia at about 1 A. M. on 12-6-30 suffering from great distention of the abdomen with inability to pass motion or flatus and pain in the abdomen.

History:—The symptoms had commenced about twenty four hours before admission. The patient could not attribute the onset to any obvious cause. No history of worms or chronic Dysentery could be traced out.

Present condition:—Whole abdomen was greatly distended and tympanitic. The patient was restless; had anxious look and was complaining of severe pain in the abdomen.

On superficial examination transverse colon could be seen extensively distended so much so that the surface marking of the distended transverse colon was apparent to the naked eye. Then there was a depression noticeable in the left Hypochondriac region no vomiting was present. The pulse was good. Atropine 1/200 gr. was injected hypodermically at once and a soap and water enema given without any relief; the water of the enema was not at all retained. About ½ an hour after, high rectal enema was administered but still without any relief to the patient.

Two enemas of oil were then tried successively with raised pelvis, but to no effect. Twenty-four hours thus passed and the patient became more and more restless and hiccough supervened. At this stage he agreed to submit himself for operation.

Operation:—Depression in the left Hypochondriac region with greatly distended Transverse colon suggested the site of obstruction to be probably somewhere between the transverse colon and the descending colon.

An incision 6" long in the middle, coming down to the umbilicus and one inch long below it, was made. On opening the abdomen, transverse colon was found much distended as if baloon-ed out. As soon as the abdomen was opened transverse colon with the upper part of the descending colon presented itself with force.

No obstruction could be detected. Tranverse colon was yet much distended and could not be reduced.

An opening was made in the upper part of the descending colon with a fine tracar and cannula. Tracar being removed cannula was left and the wind removed through the cannula left. Then a purse string suture was made in the intestine round about the cannula, and then the cannula was drawn, the assistant at the same time tightening the two ends of the purse string suture and then the hole in the intestine was closed. The point of opening was touched with pure carbolic acid. The intestines were reduced and the abdominal wound closed.

The patient made an uneventful recovery. He passed flatus the same evening and one motion the same night.

The wound healed by 1st intention and sutures removed on the 10th day.

I am indebted to my Assistant Dr. Anand Swarup M. B. B. S. for the help during operation and after-care of the patient.

Points of importance in this case:—

No obstruction was actually found, simply opening the abdomen removed the obstruction whatever it was. There might have been a kink, a partial volvulus which corrected itself on opening the abdomen as soon as the pressure caused by the abdominal wall was removed.

GASTRIC ULCER AND INTENSIVE ALKALINE TREATMENT

BY

M. A. KRISHNA IYER, MEDICAL OFFICER, PADEROO

The idea of surgical operation, generally, for that matter, the mere mentioning of the word OPERATION, instils a considerable amount of fear in the minds of the lay public, whether civilised or uncivilised. Even to the medical men, the idea of a surgical operation, either to themselves or to their near or dear ones, produces a certain amount of anxiety. Therefore it is no wonder that any ailment that could be treated medically instead of by surgical method, will be more welcomed by every one. This will be more so in the cases of certain serious major operations involving delicate manipulations and handling, such as in abdominal surgery.

The inauguration of the intensive Alkaline Treatment of Gastric ulcers and other Gastric conditions has heralded a very useful mode of tackling the problem, especially for those who, for some reason or other, prefer to suffer a life-long misery and even death, at times suicidal and also for the sake of those medical men, who are so placed in their sphere of work, that they have neither the facility for such surgical work nor the aptitude for the work with odds against them to carry it out in a satisfactory manner.

Though the principle underlying the method is the same, as has been mentioned in leading journals for the last two years, there were certain modifications made with regard to the dosage, diet and after treatment according to the condition of patients who have undergone treatment under me. As the following case clearly illustrates the method, it is considered unnecessary to give the details of all the cases that have been treated.

S. R. a Madhva Bramin, aged about 40, head clerk in a Government office had the characteristic signs and symptoms of Gastric Ulcer of about 3 or 4 years duration. He was not taking his food properly for fear of pain and was getting emaciated and

a little anæmic too. Ordninary hospital mixture which used to give him relief before, had become useless. Some of his friends advised him to undergo a surgical operation for his condition. But, as he was afraid, he could not venture such a course. One day he came to me and asked me whether there was no medical remedy for his condition other than the surgical operation.

I explained to him about the Intensive Alkaline Treatment and told him his intelligent co-operation was necessary for its success. He promised to act up to my advice. He was given the following powder:

Sodi Bicarb.....3ii
Bismuth carb.....3ii
Mag. Carb. Pond...3ii
Ft. pul. one.

to be taken 4 times a day half an hour after food well—mixed with water. About 10 ounces of milk was allowed for each feed and he was advised to take 4 feeds per day. This procedure was followed for 3 days, and as mentioned in the journals, the pain disappeared within 24 hours from the beginning of the treatment. On the fourth day, as he felt very hungry, he was allowed the noon meal with a little rice and milk and the other feeds as before. The same medicine was continued. After 3 days, i.e., on the 7th day he was allowed to replace one other milk feed by pepper water and rice. On the 11th day he was allowed his usual meals but in smaller quantity. Now the medicine was changed a little by reducing the quantity of Mag. Carb. as he was getting his bowel more loose. After the 15th day all restrictions with regard to diet were removed, the doses of the medicine were reduced to 3 per day and the quantity of the medicines was also diminished to half, *i.e.*,

Sodi. Bicarb.....3i
Bismuth Carb.....3i
Mag. Carb. Pond...3i
Ft. pul. one

This routine was followed up to a month (for 15 days more). He became quite all right, there was no pain or any of his old symptoms from the day he began the treatment, felt very happy and began to improve in general health also. It is about a year since he underwent the treatment. I met him about 2 months ago and questioned him in detail. He told me that he was perfectly cured of his condition since the day the treatment was begun. He was much healthy and had put on weight. In all I have followed 6 cases of my I. A. T. patients, (others could not be traced as I have

no case notes). All of them are so happy that one among them, a middle aged man, told me that he could not clearly say what his symptoms were a year ago.

Though the routine described above was adhered to as far as possible in all cases, there were some changes with regard to the quantity of medicines in individual cases. The Mag. Carb. was increased or decreased in quantity according to circumstances and indications. In some, the 4 doses were only given for 3 days and for the further period only 3 doses were given. However, the three days "milk only" diet was strictly followed by all the patients.

Though a months' active treatment and two or more months after treatments have been mentioned in the published notes, only 15 days active treatment and 15 days after treatment were given in my cases, the reason for the shorter periods being the patients' inability to continue, though they were advised to continue the after treatment for at least 2 months. It is a known fact to every one experienced in the moffussial practice, that the patients will not have the patience to continue any treatment for more than a week or two without trying the patience of the doctor, if the cases were treated as Out-Patients instead of as Inpatients.

IODINE THERAPY.

BY

S. M. ROY L.M.P., PUKURPAR, (*Pabna*).

The conception of Iodine which every one must form is that it is a vital life principle of the very first order. Its enormous therapeutic power and range need cause no surprise. The medical world affords much information, regarding the therapeutic value of Iodine among which may be mentioned germicidal action, stimulation of the production of opsonins, causation of Leucocytosis, increased flow of lymph etc.

In course of my 8 years' use of the watery solution of Iodine and its colloidal composition, I have obtained unusually good and miraculous results in acute and chronic tonsillar affections; acute, sub-acute and chronic rheumatic affections of the joint, nerves and muscles; glandular affections and swellings, simple and exophthalmic goitre resulting from focal infections; Pneumonia, asthma (bronchial) acute and chronic bronchitis and pleurisy, acute and chronic laryngitis and spasmodic cough just before and following crisis in lobar pneumonia; acute and chronic gonorrhoeal infection of any part of the urogenital tract; gonorrhoeal rheumatism: primary, secondary, and tertiary Syphilis, high

blood pressure especially resulting from sodium chloride irritation or syphilis, as an emmenogogue and endocrine glandular stimulant; in abscesses, boils, carbuncles, erysipelas, cellulities and various eczematous skin affections.

I have found astounding and almost incredible results in cancrum Oris, the most dreaded complication in kala azar by 3 or 4 intravenous injections of watery solution of Iodine. In malaria which is the most common disease of our country and which type does not yield to quinine treatment, Iodine is the medicine of choice.

In fact it stimulates the natural force of the body in its fight against the disease to a point at which it usually ceases to operate and is content to keep the ineffective organisms in abeyance within the body. I have tried Iodine in milk with great benefit in small doses in several cases of tuberculosis in all its forms. During the last epedemic of influenza with its complication, I have had excellent results by administering Iodine intravenously in small doses.

Regarded as a drug pure and simple, Iodine is, without doubt the most valuable curative agent. May I request other medical men to use iodine both externally and internally in various diseases and report their results.

As Makaradhwaja of the Ayurvedic pharmacy is used in all diseases with different 'anupanams,' so Iodine can be used with excellent results in various diseases.

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MASSOTHERAPY.

Massage is one of the oldest therapeutic agents in the history of medicine.

The derivation of the word seems to be from the Arabic, '*Mass'h*,' to press softly, the Sanskrit root being '*makch*'.

Detailed accounts of the various forms of massage are found in the old Chinese manuscripts written somewhere about 3,000 B.C.

Among the writings of Celsus, Galen, and Hippocrates much information may be gathered regarding the early history of massage. Hippocrates in one of his writings says: "A physician must be experienced in many things but assuredly also in rubbing, for things which have the same name have not always the same effect, for rubbing can bind a joint that is too loose, and loosen a joint that is too tight. Rubbing can bind, can loosen, can make flesh, and can make parts to waste. Hard rubbing binds, and soft loosens.

Massage was very popular among the Romans. They used massage after their baths; and after the circus fights, it was employed to restore sprained joints and cramped muscles to their normal suppleness.

Until very recently medical men were inclined to regard massage with scepticism.

To-day it is recognised throughout the whole medical world as one of the most reliable and powerful therapeutic agents.

