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The Antiseptic

A Monthly Medical Journal

EDITED BY
THE HON'BLE U. RAMA RAU
AND
U. KRISHNA RAU, M.B., B.S.

CONTENTS

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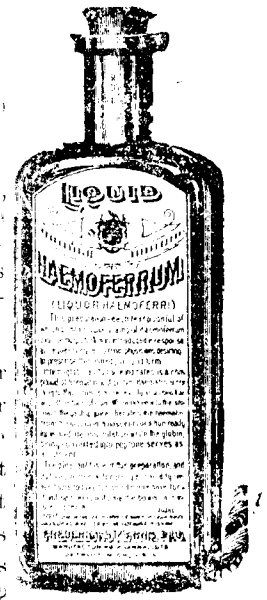

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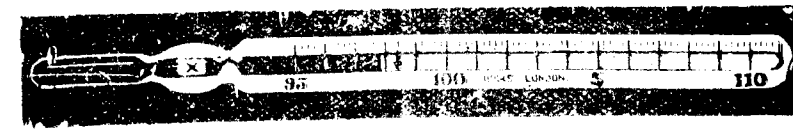

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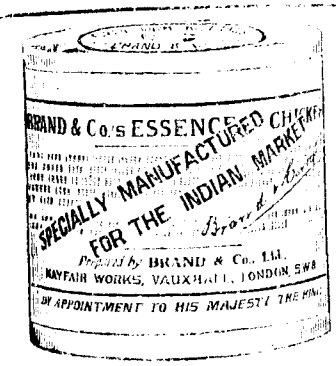

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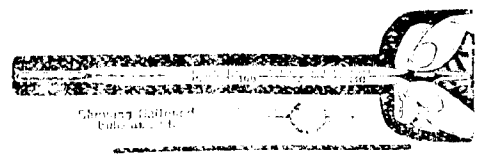

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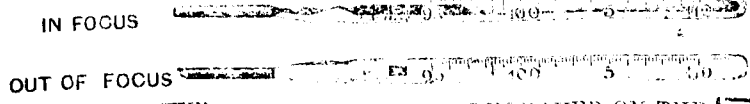

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ORIGINAL ARTICLES.

* ENTERIC FEVER.

BY

RAMNIK H. DESAI, L.C.P.S. (BOMBAY), NADIAD.

It is the name given to a group of diseases *ie.*, 'Typhoid fever, (2) Para typhoid A and (3) Para typhoid B.

TYPHOID FEVER

Definition:—It is an infectious bacillary disease caused by the introduction into the human body of a specific pathogenic organism, the so-called bacillus of Eberth. Generally small gut being the local manifestation.

It produces hyperplasia and ulceration of the intestinal lymph follicles, swelling of the mesenteric glands and spleen, and parenchymatous changes in other organs.

Etiology:—Imperfect sewage and contaminated water-supply are the two special conditions favouring the distribution of the bacilli. This disease is spread from an infected person by *finger, food and flies*.

Contaminated milk and ice-cream etc., are the prime causes of infection in India.

Season:—Common in autumn months.

Sex:—Equally common in both.

Age:—Common in youth and early adult life between the ages of fifteen and twenty-five. The disease is not very infrequent in childhood. Infants are rarely attacked.

Immunity:—Not all exposed to the infection take the disease. One attack usually protects the person.

* Specially contributed to "The Antiseptic."

Bacillus typhosus:—Is constantly present. It is a short thick flagellated motile bacillus with rounded ends. It is gram negative.

The bacillus is distributed throughout the body. It is found in the circulating blood, intestines, spleen, urine, gall-bladder, and suppurated parts.

Modes of conveyance:—(1) By contagion, (2) through water, (3) infection of food, (4) flies, (5) contamination of soil.

Typhoid carriers:—The bacilli may persist for years in the bile passages, intestines and gall bladder of persons in good health. Positive findings in carriers does not mean that they are pathogenic. They are pathogenic only when guinea pigs inoculation test is found positive. (M.A. 1927.)

Morbid Anatomy:—A catarrhal condition exists in the large and small intestines. I. There is hyperplasia which involves the glands; the follicles are swollen, greyish white, and the patches may present 3 to 5 mm.

II. *Necrosis* and sloughing follows if resolution does not take place.

III. *Ulceration* follows. They have swollen edges, soft and congested and often undermined.

IV *Healing stage*:—Healing of ulcers takes place by granulations covering the ulcers.

Perforation occurs in some cases. Cæcum is the seat of perforation. It is rare in children. Death from hæmorrhage occurs in some cases.

Mesenteric glands are hyperæmic, necrosis may come. Suppuration occurs in rare cases.

Spleen is invariably enlarged; it is soft and rupture may happen in some cases.

Liver is swollen, and there are signs of parenchymatous changes.

Kidneys:—Cloudy swelling with granular degeneration of the cells of the convoluted tubules present.

Respiratory organs.—Ulceration of the larynx. Oedema of glottis found. Lobar pneumonia, hypostatic congestion, gangrene, pleurisy of lungs found.

Heart:—Endo-carditis, pericarditis, myocarditis present in some cases.

Blood vessels:—Endarteritis, arteritis of peripheral vessels with thrombi present. Thrombosis of femoral vein of the left side much frequent.

Nervous system:—Meningitis is rare; the condition is serous, sero-fibrinous, or purulent. Optic neuritis found. Parenchymatous changes met with in the peripheral nerves. Voluntary muscles show changes described by Zenker.

Symptoms:—Incubation period lasts from 8 to 14 days, during which there are feelings of lassitude, and inaptitude for work. The onset is gradual with headache, anorexia, diarrhoea epistaxis, abdominal pain, constipation, pain in the right iliac fossa; the patient takes to his bed.

During the first week there is gradual steady rise of temperature. The evening rise is higher by 1 or 1½° than the morning. The pulse is proportionatey lower than the temperature; it is full in volume, of low tension, and often dicrotic. Tongue is coated and white, abdomen is slightly distended and tender. There may be constipation or two or three loose motions. There may be mental confusion at night. At the end of the first week, the spleen is enlarged and rash appears in the form of rose coloured spots on the skin of the abdomen. Cough and bronchitic symptoms are not uncommon at the onset.

2nd week:—The symptoms become aggravated; fever remains high, pulse is rapid, and loses its dicrotic character. There is no longer headache, but mental torpor and dullness. Lips are dry, and tongue becomes dry in several cases. Diarrhoea, tympanitis and tenderness are aggravated. Hæmorrhage and perforation may occur during this week.

3rd week:—Pulse ranges from 110 to 130. There are marked remissions in the morning temperature. There is gradual decline in the fever. Loss of flesh more noticed and pronounced weakness. Unfavourable symptoms of this are pulmonary complications, feebleness of heart, pronounced delirium, with muscular tremor; special dangers are perforation and hæmorrhage.

With the *fourth week* convalescence begins. All the symptoms subside. In severe cases the fourth and the fifth week may show an aggravated picture of the third. The patient feels weaker, pulse becomes more rapid and feeble, the tongue dry and abdomen distended. He is found in a condition of profound stupor with muttering delirium and subsultus tendinum and passes the fæces and urine involuntarily.

Special features and symptoms :—The onset is generally insidicus. The patient cannot definitely fix the time when he began to feel ill. Sometimes it is sudden. The disease may start with pronounced, sometimes sudden, nervous manifestations. It may start with pulmonary symptoms, with intense gastro intestinal symptoms, with symptoms of acute nephritis, and with ambulatory forms.

Facial aspect :- Cheeks are flushed and the eyes are bright. Gradually the patient becomes listless, and when the disease is more established he has a dull and heavy look.

Fever :—There is stair case rise of temperature in the first week; it remains constant for the second week. There is fall in the third week by lysis, hyperpyrexia is rare. Para-typhoid variations present. The temperature may rise after 3 or 4 days, it lasts for about 3 days. It may be due to errors in diet, constipation, or nervousnesss.

In children, in very nervous patients and in cases of anæmia, the evening temperature may keep up for weeks. It is to be disregarded.

Hypothermia :—Low temperatures in typhoid fevers are common.

Fever of the relapse :—This is a repetition of original fever. Streptococcal infection on the 15th, or 20th day found in the blood may keep up the temperature. This is not actual relapse. Secondary rise may be due to i. Kala Azar, ii. Secondary streptococcal injection, iii. B. coli bacteræmia, and iv Helminthisis due to ascaris infection.

Skin :—Rash consists of hyperæmic spots, which appear from the seventh to the tenth day. They are slightly raised flattened papules of a rose red colour. They come out in successive crops. Occasionally the skin peels off in large flakes. Herpes is rare in typhoid. Areas of superficial gangrene may follow the prolonged use of an ice bag.

Sweats :—At the height of the fever the skin is generally dry. Oedema of the skin occurs in (i) thrombosis of femoral vein, (ii) in connection with nephritis, (iii) and in association with anæmia and cachexia. Hair falls out after the attack. Nutrition of the nails suffers, and transverse ridges appear. A peculiar odour is exhaled from the skin.

Bed sores are common in protracted cases.

Circulatory system :—The blood Hæmoglobin percentage is reduced.

There is leucopenia throughout the course. Large mononuclears are relatively increased and the pulse is increased in rapidity but not in proportion to the height of the fever. This is a good diagnostic sign in early cases. Bradycardia or tachycardia may occur in the convalescent period. Blood-pressure is usually from 115 to 125 mm. Hg. in systole. There is gradual fall during the course to 100-110 mm. Hg.

Heart sounds :—In some cases the first sound becomes feeble, and there may be a soft systolic murmur at the apex.

Myocarditis is common, pericarditis, and endocarditis are rare complications. Arthritis with thrombus formation occur. Thrombosis of vein may also occur.

Digestive system :—There is loss of appetite, great thirst, furred moist tongue. In some cases tongue becomes dry and sordis collect around the teeth. Secretion of saliva is often diminished.

Parotitis occur in some cases.

Intestinal symptoms :— Diarrhœa is common, the stools are abundant, thin, greyish white, granular of the consistency and appearance of pea soup. The reaction is alkaline.

Hæmorrhage is a serious complication. Meteorism is a frequent symptom. Gurgling in the right iliac fossa exists in many cases. Abdominal pain and tenderness are present in many cases. Perforation is a serious occurrence most common at the height of the disease. It is indicated by the sudden sharp pain of increasing severity. There is tenderness on percussion usually in the hypogastric and right iliac fossa. There is muscle rigidity. The temperature may rise at first, and then drop sudddenly. Peritonitis follows. Perforation is always invariably fatal, unless surgical interference is attempted.

Spleen is usually enlarged :—*Liver.*—Cholecystitis and jaundice occur in some cases.

Respiratory system :—Epistaxis is an early symptom, and it precedes typhoid fever. Bronchitis is one of the most frequent initial symptoms. Lobar Pneunonia, and lobular Pneumonia are frequent in occurrence. Pleurisy is rare. Hypostatic congestion of lungs and œdema due to enfeebled circulation occur at the last stages only.

Nervous system:—The disease may start with severe headache. There may be photophobia, marked twitchings of muscles, rigidity and even convulsions. In such cases diagnosis of meningitis is made. Delirium usually present in severe cases, less frequent under the rigid plan of Hydrotherapy Convulsions in typhoid fever are rare. Neuritis may be local or a wide spread affection. Multiple neuritis comes on in the convalescent period.

Hemiplegia and aphasia are rare in typhoid fever.

Special senses:—Eye conjunctivitis simple or phlectenular may occur. Double optic neuritis is rare.

Ear.—Otitis media is much frequent.

Renal system:—Polyuria is present during the convalescent period.

Diazo-reaction of Erlich is present in many cases.

Renal complications are, albuminuria nephritis, pyuria and pyelitis. Other rare complications are orchitis, mastitis, arthritis, periostitis, and typhoid spine.

Post typhoid septicæmia, and pyemia may occur in some cases. The disease is sometimes associated with malaria and tuberculosis.

Diagnosis:—It is the most common of all continued fevers. It starts with epistaxis, then there is the steadiness of fever. The pulse is dicrotic and comparatively slow in proportion to the height of the fever. The enlarged spleen also helps the diagnosis. There is absence of leucocytosis.

Typhoid bacilli may be isolated from the blood, urine, fæces, and rash spots Widal's reaction is positive after the first week. It depends upon the agglutination test. B. Typhosus is positive. in 1 : 80 B. Para Typhosus A. 1 : 20. B. Para Typhosus B. 1 : 1000.

Marris Atropine test:—Three tablets of 1/100 gr. injected an hour after meals. Patient is kept in recumbent position. After 25 minutes the pulse is recorded minute by minute for 45 minutes from the time of injection. If the pulse is "released" by only 10 beats or thereabouts it is very suggestive of typhoid infection. The test is positive in 83 % of cases.

The disease is to be diagnosed from:—i. Seven day fever when the pulse is slow but the nature of the fever is uncertain.

ii. *Malaria and Kala-Azar*. In Kala Azar there is a progressive leucopenia, progressive diminution of polymorpho-nuclear count, a fall in alkalinity of blood and rise of globulin in the serum.

iii. *Bacillary Dysentery*:—Para-typhoid B causes ulcerations in the upper part of the colon, whereas Bacillary dysentery tends more to affect the lower part of the colon. In typhoid there is tenderness in the cæcal region, more than over the sigmoid colon, whilst there is periumbilical tenderness and tenesmus in dysentery.

IV. Appendicitis:—Rigidity, leucocytosis, and more local signs in the cæcal region are present. Cerebro-spinal meningitis, pulse slow, Kernig's sign and delirium; rigidity of neck is present in both diseases. But in typhoid group there is meningism, serous meningitis; when lumbar puncture shows serous sterile fluid on culture. The exudate is due to irritation of meninges by typhoid toxins.

Purulent Meningitis:—Milky fluid found on lumbar puncture, culture shows the typhoid bacilli.

Influenza and Broncho-Pneumonia, first week:—Bronchitis due to spraying of typhoid bacilli.

Septicæmias:—*(i)* Bacillus coli infection, where the temperature chart shows much up and down variations frequently associated with rigors, and discomfort in micturition. Pus cells, acid urine, quick pulse and renal tenderness.

Strepto-coccal staphylococcal, and pneumococcal infection only proved after blood cultural examination.

Syphilis:—May simulate first week of typhoid. Rash appears in syphilitic infection too.

Diagnosis of early tuberculosis is very difficult in early stages of typhoid. Rash of prickly heat is common in the tropics which may simulate Typhoid rash.

Prognosis:—Death rate ranges from 5 to 20 %. Unfavourable symptoms are high fever, toxic symptoms with delirium meteorism and haemorrhage. Perforation renders the outlook hopeless. Fat subjects stand typhoid fever badly, mortality in women is greater than in men. Early involvement of the nervous system is a bad indication. Sudden death in typhoid is due to myocarditis, and vaso-motor paralysis. Inflammation of heart muscle is recognised by the relative bradycardia of

typhoid fever, being replaced by tachycardia, irregular and unequal pulse, dilatation of the heart and appearance of murmurs. B. M. J. 16-4-27.

Paratyphoid fever:—This infection is similar to Bacillus Typhosus. There are two varieties, Paratyphoid A, and Paratyphoid B. Both are recognised by cultural and serological tests. The disease is much milder in form and of short duration and less fatal in prognosis. The treatment is similar to the typhoid fever.

(To be continued)

* CRIME AND MENTAL DEFICIENCY

BY

KIRPAL SINGH, L.S.M.F. (PUNJAB) GUJRANWALA.

A criminal as is generally defined is an anti-social offender but this of course excludes the political one who is only a victim of a despotic Government and a precursor of a progressive movement.

It is admitted on all hands that crime is generally on the increase and the recent description of crime in the United States of America gives ample testimony to it. The offenders are caught, prosecuted and imprisoned. The purpose of prosecuting the offenders is to prevent crime but how far this purpose is being served is apparent. This no doubt is partially due to unemployment, specially when the criminal is a fellow belonging to a family with no bread winner. He is not a professional criminal but was forced by circumstances. He does not intend to be a criminal, he does not become one by choice but superior forces make him commit crime

The other cause is mental deficiency.

This may be a sociological problem or a medical problem. It becomes a medical problem when insanity is the cause.

Killing is a natural instinct among savages and is the hereditary effect of the cave man. The offence of killing is the result of an impulse, while stealing is done for its own sake and is the effect of no mental conflict because it may give no pleasure but remorse.

In the case of a murderer, the man had in an impulse yielded and committed the crime. It is not the impulse that is important but the fact that the individual gave way to impulse and committed an anti-social act. Character determines reactions.

* Specially contributed to "The Antiseptic."

Hence *a man of poor moral* tone, with poor self-control, becomes a dangerous criminal. Inhibition is the power to resist impulse. Self-control is the power to forego immediate pleasure for subsequent greater benefits and is more a question of will than reasoning.

It is claimed that every one gets an impulse and that if every sane individual were to act on the numerous impulses starting in him he too might be guilty of a criminal act.

Suddenness of impulses in insane and in non-subjection, constitute a great proof that such impulses are the offsprings of a diseased mind. Since a person has been known to check impulse that resulted in crime it is supposed that he must check the impulse that resulted in crime. It may be considered unfortunate but surely cannot hold him responsible and his crime may be a solitary event in his life. The hanging of such a criminal is injustice. He is a criminal in the same sense as a child or animal for a noxious act. To bring all the formalities of law to bear against a mad man and to condemn him to severe punishment is unreasonable in a civilised society. It might be said that in this way all criminals might be defended by medical men under pretence of morbid impulses and insanity.

To define these requires a thorough examination of the individual. Study the family history, environments, past history, temperament, moral life, sex-life, education, work, disobedience, lying, staying out all nights, running away from home, alcohol, masturbation, intoxicating drugs, physical inferiority, bad vision, squint, bad home life, poor parental control, cruelty to animals, lack of parental affection, emotional unstability, and bad social environments are some of the points that must be looked into. Only by very careful examination can the asocial weakling be distinguished from an antisocial scoundrel.

As to the treatment of such physical inferiors, jails can be of little avail. How few are the cases that have come out of jails reformed. This is because fear does little in lessening crime. Crime has existed from time immemorial and will last for ever.

The most useful restraints to crime are furnished by conscience, religion and law.

The criminal needs descriptive but not complete suppression. Physical therapy is needed for the criminal. It may consist of

physical, mental, educational and disciplinary training. Sex offences must be approached in a scientific way not by merely thrusting one's own views. Repression does not dissipate the idea but socially approved outlets are very necessary.

Another difficulty that besets the question is one that should be seriously considered. The layman argues that it is all very well for medical men and sentimentalists to excuse them on the plea of insanity but what is society to do in order to protect itself against crimes of the insane. As medical men we are bound to defend the rights of the insane but as members of society we must acknowledge that the latter has full rights and that it should enjoy immunity from crime due to diseased mind. A remedy must be sought for the protection of the society and this remedy is in the establishment of hospitals for such criminals.

In closing I would say that all criminals should receive a proper mental examination. In this way many individuals might be spared from a life of crime and incorrigible types would not be let loose on society but kept in institutions where they are better protected.

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*RESEARCH IN AYURVED WITH A VIEW TO DEVELOP THE FUTURE MEDICINE OF INDIA

BY

ASHUTOSH ROY, L. M. S., HAZARIBAGH.

Indian politicians from different platforms have from time to time pressed the claims of Ayurvedic and Unani forms of treatment and several Provincial Governments have either opened Ayurvedic or Unani medical institutions or given State-aid to private institutions existing within their respective areas. Whether this act of Government is right or wrong, whether they yielded to the clamours of Indian politicians or as practical men, they wanted to develop Ayurved and Unani systems which still cater to the medical needs of 90% of the population living mostly in rural areas, and thereby improve the training of future vaids and hakims, knowing full well that to provide modern medical aid to the teeming millions would lead the Government to bankruptcy, it is useless to discuss here. As practical men we should look facts square and

*Specially contributed for "The Antiseptic."

fair in the face, for we can no longer ignore Ayurved and Unani systems, however obsolete and unscientific from our point of view these ancient forms of treatment may be.

We thus see that rightly or wrongly Government is encouraging, side by side, three different forms of treatment, modern western and the two ancient eastern Ayurved and Unani systems. Our first point is to consider what will be the result of such promiscuous State-aid. A very thoughful editorial in the Indian Medical Gazette for November 1924, dealing with the "Future Medicine of India" had already anticipated what will follow. We cannot do better than quote what is stated there: "A policy of drift, the favourite policy with every politician in a difficulty, will lead us nowhere. It will end in the country being given over to the professors of a dozen different systems warring with each other, until medicine in India finally reverts to a domestic medication with disastrous results."

No true lover of India will ever like such a state of things to happen. This domestic quarrel between the different sects in the profession will not only dissipate energy, but retard progress.

What is to be done under these circumstances? Here also I must quote from the same editorial:—"The alternative is to study the conditions present and the systems in vogue, to take from each what is best in it, to build up gradually, little by little, line upon line, a true universal (yet) Indian system of medicine with its own medical literature, its own indigenous pharmacopia, its own teachers, moulded and adapted to the real needs of India and its people."

These are profound words of wisdom. Here is no dogmatism. On the other hand, it is the thoughtful, deliberate opinion of a profound scholar and thinker, a real well-wisher of India. It will appeal to all, to the people generally, to the scientific medical advisers of Government, who want to serve India in the truest sense of the term.

Every medical man, Hindu or Muhammadan, Indian or European, practising in India, Allopath, vaid or hakim, should put his shoulders to the wheel and extricate medical India from the chaos and confusion to which it will insiduously drift without proper guidance. And for this purpose research of Ayurved and Unani systems of medicine on modern lines will be necessary and the sooner the work is started on an organised

plan, the better. For here should be but "one system of medicine" as stated by the Madras Ayurvedic Enquiry Committee, to which the different sects of medicine in India should contribute their quota.

On what form the future "universal yet Indian system of medicine" will be based? Again we must quote from the same editorial—"It must be based on present-day western but really international medicine, as no other alternative is possible, but it should incorporate all that is valuable in the indigenous system".

Nay I should go a step further and state that not only it should contain what is best in the ancient systems, but should contain modern western medicine modified to suit the special need of tropical India.

That the future medicine of India should be in modern western form cannot be denied. In these days of free intercommunication and inter-change of thought between the various nations of the world, India cannot remain isolated in water-tight compartments, aloof from the rest of the civilised world.

Who will do this great work of building up the future international, yet Indian, system of medicine? Not the orthodox dogmatic Vaid or Hakim or doctor, but those medical men of the different sects, Indian as well as Europeans in India, who are free from dogma and prejudice, who are above vested interests, who are above the spirit of trade unionism, the true scientific spirits, the real lovers of India.

As Col. Megaw remarked in a former editorial of the Indian Medical Gazette, we belonging to the modern western medical school are "great robbers", we cull medical truths irrespective of race and clime. We should therefore incorporate what truths we find in those ancient books of medical wisdom to build the future medicine of India. Charak also had spoken in the same strain. Medical truths should be learnt from others, even if unfriendly towards us without any humiliation whatsoever (Charak Bimansthan). We therefore look to progressive vaids and hakims to help us in this great work of reconstruction.

THE LINES OF RESEARCH.

We therefore come to discuss the different lines of research in those acient systems of medicine which may be taken up profitably without any further delay.

As early as 1915 the Hon'ble Mr. Cardew had pointed out in the Madras Legislative Council that "two lines in which research will be useful are the critical study of Ayurvedic books the re-investigation of drugs on modern lines."

Recently the Punjab Government have issued a circular letter to the members of the local Councils to allot funds for research work on indigenous diet and drugs and have appointed a committee, consisting of the Inspector-General of Civil Hospitals, the Punjab and the Principal Medical College, Lahore, to draw up a scheme for the purpose.

There are thus three main lines of research which I shall discuss one after another.

I. RESEARCH ON INDIGENOUS DRUGS.

Regarding metallic and mineral drugs I think the well known Bengali Chemist Panchanan Neogi, P.R.S., was perhaps the first to analyse these preparations of Ayurved.

Recently this work has been taken up systematically by the Ayurvedic department of the Benares Hindu University.

Research work on the vegetable drugs was perhaps first performed by Dymcock, Warden and Hooper and recorded in their monumental work—the "Pharmacographica Indica". Recently this work is taken up in the Calcutta School of Tropical medicine. It is not enough for a single worker to explore this vast field. We should like that every Provincial Government should take up this line of research. There should be a central committee to divide the research work of different groups of drugs to different provincial workers. The work should not be done haphazard but systematized. Let each member of a group *e.g.* emetic, purgative, diuretic, diaphoretic, be tackled one after another and the points of difference in action between the different drugs of the same group be brought out quite clearly.

To work this department systematically a critical study of Ayurvedic and Unani books is necessary.

Further as pointed out by Mahamahopadhyaya Gananath Sen, B.A., L.M.S. of Calcutta and recently emphasized by the Ceylon Ayurvedic Congress of last year, the "beauty of Ayurved drugs lies in specific combinations." This should be critically studied by research workers on the subject.

The clinical study of some Ayurvedic drugs and combinations on modern lines was first done by the late Dr. Hem

Chandra Sen, M.D, of the Campbell Medical School of Calcutta.

II. RESEARCH ON INDIGENOUS DIET.

This is a very fertile field of research as suggested by the present writer in the Indian Medical Gazette, February 1923, and recently by the Punjab Government circular letter. The editorial I have often quoted said that "its (Ayurvedic) dietaries are based on Indian dietary and meet Indian requirements as to caste, creed and constitution". The late Sir Pardy Lukis at home before an audience of British medical men and women recruited for the Indian service, said on a memorable occasion as follows :—

"Study Indian prejudices regarding diet. Don't fall into the grievous error of regarding these as nonsensical" (British Medical Journal October 1913.)

The empirical knowledge regarding diet and drugs as found in Ayurved and Unani systems of medicine, if critically studied, will much help the research scholar on the subject. A study of the former will enable doctors to prescribe suitable diets to Indian patients.

Indian vegetables and fruits had been partly studied regarding the proximate principles they contain from the point of view of diabetes. They also contain very valuable salts and vitamins, a field almost unexplored.

III. CRITICAL STUDY OF INDIGENOUS BOOKS OF MEDICINE.

This is no less important. A good deal of misunderstanding regarding the ancient system will disappear if these are critically studied and properly translated in modern form for the benefit of those who do not understand the language.

There is no doubt that the proper interpretation of many an obscure passage in those books can be done by bearing upon them the light of modern western medical thought.

Thus the "Tridosh" of Ayurved is no longer considered as the three "humours" just as the Greeko-Unani humours are now regarded not as "humours" but as horomones(vide Galen no Natural Faculties" by Dr. Brock, M. D.) A critical study of Ayurved will reveal to the unbiassed scholar many an idea unknown or recently discovered in modern west.

Thus the cutting off of salt in dropsy is only a recent acquisition of the west, though it is known to every vaid of the country for ages.

In the chapter on venesection, examples are given of a distinct relation between proximal organs and distal circulation in the extremeties. If these are found correct by modern experiment, we will be on the threshold of a great anatomical discovery.

Modern western medicine has developed "public health" very fully, which depend on the "seed" (the bacteria and bacilli) of disease, due to peculiar environments (aggregation of large population in industrial, manufacturing and mining towns and big trade centres). Ayurved had better studied" individual health" which depends on the "soil" (human body) and its environments. It is only very recently since the recent advances in Bio-chemistry and Endocrinology that Sir Charles Newman bas taken up this matter in hand in England.