To derive benefit out of massage, it must be properly administered under the immediate direction of a trained physician, and only then will we be able to perceive the excellent results that it yields. At present an accurate knowledge of the physiological actions of massage cannot be given at any length for want of any conclusive proof; but careful experimenters in this field have observed certain unmistakable phenomena following massage of varying degrees, from gentle stroking to hard squeezing.

It has been proved beyond doubt that massage produces marked toning of the smaller vessels of the body. This is explained by the fact that various stimuli may cause opening of the large parts of the capillary system of the body (Krogh, Carriers) and that massage in the shape of light and hard stroking induces these stimuli.

By suitably adopting massage it is possible to produce varying degrees of influence over the superficial and deeper net work of vessels. The corpuscular elements of the blood that stagnate in in active centres could be brought back to circulation by careful massage.

Experiments carried on in this line by workers in this field of science show a decided increase of R. B. C's in the circulation about an hour after massage. This increase of R. B. C's is more in cases of anaemia than in the normal individual. This fact, if borne in mind, gives us an effective therapeutic agent in anaemia where the number and activity of the red cells play such an important part.

The value of muscular exercises in rheumatic individual in warding off an attack is known to everybody. Such exercises, taken regularly in the morning and evening, have been found to be highly useful in toning the muscles of the body.

Pemberton, in a series of five arthritic patients found no significant differences in any of the blood figures obtained before and after treatment with the exception of the inorganic, phosphorus and oxygen capacity; in one case he observed an increase in lactic acid of the blood, after exercise in varying degrees. In three cases a marked dieurisis was also observed, accompanied by an alkaline tide in the urine, as evidenced by changes in PH. titratable acidity.

Massage of voluntary muscles even though vigorous, is not followed by the evidences of lactic acid production and acidosis, which accompany relatively mild exercise of short duration. The benefit obtained by massage is solely due to the changes in the capillary circulation. Its effects on general metabolisim of the

body is very little, but the cumulative effect which massage exercises on metabolic process lies entirely in its mechanical influence on the circulation of the parts concerned. The employment of massage requires adequate training under expert guidance. Massage, if improperly done, even by an expert masseur is apt to produce more harm than good.

The value of massotherapy cannot be over-estimated in arthritis. Its cautious employment will help to restore the tone of the muscles, to prevent atrophy of the muscles from disuse. As has already been said it improves to a certain extent the local and general body metabolism. In promoting the capillary circulation in tissues, in increasing the return to circulation of the corpuscular elements locked up in inactive centres massotherapy plays an ever important part.

In normal individual the contractions of the muscles help the return flow of blood through the vein to the heart, whereas in conditions of debility of the muscles this return fluid of blood entirely depends upon the initial cardiac *visatergo*.

That massage in these cases improves the tone of the muscles, and the back flow of blood to the heart has been conclusively proved by various experimenters. Pain due to myocitis is relieved by carefully conducted massage, while it does more good than exercise, in cases of disfunction of muscles due to faulty metabolism.

Massage can be applied to any part of the body, and various physical, and mechanical disfunctions of the body can be restored to normal activity by a good regulated course of massage.

After all is said it should not be forgotten that much depends upon the scientific, and artistic skill of the masseur or masseuse.

Medical News and Notes

NOTES

BY

COL. PROFESSOR FROILANO DE'MELLO, NOVAGOA.

SURGERY

Acute osteomyelitis of left femur due to Thiercelin entero-cocus. Ginseppe Grella. *Terapia* 103 XVIII. Jan. 1928.

According to a statistic of Klemm (1913) in 320 osseous suppurations 75% are due to staphylococcus, 17.8% to streptococcus 5.7% to pneumococcus, 3.5,% to association of these germens, 1 case to coli, 1 to Eberth.

The author shows one case in which the pus gave a pure-culture of enterococcus.

Operation. Autovaccine with remarkable results, hence the necessity of identifying the agent of such suppurations.

MEDICINE

Synopsis of the antixerophthalmic, antineuretic and antiscorbutic vitamin percentages, besides the protein, fat, carbohydrate and water in different Indian foodstuffs. Donath. (*Mededeelingen Van den Dienst der Volkgezondheid in Nederlandsch Indie foreign edition XVIII. 1929. II)*

Among cereals no one contains antiscorbutic vitamin, coloured maize, maize corn, maize meal, with—bread contain little antixerophthalmic vit. As far as concerns antineuritic vitamin the author gives the following indications: unpolished rice, coloured maize maize corn, wheat meal, barley, white bread †; white maize, maize bran ††, *djawawoet*, †††; polished rice, wheat meal †.

Among the legumes; antiscorbutic vit O, antixeropht. vit †† in peanuts, *katgang pandgang*, soy beans, *katgang idjoe*; antineuretic vit. † in peanuts, *peteh*, kidney beans, *katgang idjoe* † in katgang pandgang and soy beans.

Among vegetables: antiscorbutic vit. in salad, spinach, cabbage, cucumber, *kangkoeng* leaves: antineuretic vit. o in all those

quoted above, but †† in *too-geh*; antixeropthalmic vit. in French beans, salad, spinach, cabbage, cucumber, cassave leaves and some other gavanese vegetables.

Among carrots and turnips the sweet potato (white and purple varieties) have antineuritic vit †, antixeroph. O; the red, orange, and yellow var. have both vit. Potatoes and carrots have all three kinds of vit.

Among nuts and oils thereof, cocoanut has antixeroph. vit. †, antineuritic one's light traces.

Among fruits bananas have all three vit., the antineuritic one in slight traces; mango has antixeropht. vit. papaya all three, citrus and tomato antixeropht and antiscorbutic vit. Some local fruits (*Boengkil katgang, ontgom, tempe kedele* are provided with antineuritic vit.

Hemoptysis due to mitral stenosis. Prof. Tiago d'Almeida. (*Arquivos da Clinica Medica Porto Jan. (1929).*

Woman, 21 years, astheny, anorexy, abundant perspiration, cephalalgy, sometimes fever. Insomnia, emotivity, dermographism. Dyspnoea, bronchitis, abundant expectoration, often hemoptoic. Motor polyneuritis pulse. 112, tension 10-7, oilgury with 2. albumin. Wassermann, Van Pirquet negative.

Mitral stenosis explaining the hemoptoic syndrom which could be misinterpreted for a tuberculosis.

Pulmonary pseudo tuberculosis of cardiac origin. Hervada. (*Revista de Higieney de Tuberculosis.* Valencia 31-12-1929)

When a sign of valvulitis is found, either active prominent from an infection already cured, the practitioner should think on the possibility of all the pulmonary symptoms being due to heart, with visceral extasis and hyposystolic syndrom of Iagnov.

The fever of certain cardiac patients is irregular. The confusion of endocarditis fever with that of tuberculosis is so great that Rist has said.: the cases of endocarditis which die in tubercular wards, are very, very large.

The cough by cardiac insufficiency is very frequent and is largely ameliorated by cardiotonics.

Cardiac bronchitis are frequently found; partial asystoly of mitral origin is often accompanied by hemoptysis.

Pathogenesis and cure of bronchial asthma. A. Haibe, *Recueil et autres mem. de l'Acad. Roy. de Med. de Belgique* 1929 Vol. 29.

The author, based on his experience of 12 years, claims that haemolytic streptococcus has an important antigenic role in bronchial asthma and that autovaccines prepared with such germs give very good results in many asthmatic patients.

Importance of typho-paratyphic carriers in the epidemiology of typhoid fever. Prophylaxis and sterilisation. Antonio Leoni (*Therapia* XX Febr. 1930).

Karel, and Luchsk, Irwing and Houston, Meader, Brem, Watson, Stone, Curie and Mckeam, Clements and Dawson have tried the sterilisation of typhoid carriers through oral administration of vaccine bouillons or hypodermic injections. Pretti treated the carriers with intravenous injections of dry antityphic vaccine.

In the service of Prof. Tronentero vaccination has been tried with very good results. 4 tabloids of vaccine every day during 8 days. In two cases it was necessary to submit the patients to a new series before complete sterilisation.

THERAPEUTICS

Duhring's dermatitis in a child cured by the thyroid preparations. Blasi (*Bolletino. Accademia Med. di Perugia 2. 1928*).

Child, 18 months. Duhring's disease, polymorphic with vesicular elements predominant. Antiseptic powders with scarce ameliorations. Dry thyroid powder per os. beginning with ¼ tabloid and increasing till ½, given daily per os.

Cure after 15 days treatment. New series given for months with intervals. No recidive.

Cure of ulcerated colitis with antivirus type Beeredka. E. Toenissen (*Seuchenbekampfung* 1929 Vol. V.)

The following cases are full of interest. Two young ladies. Anemy. Septic fever, Diarrhoea with blood and pus. Rectoscopy: mucosa, hyperemica, granulata. Exulcerations here and there, Bacteriologically: staphylococcus, streptococcus, coli.

Treatment: every day enema of coli-strepto-sataphy-lococcic antivirus. 18 days after, regression of temperature, amenoration of diarrhoea, after, weeks faeces normal.

Continuation of treatment less intensely during some weeks more. Cure remaining since three months in one case, one year in another, at the moment of report.

Cure of furuncle and anthrax with D'Herelles bacteriophagus. A Raiga. (*Presse Medicale* 1929 pag. 187).

Report based on 120 cases of many kinds of supparations.

In all furuncles, anthrax and phlegmons brilliant results by injection of bacteriophage, three strains having been used, viz: polyvalent for pyogenic flora of intestine and lungs, specific for staphylococcus, polyvalent for stapylococcus, 2 c. c. injected every two days. In 95 % immediate cure and in 84% of this precococions cure recidive,

The same author (*Cure of acute mastitis of nursing mothers with D'Herelles bacteriophage. Ibid* 1930. pag. 197) claims such treatment as the best one: puncture with a trocar and injection of some c. c. of bacteriophage in the cavity.

PATHOLOGY

Experiments on human vaccination with tetanic antitoxin. Grixoni, Bruni, Bordelli. *Giornale di Medicine Militare.* L, XXVII. Fasc.

Tetanic antitoxin gives a sure immunity, without any local or general trouble. Two or, better, three injections are necessary given at an interval of not less than twenty days. The authors hope that such immunisation may render valuable service during military operations.

Preventive immunization of cows against epizootic abortion through injection of living and virulent Bang bacilli and its relations to the epidemiology of undulant fever. Zanzucchi. *Giornale de Clinica Medica.* Fasc.

3800 persons of the provinces of Parma and Reggio Imilla, were in risk of injection, as they were in contact with 2500 cows injected subcutaneously with virulent Bang bacilli and no increase in the number of cases of undulant fever has been noticed.

The author believes in the innocuity of Bang bacillus to human beings.

On a case of tonsillary cephalosporiosis. C. Cabrini and P. Redaelli (*Bolletino della Soc. Medico-chirurgica* Pavia XLIII. Fasc. 5).

Report on a case of a new tonsillary mycosis. Agent:— *Cephalosporium acremonium.* Corda. Medical treatment without any effect. Tonsillectomy.

New method for the indentification of the type of bacillary dysentery. H. Gosh. (*Compt. Rend Soc. Biol. CIII 2. page 55 57*).

The only valuable treatment for bacillary dysentery is specific serotherapy. Unhappily the identification of the baccillus spends at least 72 hours. The routine treatment combining anti Shiga and anti Flexner serum is not enough. Anti-Shiga acts upon Shiga Kraus infection as well as antidiphtheric Serum in diphtheric infection. But anti Flexner Serum has not the same effect, owing probably to the fact that anti-Flexner is only anti-bacillary in its action and such sera are always less active and less specific than the antitoxic sera.

The author claims to have found a rapid method for identification of Shiga dysentery. Take 20 c. c. of stools, add 0. 5% chloroform, leave the mixture in incubator for half an hour. Filter on mousseline and afterwards on Pasteur Chamberland. To 1 c. c. of the filtrate add 0. 2 c. c. anti-Shiga serum + 1 drop from one fifth solution of formaldehyd. One hour after there is an evident floculation in positive cases; with Flexner and Gartner dysentery there is only a certain degree of opacity not useful for diagnosis. The reaction on Shiga is not positive if the stools are collected 4 or 5 days after the infection.

Alimentary anaphylaxy and desensibilisation per os according to the method of Besredka. R. Jahiel (*Compt Rend. Sec. Bio. CVI 2. p. 59-60*).

Woman, aged 21. After taking an egg immediate pain, vomiting, diarrhoea, urticaria. Curious to note: the absorption of every protein is followed by the same symptoms.

Eggs, meat, milk are not tolerated, and the patient is obliged to live on legumes and fruits.

The first desensibilisation is tried vis-a-vis of milk. 5 c. c. of milk are administered per os one hour before a full absorption of the same and no urticaria follows. Identical procedure is observed for eggs, chocolate, chicken, ham and fish and at the end of some days of this careful treatment the regime is quite normal without any accident.

Plasma proteins in Hookworm disease. G. Villela and J. C. Teixeira. *Memorias do Instituto Oswaldo Cowz XXIII.* I. 1930).

Total proteins of plasma were found in decrease in hook worm disease, which diminution affects only the albumin fraction. Fibrinogen is generally increased. Non protein nitrogen remains in normal limits. The changes in plasma proteins are of the

same type as those found in fatty nephrosis. So, the renal disturbances which arise in helminthic anemia should be included in the group of nephrosis.

Serum of cholera convalescents. Variability of its power in specific antibodies. Its use in therapeutics. Ukil and Guha Thakurta. (*Compt. Rend. Soc. Biol.* CIII pag, 310-11).

The authors, working in Calcutta, show that the serum of cholera convalescents possesses bacteriolytic properties, increasing progressively and attaining the maximum when the faeces are free of vibrios. Such serum used in the treatment of serious cases of cholera, with the necessary precautions as far as concerned their R. W, have given, injected intravenously at the dose of 10 to 15 c. c., better results than 100 c. c, of commercial antiserum employed by the same way.

Comparative study of coccidioidal granuloma in the United States and Brazil. F. P. de Almeida. (*Annaes da Faculda de de Medicina de Sao Paulo* IV. 1929).

The author proposes for the agent of Brazilian cases the denomination *coccidioides braziliensis* (Splendore 1912) emend. F. Almeida. The cultures of this parasite are obtained with difficulty and have the aspect of white or gray dawn in contraposition with the easy and snow white cultures of U. S. A. The Brazilian parasite in inoculation gives positive results with difficulty if not by the testicular way. The lesions are local and not generalised as in U. S. parasite: which is also easily inoculated to guinea pigs. There are also differences in the morphology of the parasite and in their morbid localisations in Brazil the intestine is frequently affected (not in U. S.), rarely the bones and lungs which are frequently attacked in U. S. The lymphatic glands give the principal localisations of the Brazilian parasite, not so frequent in U. S.

Experiments on the filterability of the vaccine virus Monteiro Lemos. (*Archivos de Hygiene* Rio de Janeiro IV. 1930).

The vaccine virus passes through the Mandler candle with relative facility when on glucose broth, the activity of the filtrate being diminished about 10 times only.

In common broth the virus is almost entirely retained in the the candle, the activity being reduced about 1000 times.

In physiological serum the virus is completely retained under the same conditions.

It is practically possible to supply vaccine virus entirely free from foreign bacteria.

Neurotropism of Spirochaeta hispanicum. (Mansouriah strain on rabbits: new form of inapparent infection. Velu, Balozet, Zotner. (*Compt. Rend, Soc. Biol.* CIII page, 381).

The neurotropism of recurrent spirochaetes (*Sp. obermeieri and duttoni*) or better, the aptitude of such spirochaetes to remain in the brain long time after the infection has ceased in blood or organs has been firstly studied in 1920 by Plaut and Steiner, in 1922 by Buschke and Kroo and further on by many other authors.

The authors confirm the same results vis-a-vis of *Sp. hispanicum* in rabbits and show that moreover the inapparent infection there, is another stage, closely allied to refractory stages where only the central nervous system remains infective.

Resistance of Trypanosoma brucei to 205 Bayer 305 Fourneau in rabbits; its avirulence for rats. Launoy and Mlle. M. Prieur. (*Compte. Rend. Soc. Biol.* CIII. 7 pag. 482).

Report of a very curious fact; rabbit infected with T. brucei and treated by 309 Fourneau. The trypanosomes continue their multiplication in the blood of the animal, but every inoculation to rats remains negative, in spite of the number of trypanosomes inoculated. The same results are obtained by the inoculation of the same-blood in other rabbits, only one having presented the flagellate 3 days after the inoculation and never more.

Rosenbush. (*Prensa Madica argentina* 21. IV. 1926) has reported similar facts in horses suffering from *mal de caderas* and treated by 205; after the treatment the trypanosomes remained in cerebro spinal fluid but had lost all their virulence for rabbits and guinea pigs.

Influence of B. C. G. on lepra murium. Valtis and Markianos. (*Compt. Rend. Soc, Biol.* CIII. 7 483-85).

Rats infected with B. Stephanski do not show any trouble for the injection of strong doses of B. C. G.

Such infections possess a favourable influence on the disease; undergo cicatrisation, and the generalisation of the disease is retarded.

Results of inoculation to the rabbit of encephalic fragments from general paralytic patients. Levaditi, Marie, Lepine. (*Compt. Rend. Soc. Biol.* CIII. 7.467).

The encephalic fragments of G. P. patients inoculated to rabbits did not transmit the infection. Comparing these results with the constatation of Treponeme in the ant. brain lobes of G. P., and the recent record of an experiment where the encephale of a mouse with latent syphilitic infection (virus Truffi) was virulent for rabbit in spite of no treponeme being noticeable in this organ. The authors put forward the following hypothesis: the spirochetic form may be the last stage of the evolutive cycle of syphilitic virus in the encephale of G. P. patients, being in such stage aviruient for rabbits.

Influence of radium emanation on the transformation of ergosterol into Vitamin D. Maisin Mund Pourbaix, Castelle. (*Compte, Rend. Soc. Biol.* CIII 7. page 534-36.)

Ergosterol in solutiou on paraffine, irradiated by eadon, shows in closed medium, an evident chemical transformation. The product so obtained possesses antirachitic properties.

Gleanings from Medical Press

SURGERY.

Two Cases of Alopecia Areata Treated With Milk Injections.—Djoritch describes (*Annales de Dermatologic et de Syphiligraphic*, April, 1930) two cases of alopecia areata treated by introdermic injections of one-fourth to one-half c.c. of a milk product. This amount was injected directly into the denuded portion of the scalp and caused a prompt regrowth of hair in the region treated. The effect apparently was local and not constitutional, for other placques upon the same patient were not affected. These had to be treated in turn in the same way, the results were uniformly good, and once cured these cases showed no tendency to relapse.—*U. & C. R.*

Cancer of the Stomach.—M. C. Llado deprecates the even more fatal delay in the diagnosis of gastric than of rectal malignancy. He points out that a progressive loss of weight is more likely to be due to cancer than to tuberculosis, while the same applies to an apparently causeless anaemia which resists ordinary means of treatment. If pains in the gastric region, extending to the back, occur in a middle-aged patient together with either of the

above symptoms, a special examination of the stomach should be made without delay. Here the evidence afforded by the gastric contents is conclusive. If no blood is discovered in them and there is pronounced acidity, the disease is almost certainly not cancer, although we are warned that in the early stages some hydrochloric acid may be secreted. On the other hand, the presence of blood and the absence of acidity point definitely to malignancy, althoug the blood is seldom much in quantity unless an ulcer complicates the conditions. Should there be no blood, gastric syphilis which closely imitates all the other symptoms of local cancer may be suspected. (*Revista Medica de Barcelona.*)—*Medical world.*

Removal of Tattoo Marks.—*The removal of tattoo-marks*, as we learn from Buschke and Loewenstein (*Die Medizinische Welt*, April 19, 1930) is a difficult problem. The pigments used in tattooing are insoluble and cannot be bleached. Smaller marks may be dissected out of the skin, the sutures in closing the defect to be applied with the greatest care. Larger areas may be filled by skin-flaps, especially when the surface involved is covered by clothing. Or the subcutis may be exposed to view by inverting a flap, and the pigment trimmed off with a fine scissors. Decortication (Dubreuilh) is feasible only in superficial deposits. Curetting of the skin may be done. Some have used hot-air applications, This may be followed by keloid which will demand a radium treatment. A very good method is electro-coagulation, subsequently applying pyrogallic acid, as a 20 per cent pyro-vaseline, protecting the environment with a thick zinc-paste. After three days the pigment particles will loosen from their depository. Finally the disfiguring figures may be covered up by some enamel (a mixture of milk, strong alcohol, zinc oxide and chalk).—*U. & C. R.*

Ionized Silver in Treatment of Burns L. Shillito.—*British M. Journal, 2 : 668, Oct. 12), 1929.* (*Abst. J. A. M. A,, Nov. 23, 1929*).