Take again the treatment of malaria by quinine, the Prince of bitters. Lt. Col. Acton has shown that the blood P. H. is turned in malaria towards the acid side. If it is reconverted towards the alkaline side, much less quinine is necessary, for it then acts with advantage in much less dose and quininism is avoided.

When the P. H. is turned towards the acid side, clinically we find that the secretions and excretions are locked and when they are reconverted towards the alkaline side, the secretions and excretions are set free. Ayurved says that this is the time to give specific bitters.

The idea that a diet after administration produces immediate specific and remote effects like drugs,is not unknown in Ayurved. You have all heard of incompatibility of drugs. Have you heard of incompatibility of diets and their bad effects which you will find in Ayurved?

Have you heard of the ill-effects of persistent neglect to attend to the calls of nature and how they affect the very delicate nervous mechanism? You will find it in Ayurved.

Time does not permit me to cite further instances like those mentioned above, some of which are unknown in modern western medicine. These can be learnt by a critical study of Ayurved.

We may therefore conclude with the editorial so often quoted that a critical study of Ayurvedic and Unani books will reveal to the assiduous student many new ideas, many new

drugs and their combinations, special dietary for Indians and many "new and specific principles of treatment ".

The Hon'ble Mr. Cardew had suggested that a critical study of ancient medical books should be left to private enterprise. A decade has passed since then and very little work has been done in this direction in a haphazard way as it is left to chance. We cannot neglect it any more.

Col. Megaw in a recent editorial in the Indian Medical Gazette (December 1925) stated as follows: "We are willing to study these old books and if a claim were made for funds for this purpose nobody would object."

Sir Nilratan Sarkar of Calcutta in his Presidential address in the All-India Medical Conference held at Delhi 1918 remarked that "It is necessary that the truths contained in them (Indigenous systems) should be studied. Any further neglect will prove harmful not only to the Indigenous systems but to the entire medical profession in India".

Students of modern western medicine with a training of eastern medicine or who have already shown some special aptitude for such work, may either be appointed wholetime or at least subsidized for such work of critical study. Bengal is one of the strongholds of Ayurved as the United Provinces and Punjab of Unani and Southern India of the "Siddha system," an offshoot of Ayurved.

CONCLUSION.

For the development of the future "international yet Indian system of medicine", not only should research work be done of Ayurved and Unani systems, but American and modern European medical practice should be modified to suit the special needs of India. The Calcutta School of Tropical Medicine is already doing real good work in this direction. As funds permit each province of India should be provided with such a research school of medicine working under a central advisory body. Let us hope that the spirit of research will develop in India and the various sects of our profession unite in a common brotherhood to develop the future "international yet Indian system of medicine" to benefit suffering humanity.

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*SOME THERAPEUTIC ASPECTS OF FASTING

BY

R. V. PURANIK, ASST. SURGEON, NANDED.

The practice of fasting is known from a very long, long time. Every religion has set apart certain days for fasting. The principles on which religions set apart these days of fasting were perhaps ignored, but with the progress of modern medicine, fasting represents a very potent therapeutic agent by itself.

Fasting, as a potent therapeutic agent, is not a novelty to those who have studied religion on real scientific basis.

It is my object in this article to discuss the value of this novel line of therapeutic activity.

It must be stated at the outset that the sensation of hunger is an unphysiological condition of the organism against which the body revolts more or less instinctively.

Disagreeable sensations arise that warn the organism, and naturally the most valid objection to fasting as a therapeutic measure is that the system can thereby be injured. Recent experiments show that fasting is tolerated in healthy individuals for a period of 15 to 25 days without any injury to the organism. The break-down of proteins is reduced, so that very soon the physiological minimum of protein turnover is reached.

The combustion of carbohydrates and fat supplies the body with the necessary working energy, first the circulating material is used up and then the fat depots.

The break-down of protoplasm is but slight. The change of metabolism during the period of starvation also affects the distribution of mineral salts, as is only natural, but again during the first weeks, this does not entail any injurious action.

The economy exercised by the system also finds expression in an alteration of all the bodily functions during this first stage of fasting. The conditions resemble those in a business whose income is temporarily suspended; all functions are reduced to a minimum. The blood-pressure and the pulse-rate sink owing to the reduction of the demands put to the heart and blood vessels.

The respiratory volume sinks and even the body temperature falls so slightly.

* Specially contributed to "The Antiseptic."

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The secretory functions with the exception of salivation remain unaltered. The fatty tissues even of the liver and bone-marrow are slowly melted down. The nervous system, and above all, the senses, appear to grow more efficient by fasting. The observation of the individual cells teaches that the system is striving to maintain that which is important and vitally essential. When the human organism is left without food it reverts to the embryonic state, as it were, and the essential parts of the cells indispensable for tissue reconstruction, survive.

Not only does no injury to the system result from fasting for short periods, such fasting furthermore appears to promote certain functions after short periods of fasting, the work of restitution proceeds with unwonted vigour. Such vigorous reparation is favoured by the relief of important organs from an excess of circulating and deposited supplies, so that the work of restitution is facilitated. The digestive and intestinal tracts are rested and putrefactive and fermentative processes are inhibited, so that a large proportion of the poisons that are regularly resolved by the intestines and neutralized by the liver no longer burden this organ, with a resultant facilitation of metabolism in general. This finishes with short periods of fasting.

Under-feeding of long duration is, of course, very harmful and in time without doubt causes a break-down of protoplasm. In numerous disorders and diseases, short periods of fasting are very useful and desirable.

The reigning idea should be to blend the patient's natural desire to fill his stomach and experience a sensation of satiation with our aim to maintain a low diet with a reduced quantity of proteins.

In this manner, it is also possible to avoid the disagreeable sensations that are produced by an empty stomach. At the beginning it is best to be modest in one's demands and to commence with single days of fasting.

At times, it is necessary to make slight concessions at the beginning. Small quantities of rapidly absorbed carbohydrates such as sugar and perhaps small quantities of alcohol very soon relieve disagreeable sensations and fits of weakness.

One factor can never be dispensed with and that is a close contact between the physicians and his patient.

Only if the physician has a talk with his patient every day and is willing to concede small changes in diet, a knowledge of cookery, enabling him to meet his patients in their wishes, will the physician be able to manage a case successfully.

The indication must furthermore not be confined to certain groups of disorders but regard must be paid to the customary physical exercise of the patient, to his general consitution and to the existence or otherwise of depots of adipose tissue. In at any case, the condition of the heart, of the vessels and of other vital organs rarely constitutes a contra indication, if the case is carefully managed. In the management of chronic dyspeptic condition with or without apparent organic lesions, considerable errors in diet are often made.

Not infrequently the condition is merely one of over-feeding with a too low metabolic turnover. There are occasions to observe quite a number of such cases, especially among young people and where, in spite of anorexia, general malaise, headache, insomnia and even vomiting and occassionally loose bowels—symptoms that resemble those of a toxicosis—food has been pressed on to the patient, with the idea that the loss of tone would be best relieved by a rich diet.

Many a case sailing under the diagnosis of neurasthenia, whose condition was principally caused by chronic dyspepsia with fermentations or putrefactions in the intestines, has been improved by such a course of treatment. It has been no rare experience to find the quantity of food given to consumptives, whose weight must at least be maintained wrongly apportioned.

The diarrhœa vomiting resulting at intervals can be taken to be the expression of the gastro-intestinal tract of a desire for disencumbrances, usually such critical manifestations are not encountered, but rather chronic dyspeptic and general complaints. The conception that a temporary severe reduction of the proteins is of great benefit to many diabetics, has gradually gained hold of the majority of practitioners and it has become a rule to reduce the quantity of meat allowed within the ration of proteins. In chronic kidney complaints, if acute manifestations are threatening *e.g.* sudden uraemia, a radical cutting down of the diet is expedient. Together with venesection, this constitutes a therapeutic procedure whose value is still under-estimated.

In view of the results of recent research work and theoretial considerations a number of authorities believe toxic processes to be responsible for a certain proportion of the cases of megrim.

The relation to, and the occasional combination with, asthma, urticaria herpes like rashes with nuclear feverishness especially in children often suggests that in megrim, we are dealing with a weakness of the system to exploit and break down certain substances. It appears that hyperemesis is also suitably treated by short periods of fasting.

The precise nature of Hyperemesis Gravidarum is unknown, but most authorities consider it to be the manifestation of a toxicosis.

Our aim must rather be to arrive at an accurate dosage of the food supply with respect to the total quantity allowed as well as to its individual components, before we widen the indications.

CASES AND COMMENTS.

X-RAY TREATMENT OF ECZEMA

BY

P. GURURAJACHAR, MADRAS.

Exactly thirty years ago the local treatment of eczema by X-Rays was first reported by R. Hahn. Later Dr. Margaret Sharpe, Montgomery, Williams, Mackey, Scholtz and others reported excellent results by this treatment. Grummach, Liemssen and Payne also reported very favourably on their experience with the X-Ray treatment of eczema, and they voted the immediate drying of the skin and the relief of itching following the first exposure to the X-Rays. The treatment in the hands of these observers varied from four to twelve exposures and each was a five to fifteen minutes exposure daily, at a ten to fifteen centimeter distance.

In all the twenty-seven cases of different varieties of eczema that underwent X-Ray treatment in our Institute, I used 70 K. V., 5 M. A., 12 in anode skin distance and five minutes exposure. The treatments were given continuously for six days, and then an interval of about a week was given, when if necessary another series of six exposures were given again In all the cases, except in two, there has not been any increase in the inflammation during the course of six exposures.

In five cases, severe inflammatory reaction followed the complete course of six exposures, only to subside within about a

fortnight. In one or two cases I had to supplement the treatment by one or two exposures of quartz mercury vapour lamp, before this inflammation would sudside. In all the other cases a gradual clearing of the skin was noted. Out of the cases treated eighteen were chronic dry squamous type, two cases of weeping eczema, four of seborrhoic type and three were of the type of eczema marginatum The different cases involved the following areas—twenty cases were on the legs and feet, one on the thigh and groins, one on the face, and others on the upper limbs, especially on the forearm.

The duration of these cases ranged from three years to eighteen years. The age of the patients varied from eight years to fortyfive years. Of the twenty-seven cases only five were young females and the rest were males. The highest number of exposures necessary was thirty-two and this was only in one case, while in all the other cases six to twelve exposures were quite sufficient.

The improvement was noted within a week or a fortnight after the stoppage of the treatment in most of the cases. Only in the case which required thirty-two exposures it took about three months before any improvement was observed.

Of these cases four did not return after they were discharged, probably because they have gone to their far away native places, and could not return. Out of the remaining twenty three cases, twenty one cases were observed to be apparently cured, the skin being quite clear in about two or three months after the treatment was stopped. Of these fourteen cases were treated about ten to fourteen months ago. Among these none have reported any return of the condition until now. Only one of the twenty-three cases showed a tendency to have a small patch re-appearing after about four months, when another course of six exposures was given. And this case is yet under observation.

In conclusion, I may venture to remark that the results of X-Ray treatment of eczema in my hands have been so gratifying that in the X-Ray we have an excellent method of treatment of these chronic conditions, which are so very troublesome to the patients as well as to the physician.

RADIOGRAPHY (X-RAY) *vs.* PHYSICAL SIGNS IN THE DIAGNOSIS OF LUNG CONDITION

BY

DR. S. K. BASU, M. B., CHAUKAMBA, BENARES CITY.

Most of us believe, if I mistake not, that (X-Ray pictures) radiograms give earlier indications of pulmonary tuberculosis than the physical signs. Consequently we place greater reliance on radiography than on the physical signs in the diagnosis of early tubercle. I believe it will be interesting to quote here a few of the most contradictory opinions expressed by various eminent authors, on the role of radiography in the diagnosis of lung conditions.

Boney states that little help is derived from Rontgen rays in the diagnosis of early tuberculosis. *Sir Douglas Powell and Hartley* in their volume on 'Diseases of the Lungs' state that in the majority of patients in whom signs and symptoms suggested an early lesion of the lungs, they have not derived any help whatever from X-Rays.

Sir William Osler in his 'Practice of Medicine' says that X-Rays tell us no more than a careful clinical examination.

Kidd in Albutt and Rolleston's 'System of Medicine' states that it is still a matter of doubt whether skiagrams or screen observations give as early or as trustworthy indications as the older methods of physical examination.

Williams's (of Boston) observations probably approach the truth more than all those mentioned before. He says "I find that X-Rays are of value not only in determining the extent of the disease but also *sometimes* in revealing its location where and when it would otherwise have been unsuspected. He classifies the early cases of pulmonary tuberculosis into 3 groups:—

(1) Those detected by the X-rays before auscultation and purcussion yield any physical signs.

(2) Those detected simultaneously by X-Rays and by auscultation and percussion.

(3) Those in which the causes of the physical signs are not ascertainable by X-Rays.

The last class is as common as the first. X-Ray examination of the chest should not therefore take the place of careful physical examination.

Crocket in his book of 'Physical Examination of the Chest' observes that the amount of cellular elements present in the very earliest stages of pulmonary tuberculosis is insufficient for X-Rays to produce a shadow of the lesion; hence X-Rays cannot enable one to detect the disease at such an early stage. Absence of X-Ray findings in a radiogram of the chest does not therefore exclude early tubercle. We may now conclude that X-Rays are not superior to physical signs in the diagnosis of all cases of early tubercle. It is only in a limited class of cases that X-Rays are unrivalled as a means of diagnosis of early tubercle. They are—

(1) Cases of early tuberculosis complicated with bronchitis and hence the physical signs masked by the adventitious sounds

(2) Cases with deepseated and closed lesions.

(3) Cases of hilum tuberculosis.

(4) Cases of recrudescence of an old lesion.

Consequently no case can be reckoned to be completely examined unless X-rayed from four aspects—anterior, posterior, lateral (right and left.)

Apart from this, a thorough X-Ray examination helps us—

(i) to verify and confirm the findings of our physical examination or compare these with the findings of the X-Ray examination;

(ii) to study in detail the condition (normal or pathological) of the various structures inside the thoracic cavity e.g., mediastinal glands, heart, diaphragm and its excursions, etc;

(iii) to detect the presence of abnormal structures, if any e g. neoplasm, fluid, etc;

(iv) to determine the extent and nature of the disease, whether active, quiescent or healed, and thereby enable us to find out the progress or otherwise of the lesion in every case; and lastly,

(v) to carry on the artificial pneumo-thorax treatment successfully.

BERI-BERI OR WHAT?

BY

DR. A. PEAS, M.B. B.S., D.T.M., CUNCOLIM, SALSETTE, GOA.

A short account of a disease affecting women in some southern villages of Goa.

Definition:—A disease affecting pregnant and particularly parturient women and characterised by symptoms of peripheral neuritis.

History and distribution:—There are no statistics available but it is the opinion of old local practitioners that the disease has, if not appeared for the first time, increased very much of late years.

It is most prevalent in the 3 villages of Assohea, Velim, and Cuncolim and to a lesser extent in the villages immediately to the north.

Etiology:—It is most frequent among Christian women of the lower middle class who lead an indoor life and the dampness produced by the large number of irrigation artificial lakes seems to favour it.

Symptoms:—In the first two types, the symptoms often begin during pregnancy in a mild or larval form, but become only marked after delivery.

Mild type:—The patient is wasted and complains of a sensation of burning in the feet. There may be œdema of the feet and legs which often does not go to the extent of pitting but is only a sort of fulness which comes and goes and the burning lessens with appearance of swelling and vice-versa. There may be diminished tactile sensation over the slims and dorsa of the feet and the deep reflexes are abolished. The patient has difficulty in walking and on standing does not touch the toes to the ground and says that she feels as though a layer of wool were interposed between her soles and the ground.

The hands show the same symptoms but in a milder form. The grip is weakened and the patient cannot button or unbutton her dress.

The cranial nerves and all the functions of the alimentary canal are normal and there is no fever in any of the 3 forms.

Severe type:—All the above symptoms are aggravated, the patient is reduced to skin and bone and either cannot stand at all or stands and walks by the aid of a stick.

The oedematous type:—This type, contrary to the above two types, is almost always present during the latter months of pregnancy. There is suppression of urine without albumen and there is anasarca with marked dilatation of the heart and quick pulse. In one case the apex was 2 inches external

to the mammary line and the pulse was thready and almost uncountable. The patient lies helpless in bed and shows the other symptoms of peripheral neuritis. This type improves rapidly after delivery and shows the symptoms of the other 2 types.

Diagnosis:—The opinion as to diagnosis is divided. Mostly it is thought to be pregnancy intoxication favoured by the sedentary indoor life led by these women under insanitary surroundings, but there is the fact that mostly the symptoms get aggravated after delivery.

The other opinion is that it is Beri-Beri. As against this, there is the fact that out of the hundreds of cases, there has been only one case in a man, which perhaps was Beri-Beri, which is rather strange; although pregnant and parturient women are more vulnerable to its attacks. The staple diet of the people is rice, which is eaten as freshly prepared par-boiled rice. The storing is done as paddy and, as the people grow their own rice, it hardly ever lasts beyond a year and mostly does not last beyond six months. There are 2 crops, so there does not seem to be much room to suspect infection of overmilled rice stored for long periods in damp godowns, as it is said to be in Calcutta, although the disease resembles Beri-Beri most. The people eat a good deal of meat.

Treatment:—The best treatment is change to the sea-side and, in the oedematous cases, it should be preceded by absolute rest in bed till the heart returns to normal. As the disease is not mentioned in any book *i. e.* there is no pregnancy neuritis described in any book that I have come across, I shall be much obliged if any of the readers of your esteemed journal would enlighten me on the point.

CHOLERA AND ITS TREATMENT.

BY

DR. B. K. ROY, M. B.

In these days of transition when nation-builders are engaged in working out the reconstruction of India in the field of politics and social renovation, we, as scientific medical men, have a solemn duty towards our country and countrymen in the shape of leading them out of painful sufferings and the legion

against cholera and other intestinal diseases of which Lt. Col. F. P. Mackie said, " I consider that the amount of experimental work on animals which has been done by the Professor and his followers, is sufficient to justify the claims which he makes for the immunization of animals" in tablets containing sterilized bile extract, coated with gluten to the strength of o.o 5 gr. i.e. 70 to 80 billion microbes. This number of bacilli contained in each vaccine tablet, sufficient to make it efficacious, is quite free from toxicity. Dr. Charles Achard, Professor of the Faculty of Medicine, was able to double the dose without experiencing the slightest discomfort.

Let me offer you a few words about immunity. Broadly speaking there are two theories, one of phagocytes and the other of anti-bodies. The first was brought to light by Metchinkoff and the other by Bordet and Wright. According to the first theory whenever a microbe gets access into the organism, it gets destroyed by the leucocytes of the blood who rush immediately to the spot and try to stop its entrance. A fight takes place between the leucocytes and the invading microbes. If the microbes are in large numbers, the leucocytes are overpowered and are unable to stop them. The microbes gain access into the organism where they rapidly multiply and produce the disease. According to the second theory the presence into the organism of a microbe produces in the serum a specific substance called antibody which defends the organism against infection. Prof. Besredka adds to the above a third and this is the receptive cell. He has discovered that every germ has an affinity for a certain organ which it attacks in preference and to the exclusion of any other. For instance, in his book Immunisation Locale he proves beyond any doubt that the germs of cholera immediately rush for the intestines from which ever door they may get an entrance. To prove this he injected a mortal dose of dysentery-living bacilli in the vein of the ear of a rabbit and within five hours the animal died and on microscopical examination no trace of them was found either in the blood or in the urine or even in the tissues but all these bacilli were accumulated in the intestine where they were found in pure culture. Having proved this he has come to the conclusion that the cholera microbes which have the affinity to the intestines will be vaccinated if the intestines are vaccinated. This is the theory in a nutshell. We shall next see what scientific men think of it.

Up to the present day, over one million persons have been immunised by Bili-vaccine in Europe, America and India. Of this quantity over 50,000 vaccinations have been made under scientific control in twelve different places in France, Germany, Poland, Russia, Roumania and French India. The result is satisfactory. To corroborate this statement, I refer to the experimental observations of Dr. B. B. Brahmachari, D.P. H. He says, "The next opportunity we had, was admirably suited to make the most searching investigation into the efficacy of oral method as a protection against cholera". The results of experiment held by Capt. G. C. Maitra were published in the Medical Gazette, July 1926, and no unpleasant effects, immediate or remote, were reported and he remarked, "a comparative study of the results obtained by using the two preparations the Bili-vaccine and Merck's cholera vaccine, apparently show that the former protected more effieciently than the latter".

From what has been said it is now for you, eminent men of the profession, to judge whether you can attach any importance with regard to conferring immunity to Bili-vaccine. But if you think the inventor of Bili-vaccine has a right to claim its efficacy, you have the duty of convincing your patients of its importance and insist upon its use in times of epidemics if you cherish the good of your country in your hearts and wish to see your places not go to destruction and complete desertation but crop up into rich, healthy and populous towns.

In this paper I need not try to encroach upon your patience by dwelling at length on the treatment which is all very well-known to you. In this connection I only beg to remind you of the fact that the object of medical science is more prevention than cure. This only justifies the saying ' prevention is better than cure.' The ultimate aim of any curative system is to influence a morbid process which it is still in a stage where skilful interference will do permanent good. Endocrinology is directed to the prevention or forestalling of many serious diseases and our best thanks are due to the inventor of Bili-vaccine which enables us to correct morbid tendencies brought about by one of the fell diseases causing a great havoc among us. We shall be regarded as most unfortunate creatures in creation if we fail to avail ourselves of the advantages which the Professor promises us.

VAGINAL LITHOTOMY FOR VESICAL CALCULAS

BY

AMBA DATT BHANDARI, L. M. P., MEDICAL OFFICER.
PITHORAGARH, DIST. ALMORA, U. P.

Vesical calculas is rare in females on account of the shortness and dilated condition of the urethra. Thus small concretions passing from the kidneys are easily expelled out. In some localities, however, we do not unfrequently see such cases. In most of the cases when the stone be small, it can be taken out by dilating the urethra but when the size of the stone is big and lithotrity be contraindicated, the stone has to be removed either by suprapubic or the vaginal routes. Vaginal Lithotomy is a very easy operation. Septic complications are rare and after treatment easy. The only trouble is vesico-vaginal fistula for a few days but latter on it gets alright.

Clinical notes on two cases are cited below.

Case No 1 :—Tulsi, a Hindu female, aged about 40 years, was admitted on the 17th August 1926 for retention of urine in the Pithoragarh hospital. Stone was diagnosed as the cause of retention. Bladder was well washed and patient was prepared for operation for the next day.

18-8-26. Stone was removed by Vaginal Lithotomy.

19-8-26. Bladder washed with Boric Lotion both morning and evening and she was also given vaginal douche. An alkaline dieuretic mixture with urtropian was prescribed for her three times a day.

20-8-26. Patient had no other complaint except vesico vaginal fistula which she did not feel at all. Discharged cured from the hospital.

Case No 2 :—Kunthi, a Hindu female, aged about 50 years, was admitted on 21-12-26 for a similar complaint as No 1.

I removed the stone by Vaginal Lithotomy on 23-12-26.

24-12-26. Bladder washed and also vaginal douche given twice daily.

25-12-26. Discharged cured from the hospital.

In both the above cases patients made uneventful recovery. While leaving the hospital they were advised to take vaginal douche daily till urine stopped coming through the vaginal wound. Though the writer could not get chance of examining them afterwards yet from their reports it was quite clear that the vesico-vaginal fistula healed in about two weeks.

It will not be out of place to mention here the techn ique of the operation of Vaginal Lithotomy. After washing the bladder with Boric Lotion, a few ounces of the lotion are left in the bladder. A median grooved staff is passed into the bladder and an incision is made in the anterior vaginal wall over the groove of the staff. The stone forceps is then introduced into the bladder guided by the left index finger and the staff is withdrawn and stone is removed. There is no danger of bleeding. Pressing with swabs stops venous oozing. After removal of the stone a hot boric lotion douche is given. No special after-treatment is necessary except giving the patient vaginal douche daily for a few days.

A CASE OF HICCOUGH.

BY

K. J. KAMALAPORE, M. B. B. S. DHARWAR.

The vagaries of ascaris are proverbially notorious. Many a case, which baffled all attempts at correct diagnosis and successful treatment, has been reported from time to time in medical literature. Here is one, which I hope, you will find sufficiently interesting and instructive to deserve a place in your monthly.

Mr. S. K. started having occasional attacks of hiccough on the 3rd February. They were controlled by sipping small quantities of warm water. As the bowels were rather costive, a mild laxative in the form of Pul. Glycerrhyza co, dr. 1 was given before going to bed the same night, resulting in a free motion early next morning. But the hiccough did not disappear, and the patient was kept under regular treatment.

From the 5th all solid food was prohibited, milk, buttermilk and plain water only being allowed and that in small quantities and at sufficient intervals. The following mixture was prescribed,

Rxy:—Sodii Bicarb		gr x
Sodium Bromide		gr x
Tr. Capsicum		m 1
Ol anethi		m 1
Tr Hyoscyamus		m x
Tr Belladonna		m iii
Aqua ad		oz 1

Each dose to be taken with Acid Citric gr x dissolved in an oz of water. This mixture was tried for two days without any beneficial results. Next Bismuth mixture was given a trial which proved equally ineffective.

The complaint in the meanwhile became more persistent and troublesome. Hyocine hydrobromide gr 1/100 with Morphine sulph gr 1/4 was administered hypodermically on the 8th morning The hiccough stopped for a few hours to return again when the patient awoke to the dismay of the relatives.

10 m. of Adrenaline hydrochloride were given twice at an interval of 2 hours each without any effect.

On the day, 9th consultation was held with a senior practitionerand it was decided to try Chloral Hydrate in doses of 5 grs each 4 hourly. It was also settled to give Santonine & Calomel in divided doses, in between Chloral mixture.

Fortunately, Chloral Hydrate proved more successful, in that the patient came under it readily and the hiccough stopped entirely during the sleep that followed every dose. The Santonine and Calomel powders which were in the meanwhile given, brought about a free motion at about 12 P. M. A dose of Chloral Hydrate, which was then due was given. The patient had again a nice sleep for three hours. When he woke up the next morning it was found to the great relief of all, that the hiccough had taken permanent leave of the patient. After that, only twice was it found necessary to giva Chloral Hydrate in the course of 36 hours.

Half a dozen round-worms were passed on the 10th night to the satisfaction of myself, who had been all the while maintaining that the whole trouble was due to Ascaris Lumbricoides, and I believe that though Chloral Hydrate, of all others, gave relief to the patient it was Santonine that was responsible for the complete stopping of the troublesome and exhausting hiccough.

MY EXPERIENCE IN ECLAMPSIA & PNEUMONIA

By

DR. RATILAL J. ADHVARJU, L.C. P.S. (BOMBAY), BARDOLI DISTRICT, SURAT.