Shilitos treatment is as follows; Silver nitrate in a 1 to 5 per cent solution is sprayed or painted on the area affected by the burn. An exposure of from one to five minutes is then given with a mercury vapor or tungsten are lamp at a distance of from 6 to 20 inches, the varying limits being given to allow for the factors of the age of the patient, the size of the burn and the efficiency of the lamp. In the absence of an artificial source of ultraviolet rays an exposure to real sunlight, if it can be obtained, for half an exposure to real sunlight. if it can be obtained, for half an hour

produces much the same result. The silver nitrate is ionized by the light and the silver ion combines with the cell proteins—an effect which is practically instantaneous with artificial ultraviolet radiation; the whole area becomes black and dry, and a shiny coagulum is formed, fixing proteins resulting from cell destruction, which if absorbed, give rise to the toxemia often associated with burns, and at the same time the penetration of the rays to the deeper layers is prevented, thus counteracting any possibility of over-irradiation. Rapid healing is produced in second degree burns and the pain is greatly decreased. No dressings are used and the bedclothes are not allowed to touch the treated area. Another application may be given in from twenty-four to thirty-six hours, if required.—*Archive of Physical Therapy X. Ray. and Rex.*

Treatment of Infections of the Hand.—Beck, in *American Journal of Surgery* (February, 1930) states that in infection of the hand it should be the object of the physician to watch abscess formation to stem its tide, and localize it if possible. This can often be done by using the passive hyperemia method of Bier on the infected finger. This consists of shutting off the circulation of the finger by the circulation constriction of a rubber band used as a tourniquet. We have seen cases threatened with rapid propagation, which were limited to one or two phalanges, or to a felon, by such a rubber band. Heat and moist dressings are the most advantageous remedies, also hot baths and alcohol applications. Heat brings more blood to the infected area and accelerates the formation of abscess. Whether we apply a hot bath, poultice or electric pad is immaterial. Moist dressing with acetate of lead in the form of so-called Billroth solution, boric acid applications, or the thermic lamps are very beneficial. The crucial question is whether surgical interference is necessary or not. Many make the mistake of incising too early and therefore unsuccessfully, because the pus formation has not yet reached the stage of a melting process. Fluctuation, the characteristic sign of abscess in a finger, is difficult to diagnose. It is best to incise in the direction of the blood-vessels, not too close to the tendons or joints, yet into the abscess. Many practitioners are too timid in their incisions, reach only the superficial surface, not the abscess, and therefore are useless. Drainage is best established in many instances by connecting two incisions through an underground channel which is kept open by silk thread, catgut, or tube or gauze.

An important consideration is the after treatment. Moist warm dressings, irrigations and local baths, with or without additional antiseptics. These depend upon individual taste more

than upon absolute indication and have changed from time to time according to the vogue and, perhaps, mostly because of the advertising by commercial interests.

The office treatment does not terminate when the suppurative process has stopped, but should be continued in the form of massage, electric pads, local baths, and active and passing motion until the function of the hand is restored to the best efficiency possible. Many fingers and hands have been surgically cured, but have remained stiff and useless because of neglect of the all-important after treatment.

Fractures of the Lower End of the Humerus.—Wallace H. Cole (*Minesota Medicine*, September, 1929), in summing up this subject, says that the following points should be emphasized: 1. Accurate knowledge of the anatomy of the parts is essential. 2. The diagnosis should be made by the clinical findings plus the radiograph taken in at least two planes. 3. Reduction of the fragments should be accomplished conservatively if possible but open operation is necessary if proper alignment is not obtained. 4. Fixation should always be with the elbow joint in acute flexion if possible, not only for the purpose of retention of the fragments but also to give the joint the best possible chance for maximum function. 5. Active motion should be started early with baking and massage when possible. Passive motion has no place in the treatment of these fractures and is absolutely contraindicated.—*I. J. M. S.*

Saline Irrigations in Gonorrhoea.—The success attending saline irrigation of wounds suggested to CLARKE that a similar process might be effective in gonorrhoea. Astringents like potassium permanganate are apt to close the crypts in the urethra and thus prevent the entrance of the irrigating solution to infected areas. Accordingly he treated sixty cases at the British Military Hospital, Rangoon—thirty with saline irrigations (one per cent. common salt) and thirty with potassium permanganate 1: 10,000. The cases were nearly all of a severe and chronic type. Those treated with saline averaged 44 days for recovery, exclusive of two relapses, while the permanganate cases averaged 61 days and eight relapses occurred. The saline treatment is much less expensive than with permanganate, and Clarke regards it as being of proved value.

CLARKE, L. B. Experimental treatment of gonorrhoea by saline irrigations. *J. Roy Army Med Corps*, 1929 June, 436-444.—*Prescriber.*

The Treatment of Non-Gonorrhoeal Urethritis.—Stumpke, in *Dermatologische Wochenschrift*, March 29, 1930, discusses the difficulty of cure in cases of non-gonorrhoeal urethritis and recommends irrigations with solutions of calcium chloride.

He begins with a three per cent. solution advancing later to a 5%. He has usued a solution as strong as eight per cent. This is injected three or four times daily. A cure is generally effected within three weeks.—*U. & C. R.*

Extravasation of urine:—In a general way extravasation of urine in cases of rupture of the external urethra centres about the perineum, scrotum, penis, inner thighs and pubes. Extravasation of urine in cases of extraperitoneal rupture of the bladder or prostatic urethra centres about the front of the bladder in the loose space of Retzius where it appears as a deep suprapubic tenderness and induration. Extraperitoneal extravasation of urine in cases of rupture of the kidney is usually slight and readily absorbed. When not, however, it appears as a deep tenderness and induration in the renal region, occasionally burrowing down along the psoas muscle to point in the groin.—DR. JAMES G. SARGENT (*Wis. Med. Jour.*).—*Thro. I. J. M. S.*

Kombinationsbehandlung Gonorrhoischer Komplikationen Mit Intravenoesen Trypaflavininjektionen Und Diathermie. (Combined treatment of gonorrhoic complications by intravenous injections of trypaflavin and diathermy). Kaj Philipsen.

Dermatol. Wochenschr., 1929, Vol. 89, Nr. 48, (Nov), p.1916-17.

The local treatment of gonorrhoea by silver salts does not always give satisfactory results. The author therefore tried intravenous trypaflavin instillations and afterwards combined the injections with simultaneous diathermy treatment of the affected part, in order to obtain hyperaemia, hyperlymphia and consequently a more pronounced trypaflavin concentration between the contaminated tissue cells. In one case of gonorrhoic epididymitis of only two hours' standing complete recovery was obtained by one single treatment; the other cases required several treatments (up to 6) without the patient's being confined to bed. Also funiculitis was most favourably influenced by this mode of treatment. Generally, treatment was given as often as it was necessary, sometimes daily sometimes only once a week. The trypaflavin dose amounted to 20–0. grams. At the same time local treatment, mostly by albargin and protargol, was continued. The treatment was begun with diathermy. After the organ had been heated well, the injection was made. According to the author's view trypaflavin is fixed in the diathermised organ; this would appear from the

fact that following the injection a sensation of increased heat could be found and the well-known universal by-effects were slighter.

The author believes his method which he calls "chemotherapeutic enrichment diathermy" to promise well. By combination with other specific means it would be possible to use it also in other complaints, as for example, in cancer. i.e. the combination of diathermy and roentgentherapy.—*Archives of Radiologly.*

Torsion of the Testicle in an Infant—Dr. Rinaldo Micotti (*La Riforma Medica*, April 7, 1930) reports the case of a baby of ten months, in whom the mother noted a painful tumor-like mass in the right inguinal region. The baby was restless, crying almost constantly, and the temperature was elevated. A careful examination revealed that only the left testicle had descended, and the diagnosis of ectopic testicle with torsion on the right side was made. The child was operated upon, the torsion undone and the testicle brought down into the scrotal sac. The original diagnosis was hernia, which was quite a natural mistake, but here as elsewhere, careful examination revealed the true cause of the distress.—*U. & C. R.*

Rational Uses of Physical Energies in Oto-Rhino-Laryngology. A. R. Hollender, M. D. *American Jour. of surgery, New Series, Vol. VIII, No. 2, Feb. 1930, Pp. 315.*

The author gives his views regarding the uses of physical agents in the specialty of oto-rhino-laryngology. The article is a resume of the subject attempting to rationalize the various physical methods at our command. It is the result of an extended experience in giving thousands of treatments for ear, nose and throat diseases. Emphasis is made on the fact that physical methods are only aids to accepted procedures.

Radiant heat-light and infra-red therapy are discussed with special reference to acute otitis media and acute upper respiratory diseases. Heat as a therapeutic agent is thoroughly evaluated. Facts concerning the physics of ultraviolet energy are enumerated and the status of this agent is elaborated upon in nasal, aural and laryngeal affections.

The galvanic current is employed chiefly for nasal and aural zinc ionization because in these two fields it has produced definite results. Diathermy is the ideal means of thermotherapy and its scope of therapeutic usefulness is both medical and surgical. The various indications for medical and surgical diathermy are suggested, this knowledge having been gained from a voluminous clinical

material the past several years. The summary and conclusions are well worth quoting *verbatim*:

1. While physical therapeutics in oto-rhino-laryngology is still more or less experimental, a vast amount of clinical evidence is available to prove the usefulness and rationale of certain physical energies in selected cases which come in the scope of the specialty.

2. Radiant heat-light and infra-red are serviceable in acute otitis media, preoperatively and post-operatively, and in acute upper respiratory infections.

3. Ultraviolet energy has proved beneficial for tuberculosis and lupus of the pharynx, larynx and oral cavities and for some skin affections of the nose and the ear.

4. Zinc ionization for selected cases of chronic suppurative otitis media and for intumescent and moderately advanced hypertrophic rhinitis represents a definite advance in the therapy of these diseases.

5. Medical diathermy is of value in acute and chronic forms of frontal and maxillary sinusitis, but must be employed with due regard for under-lying factors, principally that of drainage when suppuration is present.

6. Middle-ear deafness is an indication for medical diathermy, especially after the usual methods have failed to bring about improvement. Recent reports by Hilliard and McKenzie appear to confirm the results reported upon earlier by some foreign and American otologists.

7. Surgical diathermy is unquestionably the agent *par excellence* for the destruction of accessible new growths, whether benign or malignant, providing, however, there is absence of metastatic involvement.—*Archives of Radiology.*

Die Nachbehandlung Accidenteller Wunden. (After-Treatment of Accidental Wounds.) W. Wette. *Fortschrifte d. Therapie, 1929, J. g. 5, Nr. 6, (March), p. 182–184.*

The "orthopedic treatment of wounds" is of necessity associated with the after-treatment of accidental wounds. It aims at preventing functional trouble in the immediate or distal parts of the wounds. Elementary errors are still committed at present in this respect. Unavoidable temporary and local immobilization should be limited to the utmost, for otherwise various functional difficulties occur e. g., cutaneous scars coalescing with the substratum, tendons with their sheaths, synovial membranes gluing together, shrinkage of connective tissue and muscles atrophy. To compensate these damages by orthopedic measures

at this stage, success of a questionable nature if any would only be obtainable after a long time. The curative procedure is greatly prolonged. Treatment by exercises should therefore be commenced as soon as possible. It is not possible to lay down general rules as to when this treatment has to be begun, in many cases, however, the principles formerly advocated can unhesitatingly be abandoned. Thus tendinous sutures which were usually immobilized for at least a fortnight, resulted in an extensive limitation of motion and difficult of correction. At the present time the cautions of careful manipulation of similar conditions has given good results within four to five days.

Points on the Value, Safety, and Methods of Giving B.C.G. for Protective Immunization Against Tuberculosis.—Few topics in the field of tuberculosis have assumed so much prominence as the present discussion of the value and safety of Professor Calmette's prophylactic immunization method against tuberculosis.

The B. C. G. vaccine is the discovery or the production of Professor Calmette, the assistant director of the Pasteur Institute in Paris, and his coworker Guerin, a veterinary surgeon. The Bacillus of Calmette and Guerin is abbreviated "B. C. G." It consists of living, slightly virulent tubercle bacilli of the bovine type, having been attenuated by being cultured on an ox-bile-glycerin medium for the past twenty-one years.

It is pointed out that from 35 to 90 per cent of children reaching the age of puberty react to tuberculin, and that infants are born with no appreciable resistance to the infection. In many instances, contact with tubercle bacilli leads to progressive disease, ending with an infection large and severe enough to produce death. On the other hand, apparently, if the infant comes in contact with only a few micro-organisms and at infrequent intervals, it escapes serious consequences. The latter type of case has apparently been successfully immunized against tuberculosis, due to the fact that he has never been overwhelmed with a host of virulent organisms.

According to Calmette, an infection of mild nature is very desirable. The excessive infections must be avoided and the intervals of periodic implantation well regulated. The micro-organism used for producing mild infection should be of low virulence. Calmette is supported by a large following in his belief that the attenuated B. C. G., properly used, is capable of producing this desired immunity. Believing that most of the infections in children take place by the digestive route for the reason that the intestinal mucosa of the infant during the first ten days of life absorbs the micro-organisms much more readily than at any other later period. Calmette's vaccinations have been carried on in most cases by feeding the micro-organisms to newborn babies. Some were vaccinated by the subcutaneous or the intracutaneous route.

In this series of cases, Calmette claims that not a single fatality has occurred in infants vaccinated with B. C. G. In some earlier publications, he claimed that no tuberculous changes were produced by the vaccination of guinea-pigs. In later publications however, he admits that tuberculous lesions can be set up, but he adds that in due time the lesions heal completely. He states that no matter what method of inoculation was used, progressive tuberculosis was never produced by the living B. C. G.

On the other hand, a number of cases have been reported by other men in which death from tuberculosis occurred following vaccination, and the deaths have been attributed to infection by the B.C.G. Petroff reports that apparently the bacilli of tuberculosis may assume two forms. In one form they are comparatively harmless, whereas the other form may be very virulent. This difference may account for the unsatisfactory results which have been reported. A vaccine made from what was supposed to be the harmless tubercle bacilli would have an unfortunate effect on the subject vaccinated if the bacilli suddenly changed to the virulent form.

Kereszturi and Park, in reporting upon their experience with B.C.G., state that one death occurred in a baby whose mother died of miliary tuberculosis soon after the birth of the child, and it was thought that the child may have picked up a blood-stream infection through the placenta.

In general it is found that oral B.C.G. vaccination is relatively simple, quite harmless, and gives some immunity. Due to the facts that the dosage of the vaccine by the oral route cannot be controlled very well and that the oral administration is good only in the newborn, it is believed that the subcutaneous or the intracutaneous injection of the B. C. G. should be superior to the oral method.

Keeping in mind the merits of this treatment and recognizing that it is not fool-proof, a safe course should be followed by using the vaccine with extreme care and considering that indiscriminate use of the B. C. G. is probably not justifiable at the present time.—*California and Western medicine.*

Correspondence.

A CASE FOR DIAGNOSIS

BY

P. PANCHAM, L.C.P.S.

I[C Mission Dispensary, Bijori, Dist. Chhindwara C. P.

A boy, aged 15, farmer by occupation, came to me for "pain in the stomach," one month ago. The boy gave the following history:

About 7 or 8 years back he felt "pain in the stomach" all of a sudden. After 2 or 3 days' domestic treatment the pain disappeared, only to reappear after a few weeks. Since then, he has been a subject of "pain in the stomach," which he acutely got at varying intervals of 5 or 6 days, each attack lasting for 2 to 4 hours, about one year back. But now the pain comes on in acute attacks almost every day. During acute pain there is felt a hard mass in the epigastrium, elongated in size, extending from right to left.

Other signs and symptoms:—The boy is well developed; robust with fair appetite, no vomiting, sometimes acid eructations, bowels normal; spleen and liver negative, on palpation. The pain is slightly relieved by taking food. Analysis of the gastric contents is not possible in this place. No family history of gastrointestinal or other abdominal disease.

I administered:

Tr. Belladona	min x
Tr opii	min v
Aqua chloroformi	ad ℥i

T. D.

This gave him only temporary relief.

Alkaline mixture also gave him only temporary relief.

Treatment for Ankylostoma Duodenale and Ascaris Lumbricoides failed.

Will any of your worthy readers be kind enough to suggest and let me know, through your esteemed "Antiseptic," the diagnosis and treatment of this case?

TO

THE EDITOR "*The Antiseptic*" MADRAS.

SIR,

I shall be glad if you will publish the following in the next issue of the Antiseptic as an answer to a query of Dr. N. N. Biswas L. M. P. in the May issue of the Antiseptic.

I had a case exactly similar. On examining the nose, I noticed an ulcerated surface in the right nasal cavity. Failing to trace any source of bleeding, I adopted symptomatic treatment for it. This did not stop the bleeding altogether. To my great surprise on the 8th day of my treatment, the patient while sneezing violently (owing to some irritation inside the nasal cavity.) some six living maggots were expelled. My attention was drawn then to these maggots. I treated next for nasal myosis to which any treatment in this line well responded.

(1) Chrysomyia-macellaria (screw worn fly) probably deposited its eggs on the ulcerated surface of the nasal cavity.

(2) In my case these maggots were r[illegible]ably responsible for this bleeding because with the disappeara[illegible]f these maggots the bleeding totally stopped.

(3) Maggots actually came from Nose.

I am,

Sincerely yours,

Nowgul Assam.
14-6-'30.

F. BAROOAH, L.M.P., D.T.M.

A CASE FOR DIAGNOSIS

BY

DR. D. G. CHOURIKAR, L.M.P.

Wun (Berar).

A man aged 35 was admitted in my dispensary a fortnight ago. He had all over his body excluding his face, eruptions with burning pains since a year. I examined those spots carefully and found the following interesting things: Those spots were two different types, some being whitish with reddish shading, and others are black. Those that are white have only burning sensation which is specially marked when they are exposed to sun and wind. Black spots are devoid of this but they have continuous sweatings all over. Both those spots and the remaining of his skin have all the sensation of heat, cold and touch. Under magnifying glass white spots are found normal, but the black ones seem to have sabacious glands raised above the skin level. The man has specially come to me for the relief of burning pain and sweating.