About six months back I was called to see a lady with a full term pregnancy suffering from retention of urine and oedema over the whole body. She was fifteen years old. I removed the urine with a rubber catheter and found it full of albuminuria. I told her husband that she would develop convulsions. I prescribed her some purgatives and put her only on milk and soda water. The next day at 12 A. M. I was called to see her as she had convulsions with unconsciousness. After half an hour of my going there, she gave birth to a living female child. I gave her ½ grain of morphine injection with digitalin as her pulse was not good. The convulsions and unconsciousness did not stop though I gave the above injection. She was unable to take any thing by mouth. She had eight to ten motions due to my giving her purgatives the last day. As her condition was very bad her husband called another qualified practitioner for consultation. The doctor who was called for consultation left no hope and told me that she would die during the night. This time the temperature was 106° Afterwards I thought of giving her an injection of mag. sulph. solution intravenously. I prepared the solution and I gave her 20 c.c. of 10 per cent mag. sulph. solution. Some of the solution went outside the vein as it was very difficult to find out the vein due to lot of œdema. The fluid which went outside the vein gave rise to a slight swelling but this subsided after three or four days. After four hours of this injection her fever and convulsions subsided and she became conscious. So I request my fellow brethren to try this solution in cases of Eclampsia if they can.

In a case of Influenzal Pneumonia I gave about three to four injections of ½ grain Iodine intravenously every other day and nine to twelve grains of camphor in oil intramuscularly daily with stimulant expectorant mixture internally but the patient instead of improving in health went from bad to worse and died.

PARALYSIS AGITANS

By

HARDEA SINGH VARMA, L.M.P., GOKHMUKTESAR.

Chotey, 45, Hindu male, Chamar by caste of Gorhmuktesar, a cooly by profession, came to the dispensary as an out patient. He was brought on charpai by his relatives. I asked the man to stand up and he could not and the whole body of the patient was shaking from head to foot. I asked him to press my hand but he could not. The muscles were weak and rigid. His right hand was exactly in a pill rolling condition. I tried to find propulsion and retropulsion and in the conditions the man

actually fell down on the ground. His speech was also defective and the whole case represented the characteristic features of the disease. I prescribed him as follows taking the condition to be hopeless :—

Rx:—Pot Bromide	gr.	v
Lqr. Stych Hyd	m.	ii
Lqr. arsenicalis	m.	ii
Ferri et Quin. cit	gr.	ii
Tinct Cannabis Indica	m.	x
,, Hyosciyamus	m.	xv
,, Opii	m.	v
Aqua ad.	oz.	i

Since 1st February 1928 upto the 4th February 1928 his relatives used to take medicines from the dispensary and the patient was not bright but to my utmost surprise the man himself all alone visited the dispensary on foot and was walking in a way that he never had that condition.

I asked him about his condition. He informed me that he is almost cured and has only came to salam me. I asked him to sit for an hour and I finished all other patients and then again tried on him other symptoms.

The rigidity and weakness got a little improved. Pill rolling mechanism was almost improved and speech also was good; but walking was still difficult but he did not fall on the forward or backward movement; but gait was still, a bit defective.

Really it is a wonder on the cure in such a short time for a six months' standing patient.

A CASE OF MALIGNANT TUMOUR OF THE MEDIASTINUM

By

N. CHATERJEE, M. B. DOMJARH, HOWRA DISTRICT.

Babu Ganesh Hindu, Male, age 55, merchant by profession, walked into my consulting room on the 15th of May for cough, fever, pain in the chest, left side marked. He was treated by me as a case of pleurisy and recovered within a fortnight.

On the 1st June he began to complain of excessive salivation and loss of appetite. No cause of salivation could be found then excepting pyorrhœa. He left me and was treated by

other Pathys till he again returned to me on the 22nd of July complaining of—

(1) pain in the chest and back left side—so much that he was unable to lie down at night;

(2) cough;

(3) slight difficulty in swallowing solid foods, but not water.

On Inspection.—I found slight bulging of the supra and infra clavicular fossæ. Practically no movement of chest wall on the left side.

There was *absolute loss of breath sounds*, On auscultation, and without looking for any displacement of organs a 10 c.c. stelire needle was introduced in the hope of drawing out pus but I was sadly disappointed. Then I looked for the displaced organs and found no displacement of the apex beat.

Then I listened to his hoarse voice and examined his larynx and found (1) paralysis of the left vocal cord.

(2) On percussion the left chest on the bulging was rather dull and the other areas were rather hyper resonant.

(3) Under X-Ray screen, a dense mass was found. This mass was not pulsating and not moving with the respiration. It was occupying the posterior mediastinum and upper part of this chest.

X-Ray plate was taken and shown the throat specialist in the Calcutta Medical College, who wanted to remove the growth, but the guardians refused any sort of surgical interference. He is seeking admission in Ranchi and trying to prolong his sufferings.

The object of recording the case is :—

1. Because mediastinum tumour is rare.

2. To distinguish it from Aneurism.

3. To show how keen power of observation is necessary to arrivea a correct diagnosis.

NOTES ON A CASE OF CHRONIC GONORRHOEA

BY

K. SINHA, M. B., CALCUTTA GENITO-URINARY CLINICS.

Mr. X, male, aged 35 years, married, infected with gonorrhœa since two years, came with the pus at the meatus containing Streptococci, Staphyloocci and Colli bacilli. Prostate was found infected. Urethroscopic examination revealed the presence of lesion in both the anterior and the posterior urethra. The exploratory sound did not show any structure.

The treatment was begun by bladder wash with Silver Nitrate lotion starting from 1 in 10000 increasing up to in 4000 every alternate day with the massage of the prostate biweekly till the urine became clear with the exception of few shreds. Dilatation was then begun by Frank's posterior Dilator (A mechanical Dilator for the Urethra). Dilatation was done biweekly followed by massage of the Prostate. Diathermy used to be given to the prostate the day following dilatation and massage. Dilatation was pushed on till it reached 60 as indicated by the instrument. Urethroscope was then applied in the anterior urethra and all infected foci (Soft infiltration infected Littre's glands and the Lacunae of Morgagni) were touched with 10 p. c. Silver Nitrate solution. Dilatation and urethroscopic treatment were then carried on alternately till the morning urine was found perfectly clear with no shreds. The patient was then asked to appear again after a month for the test of cure which he did. His condition was found quite satisfactory.

Dilatation of the urethra is certainly the best method of treating and curing chronic gonorrhoea. Dilatation should be resorted to firstly in those cases in which the exploratory sound has revealed the presence of stricture but it should also be used in those cases of chronic gonorrhoea in which the lesion consists of localised patches of inflammation in the urethra. One needed to have seen these lesions only once in order to be able to understand that irrigation and instillation cannot have action on them. The liquids introduced cannot reach the deeper part Irrigation, dilatation and massage are sufficient to cure many cases of gonorrhoea and we reserve the urethroscopic treatment for those which resist them. But in the case of chronic anterior urethritis dilatation and the urethroscopic treatment may be done alternately to save time.

The Antiseptic

MARCH, 1928.

INFANTILE MORTALITY.

Infantile mortality is a subject of very great importance. Its economical and national importance has not been very fully realised. It is therefore very appropriate that it should have been the theme of the Elizabeth Mathai lectures delivered by Dr. A. Lakshmanasamy Mudaliar, under the auspices of the University of Madras. Of all cases of infantile deaths a large proportion occur within the first month of life, and of these more than one quarter occur within the first ten days. The learned speaker therefore confined his lecture to a consideration of ante-natal mortality after the 7th month of pregnancy and to neo-natal death of infants during the first ten days of their existence. A thorough and comprehensive study of such an important subject is at best bound to be unsatisfactory in our country for want of proper statistics but we think that some of the following observations, coming as they do, from one who is so closely connected with one of the largest maternity institutions in the East, deserve a more careful and attentive consideration.

In a consideration of the causes of ante-natal mortality the condition of the mother's health is the all important problem. Whether the age incidents of the mother has any effect on infantile mortality has been a long standing puzzle. Except in so far that age influences infantile mortality in a purely mechanical manner and that only during delivery, it is now practically accepted on all hands that it does not in any way seriously affect the fœtus while in the womb. The effect on maternal mortality is however different, but we are for the present not concerned with that equally important if not greater problem. Ante-natal pathological conditions of the mother have however been found to have an adverse effect on the fœtus. Syphilis in the mother is the largest single cause of ante-natal death of

infants. Most miscarriages and stillbirths are due to it. It has been found that the time between infection with syphilis and conception has a great effect on infantile mortality. The shorter this time interval, the greater the mortality. As the interval increases, the chances of a live-birth becomes greater. Another important favourable factor is the institution of early and vigorous anti-syphilitic treatment for the mother. Tuberculosis of the lungs is very often associated with pregnancy. It is a very common impression that a tubercular lesion is aggravated during pregnancy and labour and that therefore the only reasonable course in the interest of both the fœtus and the mother is to induce labour before term. This, however, has been shown, not to be the real case—at any rate it is not borne out by facts. Probably what really is the greater risk is the lactation period, where however the strain is too much on the already weakened mother and in these cases, quiscent lesions occasionally flare up. On the other hand, pulmonary lesions improve during pregnancy because the rising uterus increases the pressure and acts like an artificial pneumothorax in helping the lung to collapse. Diabetes is another of the conditions in the mother which may result in ante-natal death of the fœtus. It is true that only a small percentage of diabetic women become pregnant but it cannot be denied that even these have a greater tendency for aborting. Hydramnios and fœtal abnormalities may also result and end in fœtal death. Heart disease in the mother often complicates pregnancy. This is also considered a great risk and very often induction of abortion is thought of. The lecturer says that interruption of pregnancy is not always necessary. His experience has been that conservatism has more often stood him in good stead than meddlesome midwifery. In this connection it would interest our readers to know what Dr. Gibbon Fitzgibbon, the Master of Rotunda says. He is of opinion that "Primigravidæ and multiparæ who have never been decompensated during pregnancy may be allowed to continue through pregnancy and labour with special care during the last sixteen weeks. If decompensation occurs during pregnancy treatment should be directed towards re-establishing the cardiac function and the patient should be kept at rest until after delivery. Primigravidæ may be allowed to go through labour, but multiparae will probably be best delivered by section at the thirty-sixth week and should be sterilised. If decompensation occurs in a multipara before the thirtieth week, the cardiac state should be re-established and then pregnancy terminated as the probability of the pregnancy reaching a period when the fœtus is likely to survive is practically nil. If labour sets in during the acute period of decompensation it is easy and rapid and natural delivery will give as good a prospect as operative; the second stage should be shortened by forceps. A woman who has suffered from loss of compensation during labour, should be kept at rest from the twenty-fourth week of a subsequent pregnancy and this pregnancy should be terminated by section with sterilization at the thirty sixth week. A woman who has decompensated during pregnancy should never be allowed to continue another pregnancy. Induction of labour has no place in the treatment during decompensation and at other times would be better replaced by section and sterilization as a means of terminating a pregnancy. The specific fevers have also been found to have a markedly deleterious effect on the fœtus. Their bad effects are attributed to the marked elevation in the temperature.

The temperature of the fœtus is always higher than that of the mother. A rise in mother's temperature produces a corresponding rise in the temperature of the fœtus. It has been mentioned that in the early months and also during the later stages of pregnancy there is a greater liability for abortion to occur. Another practical point worth remembering is that the range of variation in temperature is a much more important factor than the actual temperature itself. A sudden variation in temperature is more litkely to produce abortion than a gradual rise. Malaria, Relapsing Fever, Small Pox, Pneumonia and Influenza which are all more or less characterised by a sudden elevation of temperature are therefore more likely to cause abortion than the fevers like the enteric group. In this connection it is worth while to refer to the fear of giving quinine during pregnancy. The trend of medical opinion as seen in the recent Congress of Tropical Medicine in Calcutta and elsewhere seems to be that Quinine is a safe drug to be given in pregnancy. A seven grain dose of a soluble salt of quinine seems to serve the purpose quite well. Tumours such as fibromyomata and cancerous growths seem to increase markedly fœtal mortality. The statisics of the lecturer showed that a large number of pregnancies ended in abortion and premature labour. In connection with cancer the effect

of X-Rays on the fœtus is worth studying. While single exposures have no bad effects it has been shown that therapeutic doses arrest the development of the fœtus, both physically and mentally.

We shall next consider the causes which produce death of an otherwise healthy fœtus during the intra-natal stage. It is quite unnecessary to dwell at length on the signs of fœtal distress. Tumultuous movements of the fœtus; a fœtal heart beating above 160 or below 120 per minute; the escape of meconium unmixed with liquor amni; prolapse of the cord; and the presence of a large caput are all described as the classical signs of fœtal distress. In this great group forceps deliveries by reason of their common occurrence will be considered first. The forceps is the most dangerous and at the same time the most useful instrument in the obstetrician's armamentarium. By indiscriminate application great harm can be done both to the mother and to the child. It should be remembered that the genital canal is curved and not straight. Introduction of the blades with great delicacy, the use of no force and a continuous steady pull with a firm counter-pressure and a knowledge of the law of curves are the essentials in the successful application of forceps. A correct diagnosis and the fulfilment of some of the essentials before forceps application such as a suitable presentation, ruptured membranes, fully dilated os, will certainly reduce fœtal mortality. It should rever be forgotten that the forceps is a good friend but a dangerous enemy. In breech delivery the mortality is certainly greater than what is commonly given in text books. Hospital statistics show that it is about 20%. This is sometimes more in the case of primiparas, whereas in a multipara a breech extraction is preferable to a high forceps. With a few precautions a breech delivery can be made very safe for all practical purposes. Dr. Lakshmanasamy is of opinion that the following points will have to be observed to perform a safe breech delivery. The passages must be well dilated, at least with the hand. Traction can be made on any leg provided it is rotated forwards during traction so that the back comes to the front. The body must be kept warm with a towel when it is outside the pelvis. The axillary fold must be well out of the vulva before the hand is put into the vaccine to bring out the arm. Fundal pressure if properly applied is very useful for the extraction of the after—coming head and, if efficient, dispenses with the forceps.

Placenta prævia is another condition which is characterised by a high infantile mortality. The main essentials are arrest of

hæmorrhage and the completion of delivery. The methods of treatment employed are any one or a combination of the following—Rupture of the membranes and a tight abdominal binder, injection of pituitrin, vaginal plugging, Champetier de Ribes bag and Cæserian section. From a fœtal point of view Cæserian section is perhaps the ideal method of treatment but other considerations may arise and modify the procedure to be adopted.

Transverse presentations are also a frequent cause of fœtal mortality. In a country like ours where a great deal of midwifery is done by the untrained barber midwives it is not surprising that this preventable cause is a great factor. If properly treated by version, preferably podalic, with the usual technic, there should really be no mortality. Ante-partum hæmorrhage has also to be considered in this connection. In the external accidental variety the mortality to a great extent depends on the severity of the hæmorrhage and the maturity of the child. In the concealed variety, however, the danger is much greater to the child owing to the premature separation of the placenta. Eclampsia and the other toxæmias of pregnancy are also important causes. The lecturer was of opinion that in his experience conservative treatment was very encouraging. He never interrupted pregnancy and used no accouchement force. His method was to leave the woman till the second stage of labour was reached when the cervix was dilated, the membranes ruptured and assistance given for the sake of both the mother and child.

Asphyxia, birth injuries, prematurity, diarrhœa and jaundice are among the other causes of death in infants. Intra-cranial injuries caused by violence in delivery as well as the blocking of the respiratory passages by mucous and liquor amni usually causes asphyxia. Sylvester's method of artificial respiration, injection of Scheil's fluid and adrenalin (the latter intra-cardiac, if necessary), oxygen inhalations and the efficient use of brandy are among the common methods used to resuscitate an asphyxiated infant. Convulsions, bleeding, atalectasis, are all due to injuries to the skull, meninges or the brain caused by compression in the soft passages. Prematurity is another of the chief causes of neo-natal infantile mortality. A healthy child may be expelled prematurely by injuries to or operations on the mother, overwork, emotions and exertion An unhealthy child may also be expelled

prematurely by pathological conditions in the mother such as syphilis, nephritis, chronic pulmonary tuberculosis, heart disease with broken down compensation, pneumonia and influenza.

CURRENT TOPICS.

OBSTETRICS AND GYNAECOLOGY

Detachment of the Normally Situated Placenta.—G. Guicciardi (Riv. d' Ostet. e Ginecol. Prat. November, 1927, p. 421) describes a series of 22 cases of detachment of the normally situated placenta (accidental hæmorrhage), in all but three of which the urine contained albumin. Of the three exceptional cases, in one there was a clear history of accident preceding the hæmorrhage, and in one grave bleeding followed immediately spontaneous rupture of a hydramniotic membrane-sac. The series contained two primiparæ only, and no more than five patients were less than 30 years old. There were four maternal deaths, one before and three within a few hours after delivery; in all the necropsy showed unusual softness of the uterine wall and an infiltration of the myometrium with blood, which extended as far as the peritoneum, and was most marked in the zone of placental attachment. Seven fœtuses survived. Labour was completed eight times by accouchement force, twice by forceps delivery, eight times by podalic version and extraction, and three times by craniotomy of a dead fœtus; one patient died undelivered. Guicciardi thinks, nevertheless, that in the grave cases cœliotomy with subtotal hysterectomy or Porro's operation is the only means of saving the mother's life; careful routine examination of the urine during pregnancy, early diagnosis, and early admission to hospital will improve the prognosis. The loss of life is ultimately caused less by the hæmorrhage than by the underlying pregnancy toxicosis. In treatment it is wrong, except where the os is fully dilated, to rupture the membranes, which, by diminishing the intra-amniotic pressure, may increase the tendency to bleeding. Injections of pituitary extract or ergot, or gauze plugging before delivery, also favour hæmorrhage, and are contra-indicated; morphine and chloral hydrate, on the contrary, are called for in some cases. It is recommended that the uterus and vagina be plugged with gauze after delivery, however effected.

A Method of Preventing Perineal Tears.—L. Drosin (Med. Journ. and Record, September 21st, 1927, p. 363) has found a method which he calls "bloodless episiotomy" useful in stretching the perineum immediately before delivery in a large number of cases, particularly in primiparae. When the perineum is bulging and the caput becomes visible the distal two-thirds of the index and middle fingers of one or both hands are inserted flexed into the vagina with their palmar surfaces in contact with the postesior vaginal wall and eight or ten rapid vibratory movements in an antero-posterior direction are carried out without the use of force, keeping the fingers all the time in contact with the mucous membrane, so that the force actually employed may be gauged by the resilience of the underlying tissues; the second part of the manœuvre is to stretch the levatores and fourchette by similar vibratory movements up and down with the same fingers nearly extended, while in the third part the fingers are held flexed on either side inside the vaginal orifice with the tips in front of the levatores ani and the movements are repeated in a downward and outward direction. If the perineum is very rigid the set of movements may be repeated at intervals of three or four minutes. Drosin finds that tears are reduced to a minimum by this method, and that those which do occur are sutured more easily than those produced by deliberately incising the perineum as in lateral episiotomy.

Acetone Treatment of Cancer of the Cervix.—G. Gellhorn (Zentralbl. f. Gynak., December 3rd, 1927, p. 3114) views with satisfaction his twenty years' experience with acetone in treatment of cancer of the cervix uteri, and believes that this substance is in certain respects superior to radium in both inoperable and operable cases. The indications for acetone applications in inoperable cases are: (1) where radium is not procurable; (2) in patients whose general condition is so bad that absorption of the products of tissue degeneration due to radium application is likely to accelerate death—such cases account for the greater part of the 1 to 3 per cent. mortality associated with radium therapy in these cases; (3) where there is deep ulceration near the bowel or bladder, and radium would cause fistula formation; and (4) where the vaginal wall is the site of multiple or superficial nodules of neoplasm. With regard to preoperative preparation in operable cases, Gellhorn remarks that cauterization quickly arrests the bleeding, but is followed

by a prolonged and copious watery discharge which weakens the patient. Radium applications before hysterectomy are said to be of doubtful value in the prevention of recurrences, and in the author's experience of operations performed from three days to three months later have been found to cause the pelvic cellular tissue to be congested and oedematous or densely cicatricial; in either case the operation is rendered difficult. Acetone stops the bleeding at once and causes the discharge to cease within a few days. Gellhorn's technique is as follows: One hour after an injection of scopolamine and morphine, without general anaesthesia as a rule, or after a few drops of ether have been given, projecting ulcerated parts of the tumour are removed with a large sharp spoon; subsequently, with the pelvis elevated, a well greased cylindrical speculum is placed in the vagina, and filled with one or two teaspoonfuls of pure acetone, which is allowed to remain for ten minutes. The pelvis is lowered and the vagina emptied, and more acetone is now similarly applied for twenty minutes. This is repeated daily for one or two weeks, and then on every other day; after the first application morphine or an anaesthetic is unnecessary. Care must be taken that the vulva is not burnt by contact with the acetone. In certain cases acetone bisulphide is applied in powder form.

Treatment of Retained Products of Conception.—J. L. Wodon (Bruxelles-Medical, November 27th, 1927, p. 108) bases his treatment of retention of placental or membranous fragments on the three following assumptions, which he regards as proved. (1) From the fifth day of the puerperium the uterine cavity is invaded by vaginal organisms, including, in 38 per cent. of cases, streptococci. (2) The presence of placental remains is, even *in vitro*, an encouragement to bacterial growth. (3) So long as any part of the utero-placental circulation remains behind, direct invasion of the maternal blood by intrauterine organisms is possible. Having emphasized the importance of careful examination of the placenta after delivery, the author recommends the following procedures. When fragments of membranes are retained immediate injections of ergotine or pituitrin (preferably the latter) should in most cases cause expulsion in two or three days. If they are not extruded, curetting should be performed before the fifth day in afebrile cases, but in febrile cases intrauterine douches should be begun early and continued till the sixth day. With retention of a cotyledon after instrumental delivery, manual removal should be performed at once under strict conditions of asepsis If the delivery has been natural, the uterus should be curetted between the third and fifth day if expulsion has not occurred. If there is elevation of temperature or pulse, curetting should be performed at once. The author recommends the use of a cutting curette of large diameter, always gently manipulated so that no intrauterine grating sound is produced. He considers that the blunt curette commonly used cannot be relied on for the removal of small fragments, especially if there has been any endometrial inflammation.

Vulvo-Vaginitis in Children.—At a meeting of the Edinburgh Obstetrical Society on January 11th, with Professor R. W. Johnstone in the chair, a paper was read by Mr. David Lees on vulvo-vaginitis, in which he analysed the cases which had come under his observation in a period of five years—1922—1927.

The chief therapeutic measures recommended were the antiseptic and alkaline hip baths with daily lavage of the vagina and urethra. In older children the vagina was dried by swabbing through a speculum and the parts were dusted with dermatol powder; in younger children, when a speculum could not be introduced through the hymen, instillations of an antiseptic dissolved in glycerin were employed. The antiseptic preparations recommended were ¼ to 1 per cent. picric acid in glycerin, ¼ to 1 per cent. silver nitrate in glycerin, and ¼ to ½ per cent. chloramine T in glycerin. The instillations were supplemented by the use of small medicated bougies of these and other substances. If it was not possible to irrigate the urethra small urethral bougies, with chloretone added to ease the pain, were inserted daily. Repeated changing of the antiseptic was advised, and it was recommended that in every case the vulvar surface should be left as dry as possible by dusting it with a compound dermatol powder. Efficient treatment depended more on the care with which it was applied than on the medicament used. In every case it was essential: (1) to establish good drainage from the urethra, vulva, and vagina; (2) to produce a slight hyperaemia of the infected parts by hot hip baths and hot vaginal douches; (3) to use a sterile all-glass catheter with lateral perforations in douching so as to spread the antiseptic over the vaginal wall during the douche and

prevent the infection being carried to the cervix ; (4) to dry the parts subsequent to douching, or alternatively treat the vagina with instillations of an antiseptic solution in glycerin ; (5) to treat the urethra in every case ; (6) to examine and treat the rectum if infected ; (7) to prevent the child from conveying the infection to others and to its eyes. Adjuvant methods of treatment were used in both acute and chronic cases, and of these detoxicated and autogenous vaccines had proved the most serviceable. The child tolerated and responded well to vaccine therapy.

MEDICINE AND THERAPEUTICS.

Strophanthin in Heart Failure.—R. F. Weisz (Med. Welt, October 22nd, 1927, p. 1440) states that the strophanthins prepared from different species of strophanthus differ considerably in their action: crystalline strophanthin prepared from *Strophanthus gratus*, is much more powerful in its action on the human heart than amorphous strophanthin-k, prepared from *Strophanthus kombe* ; with the former the therapeutic and toxic doses are very close together and the risk of overdose is considerable. It is therefore important to distinguish between the two when estimating the effect of a given dose. The best results are obtained by intravenous injection, but special precautions are necessary ; thus the author considers it advisable to use a fresh needle for injecting the solution after removing the one through which it was withdrawn from the ampoule into the syringe, so that the irritant action on the tissues of traces of the drug adhering to the outside of the needle may be avoided. Strophanthin closely resembles digitalis in its effect on the heart, but its action is much more rapid. It is also much more rapidly excreted, but though the risk of a cumulative effect is negligible, injections should in general not be given more frequently than once in twenty-four hours, and they should not be started until two to three days after cessation of a course of digitalis. In sensitive persons vomiting from central irritation may be produced. The usual dose of strophanthin-g is 0.5 mg. ; sometimes 0.3 to 0.4 mg. is sufficient, though it is considered advisable to start with an adequate dose while 0.8 to 1.2 mg. should be the maximum. The dose may have to be increased gradually during a course of treatment, because increasing weakness of the cardiac muscle can only be postponed but not prevented. Though the blood pressure rises after the injections

a moderate degree of hypertonia is considered no contraindication to their use. The main indications are myocardial weakness, especially if acute or associated with pulmonary, hepatic, or peripheral congestion, pulmonary œdema, or cardiac asthma, and disturbances of rhythm when these are due to myocardial degeneration. For these one or a small number of injections generally suffice. In more chronic cases a course of injections is required, starting daily or on alternate days and with a gradually increasing interval, until the desired effect on œdema or congestion is produced; these are followed by a course of oral or rectal doses of digitalis. In the worst cases the injections may have to be continued indefinitely. Acute circulatory failure in infective diseases, due largely to toxic damage of the peripheral vessels, is hardly affected by strophanthin.

Treatment of Night-sweats.—In view of the physical exhaustion always resulting from night-sweats of any profusion in the tuberculous, A. Pelle insists on the necessity of some treatment that if not ensuring a permanent cure will at least result in a prolonged remission. He claims that no other method gives such rapidly successful and lasting benefit as the intravenous injection of calcium chloride. In a series of 18 tuberculous patients in whom the sweats were of no great amount, one injection sufficed to abolish them for from three to four months. In another series of 12 patients with more profuse sweating, an average of two injections were needed to obtain an equal result, while in 6 other patients with the most profuse and debilitating sweats, three injections were enough to relieve 4, but in the other two they had to be repeated in three weeks to complete the cure. Pelle recommends the use of 30 minims of a 50 per cent. solution at each injection, he also gives the usual caution against allowing any of this extremely irritating drug to escape into the tissues.—(*Paris*: *Bulletins de la Societe Medical des Hopitaux.* xlvi, 28.)