I am puzzled in diagnosing the case for want of laboratory help which is not at hand. Patient denies any specific history of syphilis, nor any possibility of the contact of leprosy. He had long fever of a fortnight duration a year ago. He cannot specify the fever, but these erruptions developed after a month of this fever. I cannot find any clue in this. I examined his urine on the date of admission. It was very pale as water, specific gravity being 1000 only but no other abnormality is marked. There is slight increase of taking water and also he passes a little more quantity of urine. As for myself I have not yet come to a definite diagnosis of this case. However I am putting him on the following mixture.—

(i) *Internally.*—

Tr. Ferri Perchlor	m x
Liq Arsenicalis Hydr.	m v
Tr. nux vomica	m x
Mag Sulph	gr xx
Aqua	℥i

M. ft. in ℥i after food.

(ii) *Externally,*—Alum oleum Neem mixed with sweet oil.

He is on this treatment since last fortnight without much relief though he says that the sweating of black spots is much less than before he was admitted in the dispensary. The burning pain still continues.

My excuse in sending this to your esteemed journal is to request my professional brothers to give me a guide in this case through the medium of this journal and oblige me. Any more informations regarding this case will be promptly supplied.

THE SIMLA MEDICAL CONFERENCE

BY

DR. JIVRAJ N. MEHTA, BOMBAY.

The resolutions adopted at the Conference of representatives of Provincial Governments and Medical Faculties which was held last week at Simla, under the Presidentship of the member in charge of the Department of Health, Education & Lands and which has been published in the press require to be carefully considered before the Independent Medical Profession and the Medical Faculties can echo the satisfaction which the Simla circle seem to voice at the result of the Conference. Some of the resolutions passed or tentative conclusions arrived at the Conference are undoubtedly disappointing and will need to be radically modified before they can be acceptable to the profession.

The composition of the Conference was unsatisfactory in that the independent medical profession was not at all asked to send its representatives to it. That being so, the view-point of the medical profession could not be represented at the Conference. It is true that Dr. S. K. Vaidya who is a member of the independent medical profession was there but he was there as a representative of the Bombay Medical Faculty. He must have, no doubt, pressed the independent medical profession's points of view with the usual vigour, but the fact remains that the profession, as a whole, was altogether ignored at this Conference. This was indeed, regrettable, as one of the functions of the proposed Indian Medical Council will be to deal with problems concerning medical ethics. The other regrettable feature of the Conference is that the resolutions considered at this Conference were not previously circulated among the unversities which were called upon to depute their representatives at a very short notice, with the result that in the preliminary consideration of the whole matter, the university representatives at the Conference could not confer with their colleagues on the Medical Faculties on the items that may have been on the agenda of the conference. Moreover, the members themselves were called upon to take important decisions at a very short notice.

The hurry with which the Government of India rushed through the Conference before Simon Commission's recommendations could be either known to the University representatives or their full significance and their bearing on the enlistment of European Medical Officers in this country, particularly those in the Army, could be understood, seems to be significant. Will these army Medical Officers be outside the purview of the Indian Medical Council? The members of the Legislature as well as of the medical profession will have to give considerable thought to this aspect of the question. I fail also to appreciate the hurry with which Government desires to rush the proposed Indian Medical Council Bill through the Central Legislature at its session to be held in Delhi early next year.

The proper way for the Conference would have been to accept by way of *via media,* the resolution unanimously passed at the Conference of the Delegates of Medical Faculties held in Bombay, early in May, recommending the appointment of the Inter-University Medical Board consisting of a representative of each Indian University from its Medical Faculty and of the Government of India. The experience gained by the working of such a Board for a couple of years or so, would have been, I think, of inestimable value, in drafting a proper type of constitution for the Central Medical Council in this country. The period so gained would

have also enabled us to study in greater detail the system of registration of medical practitioners, as well as the way by which the standard of medical education is regularised and controlled, in such countries as Germany, Japan and France, &c. A complete report of these points is very necessary to enable the Legislature correctly to judge the implications of the Medical Council Bill when it is brought up for discussion.

Reading between the lines of the published summary of the proceedings of the Conference it seems to me that the proposed Medical Council is likely to be of the Federal type, with a provincial spirit markedly in ascendancy. Moreover, the Conference has adopted a very strange recommendation by which distinguished medical practitioners, who may have no teaching experience to their credit, will not be eligible for election to the Indian Medical Council from the Registered Medical Practitioners' Constituency. No doubt, it is desirable that, doctors with teaching experience should be largely represented in the Indian Medical Council, but it is not in the best interest of the profession that members who may be useful to the profession in ways other than those concerned with teaching, should be altogether precluded from the Medical Council election. If the Conference had really desired that those in the teaching line should predominently be in the Council, the more logical course would have been for it also to resolve that the nominees of the local Government in this Council should also invariably have had at least five years' teaching experience, and the Director-General, Indian Medical Service, would not have been recommended to preside, even over the first Council, merely in view of his high administrative office.

The harmful effect of the recommendation referred to above would be that out of 300 or 400 teachers that will thus be eligible for election from the registered medical practitioners' constituency to the Medical Council, if this suggestion were adopted, more than three-fourths will be Government Officers, as almost all the medical institutions, where teaching is imparted, are, with three or four exceptions, entirely staffed by Government Officers. The Medical Council as conceived at the Simla Conference will thus be predominantly an official body. With the help of such a Medical Council a large degree of official control over the independent Medical professionwould be rendered easy. I cannot therefore join in the chorus of satisfaction which is reported to have been felt in some circles associated with the Simla Conference at its result.

Another important matter, to which I wish to refer, is the resolution reported to have been passed on the first day of the Conference by which the Government of India were requested to ask the Secretary of State for India so to amend the rules regarding recruitment into the Indian Medical Service as to permit the holders of Indian degrees to be recruited into this service without the necessity of their qualification being registrable in England. The implication of this resolution is that whether reciprocity between the General Medical Council is established or not, those holding British qualifications will continue to hold Government appointments in this country, in virtue of these qualifications only, though the Indian Medical Act ought to, when passed, preclude all those who are not on the Indian Register from holding medical appointments under any public authority. If the Indian Medical Council is to be an entirely independent body, as resolved upon at the Conference, no person not holding a medical qualification registrable in this country, can ever possibly hold any medical appointment in the country, be it on the Civil side or on the Military side, if the independence of the Council is to be genuine and not a mere eye-wash. The provisions in this regard in the Indian Medical Council Bill, when framed, will have to be very carefully watched.

It is to be hoped that the proceedings of the Simla Conference will be early available to the public. The proceedings of the last years's ministerial Conference on the same subject took nearly eight months to see the light of the day and the Fletcher Committee's report on the organization of Medical Research in India took an even longer time to be released for public study. These mistakes, let us hope, will not be repeated this time.

TO,

THE EDITOR, *The Antiseptic, Madras.*

SIR,

On behalf of the Medical Association, Vizianagaram I request you to be kind enough to publish the following resolutions passed at the business meeting of the Association held on 6—8—'30, in your valuable journal.

Resolution, 1.

"Our joy to see Rao Bahadur Dr. Tirumurti being selected and recommended to the Vice-Chancellorship of the Andhra University by the Senate in addition to his present duties as Principal, Medical College, Vizagapatam, a Unique Honour."

Resolution, 2.

"Our deep sorrow at the loss of Dr. Kugler of Guntur, who was the founder of the Women's Misson Hospital, Guntur, at the ripe age of 75 and who worked, lived, and died in the Andhra Desa for our women, an irreparable loss."

VIZIANAGARAM,
8—8—'30.

V. S. RAO.
Secretary, The Medical Association.

TO,

THE EDITOR, *The Antiseptic, Madras.*

A DENTAL HOSPITAL FOR MADRAS.

An Appeal.

It is known to every one that all authorities are now agreed that *infected teeth* are one of the most *common starting* points of prevailing ill-health, and that this benign Presidency has not enough Dental Departments to provide Dental Treatment for the poor or to carry out very necessary research work among the Indians by Indians. With this object in view, as well as to afford a place of instruction for the students of the Madras Dental College, the staff are willing to start a free Dental Hospital, near the General Hospital, Madras, since the only Government institution of that kind (with no facilities to give free Dentures) has been removed to Royapuram—a far off place to the needy poor. It is therefore requested that the public and the press, who have a duty to the poor, will help to assist to establish a proper Dental Hospital in Madras, which is bound to be of immense value to the Indians for generations to come. Those who would endow a decent sum or lease out a site, will be treated free for life. Any suggestion or help will be thankfully acknowledged by the Principal, Madras Dental College, 285 China Bazaar Road, Madras.

Book Reviews

General Paralysis and its treatment by induced malaria. Report By Surgeon Rear Admiral E. T. Meagher, R. N. Inspector of the Board of Control. Printed and published by His Majesty's Stationery Office.

The treatment of general paralysis by induced malaria, is an outstanding feature of the modern therapeutic progress. It has long been known that pyrexia of any type, especially of an infective nature brings about an amelioration in the symptoms of mental disorder and from time to time various methods have been tried. The diversity of types of mental disease and the lack of a definite pathology for most of them, have stood in the way of any extensive application of the principle of treatment by infectious fever not to speak of the risk involved in such a procedure.

General paralysis of the insane is a disease with a well defined pathology and has a formidable array of physical and

mental symptoms. It has been regarded as "the most terrible of all mankind's diseases". The history of the disease from the close of the 18th century down to the present day is an uninterrupted record of the attempts made to elucidate the several obscure problems connected with it and, of course, to seek a remedy. Syphilitic in its origin, and destructive in its manifestations the disease has withstood every form of antisyphilitic treatment.

The malarial therapy, elaborated by Wagner-Jauregg, which has been adopted in several countries since 1922, forms a landmark in the "long drawn out drama, extending through the whole of a century."

The brochure before us, is a report published by the Board of Control in England, giving an evaluation of the results of the treatment up-to-date. The study which has been made of five years of malarial treatment embracing more than 1500 cases indicates that the treatment produces beneficial results which are specifically due to that treatment and which cannot be attributed to any other cause.