Treatment of Amœbic Infestation.—O. Williner (Medcine, September, 1927, p. 341) reviews the drugs introduced in recent years for the treatment of amœbiasis. He remarks that the percentages of permanent cures in cases treated with emetine are not high (28 to 70 per cent.), and that there has been a constant tendency to give larger doses of the drug, with the result that toxic doses are almost always administered. The

period of invalidism after a course of emetine, especially in cases having little impairment of general health and ability to work, appears neither reasonable nor economic. Various adjuvant factors have been used with emetine: bismuth subnitrate with or without Carlsoad salts, native plants of local reputation, 40 per cent. sugar solutions as enemata, and diets of protein or milk have been tried with sometimes apparently good clinical results. Yatren, a proprietary preparation, was tried first in amoebiasis as a 5 per cent enema solution ; later the strength has been reduced to 1 to 1·5 per cent. It is also given in wafers, gelatin capsules, and pills by the mouth, the total daily dose being up to 3 grams. Courses of yatren, combining its introduction by the mouth and enema, are given over three weeks, the patient being preferably in hospital for the first week. The results in old chronic cases uncured by all previous treatment are described as spectacular. Amoebae usually disappeared from the stools by the third day, and in 79 out of 88 cases treated at the Peking Union Medical College Hospital the stools were free after three to six months. Two other drugs, both arsenicals, stovarsol and treparsol, have recently been introduced. The results with stovarsol are said to compare favourably with those of other drugs, but there is an element of uncertainty in its action and perhaps sometimes of danger; the correct dose is not yet sufficiently established. Treparsol contains more arsenic, but it is more slowly eliminated and is less toxic than stovarsol ; it has been found useful with or after a course of emetine, and can be given subcutaneously or, better, intramuscularly. Willner cites the results of Willmore and Martindale with an aniline dye, auramine, the hydrochloride of tetramethyl-diamino-diphenyl-ketonimine ; a combination of this with emetine is known as auremetine. The advantages claimed for this drug are: freedom from minor toxic effects ; that it is less depressing than emetine ; and that treatment in bed is unnecessary. Large doses of bismuth subnitrate are a valuable adjuvant. Courses of treatment are given for acute, chronic or carrier, and hepatic cases. Of 40 cases treated, among them many severe and stubborn—the residue of pensioners infected during the war—37 regained their health and lost all signs of the disease, and the stools remained free from cysts for at least six months. The drug was used in association with stovarsal and bismuth, except where the liver was involved, when emetine hydro-chloride was given. The author concludes that

yatren is the most generally useful drug ; it is the least toxic and most widely applicable of the remedies.

Chaulmoogra Oil in Ozæna:—G. Calogero (Rassegna Inter. di Clin e Terap., August 1927, p. 537) has treated ten typical cases of ozæna by local application of chaulmoogra oil with encouraging results. He uses at first a 30 per cent. ointment and continues with a mixture of equal parts of the oil and vaseline. In some cases he has used the pure oil to test the degree of tolerance of the mucosa, and he has also given injections of the oil; no other treatment was used simultaneously. After the second or third application the fetor diminished, and in a couple of months the crusts disappeared; one month later the mucous membrane had lost its dry, atrophic appearance and seemed practically normal. So far the patients have remained free from recurrence, but the author, realizing the temporary nature of the relief which follows various methods of treatment in this disease, is still keeping these patients under observation. He adds that no treatment previously tried has given such excellent results.

Treatment of Leprosy.—R. G. Medina (Arch. de med., cir-yesp., November 26th, 1927, p. 610) remarks that though leprosy is not so prevalent in Spain as in some other countries it occurs in most of the Spainsh provinces, the foci of greatest intensity being Galica, Levante, Andalusia, Extremadura, and the Canary Islands. Murillo reckons that the number of lepers in Spain is 800, but this figure is too low an estimate. Medina, who records fourteen illustrative cases in patients aged from 13 to 52, has obtained the best results from treatment with antileprol, a preparation consisting of a mixture of ethylic esters of all the non-saturated fatty acids contained in chaulmoogra oil. Intravenous injections were given twice a week in doses of 0.2 c.cm. at first, which were gradually increased up to 2 c cm. Apart from slight attacks of coughing no bad effects were observed. After a hundred injections on an average the Wassermann reaction, which is constantly positive in leprosy, as well as the Hecht and Meinicke reactions, became negative. A clinical cure was obtained in many cases as well as disappearance of *B. leprae* from the nasal mucus, a result which Medina had been unable to obtain with any other drug.

The Earlier Diagnoses of Measles.—Philip Moen Stimson.—As the coming half year will probably show a heavy incidence of measles, this disease apparently occurring in biennial waves in New York City, it would seem advisable to emphasize the familiar details in the early clinical diagnosis of measles, and, if possible, to suggest new or less well-known features which might aid in the still earlier recognition of the presence of measles. Of the four periods of the disease, those of incubation, of invasion or catarrh, of the rash and of convalescence, only the first two are discussed here.

In the last half of the period of incubation there may be a temporary loss of from 5 to 6 ounces in weight, and the blood count may show a lymphocytic leukopenia toward the end of the period.

The period of invasion or catarrh in the great majority of cases begins with fever. Within a half day or so, a "measles line" or linear congestion may be found occasionally in the mucous membrane of the lower eyelid, about a third of the way from the blepharal margin to the fornix. In ten children in whom a typical measles line of this sort was observed in the eye and the disease prognosticated at this stage, it subsequently became manifest in eight. The duration of the line as such is short, the infection spreading to become a general conjunctivitis when the other evidences of catarrh appear, such as coryza and cough, comprising with conjunctivitis, the "three C's" characteristic of the second or third day of the disease and the cause of much of its spread to other people. The rash in the throat, or exanthem, usually precedes the "three C's," as may also a short-lived prodromal rash on the body. Koplik's spots inside the cheeks, which have also been reported as having been found in the eyes, nose and vagina, usually follow the catarrh in order of appearance; hence, the condition of patients in the stage of catarrh has been contagious for an appreciable length of time before the finding of Koplik's spots establishes the diagnosis. The typical exanthem characteristic of the disease follows usually at least a day later, after the appearance of the pathognomonic Koplik's spots.

Uncomplicated measles rarely kills, deaths being due almost without exception to the effects of secondary infections. Therefore every case of measles should be isolated at its onset from every other case. Experience in the hospital and at home has shown conclusively the value of this measure, and the harm that follows when it is not used.

Therefore, this winter and every year, physicians must be prepared to make the earliest possible diagnosis of measles, to isolate the patient on the first suspicion and to protect him from secondary infection.

Electrargol Treatment of Small-Pox.—The Journal of Tropical Medicine and Hygiene, for December 1, 1927, quotes a recently published Annual Report of the Medical and Health Department of Mauritius as follows: "At the commencement of the epidemic and before we were sure of the efficacy of this mode of treatment, patients were given the choice of being injected with this drug (electrargol) or not; later on, when its success was established, I gave orders that it should be a routine treatment for all serious cases, and I do not regret having done so. It will be seen that out of the first 14 we lost 10, whilst out of the last 15 we only lost 3; and that 8 out of the first 10 deaths were among the uninjected, the figures for the whole list being: not injected 9 (cured 1, died 8), whilst among the 20 injected 15 were cured and 5 died. We found that the intravenous injection of colloid metals gave excellent results, in this case electrargol. We used it in large doses up to 50 cc. per 24 hours. It was particularly useful in confluent cases and those in which there were bloody discharges. It arrested the development of the rash and stopped the hemorrhages after the first injection. It proved to be a perfectly safe drug, as it caused no bad symptoms in any case, although we used it freely and in very large doses. By its use the mortality of the confluent cases was reduced from 60 per cent to 11 per cent and in the hemorrhagic from 88 per cent to 25 per cent."

SURGERY.

Intra-urethral Chancre.—B. Bernstein (Urol. and Cutan. Rev., November, 1927, p. 715) states that this term is applied to chancres whether occurring in whole or in part in the last half to three-quarters of an inch of the lumen of the urethral. The chancres may involve the whole orifice or only a portion of it; they are rarely met with below the fossa navicularis. They may be seen in full, in part, or be entirely hidden from external view. The features of an intra-urethral chancre are

as follows: (1) a dirty white sloughing or necrotic centre bordered by the red ring seen in external chancres; (2) induration occurs early and is characteristic; (3) a sanious urethral discharge in which *Treponema pallidum* is found; (4) the urethroscope, when it can be passed—a matter of difficulty as a rule on account of the pain and obstruction—assists in the diagnosis; (5) inguinal lymphangitis and lymphadenitis. A pure treponemal infection is rare, and in all Bernstein's cases infection with the gonococcus was present also. The usual remedies are employed—namely, derivatives of arsenic, mercury, and bismuth. Healing of the chancre may be facilitated by injecting and washing the sore with a little of the salvarsan solution used for intravenous injection. Dilatation of the urethra should be started early to prevent stricture. Bernstein adds that many patients with tabes or general paralysis, who deny having had syphilis but admit gonorrhœa, have in all probability had an intra-urethral chancre.

The Treatment of Hodgkin's Disease:—L. Lortat-Jacob and P. Schmite Paris Med., December 3rd, 1927, p. 452 draw attention to the benefits produced by the combined use of x ray and biological therapy in Hodgkin's disease, and report a case in which this method proved most efficacious. Carefully filtered rays were used two or three times a week, and always caused great amelioration of the symptoms; the ganglionic masses disappeared, functional signs lessened, the pruritus became less intense, and the general state improved. At the same time the leucocytes diminished in number and the erythrocytes rapidly increased. The authors agree that this improvement is only transitory, and sooner or later the symptoms recur with a fatal termination. In biological treatment Lindstroem, having obtained only inconstant results with injections of immune rabbit's and sheep's serums, the authors advocate the use of homologous serums. In the present case the serum employed was obtained from another patient suffering from Hodgkin's disease who had been treated with x rays. This was given in two courses, 9½ c. cm. being injected subcutaneously in ten days during the first, and 11 c. cm. in the same time during the second course. The first injection caused a slight febrile reaction, but no general disturbances. During this stage of the treatment the red cells increased from 2,800,000 to 4,300,000 per c. mm. and the white cells decreased from 22, 800 to 7,800. Following these injections x rays were

administered, and in twenty-eight days the patient was apparently cured its action may be due to protein shock a veritable vaccination reaction or to the liberation in the blood of leucolytic products of disintegration. The authors are inclined to favour the last theory, since many experimenters have shown that the serum of irradiated leukaemic patients causes *in vitro* a partial leucolysis in normal or other leukaemic blood. Deep radiotherapy and radium have given no better results than superficial irradiation.

Hematuria in Appendicitis.—A. Zaffagnini, in Archivio Italiano di Urologia (Fasc. V, 1927), has observed several cases of appendicitis complicated by hematuria. In general the hematuria occurs in the first attack, without other contributing cause than the appendicitis, and without prodromal symptoms such as difficulty of micturition, Polyuria, etc. Its maximum duration is from three to five days; it is of variable intensity, and it disappears as quickly as it appeared. It occurs most commonly in youths and in males. According to the author the pathogenesis is not uniform, but may be due to a lesion of the ureter produced by direct or indirect extension of inflammation from the appendix, or by a stenosis produced by adhesions, or from the kidneys as a result of a toxic nephritis or a vasomotor alteration. Hematuria makes the prognosis less favourable, but it does not contraindicate operation.

Granuloma Inguinale: The Etiology of Granuloma Inguinale, McIntosh, J. A., Jour. Am. Med. Assn., September 25, 1926, lxxxvii, 996.

This study of the etiology of granuloma inguinale was undertaken for the purpose of determining the nature, transmissibility and differential diagnosis of the causative agent and the period of the infection.

Fifteen spontaneous cases furnished the material for the study reported, typical Donovan bodies being found by direct smear in fourteen cases and pure cultures being grown from eight cases.

Biopsy material was fixed in equal parts of 10 per cent. formaldehyde and 2·5 per cent. aqueous potassium bichromate and stained with hematoxylin and eosin. There are four camera lucida drawings of the pictures seen.

The formol-gel test first described by the author in this disease (Memphis Med. Jour. 1925, ii, 139) was positive in fourteen cases.

The technic is as follows:

To 1 c.c. of patient's blood serum is added 1 drop of 37 per cent. formaldehyde, and mixed thoroughly. Evaporation is prevented and the mixture allowed to stand for forty-eight hours. If positive, there is opacity and gelling of the serum; in some cases the gelling occurs in less than ten minutes.

The organism was found to grow best on Sabourand's medium.

The cultivated organism was pleomorphic, coccoid to bacillary in shape, nonmotile, nonsporulating, from 0·5 to 2 microns in diameter, Gram-negative, and stained readily with Wright's stain. Primary cultures, vitally stained with brilliant cresyl blue, suspended in 0·85 per cent saline solution, showed zooglea matrix, embedded coccoid forms and numerous, unequal tetrad grouping. The impression was obtained, from a study of the vitally stained organisms, that many of the coccoid bodies multiplied in a line assuming a bacillary form, some of which would swell into large, oval bodies 3 or 4 microns in diameter. The coccoid form embedded in gelatinous nongranular matrix was the most constant, and those just mentioned were inconstant, findings. The anaerobically grown organism was generally larger than the one grown aerobically. The organism grown on Lemco medium was oval to bacillary in form and showed the most marked variation in size. Threadlike filaments were observed in cultures on this medium.

Two instances of successful inoculation in the human being are reported.

The study reported in this paper tends to prove that the Donovan body is the cause of granuloma inguinale by fulfilling the generally accepted criteria of specificity first stated by Koch. First, the organism was demonstrated in the lesion in fourteen out of fifteen spontaneous cases. Second, it was obtained in pure culture in eight of these fifteen cases. Third, a tissue graft from a spontaneous case in which Donovan bodies were demonstrated and from which they were isolated in pure culture reproduced the disease in an individual not previously exposed in any way to the possibility of spontaneously contracting this disease. Fourth, pure culture of the

Donovan body was again obtained from this experimental lesion. And, further, antibody production against the cultivated Donovan body was demonstrated by the presence of agglutinins, precipitins, globulin changes and skin sensitiveness in the spontaneous and experimental cases.

This is the first reported instance of successful experimental transmission of granuloma inguinale from one individual to another.

The data support the belief that the Donovan body is the cause of granuloma inguinale and that it is a bacterium unrelated to the Friedlander group of organisms.

Repeated exposure of normal individuals through coitus to those suffering with granuloma inguinale without their contracting the disease suggests that an actual break in the skin surface is necessary for successful inoculation or that the organism is infective only for susceptible individuals.

The growth of the Donovan body in rather low dilutions of antimony and potassium tartrate may indicate that the action of the drug within the body may be indirect rather than direct.

The blood globulins are disturbed either qualitatively or quantitatively, or both, in granuloma inguinale. The disturbance may be determined by the formol-gel test.

Brilliant cresyl blue dye dissolved in physiologic sodium chloride solution is a rapid and satisfactory stain for Donovan bodies when used without fixation and dehydration.

Gentian violet given intravenously was found to inhibit the progress of the disease. It is much less effective, however, than antimony and potassium tartrate.

Indications for Surgical Treatment of Duodenal Ulcer.—Lester D. Powell (Jour. of Iowa State Med. Soc., 1927, Vol. XVII, pp. 348-352). Duodenal ulcer as a clinical entity has been recognized since 1817, although the surgical treatment was not instituted until many years later. Prior to 1881 the field of gastric surgery was practically un-known. Billroth and Wolfler performed the first successful pylorectomy and in 1881 Wolfler and Nicolandini performed the first gastroenterostomy for pyloric obstruction, due to a non-resectable carcinoma. In 1886 Heineke and Mikulicz introduced pyloroplasty for the relief of benign pyloric obstruction.

With the increased frequency of operation for duodenal ulcer more came to be known about the pathology of such lesions. Surgeons learned that all patients could not expect to be cured by surgery and that some patients with apparently quite active symptoms would obtain relief from the medical care.

The mere presence of a duodenal ulcer is not an indication for surgery. An uncomplicated duodenal ulcer with a short history in most instances improves rapidly with medical management. Surgery is contra-indicated in neurotic, asthenic mentally or constitutionally inferior individuals in whom the symptoms are not marked, and in young individuals with a short history until medical treatment has failed.

The patients in whom surgery is always definitely indicated are those with symptoms complicated by hæmorrhage, perforation, or obstruction. Hæmorrhage rarely has to be treated as an emergency operation.

Cases with repeated hemorrhages should be transfused and operated immediately. Because of the fact that ulcers bleeding before surgical intervention have a tendency to bleed after operation, it is best to attack the ulcer directly by excision or cauterization. Perforation is the most formidable complication and requires early surgical intervention. A careful closure should be made of the perforation and a posterior gastro-enterostomy established immediately, if possible, or at a later date.

Chronic obstruction from any cause requires surgical treatment. The more marked the obstruction, the more satisfactory are the results obtained from operation. These patients carry an increased surgical risk because of dehydration and lack of resistance, often associated with changes in blood chemistry typical of an alkalosis. The preoperative treatment consists of bed rest, frequent gastric lavage, forced fluids subcutaneously, rectally and intravenously.

Any one operation may be ideal for selected cases and unsatisfactory in others. In cases with acute inflammation, chronic indurated ulcer or ulcers with obstruction, gastro-enterostomy is the procedure of choice. Small superficial duodenal ulcers without obstruction, located on the anterior surface and near the pylorus, have been satisfactorily treated by simple excision of the ulcer and a portion of the pyloric

sphincter. It appears to the conservative person that resection of the stomach is an extremely radical procedure in the treatment of duodenal ulcer.

Preoperative and postoperative medical management, including dietary measures and the eradication of all foci, helps to obtain satisfactory surgical results.

Anæsthesia in Gall-Bladder Surgery.—W. Bourne (Canadian Med. Assoc. Journ., September, 1927, p. 1031) discusses the choice of anæsthetics in gall-bladder surgery; he prefers procaine, on the ground of its being the least harmful to the liver, while lung complications are less common, and acidosis, if present, is not increased. He advises a combination of field-block, local infiltration under the peritoneum of the anterior wall of the abdomen after this has been opened, and anterior splanchnic injection. He thinks the method should be combined with the use of one of the gaseous anaesthetics, as much oxygen being added as is required to prevent any danger of anoxaemia. Nitrous oxide, he adds, does not produce sufficient relaxation in this type of case, and therefore requires the addition of a little ether. Ethylene, however, abolishes rigidity more readily and does not, as a rule, need augmentation by ether. The author adds that if the clotting time of the blood is known to be increased it should be shortened by giving calcium chloride in intravenous injections of 5 c.cm. of a 10 per cent. solution in re-distilled water for three successive days prior to the operation. Glucose with a large quantity of water should also be injected, since it seems to lessen the damage which some anæsthetics cause to the liver. Morphine, with atropine or scopolamine, may also be given in suitable doses, which should be so small that no ill effects are produced, such as hyperglycæmia, increased acidosis, and depression of peristaltic activity and of the respiratory centre. During anæsthesia the state of the circulation requires watching, so that with an increased pulse rate and a fall in blood pressure lasting more than five minutes shock can be prevented by intravenous injections. For the remedy of acidosis, sodium and potassium phosphates in alkaline form should be administered in approximately the same proportions and quantities as those in which they are being excreted; they are given by the rectum in dilute solution. Care must be taken to avoid cyanosis, in view of the severe damage to the liver which follows anoxæmia.

Regional Anæsthesia for Operations on the Spinal Column.—C. Labat (Brit. Journ. Anaesthetics, October, 1927, p. 81) states that the principles involved in regional anaesthesia for orthopaedic operations upon the spinal column differ somewhat from those for other operations, since the normal landmarks have become altered by trauma or disease. He gives notes of six cases to illustrate the technique, and remarks that the anæsthetist must have a thorough anatomical knowledge in order that his procedure may be modified to suit individual distortions. Labat considers that the following practical inferences are justified. The supine position of the patient is the best because it facilitates paravertebral injection technique, affords the greatest relaxation of the back muscles, and avoids lateral distortions. In advanced tuberculous conditions the use of a 0·5 per cent. neocaine solution is advisable, even in paravertebral block, with a limit of 250 c.cm.; it should be introduced very slowly, and with the addition of 5 drops of 1 in 1,000 adrenaline solution to each 100 c.cm. of anaesthetic solution injected. A modified technique of paravertebral block is advocated by which the nerves are approached from a point overlying the transverse process, the same wheals being used for the field-block; the resulting ischaemia of the operative field facilitates dissection. This method of regional anaesthesia renders decompression of the cord at the level of the first and second cervical vertebrae less difficult and hazardous, and its use at lower levels of the spine is greatly to the advantage of both surgeon and patient. By its means extensive spinal fusions are possible with but little post anaesthetic disturbance and with considerably improved prognosis, especially in the presence of active pulmonary tuberculosis. The method was not attempted in operations on children.

Treatment of Coxa Vara:—H. Judet Bull. et Mem. Soc. de Chir. de Paris, Tome XIX, No. 12, 1927, p. 550 describes the methods he has adopted in treating cases of coxa vara in young adults. In the first place he corrects the malposition of the limb—that is to say, the external rotation and the abduction. This is always possible under general anaesthesia, and he fixes the leg in moderate abduction and slight internal rotation. The limb is best held in this position by means of plaster-of-Paris as advocated by Whitmann in fractures of the neck of the femur. This is continued for two months, when the plaster is removed. The second stage of the treatment then consists in fixing the patient with a special type of splint extending from the pelvis to the foot. This is hinged at the hip, knee, and ankle, and the patient is enabled to walk in it. At the age of 18 to 20 years the neck of the femur is firmly consolidated and the ultimate result is satisfactory, and often perfect. In malunited cases a cuneiform osteotomy below the great trochanter, followed by abduction of the limb in plaster, reestablishes the normal angle of the neck of the femur.

RADIOLOGY AND ELECTRO-THERAPY

Actinotherapy in Dermatology.—A. Bodart (Bruxelles-Medical, October 2nd, 1927, p. 1566) asserts that ultra-violet rays exert a triple action (1) microbicidal, acting chiefly on the surface and with slight penetrating power; (2) stimulating, exciting the growth, hæmatopoiesis, and cicatrization of tissues; and (3) external revulsive, when strong doses are used. Quartz lamps were usually employed by Bodart. Actinotherapy can be applied either simply alone, in conjunction with other physical agents, or with chemical, photo-sensibilizing agents, and the method of application is briefly described. Physical agents, notably infra-red rays, are being more and more used in association with ultra-violet ones, as they have a moderating action on actinic erythema and radio-dermatites. The benefits arising from the combination of these two agents are strikingly seen in surgical tuberculoses. The chief indications for the use of ultra-violet rays are: the pyodermites, cutaneous tuberculoses, ulcers, cutaneous mycoses, chronic eczemas, certain parakeratoses, and alopecias. Their use is contraindicated in acute febrile eczema, radio-dermatites, urticaria, xeroderma pigmentosum, and in all cases of hyperchromia such as ephelides and chloasma; in the last infra-red rays are best employed. The sources of ultra-violet rays do not only produce these, but also a series of radiations which, in quartz-mercury lamps, correspond to the spectrum of mercury vapour. Wood has constructed a screen of very deeply coloured glass with a nickel oxide base, which is very slightly permeable to blue and violet rays but markedly to ultra violet ones. With this lamp healthy skin has a greyish-blue fluorescence; the nails are pearly; ordinary hairs appear black, while those affected with trichophytons give a greenish hue;

The parakeratoses appear very pale, and the puritus, premonitory to eczema, gives an orange tint. Bodart believes that the use of ultra-violet rays will become more and more general, and that Wood's lamp will prove to be an indispensable auxiliary.

Treatment of Asthma with Ultra Violet Rays.—Jean Saidman, Journal De Med De Paris, No 26, June 30, 1926. The author treated 36 cases of asthma with ultra violet light. The radiations have not yielded very definite results in his adult cases. Nevertheless relapses are allayed by ultra violet light, and the number of painful attacks have been considerably reduced. In children, however, the treatment has an immense importance, not only from the symptomatic point of view, but also because it combats hytrophy, thoracic mal-formations and the tendency to emphysema. Moreover, certain asthmatic children who are prevented from attending school, can now continue their education, due to the success with actinotherapy. In general ultra violet radiations have a greater beneficial effect on children.

Technique: The mercuy vapor lamp has yielded only 40% satisfactory results. Since the author began using polymetallic arcs his percentage of success has almost doubled (74%). Certain cases which had, at first, been irradiated without success by the mercury vapor lamp, were later, in the majority of cases, treated successfully with the polymetallic arcs. The author treats asthma with a dose a little above medium, which provokes a moderate erythema. Treatment consists of three sittings week until the paroxysms have disappeared, and then the irradiations are continued during the two following weeks.

Diseases of the Lymph Nodes of the Neck and Their Treatment.—Dr. Paul Karger, Fort. Der Med., I. Quarter, March 31, 1927. The author gives a systematic sketch of the procedure upon finding enlarged lymph glands of the neck. The location and source of lymph drainage are of the utmost importance in diagnosing the disease which caused the enlargements. Radiation therapy is indicated in many of the gland swellings. In treatment of the neck lymphomas, radiation is competing more and more with the scalpel of the surgeon, and in recent years, the lymphomas are only in exceptional cases the object of surgical intervention. This applies

particularly to the tuberculous diseases. Radiation therapy has, to be sure, the disadvantage in that the treatment stretches over many months, but on the other hand, it has the advantage of not leaving any scars or other skin changes. There is no danger of a lung infection from the tuberculous glands, since there is no lymph stream from the neck to the thorax.

Abscessed glands should always be irradiated after they have been drained. All glands of the neck which are tuberculous, and which are not abscessed, not caseated nor calcified and do not lie beneath inflamed skin should be irradiated. There is not much to expect from quartz lamp or irridation. The following indications and technique are based on the work of Czerny and Karger.

The technique purely schematic is as follows: Inductor; 35 cm. spark gap. Mercury interrupter. Muller-Siede cooling tube with Fern-Osmo regeneration 1.8 to 2.5 miliamperes. Focal distance of the skin averages 20 cm. Surface of lead rubber. Filter 3-4 mm. aluminum emits about 10 to 11 gamma per treatment. Time of irradiation 10 to 15 minutes.

As far as Roentgen irradiation is concerned, it does not make any difference whether the lymphoma is tuberculous or not, if the only object is the removal of the tumor.

What can be expected from irradiation of lymphomas? There are many possibilities.

1. Recently enlarged glands, after a temporary swelling after the first irradiation, recede almost to impalpability. This results in about 1 to 3 irradiations, that is in about 2 months.

2. Even after the first irradiation, about 8-14 days, there results a rapid decrease and separation of large gland masses. These are almost always lymphogran-ulomatoses.

3. After a number of irradiations the glands become invisible, but are still palpable to pea to bean sized hard nodes. Further irradiation does not change the result.

4. After irradiation, large conglomerated tuberculous tumors first separate into single discrete glands. Then the fresh periade nitis is attacked, and only then the actual chronic process is affected.

5. After the first irradiation there is abscess formation. Puncturing yields tuberculous pus or caseous particles.

6. Fistulous glands are closed.

7. The gland tumor remains unchanged.

Radiations for Children —Rena Weil, M D., Journal de Medicine De Paris. No. 11, Mar. 11, 1927. Ultra violet rays, x-rays and radium occupy a very important place in diseases of children.

I. In certain diseases ultra violet rays, judiciously employed, can and should be the remedy almost to the entire exclusion of all others. This holds true in the following diseases:

1. Rickets—The younger the patient the earlier the cure

2. Convulsions and spasmodic conditions of early childhood—Infantile asthma and tetany.

3. Hypotrophy and athresia—Constitute a positive indication.

4. The anemias of early childhood are clinically ameliorated and the blood picture improved. It can justly be asked to combine iron medication with ultra violet rays.

5. Impetigo and pyodermitis—Children were healed by no other medication. They were literally saved, from the general as well as from the local point of view, by ultra violet rays.

6 Tuberculosis—Where it was a case of tuberculous peritonitis, or osseous tuberculosis, or ganglionated tuberculosis, closed or fistulated. *It is not indicated in pulmonary tuberculosis with afebrile condition.*

7. Glandular insufficiency.

II. X-rays are indicated in three diseases of children:

1. Adenopathies.
2. Hypertrophy of the thymus.
3. Leukemias.

III. Radium is the best treatment for angiomas because of its ease of application, its harmlessness, and the certainty of obtaining a cure with hardly a scar left. It must be understood that only the tuberous angiomas are meant, which are very sensitive to radium,—and not the flat or wine spotted angiomas which are very resistant to radium. It is well always to remember that the angioma is removed sooner if the child is treated as early as possible.

Treatment of Fissure Ani with Diathermy.—J. Kowarschick, M.D., Wiener Klin Wschr., No. 9, 1927. Treatment of anal fissure with high frequency current, in the beginning by Arsonvalisation and later by diathermy, electro-coagulation, was practised in France for years. The Doumer method consists of the following: A conical shaped metal electrode or still better a condensor electrode, is inserted into the rectum until it is past the sphincter. Then the high frequency current drawn from an Oudin or Tesla radiation spool, is allowed to act on the fissure. The fissure is superficially sloughed off and is thus destroyed. This is brought about by the high frequency sparks showered from the electrode on the mucous membrane. The healing effect of high frequency sparks on epithelial defects and small wounds, is well established. Often the patient feels a considerable relief even after the first treatment. According to Zimmern and Turchini, the fissure is healed in about 8 treatments. Marque using the Doumer method had complete success in 94% of his treated cases.

In place of this miniature fulguration as it is effected with high gapped Arsonval currents, H. Bordier later recommended electro-coagulation of the fissure by the diathermy current. (The method is thoroughly described in his textbook.) The patient is in the knee-elbow position and the fissure is anesthetized with a solution of novocain, and then sloughed off by means of the proper electrode. A large plate fastened to the lumbar region serves as a second indifferent electrode.

Treatment of Infantile Paralysis.—Bordier (Acta Psychiatrica et Neurologica, Copenhagen, Vol. 2, p. 1, 1927) calls attention to a new treatment of infantile paralysis. He gives the general principles, technic and results obtained in his study.

Radiotherapy is the principal factor in Bordier's treatment of anterior poliomyelitis. This is administered to the affected segment of the spinal cord, begun as soon as possible after the febrile period. The dose is 200 R units in children under 3 years of age, gradually increased to 1,000 R units in adults, screened through 6 mm. of aluminum. A series of three irradiations is given, followed by an interval of twenty-five days; two or three series are thus administered, according to the gravity of the case.

Secondly, diathermy is administered to promote nutrition to the paralyzed parts. The administration of the diathermy does not conflict with the radiotherapy, nor *vice versa* For restoration of paralyzed muscles to normal, a low voltage current is employed.

Bordier's experience indicates that this combined treatment considerably improves the prognosis in the gravest forms of anterior poliomyelitis and is effective in most cases of moderate gravity.

It would seem that these suggestions would act as an impetus to others, especially in our own country, to carry on this same kind of work. The value of diathermy as an adjuvant is well recognized. Stewart * recently called attention to his work in infantile paralysis and evaluates the use of diathermy as well as other physical agents. Stewart acknowledges credit to William Benham Snow for first calling attention to the possibility of employing the Morton wave from the static machine to minimize pressure destruction in the cord during the acute stage of the disease.

Emphasis is also laid on the influence of assistive, active and resistive exercises. The latter meet the indication of keeping in function the mental and motor pathways which tend to deterioration from disease.

It is quite evident that in physical therapy there are definite aids which have marked progress in the management of infantile paralysis. In fact these have been the only advances in this malady during the past decade. Here is an open and unexplored field for investigation. The experiences of Bordier, Stewart and others are assurances that much can be accomplished along the lines suggested by them. Their work is of a pioneering nature.—*A.R.H.*

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AND
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ORIGINAL ARTICLES.

* CHRONIC LARYNGITIS WITH SPECIAL REFERENCE TO ITS ETIOLOGY AND TREATMENT

BY

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Chronic Laryngitis may be defined as a chronic catarrhal inflammation of the mucous membrane of the larynx; the chief symptom being alteration and impairment of the voice.

Etiology:—It is said that the mucous membrane of the larynx is the part of the respiratory passages which is least seldom the primary or sole seat of chronic inflammation. Except, perhaps, in professional voice users, it is quite exceptional to find idiopathic chronic laryngitis. This observation is supported by two factors: In the first place, nature has provided the nose and naso-pharynx with such a perfect arrangement for protecting the larynx from deleterious conditions of the atmosphere that the inspired air with regard to warmth, moisture and filtration is in the most suitable condition before it reaches the vocal cords. Secondly, the non-vascularity of the vocal cords and the scarcity of glands in the larynx can hardly afford a foothold to chronic catarrhal processes in the absence of other causes, contiguous or constitutional.

It follows, therefore, that the most potent factors in the causation of the disease should be disorders of the nasal and post-nasal cavities and to a less extent of the pharynx and mouth

* Specially contributed to "The Antiseptic."

The importance of nasal breathing is now so generally recognised that it is sufficient to call attention to the deterioration which must occur in the pharynx and larynx from chronic mouth breathing. The current of inspired air by its passage through the nasal fossæ is charged with moisture, raised to the temperature of the body and filtered from dust and other impurities. In ordinary conditions it is also deprived of the micro-organisms which float in it, the greater number being arrested at the very entrance of the nostrils; while those which penetrate are enclosed in the nasal mucosa which is inimical to their development and further penetration; while the ciliated epithelium removes the arrested organisms.

This is what is going on every moment in every healthy individual's body; but if as a result of chronic catarrhal affections the calibre of nasal chambers is narrowed, or the secretion of their mucous surfaces is diminished or altered; or the property of the ciliated epithelium is destroyed, what will happen? The inspired air will directly reach the pharynx or larynx, and being cold, dry and unfiltered it will deposit its impurities on these surfaces, and thereby render the mucous membrane of these organs dry, congested and chronically inflamed. Besides this, nasal and pharyngeal affections also predispose to chronic laryngitis by the possible spread of catarrh by direct continuity of tissue; and by the septic and irritant matter which may find its way directly into the larynx. Chronic nasal troubles also predispose to laryngitis by the hemming and hawking which they sometimes excite, whereby increased strain is thrown on the laryngeal muscles and catarrh and paresis are easily induced.

Chronic laryngitis may be the result of chronic catarrh of the trachea and bronchi. An inveterate form of laryngitis not infrequently precedes the development of the physical signs of laryngeal and pulmonary tuberculosis.

Inflammatory and ulcerative processes in the mouth, unclean-ed or carious teeth and pyorrhœa alveolaris may also be the causal factors of the disease.

Gastro-intestinal, hepatic and cardiac defects may cause a reflex cough which in its turn through its persistency may set up chronic inflammation of the larynx. Gout and rheumatism are also held responsible in some cases. All the direct and reflex causes of cough and even frequent fits of weeping may be productive of chronic laryngitis. Excessive or faulty

use of the voice is one of the potent causal factors of the disease.

The disease is more commonly met with in adult life than at other ages. Men are more prone to it than women, but the latter fall an easy prey to the disease if they are exposed to any of the exciting causes during menstruation.

Amongst the general external conditions it is sufficient to add here that the worst enemies of the larynx are dust, tobacco and alcohol. As a secondary phenomenon chronic laryngitis is almost invariably present in long continued diseases of the larynx, such as Tuberculosis, Syphilis, Leprosy and simple and malignant new growths.

Symptoms.—The symptoms of chronic laryngitis are too well known to require more than a passing notice here. The constant and usually the only symptom complained of is the alteration of the voice which becomes husky at first with intervals of natural clearness, but with the progress of the disease hoarseness becomes more persistent. This hoarseness is more marked after rest or on rising in the morning, and tends to disappear after some use of the voice. A sense of fatigue and soreness in the throat results from the increased effort in vocalisation. There is not necessarily any cough, but constant hawking in the effort to clear the larynx is certainly present.

Abundant expectoration indicates that trachea and bronchi are also affected; while the symptoms of concomitant nasal and pharyngeal catarrh are present in a large number of cases.

Diagnosis.—This usually presents no difficulty, the chronic nature of the trouble and the absence of constitutional symptoms being sufficient to remove any confusion. The possibility of laryngeal phthisis which is often preceded by an inveterate laryngitis should not, however, be lost sight of. The presence of marked anæmia of the air passages or any marked constitutional charges should be looked upon with suspicion; and a careful examination of the chest, temperature and sputum should be undertaken.

Prognosis.—The affection does not involve any danger to life; but the promise of a spontaneous cure in a well established case is far from being considered. On the other hand, appropriate treatment may lead to a recovery in a considerable number of cases, provided the patient is willing and is able to carry out the advice.

Treatment.—Considering the various etiological factors of this chronic affection it goes without saying that success in treatment can only be achieved by the successful detection of the cause; and it will be noticed that how often this will be found outside the larynx itself. The disease is undoubtedly obstinate and much refractory to treatment; yet most of the failures in treatment can be traced to haphazard treatment. Removal of the primary cause is the foremost necessity, local applications to the larynx, though helpful, play only a secondary part. To mention here a couple of instances in point will not be out of place: an elderly Mahommadan gentleman attended the out patients' department of our dispensary for chronic laryngitis for about a month, but the treatment—tropical applications and this, that and the other—beyond affording him temporary relief every now and then did not do him any more good. Enquiries, however, revealed that he suffered from chronic nasal catarrh with fresh exacerbations of the disease every off and on; and during those attacks his throat troubles used to become worse. He was directed to undergo vaccine treatment, which he did, probably in Burma; for he wrote to me from there that he had undergone some injection treatment and was relieved of all his troubles. Another case, I remember, was that of a mason, who, too, was unsuccessfully treated for a long time. He could not leave his profession which exposed him to dusty atmosphere as his living depended on it; and the disease also did not leave him.

Having discovered the principal cause, attention should then be directed to the customs of the patients as regards food, drink, clothing, sleep, exercise, tobacco, alcohol, fresh air and ventilation. In the majority of cases treatment will have to be directed to the nose or naso-pharynx, hence any morbid process or structural variation from the normal in those organs should be attended to.

In case the principal cause is found, by a process of elimination, to be in the larynx itself, it will generally be discovered that the laryngitis is due to faulty use of the voice. It is more often misuse than overuse which produces the disease, and in such cases it will be necessary to see that the patient acquires a proper method of voice production and singing. Rest to the affected parts is very necessary and this can be secured by enjoining strict silence; but this is seldom practicable, hence the use of the voice should be limited to the bare necessities of patient's surroundings.

As for sending these patients for a change and while admitting that the pure country air is undoubtedly better than the air of cities for a chemically inflamed larynx, experience has taught that high dry air of mountains is likely to be rather irritating to the larynx; hence milder and softer climates should be chosen. As regard sea air, apart from individual opinions idiosyncrasies, are different, but it is fairly certain that strong winds are harmful and shelter from them afforded by woods, particularly fine woods, is a distinct desirability.

Medicinal treatment of chronic laryngitis consists of medicated steam inhalations; laryngeal sprays, and the topical applications by means of a laryngeal brush.

(*1*) *Medicated Steam Inhalations.*—There are two methods of doing this. In the first the medicament is atomized to impalpable vapour by means of sterilized air in a cabinet while in the second the inhalation is through a sterile mouth piece or nose-piece. The following is a good combination:—

Rx:—	Eucalyptol	m iii
	Spt. Camphor	dr. iv
	Tr. Benzoin Co	ad. oz ii

Mft. Two teaspoonfuls to a pint of hot water and inhaled for from 15 to 30 minutes at bed time and on arising. After the morning inhalation the patient should remain indoors for an hour or two.

Or any of the following inhalations may be used :—

Rx.

(i)	Menthol	grs. 90
	Oleum Pini sylvesteris	dr. i
	,, Eucalyptus	dr. i
	Tr. Benzoin	dr. i
	Tr. Tolu	dr. i

Mft. Inhale from a steam kettle or vaporizer.

Rx:

(ii)	Eucalyptus oil	m xx
	Tr. Benzoin Co	m xxx
	Thymol	gr. x
	Spt. Chloroform	dr. 1½

Mft. ten drops to be inhaled from an inhaler.

(2) *Laryngeal Sprays*:—These sprays are of two kinds (i) those made up with a basis of liquid vaseline (Paroleine, Cimoline etc.) and (ii) those made up with water. They stand first in the treatment of the disease under consideration so much so that the oily sprays have to a large extent superseded the steam inhalations so much in vogue in former times.

There is some diversity of opinion as to whether these sprays should be used warm or cold. Maritz Schmidt says that warm sprays to the nose and throat chronic conditions are apt to lead to further passive congestion and foster catarrh; while cold sprays are not only harmless, but they are much more bracing and stimulating.

If there is much mucous about the larynx, an alkaline cleansing spray, such as the following, should first be prescribed.

Rx:	Sodii Borate	dr. i
	,, Bicarb	dr. i
	Glycerine acid Carbolic	dr. ii
	Aqua	oz viii

Mft. Sig. to be sprayed by means of a laryngeal throat atomiser.

After this other laryngeal sprays should be prescribed. To render them more soothing in cases of cough or discomfort Cocaine gr. i to the ounce may be added without any fear or risk. Antipyrin gr. v to the ounce or acid Carbolic gr. ii to the ounce have also a sedative action; and if the sprays are made up with freshly prepared peppermint-water, they are rendered more pleasant and more soothing. A stimulant effect can be produced by the addition of Menthol, Eucalyptus, Oleum gultheria or pine oil to any of the sprays.

Oily sprays are decidedly superior to those made up with water. An excellent combination is given below.

Rx:	Acid Carbolic	
	Menthol	m xx
	Oleum Eucalyptus	dr. i
	Pinol	m xxx
	Hazeline Liquid	dr. i
	Paroleine	dr. ii
		dr. ii

Mft. To be sprayed three times a day by means of a paroleine atomiser.

Astringents such as Ag no_3 (II—V grs.), Tinc Sulph (gr. V-X) and copper sulph (grs. 3-10) to the ounce can be added to the sprays in obstinate cases.

(iii) The *Laryngeal Brush* is seldom used now a days. Even when used with the greatest skill, it produces such an amount of spasm and local reaction and runs such a risk—from movements on the part of the patients of local traumatism that the

drawback attendant on its use far outweigh—the benefits to be derived from it. Applications of cocaine before use of the brush are also far from desirable. But in some inveterate cases it is required; and then generally Silver Nitrate is used beginning with a solution of grs. x to an ounce and gradually increasing it until the strength of 100 grains to an ounce is reached. There is no hard and fast rule for repeating these applications; generally speaking the frequency should be proportionate to the reaction produced.

Gargles need only be mentioned to be condemned as useless. Pastilles of Ammon. Chloride and Benzoic Acid have been recommended for loosening the secretion, if it is thick and tenacious. Any of the following may be sucked to relieve hoarseness and to improve voice.

(i) Tabloid Potass. Chloras et Boracis et Cocaine Co. (B. W. & Co.)

(ii) Trochiscus Krameria et Cocaine.

The following hygienic directions are likely to prove valuable:—

Practise abdominal breathing, (deep breathing) sponge the neck, chest, back and under the arms to the waist-line with cold water night and morning; follow by a brisk rubbing with a rough towel. Do not wear mufflers or anything to confine the throat. Cod liver oil and creosote may be taken after food three times daily for same time.

In conclusion I feel that this section on the treatment of chronic laryngitis would remain incomplete if I omit to mention here an inveterate case of this disease which I successfully treated with a single Homeopathic drug several years ago. The patient was a Bengali gentleman—a musician of much repute, whose Gramophone records had once enjoyed an extensive sale. He had been suffering from chronic laryngitis for about a couple of years and had got himself treated by good many physicians of different schools. When the patient was introduced to me by a friend of mine, the gentleman seemed to be much dejected and had given up all hopes of being ever able to sing again. Absolute rest of the voice was enjoined and he was prescribed Acid Nitric, 1000. Four doses in all had to be given, repeated every fifteenth day, and during the interval Sacchrum lactum (sugar of milk) powders grs. ii were given three times daily as placibo. One more month's rest after this two months' treatment restored the patient to his normal and he could thereafter sing as usual.

Our allopathic Nitric Acid, too, is an excellent remedy for relieving the temporary hoarseness which so often results from excessive singing in professional singers. Many a time have I tried it with gratifying success, to the astonishment of the audience, on singers in nautch parties and musical entertainments. My plan is quite simple. I order two drops of pure nitric acid to be added to two ounces a water in a phial which is briskly shaken several times.

The unfortunate patient is asked to retire to some solitary corner (to ensure rest of the voice), and directed to take the liquid in the phial in four divided doses at an interval of half an hour each. After two hours it is generally found that huskiness or hoarseness is gone and the voice has resumed its natural clearness.

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*OPHTHALMIA NEONATORUM

BY

SATYA CHARAN MAITRA, L. M. P.

Ophthalmia Neonatorum is a highly infectious disease of the eyes with which the infants are inocculated during the passage of the head through the vagina, during delivery and rarely subsequently to delivery. Of all the diseases of the eye there is none which causes more blindess—when proper care of the eyes are not taken. Though the disease can be entirely prevented and eradicated without injury to the sight, if proper prophylactic and other treatments are strictly carried out.

Etiology :—The gonococcus is the cause of the majority of the cases and, indeed, practically the only cause when the affection is of such severity as to give rise to corneal complications. The other organisms are the staphylococcus, streptococcus, pneumococcus bacillus klebs-loeffler and the colon bacillus.

Infection of the infants' eyes from the vaginal discharge of the mother may take place.

(1) During or immediately after birth most common time at which infection takes place.

(2) Some time after birth (secondary infection) from the discharge on towels etc.

Diagnosis:—The diagnosis is very simple, but there is one condition for which it may be mistaken; *i.e.*, congenital lachrymal obstruction with a large purulent mucocele. These cases are

* Specially contributed to "The Antiseptic."

always unilateral whereas ophthalmia neonatorum is generally bilateral. As a rule, although the sac may be very distended, there is no swelling to be seen over the lachrymal area, as the fat cheeks of the infant hide it, but pressure over the lachrymal sac will cause regurgitation of pus into the eye and so render the diagnosis easy.

Symptoms:—The eyelids are red and swollen and there is a thick creamy dicharge, usually from both eyes, coming on most frequently about the third day after birth; this, however, depends on the time at which infection has taken place. When a child is brought with ophthalmia neonatorum, the greatest care should be exercised in the separation of the lids, since it is impossible to say what the condition of the cornea may be, and any undue pressure on the globe may lead to the rupture of an ulcer which is on the point of perforating. The baby must be held in a way that the head is placed on or between the knees of the Surgeon, who should wear protective glasses to prevent any chance of infection of his own eyes. Naturally the most careful antiseptic precautions with regard to the hands etc. should be observed, after examining such a case. Having separated the eyelids and washed or wiped away the discharge the cornea should be first examined, for if it is found to be clear a good prognosis may be given. The palpebral conjunctiva in severe cases is red and swollen, and its surface is much papillated. Occasionally in mild cases there is much follicular formation, specially in the lower fold. The ocular conjunctiva, as a rule, is not so much affected, and gonorrhœal cases in infants, unlike those in the adult, show practically no chemosis, which is due to the fact that the eyes are always closed, whilst in the adult the ocular conjunctiva in the palpebral tissue is principally œdematous owing to the swollen lids causing a certain amount of constriction. It is impossible to say with certainty, without a bacteriological examination, what organism is the actual cause of the infection, but if a case comes with a profuse, thick, creamy discharge which, in the later stages, becomes floculent with a very little mucus in it, one can almost with certainty say that it is gonorrhœal, more specially if the cornea, with the exceptions perhaps of the stretococcus and Klebs—Loeffler bacillus. On the other hand, if a case comes with slight discharge and red lid margins, the skin around the lids being involved, the infection is probably due to the Morax-Axenfeld bacillus. The latter organism rarely occurs alone in

infants, but is usually associated with the Staphylococcus Albus, and therefore, contrary to that found in adults, the discharge is often a slightly purulent one.

Treatment:—Prophylactic treatment plays a most important part in the prevention of ophthalmia neonatorum. Crede, who introduced the method known by his name, reduced the percentage of ophthalmia neonatorum in the Leipzig Lying-in-Asylum from 10. 8 to 1 percent. The method now most commonly adopted is in every case to wipe the eyelids directly the child's head is born; then as soon after birth as possible the eyes are washed out with a solution of 1—4000 perchloride of mercury. If the mother is known to have had a vaginal discharge before birth, douches should be given before rupture of the membranes, and in addition to the use of the perchloride of mercury, silver nitrate, 2 per cent should be instilled into the eyes, and subsequently neutralised with salt solution, as infants at birth have no lachrymal secretion. There can be no doubt that the sheet anchor of the treatment is nitrate of silver. In cases of any severity, a 2 per cent solution is painted once daily over the lids and fornices. In mild cases protargol, 10 per cent solution or 20 per cent solution of Argyrol can be used as drops. In the intervals the conjunctival sacs should be washed out every hour with boric lotion 10 grs. to the ounce. The lotion should be used cold, or even iced as cold inhibits the growth of the gonococcus and at the same time prevents excessive swelling of the lids. In painting, wool mops on the end of the glass rods, which should subsequently be carefully sterilised, are used. The nitrate of silver should be rubbed into the conjunctiva of the tarsus and fornix, so that the drug may reach the bottom of the papillae, which are very marked in the gonococcal form of the disease, the excess of silver being neutralised with salt solution; the greatest care must be taken not to damage the corneal epithelium. The cotton etc. which are used for the patient must be burnt and the inmates, and if in hospital, the nurse, should be warned against the risk of infection and the greatest care must be taken whilst washing the child to cleanse the head separately, and to keep all towels, linens, etc, intended for its use, entirely apart. If only one eye be affected care should be exercised in order to prevent the spread of infection to the other. The sound eye should be covered by cyanide gauze sealed down on the nasal side by flexible collodion or strapping. It should be inspected for the first few days to see that infection has not taken place. The treatment should be continued with the lotion for at least a month after all the discharge has ceased, since the gonococcus has been found in the conjunctival sacs twenty eight days after the discharge has subsided.

The duration of treatment varies considerably according to whether the case is severe or mild. If mild, the case is usually free from discharge by the end of the second week of treatment; if severe, as in the gonococcal form, the average duration of treatment is about six weeks.

Complication:—The cornea is affected in about 27 per cent of all the cases of ophthalmia neonatorum—care should be taken to treat the case (treatment of suppurative keratitis).

ENTERIC FEVER

BY

RAMNIK H. DESAI, L.C.P.S. (BOMBAY), NADIAD

(Continued from last issue)

Prophylactic treatment:—Prophylactic inoculation introduced by Wright has proved of much value. It consists in increasing the typhoid vaccine subcutaneously thrice every 10 days, the dose being from 500 to 1000 millions.

The more recent method is that of giving the vaccine by mouth. The daily dose for three consecutive days is 1 c. c. for an adult. This is known as the Besredka's method.

General domestic and individual prophylactics:—Modern sanitation has much reduced the frequent epidemics in cities and towns.

Protection of milk is of prime importance. Water should be boiled if the purity of it is doubtful. All excreta from typhoid patients should be disinfected.

General Treatment:—The patient should be kept in a well-ventilated room at absolute rest. There should be double bed side by side, so that the patient might be removed from one bed to the other by day and night, to ensure cleanliness and change of position for the patient. The diet should be light, easily digestible and nutritious. As far as possible it should be liquid. Milk is quite suitable. But the stools should be daily examined to see that food is well digested and that it does not form hard curds. Thus we can prevent meteorism which is troublesome if once developed. Fruit juice of oranges and

grapes is also much useful. No solid food should be allowed to pass the intestinal canal. Honey is also much better, because it is little fermented in the intestinal canal, and it has high caloric value.

If milk disagrees give plain albumen water, or whey.

Predigested milk might be given. Sodii citrastor Barley water may be added to the milk to prevent the formation of heavy curds. Plain boiled water should be given profusely. It is desirable to have the patient take about four litres of water daily, and large amounts are an advantage. It helps to eliminate the toxins of typhoid fever. The routine use of alcohol is unnecessary. In most of the cases it is never indicated. Younger the patient the least is the indication for a stimulant. It is only indicated in late stages of the fever when signs of great exhaustion appear, such as weak irregular pulse, feeble cardiac first sound, a dry brown tremulous tongue or a low condition, with motions and urine passed unconsciously.

Special indications:—Antiseptic treatment of typhoid is much in vogue. The most common antiseptics used are the well-known quinine and chlorine mixture thus:—

Rx:	Pot Chloras	dr. i
	Acid Hydrochloric	dr. i
	Aq. ad.	oz. xii

Mft. mix. 1/12 part every 3 hours.

Put the powder in a stoppered bottle, and then pour on the acid. Shake well till the chlorine gas is fully evolved. Then add water gradually, each time shaking well to dissolve the gas.

Add 3 grs. of quinine Hydro. to each ounce of the mixture. Chlorine treatment is better if started in the beginning and if there is no constipation and bronchitis. But it is very nauseous. Most patients object to its taste, and it tends to produce bronchitis.

Fractional doses of calomel are much better to remove the hard fœcal masses from the upper part of the intestinal canal. It also exerts its antiseptic action.

Salol is of doubtful value. Ol-cinnamon is thought by some to be specific for typhoid. Other antiseptics used are:—

Iodine, urotropine, carbolic acid, creosotal and quaiacol carb, the sulpho-carbolates, Tr. Ferri Perchlor, Salicylic acid, ol-tere-

benthornol, ol eucalyptus, thymol, camphor, Beta-Naphthol, Bismuth Salicylas, charcoal, soured milk, Dimol, Keral and what not. Urotropine, and Hexyl resorcinal are best for urinary antisepsis.

Temperature in typhoid:—The most rational treatment of fever in typhoid cases is with Hydro-therapy. The most useful and practicable method here is that of sponging with tepid water. Sponging should be done till the temperature falls to 101° to 102° F.

Ice bag over the head is also much useful.

Diarrhœa is attended with abdominal tenderness and tympanitis. If after examining the stools we find that the evacuations are liquid and quite free from curds of milk or other undigested food, we may conclude that the diarrahœa is due to the intensity of the ulceration and catrrhal processes set up in the small intestine. In such cases what we have to do is to give rest to the intestines. Starch opii enema answers well in such cases. Internal administration of Bismuth Salicylas is also very useful or Bismuth Beta Naphthol. If tympanitis is excessive give turpentine enema or turpentine stupes. It could also be given by mouth in 10 m. doses if the kidneys are healthy. Constipation is common. It is dangerous to give any purgative in a case of typhoid.