How does malaria act? Whether it is the pyrexia alone or the malarial parisite with its toxins, is still unsettled. The explanation of the author of the report on this point, that "the blood is increased in activity and flow, the whole body is subjected to a kind of spring cleaning.....the spirochoctes deprived of their defences are lulled into inactivity....." does not clear the point.

However the report recognises the malarial treatment of G.P.I.as a notable advance in therapy. Time alone will show if the improvement obtained under this form of treatment is of a permanent nature.—*F.N.*

Mental Disorders—a hand-book for students and practitioners.—By Herbert J. Norman M.B. C.H.B. D.P.H. Published by E. & S. Livingstone—Edinburgh. Price 14/-

The successive appearance of new books on mental disorders, is an indication of the steadily increasing progress in the subject and medical practitioners who were wont to place this subject on the fringe of their professional attention, can no longer ignore the social, economic and hygienic implications of a disordered mind. The time has come for practitioners of medicine to view the question at close quarters and to bestow on the matter the same attentions as they do on tuberculosis, syphilis or malaria.

The book before us, is one that will rouse the interest of those who have hitherto had only a nodding acquaintance with the subject.

The author has tried to moderate the usual enthusiasm for new theories, many of which have yet to be so established as to be capable of general acceptance and has sought to view the old truths from a new angle.

Unlike the arrangement in similar books, which deal with theoretical matters first, the clinical description of the several types of mental disease are placed at the commencement of the book, so that readers may be served with more tangible matters, and when their interest is sufficiently stimulated they may study the theoretical aspects of the subject.

The historical survey is dealt with in a special chapter. The chapter on treatment is exhaustive. The writer has given us the benefits of his wide experience in not only dealing with insane patients, but what is more significant, he has laid stress on the obstacles encountered in the application of remedial measures. Such obstacles arise from popular beliefs and preconceived notions, among the general public and hamper the work of the psychiatrist a great deal. Every psychiatrist is painfully aware of this and a commendable attempt is made in the book, to combat the several popular fallacies. At the same time, recognised modes of treatment, which could be carried out by any medical practitioner are described in detail.

The book is handy, well—printed and adequately illustrated. Psychiatrists also will find in the book a useful guide in their daily work.—*F. N.*

A short Practice of medicine for students and junior Practitioners.—By U. P. Basu, M. B. (Cal.) M. R. C. P, (Orl) 1929, P. p. 827. Kamala Book Depot. Price Rs. 10/ net.

In this present work the author gives the minimum essentials for the medical students specially in India, leaving out all the non-essentials.

Tropical diseases are dealt with in the first few chapters followed by chapters on specific infectious diseases. The diseases of the various systems are described in order, and lastly the diseases of the children are dealt with.

The book is highly practical, and mostly it is a reproduction of the lectures given by the author to his students.

The book contains some illustrations, depicting the various diseased states. They are very impressive and useful. Throughout in the book good many prescriptions are given which may be found valuable.

The book is sure to make a good appeal to students in India, as the author has specially written this for Indian conditions, after

many years of experience as a teacher in medicine to Indian students.

Both the author and the publishers are to be congratulated, on the production of this eminently practical and useful book.—*V.C.S.*

Handbook of Diabetes, Mellitus and its modern treatment.—By J. P. Bose, M. B. (Cal) F.C.S. (London) 1928. Pp. 192 with 1 colour plate and 7 charts, Calcutta. Thacker Spink & Co., Price Rs. 5/—

This hand book will be found very useful by all medical men in India specially by those in places where diabetes is very common.

The disease is dealt with, as is found in India and in Indian surroundings.

The author who is a research scholar of the Tropical School of Medicine, Calcutta, and holder of the Mitra Research scholarship in diabetes, has given in this book the results of his researches and observations on diabetes in a clear manner. The book contains fifteen chapters and three appendices.

The first chapter gives a vivid account of the discovery of insulin, and subsequent developments. Chapter II deals with the definition of diabetes and its etiology. It is defined as a constitutional disorder due to deficiency in the secretion of Islets of Langerhans. The author states that diabetes is extremely common in Bengal and especially among the rich and educated classes. He attributes the cause, to a combination of ill-balanced diet, over-eating, disinclination to any form of active physical excercise, excessive intellectual work, sedantary habits and too much worry inseparable from the present struggle for existence. But what is perhaps more interesting to note is the result of the author's experiments on the D.T.M. Students before and after their examinations. He analysed the urine of some of them both before and after their examination, and was surprised to find that 5% of them showed unmistakable glycosuria following the ordeal. From this he concludes how much worry and mental anxiety can contribute to the production of glycosuria.

The general carbohydrate metabolism, the value of glucose tolerance test, the interrelationship of the endocrine glands in sugar metabolism are fully discussed in chapters III and IV.

The morbid anatomy and symptomatology of diabetes form the subjects for the following two chapters.

The VII th chapter is highly practical and reviews the most modern and up to date methods of dietic treatment of diabetes. Some of the suitable diets as worked out by the author for European and Indian patients on mixed diet as well as for the vegetarian Indians are included at the end of this chapter.

Insulin treatment, dangers and surgical complications in diabetes with their proper treatment, some useful hints for medical officers of insurance companies, author's simplified

method for estimation of blood sugar, the examination of the urine and its importance form the main theme for the remaining chapters of the book.

Among the appendices, the first two deal with the calorific value of different common food stuffs of India, and carbohydrate content of the various Indian vegetables; while the last gives a short account of the late Rai Bahadur Dr. A. Mitra.

This is one of the best books on Diabetes and its treatment. It is practical and up to date, and we heartily commend it to all our readers. We heartily congratulate the author for having produced such a useful volume, for the benefit of the profession.

The book is well got up, and handy and is well worth its price.—*V.C.S.*

Aids to Tropical diseases.—C. Ramachandran, L.M.P. L.C. P. S. L.T.M. Assistant to Director of Medical Unit, Government Royapuram Hospital. 1930. 109. pages. (B. G. Paul & Co. Madras) Price Re. 1.

The author has brought out in a concise form the fundamental facts of some of the important and common tropical diseases. His object is to meet the requirements of medical students preparing for their examinations. All the tropical diseases are discussed in a clear and concise manner. Temperature charts, wherever necessary are included and useful prescriptions are also given. A very useful feature is the inclusion, at the end of the book, of tables of differential diagnosis of such common and important diseases as amoebic and bacillary dysentery, small pox, chicken pox and measles, diarrhoeal diseases such as cholera, Ptomaine poisoning and beri-beri, epidemic dropsy, lathyrism and neuritis due to Alcohol, arsenic or lead and the fevers. We however wish the author pays more attention to the proofs in the next edition of the book.—*U.K.R.*

Physical signs in Clinical Surgery.—By Hamilton Bailey, F.R.C.S. (Eng) 1930 Second edition P.p. 268 with 306 original illustrations some of which are coloured. Bristol: John Wright and Sons Ltd. Price 21/—net.

This book is intended for the fourth year students for their use in the wards. It is based upon the demonstrations given by the author to his students, and as such it is immensely practical.

Methods of examination of physical signs and symptoms are explained fully in a very concise yet clear manner. The photographs are very good and every one of them illustrates very effectively the clinical picture of the disease. Of the most impressive photographs may be mentioned the case of a traumatic asphyxia, and the picture of trans-illumination of a cyst of the female breast by a Cameron lamp.

Many useful hints and diagnostic methods are given.

The book is well printed and nicely got up, and easily portable. To the students in wards it will be found helpful in solving many a difficult problem in arriving at a proper diagnosis.

We are sure that this book will be greatly appreciated and found helpful to students and clinical teachers.—*V.C.S.*

The Care of Children in the Tropics:—By Eric. C. Spaar, B. A., M. D., B. S., (Lond) M. R. C. P. 1930. P. p. XIV + 265. Bailliere Tindall and Cox. London. Price Sh. 7/6 net. The object of this manual is to give knowledge and simple direction to those who need it, whereby children may be brought up from the cradle to enjoy vigorous health.

The book is divided into three parts. In the first part, the general management of the infant is discussed in detail. Proper method of nursing a babe during the first nine months, the health of the mother during lactation, general hygiene of the nursery and dentation and its disorders are some of the broad headings under which the author discusses the subject. The second part treats about the modern methods of artificial feeding. The technique of artificial feeding is explained fully and the relative value of cow's and goats' milk, condensed milk, dried milk and malted foods to the breast milk is given.

Chapter VII deals with the stools of the bottle-fed baby and the significance of the various changes in the stools as an indication for changing the milk formula is clearly brought out.

In Chapter VIII Nutritional disorders are described with their proper treatment. The care of the sick child is dealt with in a practical manner and sound advice is given.

There is a long chapter on common ailments, medical and surgical, and their treatment. The various diseases and affections are alphabetically arranged giving the main symptoms and treatment under each heading. The treatments suggested are simple and effective and could easily be carried out by any intelligent mother or nurse. Many of the common household remedies and management of emergencies are also given.

Useful nursing recipes are included in the last chapter. The book is up to date, and will be found useful by all those interested in child welfare problem:—*V. C. S.*

Practical massage and corrective excercises with applied Anatomy.—By Hartwig Nissen. Revised and enlarged by Harry Nissen 5th edition 1929 P. p. 271 Illustrated with 72 original halftone and line engravings. Philadelphia. F. A. Davis & Co. Price $. 2·50/net.

Massage is one of the oldest of therapeutic agents in medicine.

This book deals about the value of massage and corrective exercises as a useful adjunct to medical treatment in a practical manner. The author explains that massage is a scientific method, based on sound physiological and anatomical considerations.

The various methods or types of massages are very clearly described.

The book is divided into three sections, and in the first part, a clear account of the manipulations and their effects on the systems are clearly set forth.

Part II gives the applied anatomy in relation to massage, and some exercises are based on the anatomical and pathological considerations of the diseases like paralysis, stiffness of joints and tendons.

Part III contains the treatment of diseases and injuries including a discussion on flat foot.