Liquid Paraffin with Tr Iodine rectified is much beneficial in such cases. It may be presoribed thus.—

Rx:—	Paraffin Liquid	oz.	i
	Tr. Iodine Recti	m.	vi
	Ol. Terebentheni	m.	iv
	Urotropine	gr.	xxx
	Mucilage	q.	s.
	Syrup Aurantii	dr.	iv
	Aq. Cinnamon	oz.	iii

Mft. Mix. 1 part every 3 hours.

Ol terebentheni in the above mixture works as an antiseptic and hæmastatic, also removes any eatus in the intestine.

Give a simple enema of plain water. No soap is to be used, as it removes the much needed calcium from the intestinal walls.

Hæmorrhage is a serious symptom. Its occurrence is indicated by a sudden fall of temperature. Immediately give an Enema of Dower's powder and Tannin each half a drachm.

Apply a flannel binder over the abdomen to arrest any movement of the intestines. Ice bag hung from a cradle and kept lightly over the abdomen helps to arrest the hæmorrhage.

Give an intravenous injection of calcium chloride 10 grs in 10 cc. of distilled water.

Perforation.—This is indicated by fall of temperature, sudden severe pain, collapse, and signs of peritonitis. The only chance of recovery in such cases is immediate laparotomy. But there are cases reported where death occurred after a long period due to some other cause, and post mortem examination showed cicatrix near the perforation. Heart failure and hypostatic congestion of the lungs may require stimulants like brandy, Strychnine and Atropin, Camphor in oil, Digitalin Pituitrin, Adrenalin etc. Venous thrombosis common on the left side. Elevate the limb. If it is painful apply, Glyco-Belladonna cum Ichthyol, and give Sodiicitras in 30 grs dose daily as a prophylaxis to prevent thrombosis. Leeches may be applied locally to the thrombosed veins.

Nervous disturbances are restlessness, delirium, insomnia etc. They are due to sustained high temperature. Keep an ice-bag over the head. Give brain sedatives, such as Bromides, Sulphur Paraldehyde, medinal hyoscyamus &c.

Lumbar puncture is advocated by some. About 20 c. c. of cerebro-spinal fluid withdrawn gives much relief to the patient. But sores if develop are very troublesome. Preliminary washing of the exposed part of irritation with spirit and dusting with boric and starch powder will mostly prevent bed-sores.

Convalescence:—This is the important period. No solid food should be given for 10 to 12 days after the temperature becomes normal.

There is sometimes a rise of temperature when the solid food is being administered. This is due to too much fœcal matter in the intestines, the toxins of which are easily absorbed by the ulcerations.

For urinary infection the best drugs are urotropine in 30 gr. doses, and Hexyl resorcinal in capsules.

I. The recent treatment of typhoid is by injecting intravenously 200 m. of T. A. B. Stock Vaccines in 1 c. c. every 3rd day. (Medical Annual 1925)

II. Non-specific protein therapy in the form of intra-gluteal injections of boiled milk in doses of 3 to 8 cc. is recommended.

III. Another method by transfusion of blood from persons recently inoculated with T.A.B. vaccine.

IV. Convalescent serum in doses ranging from 5 to 20 cc. given subcutaneously on alternate days.

V. *Auto Hæmo-therapy*:—5 to 10 cc. of blood withdrawn from a vein and injected in the lumbo-sacral region, repeated twice or thrice every 5 days. There is improvement in general condition, other new drugs are used but they are still on trial.

They are Tr. Iodine m v injected intravenously in 10 cc. saline.

Mercurochrome:—1·1 solution injected intravenously in 20 cc. solution.

Urotropine 20 grs. injected intravenously in 5 cc. of distilled water.

PRESCRIPTIONS:—

I. *Rx*:—

Urotropine	gr. xxx
Soda Benzoate	gr. xx
Tr. Hyoscyami	dr. i
Aq. Chloroform	oz iii

Mixture ⅓ t. d.s. every 4 hours.

II. *Rx*:—

Calomel	gr. iv
Soda Bicarb	gr. xii
Mft. 1/12 part	every 3 hours.

III. *Rx*:—

Bismuth Salicylas	gr. 40
Salol	gr. xv
Mucilage	q. s
Aqua	oz iii

Mft. ⅓ part every 3 hours.

IV. *Rx*:—

Pot Brom.	gr. xxx
Ammo Brom	gr. xxx
Tr. Hyoscyami	dr. i
Tr. Nux Vomica	m xx
Spt. Camphor	dr. i
Spt. Ammo Arom	dr. i
Spt. Chloroform	dr. i
Aqu ad	oz iv

Mixture ¼ part every 3 hours.

V. *Rx*:—

Pot citras	dr. ii
Liq. Ammo Acet	dr. vi
Spt. Aetheris	m xxx
Syr Auratii	dr. iv
Aqua. Camphor	oz iii

Mixture ¼ part every 3 hours.

VI. *Rx*:

Quinine Glycerophosph	gr x
Nuclein Solution	m xx
Liqr Strychnine	m x
Tr. Gentian Cc	dr. i
Aqa ad	oz iii

Mixture ⅓ part every 3 hours.

* THE IMPORTANCE OF DIET AND HYGIENE IN GENERAL AND IN SKIN DISEASES AS LEUCODERMA AND LEPROSY IN PARTICULAR

BY

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Every intelligent person recognizes that what is eaten and drunk must have much to do with the character and integrity of the tissues of which it goes to form a part, and the profession should be more alive to study and observe the internal relations of many maladies which appear upon the skin. This is not a new idea but has been repeatedly impressed upon the minds of the public from the very ancient times of "Charak and Shushrut".

"Sufferings can be greatly relieved by regulating diet, and thousands of medicines can have little effect without that" and also.—

"Symptoms of suffering subside with regulation of diet and increase with non-attention to that—so the physician should always apply himself to the regulation of diet". And one can always see that.—

"Food and only food makes blood and blood as one knows makes body, so that the body structure is dependent upon and only upon the food one takes". In all diseases, mind has a profound influence on the body and the body is profoundly influenced by diet.

Treatment of diseases by drugs without attention to diet is not likely to meet with marked success. Therapeutic treatment and dietary are like the two legs on which we walk, the one must help forward the other and progress must not be expected by means of one alone.

On the contrary, it is easy to see that a great deal of harm may be done by the popular idea arising that a specific has been found for a certain disease, for the patient will pin his faith to that drug only and neglect to regulate his diet and remove the primary cause which has brought on the disease.

It is commendable, rather, some diet for certain disease than frequent use of physic, except it be grown into a custom, for diet regulates the body more and troubles it less.

The sooner and more thoroughly, thought and attention and work of those engaged in the science of medicine is turned

* Specially contributed to "The Antiseptic."

along with local pathology and treatment to the consideration of the deeper and fundamental elements of tissue disturbances from internal causes, the better it will be for science and for the practical relief of sufferers from many diseases.

Diseases of the skin as a class are notoriously rebellious and some cases tax the skill and patience even of the specialist to an annoying degree and consequently they are sometimes termed "Incurable" But there is cause for everything in this world and human skill and discernment are gradually probing Nature, so the science of medicine has progressed incomparably of late years along the lines of both Etiology and treatment.

Metabolism, as influenced by diet and hygiene, has the greatest effect upon the structure and diseases of the tissues of the body, including the skin and consequently the diet and hygiene are of importance in relation to many diseases of the skin, and one can recall instances, where the clinical evidence of this is quite clear. Thus it is very often seen that acute Erythema or Urticaria results in some persons from the ingestion of certain form of fish (particularly shell fish, strawberries or bananas. In some, crops of acne follow the free use of certain articles as nuts, excess of sweets, pastry and cheese etc. In some Psoriasis reappears by an excessive consumption of protien matter or indulgence in alcoholic drinks, whereas, there may be entire or comparative freedom from the eruption under strictly vegetarian diet.

In some, ulcerative lesions of syphilis take long time to cahela in habitual drinkers.

In some, Leprotic ulcers prove very impertinent as long as the person indulges in alcoholic drinks and takes in large quantity of common salt. Severe itching is also seen in these cases and as soon as salt is stopped the itching disappears.

In some people different kinds of rashes appear after the use of Bromides, Serums etc.

In some, Eczema "acute or chronic" is influenced very much by diet adversely or favourably; certain fruits and drinks increasing and others decreasing it.

To the popular mind restriction of certain articles of diet appears as a starvation or faminishing process, generally to be continued for, but for a short time. Now it is generally seen, and with great advantage, that total abstinence from food for a

few days, taking only water for a while, is of the greatest value in certain incurable skin diseases (*ie.*, Leprosy, Leucoderma as practised in Panch Karmas) as in acute febrile conditions and in certain gastro-intestinal affections and it is also seen that light diet as that of rice or vegtables has often the most beneficial effect in cutaneous affections.

In connection with many skin diseases (Leprosy and Leucoderma) diet has a much broader meaning and siginifies regulation of the quantity and quality of food and drink taken, its mode of preparation, and the time and method of consumption as related to the season of the year, and stage of disease and its influence upon the mind

I (a) 1st in connection with quantity of food and drink:—Do not gratify the taste after the appetite is satisfied. It is now well proved that the well to do classes suffer very much from eating too much and the poor from starvation, as in seen in eczema and gout in the rich, and deficiency diseases, lathyriasis etc., in the poor.

The overloading of the system with material which can only be partially digested and assimilated has often given rise to intestinal fermentation, and to many derangements of metabolism, which induce and perpetuate certain skin affections.

Underfeeding can, of course, induce anæmic conditions which may in turn influence the skin but so rarely such cases of skin diseases are seen, that it is hardly to be considered in comparison with error of over-feeding.

(*b*) *The quality of food*:—This may often have a great influence on certain erruptions:—

(1) Irritating articles of diet, irritating directly stomach and intestines, giving rise to reflex cutaneous eruptions as erythema and urticaria from strawberries, fish etc.

(2) Articles of diet, producing gastric and intestinal indigestion giving rise to imperfectly elaborated materials or to toxins, which have a direct irritating effect in their circulation, through the capillaries and also by attempted elimination by the skin as in Acne from indulgence in sweets, pastry and cheese. Psorisis, re-appearance from excessive protein diet, Leucodermic patches come on suddenly by indulgence in alcoholic drink and salty dishes—skin eruptions, by too irritating articles of diet as spices etc.

The simple nourishing non-irritating and fresh diet is very important in skin affections as in other diseases.

(*c*) *The quality and quantity of drinks*, are also to be taken into consideration, because the ill-effects on the skin of alcoholic drinks are well known and many a case of cutaneous disease persists as long as they are indulged in, but yields to previously in-effective treatment, when they are abandoned.

Mode of preparation and compatible combination of food stuffs. are also often of great importance; very little is realized, what important part a good and bad cooking play. The present day so-called civilization has much to do with it. The Beri-beri and epidemic dropsy, arising from polished rice. The dainty preparation of dishes, from which nourshing food stuffs are boiled to such an extent that the very nourishing elements (Vitamines) are driven out of them. Fresh fruits, fresh milk and course flour have become the traditions of old times. Repeatedly it has been seen that patients have gone into the woods for the relief of symptoms and for leading a simple life for their health, but on their return, they have found that the symptoms instead of subsiding have been aggravated by the ever-lasting use of frying pan with hot cakes, soda biscuits, fatty and tongue bribing articles of diet.

Very often one has to caution his patients with regard to the harm, which may come from unequal combinations of food-stuffs—incompatibility of cooking (Chemistry of food articles) as milk and fish taken together, melons and milk taken together and milk and radish and so on.

Combination and cooking:—Injurious effects as seen with oysters. Some raw oysters could be eaten with crackers and butter on them without harm, but when the crackers are crushed to powder and the oysters rolled in them and then the butter melted and the oysters fried in it—one has in fried oysters a combination, which may be far from healthy if largely indulged in. Sulphur, charcoal and saltpetre can each be burnt separately in a stove, without harm, but when these are combined into gunpowder, such an attempt would be most disastrous. There are many illustrations and this matter should be given serious attention and patients clearly warned of the dangers of errors in diet which unconsciously creep in.

III *(a). Time and method of consumption* are very important matters, which few realize, but which are constantly seen

to affect the digestion and metabolism greatly and may frequently be observed to have very considerable influence upon certain diseases of the skin. Many will recognize that meals after exhaustion, and at late irregular hours, are not properly digested, and give rise to intestinal irregularities. Moreover certain articles of diet at certain seasons of the year are contra-indicated *i.e.* curds and wheys in the rainy season. Taking a lot of liquids immediately after meals generally causes indigestion.

(b) *Method of consumption* :- Many will recognize that pleasant surroundings and agreeable company are great aids to digestion and one often meets with confirmed dyspeptics of those who suffer greatly under the simplest diet, who can go to an agreeable banquet and indulge in very many things with apparent impunity which under ordinary circumstances would be quite impossibe. One of the great faults is "haste in eating" (loading the wagon), resulting in imperfect mastication and inadequate salivation. It would seem almost unnecessary to remind that the process of digestion begins in the mouth and that the saliva should play an important part in digestion. But the error of rapid eating is so continually occurring and unquestionably is the cause of so much trouble, as is very often noticed in general practice. Alittle observation shows that very many swallow their food, with very little chewing, washing it down with various liquids and that the time consumed for taking even a large quantity of nutriment is sometimes a very few minutes.

Mastication and in-salivation that are compelling the mouth and teeth (Fletcherism) to perform the part in digestion which Mother Nature intended us to do are the secrets of good digestion. But unfortunately we do not follow the dictates of Mother Nature and generally make the intestines work for the mouth and 32 teeth and and are rightly punished. Even beasts are far superior to us in this respect, they spend lot of time in chewing and cudding and consequently require no ablution. If we spend less time at one pole, we have consequently to spend more time at the other (defaecation) and suffer the consequences, indigestion, piles, constipation etc.

Not only this, we can greatly exercise a great saving in food. If food is properly masticated far less food is eaten. Too many of course gratify the taste when they think that

they are satisfying the appetite. Many, if not most, persons consume very much more food, than is at all necessary for the perfect equilibrium and efficiency of the system. Sir Michael Foster of London found that when Fletcher's method was pushed to its limits, complete bodily efficiency was maintained for some weeks upon a dietary which had total energy value of less than one half of that usually taken and comprised little more than 1/3rd of the protien consumed by the average man. It is not so much "the high cost of living as it is the cost of high living" which is at fault at the present time, and this high living and excessive consumption of food, is unquestionably affecting diseases of the skin badly as well as those of other organs.

There are many other items, *i.e.*, mental influence, nervous shock, fatigue, rest, exercise, irregular eating, cleanliness and hygiene of the mouth massage etc, connected with diet which contribute towards bad digestion and consequently to certain diseases of the skin.

This subject cannot be closed without saying a few words about mental influence. Mental influence has long been recognized as having an effect in determining or perpetuating eruptions on the skin and it is seen that this occurs often, if not chiefly through their influence upon the digestion, Repeatedly the patients with eczema, psoriasis, urticaria, and acne etc, will have outburst of eruptions following household and other worries which have produced indigestion of more or less acute character. Any strong mental excitement can also arrest or delay digestion and it is well-known that after dinner orators are very apt to be troubled with sluggish or disturbed digestion which generally brings on renewed attacks of eczema, specially about the face.

It is well to remember that numerous experiments with animals, specially cat, have shown peristaltic movements of the stomach and intestine, as watched by Bismuth and X Rays, arrested competely, when the animal is irritated and in a rage and return to a normal action when the animal is again soothed.

Nervous shock has also been observed to be followed by the appearance of certain eruptions and this probably operates also through an arrest of the digestive function, resulting in subsequent fermentation and auto-intoxication.

In short, we should have a great respect for mental conditions and all causes of worry and anxiety should be

removed as far as possible, the human system is a marvellous machanism and the more it is studied, the more marvellous it appears, and while many seem to have a resisting force which can overcome all sorts of obstacles to health, it is to be remembered that there must be a cause for everything and cause for many diseases of various organs of the body including the skin, is often found to depend upon errors of metabolism and these again upon avoidable errors of diet.

In searching out and rectifying these, one can secure the greatest degree of success, with of course the employment of popular measures.

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* CHOLECYSTITIS

BY

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For many years we have held the opinion that affections of gall bladder are just as common as those of the appendix and we know of no ailment so frequently overlooked as is cholecystitis in its various forms and none which until recent years has been given such scanty attention by our profession. Just as is the case of the appendix, when we can recognise the earlier affections of this organ such as appendicial colic, catarrhal appendicitis, subacute and chronic appendicitis, so should we learn the early recognition of similar conditions with regard to the gall bladder. Our aim should be to recognise the presence of the cholecystitis and to institute treatment before gall stone or other latter troubles have time to develop.

In cholecystitis we have an inflammation which may spread to the liver cells and even to the pancreas. Gall bladder disease may be classified as follows.

Gall bladder disease.

- Inflammation.
  - Catarrhal.
  - Suppurative.
  - Phlegmonus.
- Stone.

The suppurative and phlegmonus varieties of cholecystitis are generally associated with gall stone. Acute non-calculous

* Specially contributed to "The Antiseptic."

cholecystitis is a result of bacterial invasion. The colon bacilli, the typhoid bacillus, the pneumococcus, staphylococcus and streptococcus have been the organisms most often found. Careful studies have shown that almost half the cases of indigestion due to abdominal disease are caused by gall bladder inflammation. The most typical patient is he who complains of an irregular flatulent dyspepsia, a feeling of fullness of weight in the epigastrium, which he often describes as "wind". Some have what they call "heart attacks" brought on by "wind" with myocardial degeneration and some young subjects have hyperplesia with epigastric discomfort after meals.

Symptomatology:—The patient generally refers early symptoms to the stomach, complaining of fullness, weight, distension or a feeling of oppression in the epigastrium, coming on as a rule about half an hour after meals and relieved by belching or induced vomiting. There is generally a sensation of painful tightness beneath the right costal margin, referred through the back or under the right scapula. One often complains of heartburn, acid or bitter regurgitation into the throat or occasionally there is a sudden gush of saliva into the mouth. When the inflamatory changes are moderately active, the patient may experience a sensation of chilliness or of shivering especially in the evenings with slight fever. Symptoms such as these may persist for years until a series of acute attacks of colic supervene. Involvement of the pancreas with chronic cholecystitis produces the symptoms of pain and tenderness running across the epigastrium under the left costal edge accompanied usually by vomiting.

Diseases in close association of cholecystitis:—(1) Appendicitis. So frequent is this the case that in operating for gallbladder trouble we should always examine the appendix and in operating for chronic appendicitis always try either to see or feel the gallbladder.

(2) *Myocarditis*:—Always examine the cardio-vascular system before advising operation, particularly in the elderly stout type of patient.

(3) *Angina pectores*:—Usually of an atypical character.

(4) *High blood-pressuure*:—We refer to cases with intermittent and spasmodic attacks of high blood pressure due to the effects of acute auto-intoxication. The blood-pressure may rise to 220 to 240 millimeters of mercury and the heart condition causes alarm.

(5) Empyema of the gall bladder is usually a disease of elderly folk and is usually but by no means always associated with gall-stone.

(6) Abscess may develop in the liver substance.

Treatment Medical:—(A) Successful medical treatment is based on ætiology.

(*i.*) Gastric acidity or achlorhydria may be treated with dilute hydrochloric acid given with a meal.

(*ii.*) *Focal infections:*—Generally septic teeth are very commonly the original foci of gallbladder infection. Teeth should be extracted in very bad cases and antiseptic gargles like Odol or Listerm may be used.

(*iii.*) *The Hyper-chlovesteroloemic Diathesis*-Metabolic stones-have a high blood-cholesteral—near or over 2 %—it is due to metabolic fault. In such cases it is rational to eliminate from the diet such foods as egg yolk, brains, sweet bread, liver and kidney and to restrict all fats.

(*iv.*) *Biliary stasis and obstruction:*—Regular intestinal movement is vital; regular meals and sufficient exercise are important and the obese patient should loose some weight. The diet should be sapid and sufficiently stimulating to encourage digestion. Protein is often limited but should be adequate in amount. Drugs are few. Alkalies seem to relieve symptoms especially in the hyperacid patients; even a chlor-hydria is not a contra-indication, as they may be given at a suitable interval after the acidified meal. Salicylates also appear to give relief to some patients. Olive oil may help those with hyperacid stomachs. Sulphate of soda and magnesia have long been our mainstay and with reason, for their presence in the duodenum is followed by the arrival of the gallbladder contents through the duct sphincter by osmosis. These salts may be administered hot in strong solution, preferably fasting. Large doses of Hexamin help to reduce the bacterial contamination of the bile. Large doses of bicarbonate of soda should be given to keep the urine slightly alkaline, thus preventing the liberation of irritating formal dehyde in the urinary passages. The pain of gallstone passing through the duct cannot be subdued short of opium in the form of morphia injection or Papine (Battle Co.) In forms of gallbladder disease with no stone, the pain can usually be relieved by the application of heat. Mustard plaster or Menthol Belladonna plaster over the hepatic region may do

good. Nervous irritability and insomnia induced by the toxic agents generated and thrown into the blood-stream, are best combated by adequate doses of Bromides Bromedia (Battle Co.) or Peacock's bromide.

(B) *Surgical—Cholecystectomy.*—As regards incision we now use only a right paramedian incision and find that with Devine's retractor this gives the ideal exposure. Never displace omentum more than is possible when dealing with these cases. After cholecystectomy a tube from the stump of cystic duct is brought through the loin for thirty-six hours or so. In skilled hands, the mortality of gallbladder operations should not be any greater than that of appendicitis.

CASES AND COMMENTS.

TREATMENT OF SYPHILIS

BY

R.M. JHALA, L.C.P.S., JUNAGADH.

The reasons for slecting this subject for publication are very numerous. It is a disease very widely distributed, is no respect or of age, person or position in life.

For such a widely distributed disease, necessity for prompt and effective treatment becomes very well obvious. The disease has varied manifestations. There is hardly a tissue which is not affected by the disease.

Considering the widespread nature and manifold manifestations of this disease the question of proper treatment becomes of prime importance.

It is sometimes accidentally discovered in persons in whom there is not the remotest suspicion. Mostly it is a disease of the poor. In Noe—Salvarson we have a specific. The drug is a great boon to many syphilitics. It is a specific no doubt, but there is one single drawback for its general adoption. All cannot afford to undergo complete course of the treatment. Its cost is prohibitive, looking at the fact that the disease is mostly found in poor class of people whose pockets are too slender for specific treatment. Some other substitute is a desideratum. Neither we can allow the disease to be treated with Iodides and mercury by mouth, which besides giving rise to several disagreeable symptoms, few days after its commencement,

requires to be given for a very very long time. No single patient can stay in the hospital for such a length of time.

The result too frequently is that the patient is discharged from the hospital in a half cured condition—a condition which constitutes a source of potential danger to himself and to the society. Such patients when discharged go on with their avocations, wherein they daily come in too close contact with many persons. To these persons such patients easily infect.

With these facts before us, on one side the widespread distribution of the disease with its deep inroads and highly infective nature and on the other side prohibitive cost of its specific drug Neo-Salvarsan, which latter neither the pockets of the poor nor the resources of even the most liberal Hospital can afford, an efficient substitute is a dire necessity.

I hope my professional brothers are not unaware of Bismuth in the treatment of Syphilis. During two years of my senior course at Hyderabad (Sindh) Medical School, I had opportunities to see the use of this drug there.

For Hospital practice stock suspension of Potassio-Bismuth tartarate in olive oil may be used, whereas in private practice one of the patent preparations of Bismuth may be used. Preference of a particular preparation is a matter of individual choice. I use "Bismuthoidol".

This plan of treatment is more satisfactory in secondary and tertiary stages. Course of Bismuth may also be more advantageously given after one injection of Neo-Salvarsan. Its action on Wasserman's reaction is said to be slow and late but is good. All secondary and tertiary manifestations soon disappear after course of about 10 injections. Insoluble preparations are to be preferred to soluble ones, as there is no risk of rapid absorption.

PYREXIA DUE TO A PUERPERAL ULCER

BY

C. VEERARAGHAVAIYA, L. M. P., DAMAL.

On 13—9—27 I was called upon to see a young lady in labour, primipara.

On making a P.V. os was fully dilated, membranes ruptured and sufficient time had elapsed and yet there was delay in the birth of the child. Diagnosing the case to be one of primary inertia, ½ cc pitutrin was injected subcutaneously. Within twenty minutes after the injection the child was born without any further complications.

From the third day onwards she had fever ranging from 99° to 101°.

Thinking it might be a mild case of sapræmia, Lysol douches morning and evening were given. Ergot and quinine were given by mouth. For about three or four days the above treatment was repeated but to no effect.

The patient was, however, complaining of some pain in the left labia.

Next day I gave a good douche and examined her in good light. I found an ulcer in the left labia minora about ½" in. circumference. Then I douched the ulcer with Tr. Iodine on a sterile swab and placed a piece of sterile gauze in the vagina so that the ulcer may not spread by contact to opposing labia.

Next morning to my surprise the temperature fell to normal and it remained the same. I continued the treatment for a couple of days more and the ulcer healed and the temperature was normal. The patient got quite well.

[*Points to note in this case.*—This young woman had rather an abundant lochial discharge during the puerperium as some women do have.

These discharges were absorbed by the ulcer and the toxins were producing slight temperature.

Thus sometimes minute points are passed over without our knowledge and lead to the adoption of severe methods for trivial cases.]

"A CASE OF INCESSANT VOMITING AFTER AN INJECTION OF MORPHINE AND ATROPIN"

BY

A. K. GHESE, MEDICAL OFFICER, AMBARI.

A man was suffering from colic pain in the abdomen near the umbilicus. On enquiry I learnt that he had suffered from such pain on 2 or 3 previous occasions. He also told me that the pain was relieved by an injection of some medicine (the medicine was, no doubt morphine) and insisted on my doing so. At first I did not like to inject it. I tried to relieve the pain by other means such as carminative mixture, purgative, fomentation, soap-water enema etc., but to no effect. At

last I injected one ampule of morphine and atropin (gr. ¼ and gr. 1/100 B. I.) He was relieved of pain almost immediately, but about 2 hours later he began to vomit again and again The vomiting was so incessant and distressing that he could retain neither food, nor medicine nor even water. I was puzzled what to do. I proposed to wash out his stomach but he objected to it. No medicine could give him any relief. He was in this condition for nearly 36 hours and was quite exhausted.

Now I injected. 5 c.c. sol adrenalin (P.D.) quite empirically but to my great satisfaction he was much relieved after sometime. I then gave him sol adrenalin—m. X by mouth every 2 hours and he was alright in no time.

It is interesting to note how adrenalin acted in this case. One should not rest assured that because morphine is injected along with Atropin, there would be no untoward effects of morphine. Hence one should be very cautious in injecting morphine, because sometimes it makes the matter worse and places the practitioner in a very difficult situation.

EXTERNAL USE OF OL MORRHUÆ

BY

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KOSLANDA, CEYLON.

Pakeer Saibo, aged 68 years, a Mohamedan Estate mason, was admitted in this hospital on 26-5-23, with the following history of disorders. He was anaemic and debilitated, the chief disorder being inability to stand on his legs as the parts below the knees were altogether lifeless and unable to move. Before admission to this hospital he had been in the Government District Hospital under treatment for about two months and having no benefit was carried home. The duration of this disorder was about ten or twelve months.

As these chronic disorders require faith and suggestion more than any other drug I first of all impressed on him that I will cure him positively and every time I saw him I reminded him of this expression. In the way of drug treatment I gave him first of all a small dose of Beta Naphthol, followed by a dose of Epsom salt. From the following day Ferri et Quinine mixture with Liq. Arsenicalis Hydrochlore and Liq. Strychnine was given until he was discharged. As the patient insisted on a liniment to be applied externally to the weak parts of the

legs, I gave him Liniment Belladonna mixed with an equal part of Ol Morrhuæ to be applied morning and evening after hot fomentations. His legs were so weak when admitted that he was not able to stand on them, even with the aid of a stick. After a few days of treatment as above I asked him to try to walk round his bed slowly by holding to it. After a few days' practice he succeeded with much difficulty, and day by day this he was able to do with much facility. After another few days he was able to walk about the hospital verandhas, first with the aid of a stick and then without it. So after a month I made him to walk down to his home which was about ¾ of a mile from the hospital. This he did well but unfortunately he was not able to walk up to the hospital and had to be carried on the following morning. The iron tonic internally and the Belladona c Ol Morrhuæ liniment externally were continued all throughout and he was discharged on 8-7 23 perfectly cured. Now he is walking miles and miles and attending to his ordinary work still. I saw him a few months ago in good health.

A CASE OF A TYPICAL MALARIA

BY

M. A. KRISHNA IYER, CENTRAL JAIL HOSPITAL, COIMBATORE.

It is easy to diagnose a typical case of malaria. It is a disease which every one of us meets with in our daily practice. Though easy of diagnosis, it is the one among many that misleads one from arriving at a definite diagnosis. There are many diseases which are atypical but malaria at times shows signs and symptoms which cannot be, with any reasonable arguments, properly diagnosed. The following few cases among others that came under my care will clearly illustrate the atypicality of the disease which was diagnosed only by the microscopical examination of the blood of the patient for which the only clue was the failure to respond to other treatments.

I. A female aged about 22, mother of three children, was shown to me for attacks of metrorrhagia of four days duration between her menstruation, which was quite normal according to her description. Every month she got the attack once or twice, each attack lasting 3 to 5 days, during which time, she lost much blood. She was not pregnant. She was very anæmic and could not nurse her child due to want of breast-

milk. She mentioned of no other constitutional symptoms during the attack except that she used to feel a sort of sensation running throughout the body, and the blood flowed out and only then she came to know of her condition. Even when I examined her there was bleeding, but no constitutional signs or symptoms. Suspecting the condition was one connected with the uterus she was treated with calcium, ergot etc. Thrice she had similar attacks of bleeding, which did not respond to the above treatment. It somehow struck me to examine her blood since the patient had come from a malarial tract. To my surprise, there were any number of malignant tertian parasites in the film. She was put on ten grain dose of quinine sulph. and the effect was more than what was expected. The next day the bleeding stopped and did not recur for the one year she was here.

II. A well-built man, aged about 25, used to get very severe attacks of headache once in three or four months, so severe that he would cry out of pain like a maniac and had frequent attacks of vomiting of a bile coloured fluid. He could not retain anything either liquid or solid. The moment he takes anything it is brought out. Only on two occasions there was a rise of temperature to 101 to 103 which persisted for three days without any remission. Asperin, Pulvis Dover's, Pyramidon etc. had not the desired effect. Once I had to give quarter grain morphia subcutaneously when he had some relief and slept a little. Here again though he was never in malarial districts, I examined the blood and found a good number of B. T. parasites and as quinine by mouth could not be retained I gave 7 grains intra-muscularly and that, more or less, cured him and he had not the attack for the last one year and, 9 months.

III. A female, aged about 15, well-built, came under my care for attacks of repeated diarrhœaic motions, four or five in a day. In this case the one interesting point was that she got a severe chill before the loose motions started. In the evening she was quite alright and fit for daily routine. She had five attacks when she was under me in the course of 6 months. Each attack lasted for two or three days and will suddenly stop. On the first two occasions I thought the diarrhœa was due to some error in diet. But subsequently I came to understand that diet had nothing to do with the loose motions. Her blood was not examined. But, since I saw the rigor myself one day, I put her on ten grain doses of quinine three times a day. It is nearly a year since she has left my care and on enquiry I come to understand that she had had no such attacks up-to-date.

The Antiseptic

APRIL, 1928.

THE NEED FOR THE APPOINTMENT OF A COMMITTEE TO OVERHAUL THE GOVERNMENT MEDICAL INSTITUTIONS IN MADRAS.

We have read with mixed feelings of pleasure and pain the recent proceedings in the Madras Legislative Council *anent* the voting of the medical grant for the current year. Pleasure, because there is at least one member of the Independent Medical Profession in the council—and it is a pity that the Independent Medical Profession is sparesly represented in the various Legislative Councils in India generally—who has the courage of his conviction and is bold enough to expose the vagaries of the Medical Department; pain at the thought that the affairs of the Medical Institutions in Madras are drifting day by day from bad to worse. We have repeatedly pointed out in these columns some of the grave defects and irrregularities that existed and still continue to exist in these institutions and suggested more than once the appointment of a Committee to enquire into, overhaul and set right matters. But our appeals had so far fallen on deaf ears. The racial discrimination in the matter of filling up superior posts that fell vacant from time to time in the medical institutions, the unnecessary duplication of appointments in the Medical College in Madras, the half-hearted and indifferent manner in which the Honorary Scheme is being worked, the lack of proper control and discipline in the General Hospital, resulting in the refusal of admission to a dying patient who ultimately expired and a case of professional neglect, which is now *sub-Judice*, the exclusion of Indian I.M.S. Officers from the Special Medical Board recently constituted, the abuses of the chit

system, the system of admission of pupils in Medical Schools and Colleges and the paucity of passes in the examinations, the imperfections of the Rural Medical Scheme, the sad plight of the Independent Medical Profession due to unemployment and unfair and unequal competition with the Government medical men in the matter of private practice, the undue sweating of the nursing staff, so pathetically described by the Labour M P., who was an in-patient in the Hospital—all these are too grave and too serious irregularities to be passed unnoticed and uninvestigated. Whether these defects and irregularities are the heritage of the past bureaucratic administration or have been acquired during the present reformed regime, it is unnecessary for us to discuss here. The fact remains that they have been allowed to develop into a chronic sore, for which no excuse or justification exists. The Panagal Ministry, though it had a strong backing up in the Council, had made no attempt whatever at reforming the medical institutions during its tenure of office. The Independent Ministry which followed, has a tottering existence. It lives and has its being on the bureaucratic will. It has shamefully flouted public opinion and unblushighly kicked the very ladder by which it rose. Any appeal to a lifeless, soulless Ministry such as the one at present constituted, will be in vain. We are only hoping against hope when we raise our humble voice and approach the new Minister for Public Health with the revival of our old proposal to appoint a Committee to enquire into the affairs of the Medical Institutions in Madras, with a view to set them on a sounder basis. The Committee must consist of at least 3 non-official members elected from the Legislative Council, with 3 medical officers in Government service and 3 members of the Independent Medical Profession, the Hon. The Minister for Public Health acting as Chairman. Will the Hon. Minister have the grit to create such a Committee? If he has, he will surely be opening a bright chapter in the dark pages of his Ministerial history.

THE PROGRESS OF SURGERY.

Surgery is an ever advancing science. This advance is very much in evidence, if we look into the surgical progress made within the last two hundred years. Sir Holburt Waring could not have chosen a better subject for his Hunterian oration than a consideration of surgical progress from Hunter's days to ours.

By far the most important avenue of progress in surgery is bacteriology. Pasteur's work in this connection is too well-known to need repetition. The adoption of Lord Lister of his Antiseptic doctrine was the commencement of advanced surgery on a scientific basis. Later on this Listerian doctrine was generally accepted. This was followed by the aseptic doctrine. Modern surgery, however, is a combination of antisepsis and asepsis. The net result of these methods is that infection of and suppuration in operation wounds is almost non-existent in most modern hospitals and surgical operations have been freed from the dangers and dreads associated with them in earlier days.

The discovery of anaesthesia, general and local, is another important epoch in the progress of surgery. In the earlier days a certain amount of anaesthesia was induced by inhalation or taking internally certain narcotic substances such as Hemp, Hyoscyamus, Opium etc., but they gradually lost favour and were practically entirely forgotten. It was however the discovery of Hydrogen by Cavendish, of Nitrogen by Rutherford and of Oxygen and Nitrous Oxide by Priestley, that can really be said to have been the foundation of modern anæsthetics. Ether was later used for the purpose of inducing anaesthesia. But it was left to Simpson of Edinburgh to first use chloroform extensively. Since this period (1847) Ether, Chloroform and Nitrous Oxide in many and various combinations have been used for the induction of surgical anæsthesia. In modern surgery local anæsthesia has to a great extent replaced general anæsthesia. Of this latter variety, Cocaine, Novocaine and Stovaine are the three most important. Cocaine as an alkaloid was first isolated about 1855; but it was not till twenty years later that its anæsthetic properties were found out. It was left to Anrep to first completely investigate its anæsthetic properties by injecting a dilute solution underneath the skin. This was followed by its use as a local anæsthetic in eye work. Since then Cocaine has been used increasingly for the production of anæsthesia in all kinds of surgical operations. Considerable progress in the method of induction of local anæsthesia has however been made only after 1905 when novocaine, the synthetic product derived from coal tar, was discovered. Thus it is possible to-day to do a considerable number of major operations and almost any minor operation painlessly and in certain cases with greater safety

to the patient, by the use of a dilute solution of Novocaine, administered by the infiltration method. Spinal analgesia can be induced by the injection of a solution of stovaine into the spinal theca. This form of anæsthesia is specially useful in operations below the diaphgram as on prostatectomy or where a general anæsthetic is contra-indicated as in affections of the lungs. Now a days almost any operation can be performed by a skilled surgeon painlessly and with very slight anæsthetic risk to the patient.

The discovery of X-Rays and Radium marked the commencement of a great deal of progress in surgery, especially surgical diagnosis. At first these rays were used only for the diagnosis of injuries and diseases of bones. It is however now utilised for the purpose of diagnosing disease in internal vicera and organs. Uretrography and pyelography are some of the later developments. The use of X-Rays was abundantly demonstrated in the great European war when they were extensively used for the localisation of bullet and other metallic substances which had entered the bodies of the wounded. Radium (which was first discovered in pitch blende by Monsieur and Madame Curie) and its salts have been used in the treatment of various diseases, especially new growths like sarcoma and carcinoma. The best results have been obtained by the implantation of either radium needles or radium seeds in the margins of diseased tissues. The greatest difficulty in its extensive use has been its scarcity and consequent prohibitive cost of treatment.

Light either reflected or incandescent has been utilised for surgical diagnosis and treatment. The urethroscope of Bozzini, the Ophthalmoscope of Helmholtz, the laryngoscope of Garcia, the rhinoscope of Czermak and the cystoscope of Nitze and Leiter are some of the instruments nowadays used in which light is utilised in the investigation of deep spaces or cavities of the body.

Blood transfusion though first practised as early as 1665 did not receive universal application till the latter part of the nineteenth and the beginning of the twentieth century. The capacity of the blood serum to hæmolyse the blood of the receptor and the subsequent division of human beings into four groups were all factors that have made blood transfusion such a common occurrence in ordinary hospital and surgical practice. It has saved many lives which otherwise would have been lost.

We can thus see that great strides have been made in the progress of surgery. Perhaps in view of the many vistas of investigation it will not be possible for one individual to make all the investigations required for a correct diagnosis of a case. This naturally leads to specialisation and consequent team work. In the surgical work of the future, progress will perhaps follow biochemical and Biophysical lines both as regards diagnosis and treatment.

CURRENT TOPICS.

MEDICINE AND THERAPEUTICS

Charcoal as a Medicinal Vehicle.—P. Blum (Bull. Acad. de Med., January 24th, 1928, p. 119) states that the high absorptive powers of charcoal, due to its porosity or the presence of impurities, such as traces of iron, lime, or nitrogen, vary so widely, according to its origin and manufacture, that it cannot be employed therapeutically without some degree of selection. It has been widely used, with favourable results, in cases of poisoning. Experiments, however, have shown that in certain conditions charcoal can give up the substances previously absorbed and thus be utilized as a medicinal vehicle. Using animal charcoal, Blum obtained a preparation of iodine by triturating it with charcoal. Cachets containing 0.01 gram of iodine and 0.5 gram of charcoal were administered at first, but later the amount of iodine was increased to 0.08 gram. These were well tolerated and proved efficacious, the iodine being slowly liberated and exercising, therefore, a more prolonged action on the body. The mixture is now prepared by slightly heating 10 grams of iodine with 30 grams of animal charcoal. After some minutes no trace of free iodine remains; 70 grams of charcoal are then added and intimately mixed, the resulting mixture containing 0.1 gram of iodine per gram. Mercurial preparations can be similarly made, and experiments are being conducted with bromine, sulphuretted hydrogen, and other substances. Hydrochloric charcoal can easily be prepared by bubbling hydrochloric acid gas through charcoal for ten minutes, stopping the operation for ten minutes, and then renewing it slowly for twenty-five minutes. The charcoal thus prepared should be kept in well-stoppered bottles and its acidity tested from time to time. The charcoal loses a great part of the absorbed gas during the first five minutes, but then the de-

absorption becomes very slow and lasts for several days. Blum believes that this is a convenient method of administering many gaseous and solid medicaments; that it permits of a molecular therapy by substituting salts for metalloids and metals, and solutions for gases; and that it utilizes the catalysing properties of certain drugs usually given in infinitesimal doses. It is also of advantage in the administration of galenic preparations.

Intravenous and Peroral Methods in Cholecystography.—T. Sendtner Voelderndorff (Med. Klinik, September 9th, 1927, p. 1374) contrasts the two methods of filling the gall bladder in cholecystography, and emphasizes the value of the peroral method. In this he maintains there is less danger to the patient; it is easier, and gives equally good results. He uses a preparation called "videofel," either in the form of pills or of capsules containing 0.5 gram each, the dose being one pill per 10 kilograms of body weight. These pills, in common with all tetraiodic preparations, do not keep well. The patient should have a light meal and an enema in the evening, after which the pills should be given with cream. This not only disguises the pills, but, as an emulsion of fat, assists in emptying the gall bladder. The patient then fasts for twelve hours, after which the x-ray examination takes place. The author adds that he has never observed any ill-effects to the patient result from this method, and in 36 out of 50 cases the gall bladder was made distinctly visible.

Radiotherapy of Asthma and Spasmodic Coryza.—P. Vallery-Radot, P. Gibert, P. Blamoutier and F. Claude (Presse Med., October 5th, 1927, p. 1201) have employed x-ray treatment in cases of asthma and spasmodic coryza with some good results, and cite supporting evidence from the literature. The methods include irradiation of the thorax and spleen, singly or combined, and applications have been made to the thyroid in asthma associated with exophthalmic goitre. The results have been very variable; there is often a more or less transient improvement. The authors quote statistics of six investigators who used thoracic irradiation; these show approximately 30 per cent. of cures, 43 per cent. of cases more or less relieved, and 27 per cent. of failures. On the other hand, splenic x-ray treatment appears to have given approximately 82 per cent. of

cases cured or improved and 16 per cent. of failures. Reference is made to the paper by S. Gilbert Scott (British Medical Journal, June 5th, 1926, p. 939) who, in 21 cases treated by combined thoracic and splenic irradiation, obtained very good results in all but one. The present authors treated 64 patients of both sexes, of whom 31 had asthma only, 8 spasmodic coryza alone, and 25 had both affections. Almost all the patients were adults, and the cases were not selected. They report 30 per cent. cured, 25 per cent. improved, and 45 per cent. were failures, or showed only temporary improvement; 26·5 per cent. of these were total failures. Some patients remained cured or greatly improved for fifteen or eighteen months. The authors believe that their best results followed combined thoracic and splenic irradiation. Twelve treatments may be necessary before a case can be regarded as a success or a failure, and many patients have improved only after 6, 8, or 10 irradiations. In apparently similar cases the treatment succeeded in one patient and failed in another.

The Early Diagnosis of Anterior Poliomyelitis: Non-Paralytic Cases.—E. H. Luther (Boston Med. and Surg. Journ., p. 1175). During the past summer and fall Massachusetts experienced a severe epidemic of anterior poliomyelitis, exceeded only in 1926 when the disease was pandemic. What is apparently the fully developed case begins with a gastro-intestinal disturbance and fever, usually lasting one day, and then clearing up. There are no symptoms for the following 3 or 4 days, and then fever and gastro-intestinal symptoms recur, and frequently there are headache, irritability, and drowsiness, and rigidity of the spine. This appears to mark the invasion of the central nervous system, which is followed after 36 to 48 hours by paralysis.

The assumption that the disease may stop at any point in its development offers an explanation for the abortive type, where there is a generalized infection with the virus of anterior poliomyelitis, which does not go on to localization in the central nervous system; the non-paralytic type, where there is a demonstrable invasion of the central nervous system both by physical signs and lumbar puncture, but where no discoverable paralysis ensues; and the paralytic type, where there is invasion and injury to the central nervous system, with the characteristic paralysis.

In the abortive type, without the involvement of the central nervous system, there are no characteristic signs, lumbar puncture is negative and the diagnosis must rest on symptoms—fever, a gastro-intestinal disturbance, with or without headache. As these may also be the symptoms of many acute infections, diagnosis is a matter of conjecture.

The non-paralytic and the paralytic types are indistinguishable at the onset, the difference being that after 2 or 3 days of illness paralysis supervenes in the latter, whereas the former recovers. For purpose of early diagnosis, the two can be treated together.

The child, for it is usually a child, is taken sick with fever, head-ache, and a gastro-intestinal disturbance (vomiting, constipation and occasionally diarrhœa). Drowsiness and a desire to be let alone are also frequently observed. While these symptoms are fairly constant, the absence of one or more does not exclude the disease, and they are not characteristic enough to warrant a diagnosis on symptoms alone.

It is, then, the physical signs to which one must look for diagnosis, and these make the early picture of infantile paralysis fairly characteristic. The child seems prostrated to a greater degree than the temperature, usually under 102°, would warrant. The face is flushed, the expression anxious, and there is frequently pallor about the nose and mouth. The throat is mildly injected, but not enough in itself to account for the condition. The pulse is usually rapid out of proportion to the temperature. There is frequently a rather coarse tremor when the child moves, which may be striking. There is slight rigidity of the neck. It is not the stiff neck of a meningitis, nor is the head usually retracted. The child tilts the head on the neck, but does not bend the neck on the shoulders. As a result, the head can be brought about half way forward, when resistance is encountered, and the child complains of pain. More constant and more characteristic than the stiffness of the neck is a stiffness of the spine. This is best brought out by sitting the child up in bed and trying to bend the head down on to its knees. The average child, ill with other infections, is very flexible, and has no difficulty in doing this. These children cannot. If they bend forward at all it is from the hips with the spine held stiffly. Many of them cannot bend forward enough to assume a comfortable sitting position without propping themselves upon their arms. The rigidity of the

neck is brought out to a more marked extent in the sitting position. There is seldom a Kernig's sign at this stage, and the deep reflexes are usually over-active, rather than diminished. A cerebral tache is almost always present, and grows more marked as time goes by, until it frequently becomes a purplish irregular blotchy line a half inch or more in width after 2 or 3 days. These signs and symptoms justify a probable diagnosis of anterior poliomyelitis, and call for the final step in the diagnosis.

This step is lumbar puncture and examination of the spinal fluid. The fluid is usually under increased pressure. It is not quite clear, presenting a ground glass appearance. There is an increase in cells, usually between 50 and 250, but occasionally as high as 700 to 800, or as low as 20. These cells may be largely polynuclear early, but later are lymphocytes. There is an increase in globulin.

Acute infections accompanied by meningismus may simulate early infantile paralysis, but usually the cause of meningeal irritation becomes evident on examination, while in cases of doubt, lumbar puncture as a rule gives a normal spinal fluid. Tuberculous and luetic meningitis, or encephalitis may give a spinal fluid which may be confusing, but the clinical picture is usually sufficiently different to avoid mistakes.

There is no method of separating the non-paralytic and paralytic case at this stage. It is impossible to predict either from the symptoms, signs or spinal fluid changes, whether the cases will escape without paralysis or go on to a fatal termination, and no accurate figures are available as to the percentage of non-paralytic cases—but it seems small.

There are two reasons for keeping the early picture of the disease clearly in mind. It is possible to sift out children, with the ordinary mild infections, and assure parents that they are not developing infantile paralysis. In the second place the best hope of treatment lies in early diagnosis.

NEUROLOGY AND PSYCHOLOGY.

Impediments of Speech.—During a study of fifteen cases of strephosymbolia, or reading disability S. T. Orton (Arch Neurol, and Psychiat.), noted that three patients stuttered and four others had a peculiar laboured hesitancy in speech. Numerous instances also are recorded of

the onset of stuttering when a normally left-handed child is coerced into using the right hand for writing, and of recovery when the use of the left hand is permitted. These cases seem to support the theroy that stuttering and strephosymbolia are expressions of confusion in cerebral dominance, and that therefore stuttering would be more closely related to the apraxias than to the ataxias. The act of stuttering is not unlike an ataxia, which has led to the suggestion that the cerebellum may be at fault. No demonstrable cerebellar lesions, however, have been observed in stutterers, and both speech and writing are probably essentially integrative functions of the higher cortical arcs of the dominant hemisphere. Emotional variants may be observed in many stutterers, and further work indicates a marked lack of integrative solidarity—a disintegration—in the stutterer's attempt at speech.

L. E. Travis suggests that the complex peripheral structures serving speech fall into three main functional groups—those of breathing, voice, and articulation. Normal speech displays a harmony in the separate groups and their combinations, while stuttering shows a disharmony in their combination and also within each group. In the investigation six persons with severe forms of stuttering and several normal speakers were studied, and the technique of the experiments is described. The results were that the records of normal speech showed an integration of the various units of the breathing mechanism, which exhibited the following characteristics: (1) a fairly close correspondence between thoracic and abdominal breathing; (2) a relatively greater number of laryngeal than breathing movements; (3) a relatively complete independence between vertical movements of the larynx and movements of breathing; (4) an evident rhythm of breathing, of the vertical movements of the larynx, and of the changes in breath pressure; (5) a disproportionate increase in the duration of expiration during speech; and (6) the presentation by the abdomen of small in-and-out movements ranging from five to seven a second. The stutterers showed a disintegration of certain motor speech units which was apparent in the following ways: a complete antagonism between the actions of the thorax and abdomen; a marked synchronism between the movements of the larynx and of the various unit; of the breathing apparatus; a marked prolongation of inspirations large vertical movements of the larynx during inspiration;

tonic and clonic spasms of the muscles of speech; and a new abdominal tremor rate.

Gentian Violet in Dermatology.—A.R. McFarland (Arch. Derm. and Syph., January, 1928, p. 16) records his experience of the clinical use of gentian violet locally in certain pyogenic skin infections and as a preventive. Using an approximately 5 per cent. solution in distilled water, with 20 per cent. ethyl alcohol as a solvent and to render the dye more penetrating, rapid improvement resulted in a child suffering from a severe pustular infection of the head and chest, and in an obstinate case of infectious eczematoid dermatitis which had failed to respond to other treatment. In folliculitis and boils improvement followed painting twice daily, but McFarland found the solution of most value in the post-operative treatment of lesions, which had been fulgurated or treated by diathermy, by painting the denuded areas after removal of the burned tissue with a curette. If the skin is kept dry for about twelve hours the dye becomes set and does not wash off; a dry crust forms, which drops off in about a week, the patient suffering but little discomfort or inconvenience. Similar results were obtained in the post-operative treatment of molluscum contagiosum, and one of mycotic infection of the mouth cleared up by its use. For epitheliomata which have been destroyed by diathermy the use of gentian violet is advisable until the granulations begin to form, when a mild stimulating ointment will hasten epithelial proliferation. Results were negative in patients with coccigenic sycosis barbæ and epidermophytosis of the feet. The denuded surface to be treated should be as dry as possible, and this may be hastened by swabbing with 1 in 1,000 adrenaline solution. All crusts must first be removed, and no surface should be treated in the presence of an albuminous or mucoid deposit or if there is hæmorrhage or oozing. The application should be made with a small applicator wrapped in cotton-wool, since a brush tends to splash the surrounding tissues. The only drawbacks are the colour and the liability to staining after frequent use.

Glucose Medication.—Admitting the great value of intravenous glucose injections in uræmia and toxæmia in consequence of the supply of calories, the relief of nausea, the economizing of proteins, and the completing of the combustion

of fats, W.E. Robertson, A.E. Oliensis and D. Stein (Med. Journ. and Record, December 7th, 1927, p. 654) have tried to determine the factors responsible for the untoward reactions and deaths which occasionally follow this treatment. They find that a concentrated solution affords greater safety and freedom from reactions than weaker concentrations with larger volumes; the rate of injection and the temperature of the solution are also important factors. They advocated the injection by gravity at body temperature of 108 grams of dextrose in 180 c. cm. of freshly prepared sterile salt solution, the time taken being never less than thirty minutes. With this technique no reactions occurred in fourteen consecutive cases, although the patients were seriously ill, and it was found that a severely damaged cardio-vascular system was no contraindication. The authors conclude that untoward results are due to too rapid a rate of injection, too large a volume of fluid, and an improper temperature of the solution. The use of distilled water is deprecated, since it has been shown to produce hæmolysis and occlusion of the coronary arteries and peripheral vessels.

Treatment of Ringworm by Thallium Acetate.—D. T. Levy (Nederl. Tijdschr. v Genesk, December 17th, 1927, p. 2611) states that this method was first introduced by Cicero, and later employed by Buschke, Peter (354 cases), and Trokao (104 cases) with invariable success. The present author records his own experiences of this method in twenty six cases of ringworm in patients aged from 3 to 16 years. The drug was given by the mouth, according to Buschke's recommendation, in doses of 8 mg. for each kilo of body weight. The hair began to fall out in from two to three weeks; in a mouth's time the whole scalp became bald and after another four weeks a fresh growth of hair appeared. The hair of the scalp only was affected. No complictions occurred except in one child who developed a generalized eruption of large and small macules accompanied by nephritis; recovery followed in three weeks' time.