The book will be found very useful by practitioners and nurses who are interested in this speciality.—*V. C. S.*

Devils, Drugs and Doctors (The story of the Science of healing from Medicine Man to Doctor).—By Howard. W. Haggard, M. D. 1929. P. p. 405, (Illustrated) Price Sh. 21/net. London: William Heinemann (medical books) Ltd.

The author has described in this book vividly and in a very plain language the growth of medical science as it is today from the earliest of times. A good account of the medical practice among savages, surgical operations performed by the Egyptians, and various other treatments and remedies as prevalent in ancient times are given with much authenticity.

The book is divided into six parts.

The opening chapters deal with the growth of obstetrics and gynaecology. In this chapter the author states that the care given to the 'child-bearing woman is an index of civilization.' A good review of the work done by Ludwig Ignaz Philipp Sommelweis towards the eradication of puerperal sepsis is given.

The following part begins with the story of anaesthesia its discovery and first application by James Y. Simpson at child birth, and closes with a concise description of the attempts at painless child birth, and the effect of magnesium sulphate as an effective narcosis.

The third part gives a good idea of the progress of surgery which includes a good discussion on the work done by Pare Vesalius, Florence Nightingale, Lister and Pasteuer.

Passing of Plague, Pestilence and the healing art form the subjects for the subsequent two parts.

The last part on medicine through ages gives a very interesting reading. The book contains over one hundred and fifty illustrations from quaint old teachings and engravings which make it particularly interesting.

The book is very entertaining and will be found most useful to all those interested in the dark beginnings of medical profesion —*V.C.S.*

A Synopsis of Surgery (illustrated):—By Ernest W. Hey Groves M. S., M. D., B. Sc., (Lond) F. R. C. S. (Eng.) 1930. Ninth Edition P. p. 676. Price Sh. 7/6 net Bristol:—John Wright and Sons Ltd.

The ninth revised edition of this well known book maintains the high standard set by the previous editions. Many advances made in surgery since the last edition have been included in

this present edition. The whole of the text has been carefully revised and brought up to date.

The chapters on shock, spinal anaesthesia, glossitis, fractures of the neck of the femur, tumours of the bladder and testis, and infections of the kidney have been rewritten.

Modern use of radium in the treatment of malignant diseases has been included. The injection method of treatment of varicose veins, tuberculosis of the bladder, and the Winnett Orr treatment of compound fractures and osteomyelitis are briefly outlined.

It is one of the best books of its kind and provides in a compact and well arranged form an outline of surgery as it is today which will be helpful to all students of surgery.

The format of this book is exceptionally good and the work undoubtedly deserves continued popularity.—*V. C. S.*

Varicose Veins Haemorrhoids and varicocele, their treatment by injection.—By Ronald Thornhill, M. B., Ch. B.

1930, Second edition P. p. xiv+112. Price Sh. 5 net London: Bailliere, Tindall and Cox.

The first edition of this book appeared in 1928 where the author has described his method of injection treatment of varicose veins as the "Empty vein method". Since the publication of this book, much work has been done on this subject and the injection method of treatment of haemorrhoids varicocele and hydrocele has been found to be suitable and is becoming very popular among the profession.

The author puts forth in this second edition clearly, what seems to be the best procedure in each case. It is claimed that this method of treatment has got several advantages over operative methods the foremost being that it is safer, ambulatory, causes little or no pain, does not require a general anæsthetic, cure is positive.

The chapter on different methods, is descriptive. The author prefers the use of Quininelesa by hydrochloride solution to carbolic, as it gives no post operative pain, and at the same time relieves any opete or itching which was present before the injection due to its analgesstic action. The technique of the injection after treatment is lucidly written. In part III of the book the injection treatment of varicocele and hydrocele are dealt with in a practical manner.

A notable feature of the edition is the inclusion of Don'ts', which every reader will greatly appreciate.

It is a handy little book full of practical material on this subject, and will be found valuable by surgeons and physicians as well.—*V. C. S.*

A Synopsis of Physiology.—By A. Rendle Short, M. D. F. R. C. S. and C. I. Ham, M. B., M. R. C. S., L. R. C. P., 1927, illustrated 258 pages. Price 10 s. 6 (John Wright & sons Ltd., Bristol.)

This book is another of the popular series of synopses of surgery, Medicine, and Midwifery issued by the same publishers. Its object is to give a summary of modern human physiology in a small compass and thus enable the student to extend his knowledge, or revise it, with a minimum expenditure of time and trouble. The authors are to be congratulated on the success of their book. We are sure that this book will be very useful to all those to whom it is intended—*U. K. R.*

Books Received.

The following books have been received and the courtesy of the publishers in sending them is acknowledged. Reviews will be published from time to time:—[Ed. A].

Diathermy in the treatment of Genito—Urinary Diseases.—By B. C. Corlues and V. J. O'Connor, Published by Bruce Publishing Co. 2429, University Avenue St. Paul and India poli s.

Babys' Health day by day.—Published by the Professional Press, 2 Wabash Avenue, Chicago.

Truth about Venereal Disease.—By Marie Stopes. Published by Messrs. G. P. Putnams Sons Ltd., 24, Bedford St. Strand, London W. C, 2 Price 3/6.

Hickman's centenary Exhibition, the Wellcome Historical Medical Museum.—Published by the Wellcome Foundation Ltd. 54, Whigmore St. London W. 1.

Medicinal Drugs of India.—By Kaviraj Balwant Singh Mohan. Price Rs. 2, foreign $ 3.

Aids to Tropical Diseases.—By C. Ramachandran. Published, by Messrs. B. G. Paul & Co. Madras. Price Re. 1.

Allergic Diseases.—By Ray M. Balyeat M. A. M, D., F. A. C.S. Published by Messrs Davis & Co., Philadelphia, Price $. 5.

Text-Book of Hygiene.—By J. R. Currie M. A. M. D. Published by Messrs. E. & S. Livingstone 16 and 17, Teviot Place, Edinburg. Ccopies can be had of Messrs Butterworth & Co., Calcutta Price Rs. 20-4.

Hand-book of Therapeutics—By Daid Campbell M. C. M. E. B. Sc. M.D. Published by Messrs. E. &. S. Livingstone, Edinburgh. Copies can be had of Messrs. Butterworth & Co, Calcutta Price Rs. 9/6.

The Physiological Principles of Hydrology—By R. G. Gorden M. D. Dsc. F. R. C. P. and F. G. Thompson, M.A. M.D. F. R. C. P., Published by Jonathan Cape, 30 Bedford Sq; London. Can be had of Messrs. Butterworth & Co. Calcutta. Price Rs. 3/12/

Modern Treatment of Diseases of the Throat, Nose & Ear—By H. Lawson Whale M. D. F. R. C. S. Published by Jonathan Cape, 30, Bedford Sq. London. Can be had of Messrs. Butterworth & Co. Calcutta. Price Rs. 3-12.

Liver in the Treatment of Pernicious Anaemia.—By S. C. Dyke D. M. (Oxon) M. R. C. P. Published by Jonathan Cape, 30, Bedford Sq. London. Can be had of Messrs. Butterworth & Co., Calcutta. Price Rs. 3-12.

Surgical Treatment of Pulmonary Tuberculosis.—By Bernard Hudson M. D. M. R. C. P. Published by Jonathan Cape, 30 Bedford Sq. London. Can be had of Messrs. Butterworth & Co., Calcutta Price Rs. 3-12.

A system of clinical medicine.—By Thomas Dixen Saville M. D. (Lon). Published by Mssers. Edward Arnold & Co. 41, 43, Maddox St. London, Price 28/-

Tuberculosis and its early diagnosis and Treatment—By J. Mukerji M. B., Ranchi.

NOTICE

THE INDIAN SCIENCE CONGRESS, 1931.

The Eighteenth Annual Meeting of the Indian Science Congress will be held at Nagpur from the 2nd to the 8th January 1931. Dr. U. N. Brahmachari, M. A., M. D., Ph. D., F. A. S. B., has been appointed President of the Section of Medical & Veterinary Research.

In view of the fact that a very large number of papers have been received in past years making it impossible to read all of them in the time available, and necessitating the curtailment of discussion on others, the Sectional Committees have been advised to make a careful selection of papers accepted. Authors are requested to take note of the following points:—

(i) Papers on Medical and Veterinary Research *must* be received by the Sectional President, Dr. U. N. Brahmachari, Asiatic Society of Bengal, 1, Park, St. Calcutta not latter than the 15th October, 1930 which is the last date for accepting papers according to the rules.

(ii) Only original papers, that is to say, papers which have not already been read or published in the same or similar form, will be accepted.

(iii) Not more than two papers will be accepted from any one contributor.

(iv) Papers must not take more than 20 minutes to be read. It takes 3 minutes to read a page of foolscap intelligibly, apart from diagrams, slides, etc. Papers should not, therefore, exceed 7 pages of typed foolscap.

Medical Men's Success in their Career.

"Lancet" endorses the following outlook on the part of the Editors of the "Antiseptic" as practical.

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A Modern young Archer. O.P.S.—A modern young Archer, a young member of London's Sun-Bathing Society participates in a little Archery practice in the grounds of Society at Norwood. LB/D. KEYSTONE.
Sanitation in Ancient and modern India—A Comparative Study
Constipation, by Rao Bahadur Dr. C. B. Rama Rao, B.A., M.D.
Diet in Disease, by G. Narasimaswami Aiyangar
Why we Eat
The Beautiful Cocoanut Palm Benefactor of mankind, by Henry Wharton.
Regulations Governing the Sanitation of Public Eating Places.
To Induce Sleep without Drugs.
Healthiest Vegetables.
Dangerous Baby Thumbs.
Stimulation of the Skin, by A. Harley Street Specialist.
Children's Clothes.
Pleasure in exercise.
A Brief Recipe for Longevity.
First-Aid in the Home, by a Trained Nurse.
Reaction of the Human Organism to Coffee Drinking.
Eat more Fish.
Six Best Doctors.
Summer Drinks.

Short articles of about 2000 words from you are also welcome.

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