W. G. Bronstein (Med. Klinik, December 2nd, 1927, reports 94 cases of ringworm treated in one year by thallium acetate, and describes experiments on animals. He finds that young children stand the treatment better than older ones, and that severe albuminuria only occurs through a

miscalculation of dosage. He states that no departure from the normal is discernible in children a year later. His method is the administration of 0.008 gram thallium acetate for each kilo of body weight in water before food in the morning: he only treats children between the ages of 1 and 14. The hair comes out fourteen to sixteen days later, and growth begins again in four to six weeks Comparing this treatment with *x*-rays the author finds it to be more often successful, shorter, less unpleasant, and followed by fewer complications

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Hæmoptysis in Tuberculosis.—L Bard (Presse Med., August 17th, 1927, p. 1009) distinguishes four clinical types of tuberculosis hæmoptysis. (1) The sequel of an abortive lesion and an index of favourable prognosis; the hæmoptysis is unaccompanied by congestive pressure, recrudescence of dry cough, fever, or pain. This type was named by Brabancon "mechanical hæmoptysis." (2) The most common type is characterized by a sputum more or less hæmorrhagic in character and associated with the inflammatory exudates of alveolitis. The condition resembles that in lobar pneumonia, and is produced in a similar way; there is blood in the sputum but not a true hæmoptysis. (3) A type following the rupture of ulcerated arteries in the active focus of the disease or in cavities. (4) Congestive or inflammatory hæmoptysis, a rather more complex condition, occurs like type (2) in tuberculous alveolitis, the blood coming directly from the capillary network under the influence of inflammatory vaso-dilatation. The liquid vascular exudation exceeds the catarrhal parietal proliferation, just as the congestive element sometimes outweighs the hepatization in lobar pneumonia. In hæmoptysis of the third and fourth classes absolute rest is prescribed in the horizontal position on the back without distinction of the point of origin of the hæmorrhage. In the last type, however, the author advocates lateral decubitus on the side opposite to that in which the bleeding is occurring, and quotes a striking instance of cure in a patient treated by him twenty years previously. Since then he has had many cases in which this simple method has proved efficacious. He adds that this treatment suits all congestive cases, but especially those due to passive vaso-dilatation.

SURGERY.

The Diagnosis of a Limp.—H. A. T. Fairbank (Lancet, p. 19).—The diagnosis of the cause of a limp, though often simple, is sometimes very difficult. Amongst the causes are many conditions which may affect any and every tissue and joint not only of the leg, but also of the sacro-iliac and lumbar regions. Some of these are associated with pathological changes which have been recognised only in recent years, and of which the ætiology is still obscure. Even an excellent radiogram may not put an end to the difficulties, yet an early and correct diagnosis may be important to the patient.

Young patients present the greatest difficulties. Their limps vary considerably from time to time and may be intermittent; many children with definite pathological conditions of the hip-joint, for instance, limp only when tired. Many curious gaits are met with in children; some of them are hereditary and no adequate cause can be found for them, but these do not, as a rule, deserve the term "limp." Much, however, can often be learned from a patient who limps by watching him walk; a shrewd diagnostic guess is often proved correct by subsequent examination.

Limps proper can be classified into the following groups: (1) the short leg limp; (2) the painful limp; (3) the stiff limp; (4) the weak leg limp; (5) the hysterical or functional limp. Two or more of these types are often combined.

With a *short leg* the patient either "goes down" on the affected side or walks with the opposite knee bent, rising on that leg at every other step without any rolling of the trunk.

In a *painful limp* the patient endeavours to put as little weight as possible on the limb and to relieve it as quickly as possible. He hurries off the bad leg on to the good one, while he may also walk on the toes in order to avoid jarring the tender joint.

In the *stiff limp* one or more joints of the leg fail to move normally, and often there is a certain amount of deformity. Fraser places the short legs with the deformed legs and classified the limp due to these conditions as "mechanical."

The *weak leg limp* varies according to the extent of the limb affected. The weak leg is usually also a short one. The various types are most commonly seen amongst sufferers from poliomyelitis. In a grossly paralytic leg the limb is flung

forward in a loose disjointed manner. If there is foot-drop the knee is often raised abnormally high, so that the toes may clear the ground. If the quadriceps is weak or paralysed the patient may be able to walk only if one hand is placed on the front of the thigh. Lastly, there is the lurching or rolling gait associated with difficulty in sustaining the pelvis on the femur. As the weight is borne on the weak leg the, shoulders, and with them the centre of gravity of the body, are thrown towards that side. This is well seen in infantile paralysis, when the glutei are affected, but is present in all conditions which seriously disturb the mechanism of the hip-joint and the action of the glutei.

The *functional or hysterical limp* may simulate any of the above, but tends to suggest a combination of the painful and the stiff types. The three characteristics of this type are exaggeration, variability, and the absence of any clinical or radiographic signs of disease. The limp is apt to be grotesque in its exaggeration, particularly if the patient is aware that the doctor's eye is upon her. The gait of hip disease may be imitated. If the foot is held in a deformed position it is almost invariably in the direction of varus. A radiogram should always be taken of the joint which is apparently affected. A second or even third examination may be necessary, and is, in fact, advisable, before a definite decision. If the diagnosis of hysteria is correct this will usually be confirmed by the rapid disappearance of the symptoms under treatment, which should always be given in a hospital or institution and should include daily instruction in correct walking.—*Med. Review.*

Local Anæsthesia.—H. S. Souttar (London Hosp. Gaz., p. 68).—Local anæsthesia is a powerful method of which in this country far too little use is made; few practitioners in any branch of medicine would not find it of use at some stage of their work. By its means small operations can be carried out with facility and economy, and the general practitioner will find it one of his best allies. On the other hand, local anæsthesia in major surgery enables us to carry out with complete safety operations which under other methods involve grave risks. In cranial surgery its introduction will revolutionise our technique and the heavy primary operative mortality can be almost abolished. In extensive gastric operations its effects may be almost as striking. In these large operations the ad-

vantage of local anæsthesia is the abolition of shock, which results from elimination of all afferent impulses. We are apt to forget that general anæsthesia, although it renders the patient unconscious, protects him only in a variable degree from violent disturbances of those lower centres upon which life depends.

The equipment required is simple and consists chiefly of a first class syringe with fine needles of varying length. For most operations a 10 c.c. "Record" syringe with needles up to 5 cm, in length will be sufficient, but for larger operations a powerful metal syringe capable of holding 50 c.c. and with convenient finger grips is essential, whilst needles as long as 12 cm. will be found a great convenience.

The solution most generally useful is half per cent. novocaine to which a few drops of adrenalin have been added immediately before use. The solution should be absolutely fresh and sterile. The most convenient method for its preparation is to pour boiling water on tablets of novocaine and adrenalin; a stale solution is useless. Such a solution may be injected in large quantities—even 200 or 300 c.c. with impunity. Where a rapid action is required it may be used in a strength of 1 per cent., whilst for local application in the urethra a 4 per cent. solution will be required.

Local anæsthesia may be produced by several methods—local application, local infiltration, and nerve blocking, or regional anæsthesia.

Local application can be used only on mucous membranes and raw surfaces, since none of the available drugs will penetrate the skin. Its chief applications are in the nose, the eye, and the urethra. The nose may be plugged with strips of gauze soaked in a 20 per cent. solution of cocaine, whilst in the eye from 1 to 4 per cent. may be used. In the urethra cocaine must on no account be used, since it is rapidly absorbed and severe symptoms may be produced; a 4 per cent. solution of novocaine will generally give all the anæsthesia necessary.

Local infiltration is the method most generally useful and is all that is required for minor surgical procedures. The solution generally used is ½ per cent. novocaine, to which a few drops of adrenalin have been added. Practically any quantity required may be injected with perfect safety. The adrenalin is esential since by constricting the vessels it not only prevents

bleeding, but limits the anæsthetic to the region required, increasing its effect and preventing its rapid absorption into the circulation and resulting toxic symptoms.

In making the injection there are two methods. We may inject into the dermis or into the deep tissues. The former is essential along the line of incision, and should result in the raising of small swellings as the injection is made. Each swelling is itself anæsthetic and may be used as the starting point for further injections. But if the deep tissues are to be entered, these too must be infiltrated. In an extensive opersation it will be better to carry this out as the various structures are exposed. In this way any superficial tumour can be removed, and even extensive procedures carried out with no shock and little or no hæmorrhage.

An important application is in fractures and dislocations. Deep injections are made around the displaced ends of the bone, the tissues around both surfaces being thoroughly infiltrated. In a few minutes all pain will have ceased, the reflex spasm of the muscles will have disappeared, and the bones may be reduced with great ease.

Regional anaesthesia is produced by blocking of a nerve with novocaine, the injection being made either into the nerve trunk or around it. In the latter case the solutions should be twice as strong, and only small nerves should be dealt with. For large trunks endoneural injection is essential.

As an example of perineural injection take resection of a rib for empyema. Several c.c. of solution are injected around the heads of the rib in question and those above and below. The skin, the rib and all the tissues to be divided will thus be rendered anæsthetic. Similarly, perineural injections around the median and ulnar nerves at the wrist will enable many operations on the hand to be performed.

Endoneural injections are less frequently used as they are more difficult to carry out, but by their means brilliant results can sometimes be obtained. A very fine needle is inserted into the nerve trunk which it is desired to block, tingling in the distribution of the nerve indicating that the nerve itself has been entered. A few c.c. of 1 per cent. novocaine are injected and give a most satisfactory anæsthesia. It has been most often used in the brachial plexus when it enables prolonged operations, such as may be required for a tendon in the hand, to be carried out with great facility.

As examples of regional anæsthesia take the fingers A fine hypodermic needle is inserted at the base of the finger from behind and 5 c.c. of 1 per cent. novocaine are injected on each side blocking the digital nerves. Five minutes later the finger will be found to be completely anæsthetic and any operation may be easily performed. The method may be used in the treatment of whitlow, provided that the injection can be made at a distance from the septic focus, although there is less pain afterwards when gas is used.

Any portion of the scalp may be readily anæsthetised by direct infiltration or by simply surrounding it by a line of infiltration. Indeed the whole scalp and cranium can be totally anæsthetised by a zone of infiltration encircling the head, since all the sensory nerves pass upwards in the subcutaneous tissues. By this simple method suture of scalp wounds or the removal of small tumours may be greatly facilitated, whilst even the most extensive operations on the cranium and its contents can be carried out painlessly and with safety.

In dentistry local anæsthesia to the teeth is now widely used. Apart from injection into the tooth sockets themselves, anæsthesia of the upper teeth is easily obtained by injections beneath the mucous membrane covering the outer surface of the superior maxilla, since the bone is here so thin that the anæsthetic readily penetrates to the dental nerves which traverse it. In the lower jaw the most perfect regional anæsthesia is obtained by injection of the inferior dental nerve, readily reached as it passes downwards on the inner aspect of the ascending ramus of the mandible.

In the chest local anæsthesia in the removal of a rib has been described. For more extensive operations, such as thoracoplasty, complete anæsthesia of the chest wall can be obtained by blocking each of the intercostal nerves where it lies just beneath the neck of the rib. The skin of the back is first anæsthetised by infiltration in a vertical line over the transverse processes of the vertebræ and through this anæsthetic area the needle is inserted just below each transverse process and 5 c.c. of 1 per cent. novocaine is injected at each point. By this method the patient is saved the annoyance of feeling repeated pricks, whilst complete anæsthesia of the whole of one side of the chest is rapidly obtained. As thoracoplasty is usually required in conditions such as

tuberculosis, where general anæsthesia is most undesirable, the regional method is here of peculiar value.

The abdomen has hitherto been almost monopolised by the general anæsthetist, but the most extensive operations can be carried out under local anæsthesia. For an operation on the stomach the skin in the middle line is first anæsthetised from the ensiform cartilage to the umbilicus. Using the anæsthetised skin as a basis for operation, the rectus muscle on each side is freely infiltrated with ½ per cent. novocaine. The abdomen is now opened in the usual way and the extra-peritoneal tissues are infiltrated by injections made through the peritoneum from inside, ensuring absolute anæsthesia of that portion of the abdominal wall with which the surgeon comes in contact. The liver is now drawn upwards and the stomach downwards with extreme gentleness. The left forefinger is placed on the spine to the right of the aorta so to push aside the vena cava. Guided by the finger a long hyperdermic needle is inserted into the retroperitoneal tissues on the front of the first lumbar vertebra just below the liver and 70 c.c. of ½ per cent. novocaine are injected at this point. The result is a complete block of the splanchnic nerves. By this method excellent relaxation is obtained and operations can be carried out on the stomach and the upper intestine with entire absence of shock.

Ureteral Stricture in Male and Female.—In Surgery, Gynecology and Obstetrics, Tolson says that ureteral stricture is a common pathological condition that should be of interest to every medical man. Patients suffering with this lesion are frequently seen by every active physician whether he be engaged in general medicine, or one of the specialities.

Usually these patients first consult the family physician, and for this reason those doing general medicine should be particularly interested in the symptoms and diagnostic features of ureteral stricture. Pain in the abdomen or back is the most frequent chief complaint, and consequently many patients with ureteral stricture are referred to the general surgeon. On account of pain in the pelvic region, backache and dysmenorrhea many of them go to the gynecologists. Stricture patients usually have an exacerbation of symptoms during pregnancy, and obstetricians have to deal with the condition. Again, the gastro-intestinal disturbances are the most prominent features and the patients are sent to the gastro-enterologists. Pain due to

ureteral stricture is often referred to the sacro-iliac, hip, and thigh regions, and therefore the advice of the orthopedists is sometimes sought. The ophthalmologists are often called upon to relieve headache, which is frequently a prominent complaint. Tonsils are the source of infection in a large percentage of ureteral stricture cases, and the sevices of the laryngologists are necessary to eradicate the focus. Neurologists see many of these patients, who after a long period of suffering have developed neurological symptoms. The ones with renal colic type of pain and prominent urinary symptoms are ordinarily promptly referred to the urologists, who too often on account of the easy passage of plain renal catheters, negative urinary findings, and misinter pretation of X ray films, turn them over to some other specialist.

As in many other conditions, the effects of ureteral stricture are manifested in various parts and symptoms of the body and the predominating symptoms may be in any of the parts or tracts involved. Prominent symptoms in parts of the body outside the urinary tract have served to direct attention and remedial attack on the effects, and have placed the primary causative pathology so far in the back ground as to be out of sight in many cases. Even within the urinary tract attention and remedial attack has been largely directed to resulting kidney pathology, such as hydronephrosis, while the primary pathology in the ureter has passed unobserveal. The manifestations of ureteral stricture frequently simulate better understood conditions. Moreover, it is quite apparent that a large number of medical men are still unfamiliar with the clinical picture of ureteral stricture, and do not sufficiently appreciate its prevalence and importance. Consequently, it is not surprising to observe that patients with ureteral stricture commonly pass through the hands of many medical men, including surgeons and various specialists, without obtaining relief.

There seems to be a general impression that the symptoms of ureteral stricture are indefinite: that there are physical findings that suggest the condition, and that the lesion can be diagnosed only by cystoscopic methods. On the contrary, is the firm belief of the author, ureteral stricture has definite symptoms that produce clear-cut clinical pictures; there are physical findings that suggest the lesion and a working or provisional diagnosis can be made in most cases without the aid of cystoscopic methods. Certainly the diagnosis of ureteral

obstruction which may be due to a variety of conditions can be readily made, and this is sufficiently exact for a provisional diagnosis.

The treatment the author advances consists of gradual dilatation of the stricture areas, appropriate treatment of the asociated pathology in the urinary tract, and lastly but equally as important, the removal of all discernible foci of infection. The author does not state the various methods of ureteral dilatation; but he does state that large bulbs on catheters and bougies can be passed with almost equal facility in the male and female through the Mc Carthy panendoscope.—*U. and C. R.*

Otitis in Influenza.—Vachey (These de Paris, 1927, No. 260) who reviews the literature and records seven illustrative cases, in patients aged from 9 to 48 years, states that influenzal otitis is characterized by its sudden onset and violent pain. Two subsequent stages may be described. The first is one of hyperæmia, manifested by a diminution of hearing and a sense of fullness in the ear. When the condition becomes worse the patient complains of a more or less dull continuous pain in the ear radiating to the temporal region On exmination the tympanic membrane is seen to be of a uniform dark red colour and sometimes the ossicles cannot be distinguished. Interstitial hæmorrhages may develop and give rise to the appearance of hæmorrhagic vesicles on the membrane and walls of the external auditory meatus. The stage of hyperæmia is usually followed, unless paracentesis is performed, by a stage of exudation in which there is an effusion into the middle ear causing pressure on the membrane and walls of the tympanum and giving rise to severe and continuous pain. On examination the membrane is seen to be oedematous and bulging into the meatus. Paracentesis is followed by a discharge of blood-stained pus and relief of the pain. In rare cases influenzal otitis is purulent from the first. In addition to the form which runs its course in two stages is one ushered in by severe constitutional disturbance and affection of hearing. On examination hæmorrhagic vesicles are seen to cover a more or less considerable extent of the tympanic membrane, the rest of which remains normal. There are also numerous vesicles in the meatus, the lumen of which is sometimes completely blocked. The mastoid becomes tender on pressure at an early stage. The most characteristic feature, however, of this form of otitis is the rapid disappear-

ance of the alarming initial signs in the absence of any treatment or after antiseptic applications to the nasal fossae, nasopharynx, and external auditory meatus.

Treatment of Thrombo-angiitis Obliterans.—S. Silbert (Journ. Amer. Med. Assoc., reports a series of 258 patients with thrombo-angiitis obliterans in whom the symptoms began before the age of 45. In 137 patients amputation of one or both lower extremities was performed, and in 120 of these the operation fell within five years of the onset of symptoms. In 121 patients no amputation was performed, and the spontaneous course exceeded five years in only 18 cases. It is concluded, therefore, that 77 per cent. of such patients will require amputation within five years from the onset of symptoms, unless treatment is provided. In comparison with these results Silbert reports that 84 patients were treated with intravenous injections of hypertonic salt solution, and so far only 10 patients (12 per cent.) have required amputation; in 5 of these cases gangrene of the toes was already present when treatment started, so the true percentage is lower still. He thinks that this rusult suggests the possibility that such therapeutic treatment may be beneficial, but he insists that in assessing the benefit of this and other procedures it is important to compare the results statistically with those in which no treatment is given. He is convinced that, whatever the underlying cause of this condition may be, prolonged tobacco smoking is the immediate etiological factor, though the vast majority of smokers never develop signs of the disease. He concludes that some additional factor is present, possibly a predisposition to vascular disease, or special susceptibility to the effects of tobacco poison, patients in whom thrombo-angiitis obliterans develops. Cessation of smoking is the most important therapeutic measure.

CORRESPONDENCE.

INJECTIONS OF ATOPHANYL IN RHEUMATISM.

TO THE EDITOR, "*The Antiseptic*," MADRAS.

SIR,

I was glad to read the experience of Mr. P. D. Samuel, published in your issue of January, 1928. I had occasion to treat at least eight cases of rheumatism, both acute and chronic,

during the last year. In every case I have used atophanyl and got good results. My experience is that the injections are required to be pushed to get good results. In one peculiar case, the injection used to give good relief in about eight to ten hours time, but the pain used to appear with the same intensity next morning. I had to inject at least six times before the disease came under control. If pushed with caution I believe it is a good treatment for rheumatism.

There was a warning note about this drug in one of the papers recently which ought to be borne in mind when the injections are to be pushed—its effect on liver.

Yours truly,

BHALCHANDRA BHAGWANT KIRTANE,
M.B.B.S.,
Dhulia.

"AN INTERESTING CASE."

TO THE EDITOR. "*The Antiseptic*," MADRAS.

DEAR SIR,

I have read with interest the interesting case reported in your journal by Dr. M.G. Ramachandra Rao of Pudukotah.

Really it is a case where all sorts of possible methods of treatment have been tried and the doctor is no doubt wearied.

The case as it is diagnosed by the doctor himself is one of toxæmia due to acute inflammation supervening on chronic proctitis. The pyrexia is no doubt due to the absorption of septic products of the discharge from the ulcers and also due to the contamination of the fæcal matter. Since the ulcers in the rectum are not healing up by the previous methods of treatment. I think a bolder step might be taken and tried, *i.e.*, to avoid the fæcal matter to pass over the ulcers and thus to give rest to the rectum and make it easy to continue treatment for the ulcers.

I mean to say a temporary *Colostomy* might be done preferably an *Illiac-Colostomy* and thus avoid the ulcers from being contaminated by the fæcal matter.

Locally for the ulcers, irrigations and *iodex* may be tried.

Repeated microscopic examinations of the fæces might be made for any amæba or ova.

A course of *Bacillus Coli* Vaccine alone may be tried as this bacillus plays a lot of havoc in some cases.

Yours faithfully

C. VEERARAGHAVAIYA,

Damal.

"A CASE FOR DIAGNOSIS."

TO THE EDITOR, "*The Antiseptic*," *Madras.*

DEAR SIR,

In the "Antiseptic" of October, 1927, you have described a case under the heading of "A case for diagnosis". Your last wordings encourage me to write something about it. How should such a case be treated at that time. In my opinion the case was surely one of "Snake-bite".

(1) First of all Liq. Adrenalin Hyd. 1 c c. should be injected immediately. (2) And after that 1 sterilized normal saline, 40 c.c. intravenous should be injected, and if there was more chance for treatment, the enema of sodii chloride lotion should be tried. The treatment may be continued as long the respiration has not stopped.

Adrenalin Hyd. and Post pituitary ext. are the two things, because in my experience, in cases of fatal diseases in which the respiration was about to stop, the injection of any of the two above extracts made it continues. And I got the chance for treatment. But there is an other specific remedy for such like doubtful cases, which is called, "The Ayurvedic" treatment, by which I have got success in many cases in my practice. I shall write about this treatment next time.

Your's sincerely,

BASANT SINGH,

Private Medical Practitioner, Lyallpur, The Punjab.

TREATMENT OF ABORTION BY POT. CHLORAS.

TO THE EDITOR, "*The Antiseptic*," MADRAS.

DEAR SIR,

In connection with Dr. Sundararajan's article on the treatment of abortion by Pot. chloras, it would be interesting to bring to your notice the teaching of Prof. Kedernath Das,

M.D., C.I.E., for 45 years the leading Obstetrician and Gynæcologist of Calcutta.

To put in his words—"when you are not sure of the cause of abortions and when you cannot find out any organic lesion you can use the following prescription which has rarely failed me. It is this.

Pot. chloras	gr. x
Tinct Ferri Perchlor	m. x
Glycerine	oz. i
Aleteris cordialis	ad. oz.

Thrice daily when abortion is threatened or expected."

Coming from the specialist of Dr. Das's standing and experience, who counts his cases by thousands and tens of thousands it will be of interest to your readers.

Yours sincerely,

B. NARAYANA RAO,

B. Sc., M.B. (CAL.)

Hassan.

MYIASIS IN MAN.

TO THE EDITOR, "*The Antiseptic*" MADRAS.

SIR,

I read your article under the heading "Myiasis in man" contributed to December 1927 issue of your esteemed Journal by Dr. R. Ch. Panda of Puri, Parikud Dt.

As my experiences of the subject is somewhat different from his, I wish to make a few observations on the subject under the heading "myiasis in man; not a rarity."

I request you will be good enough to publish my article, if you think it can in any way help the readers of your esteemed Journal.

Myiasis in man is not a rare malady nor is it an uncommon affection in India. We often come across this affection complicating foul smelling ulcers of people who observe no personal cleanliness and who neglect their wounds, exposing it without a proper dressing and thus allowing the flies to play upon. The flies settle on the wound; deposit their eggs; the eggs hatch out; the screw worms come out and live in the foul-

smelling ulcer at the expense of their host. Of course these do not cause any serious suffering to the patient, but their presence is a source of worry and nuisance to him. But when they infect important cavities like the ear or the nose, they may sometimes cause death by forcing their way into the brain. The ulcer which is infected by these worms becomes awfully bad smelling.

Our masses are just the people who provide all facilities for this screw worm infection. During the last two and a half years of my rural life I have come across several cases of this troublesome malady. All my cases fall under two groups: (1) those complicating otorrhœa (here the patients are generally children); and (2) those complicating foul-smelling ulcers on the surface of the body, especially on the parts most exposed *e.g.*, foot and hand scalp. I have not met with any cases of intestinal myiasis nor myiasis of the nose. For the first group of cases I use $H_2 O_2$ instillation and for the second group turpentine which in all my cases have successfully expelled the worms.

There are several other cases which do not come under our treatment and which the patients themselves treat by applying some hot compounds like chunam and tobacco; and fresh juices and leaves of certain indigenous plants.

In my opinion the screw worm infection forms a sort of measure to estimate the sanitation of a population. Wherever the people keep themselves and their surroundings clean and do not neglect their wounds then this screw worm infection will become a rare complication; but when the people keep their wounds exposed or improperly dressed, such places are sure to be haunted by myiasis.

Myiasis will become a rare affection to man when he learns to keep himself and his wounds clean and thus ward off flies from coming to him. They are the real originators of this troublesome mischief. India of the present day cannot afford to make this malady a rarity among her masses.

Yours truly,

K. NARASIMHAM, L.M.P.,

S. RAYAVARAM,

Vizag Dist.

FEVERS IN B. COLLI INFECTION.

TO THE EDITOR "*The Antiseptic*," MADRAS.

SIR,

Reading an article on the fevers in B. colli infection in your issue of December 1927 I am prompted to send the following notes on a case which I met with when I was in King Edward Memorial Hospital, Bombay, in the hope that they may be of interest to your readers.

Patient Raghunand Hanuman Singh was brought to the Hospital on 24-2-26 in semi-conscious condition with a history of continuous fever for the last seven days. On examination he was found to be suffering from pneumonia on the left side. In the Hospital his temperature came down to normal within two days.

However, after 6 days of normal temperature during which he was still in the hospital his temperature shot up all of a sudden to 103°, being attended with rigors. It went down to normal a few hours later with perspiration. The temperature was taken to be of malarial origin and quinine injection was given. Next day temperature returned exactly the same time and continued to do so every day with clock-like regularity. Quinine injections were given one after the other but temperature remained unaffected except that the height was less and the clock-like regularity stopped. Blood films sent to the laboratory were reported negative, but considering the fact that Quinine injection was given before the blood was taken and that the height was less after the injection no value was attached to this negative result. Quinine was given intravenous and even one Neo-salvarsan but temperature persisted to come every day.

Meanwhile one change was noted. Urine which was clear before was turbid now and this roused the suspicion of B Colli infection. A specimen was sent for culture with a positive result. Alkaline line of treatment was instituted and vaccine ordered to be prepared. Alkalies however sufficed and patient stopped getting attacks within a short time.

Everything seemed well for the next few days. Patient was thought to be convalescing when all of a sudden one night on 30-3-26 patient developed some kind of fit. His fit was of an epileptic character, patient having foam at the mouth, biting his tongue and avoiding urine. This epileptic origin was not however borne out by duration as

patient continued in the same condition instead of rallying round. Every possible investigation was made but nothing could account for this fit. His urine, blood, and blood sugar were normal, so also the spinal fluid. There was no paralysis or paresis. Fundal examination revealed nothing.

As no diagnosis as to the cause could be made patient was treated symptomatically. Paraldehyde was given per rectum and morphia by injection.

Gradually patient rallied. On the fourth day he recovered consciousness and could be fed. Credit to nature who wanted to spare her child, no credit to drugs.

Next four days there was nothing noteworthy except slight rise of temperature and boils all over the body for which pharmosol manganese was given with good results.

However soon his temperature shot up to 104°. It dropped down again to normal to rise next day. Urine which appeared clear was seen for culture and Quinine injection given without effect. Culture result was positive and so patient was placed on alkaline line of treatment and vaccine given. Result was very encouraging. Patient from that day made uninterrupted recovery and was discharged cured.

Points of interest in this case are—

(1) Complete absence of urinary symptoms to start with.

(2) Exactly malaria-like temperature.

(3) Occurrence of fit to which no cause could be assigned.

One positive finding was B. Colli infection but fits due to B. Colli infection are unknown.

Yours truly,
KRISHNALAL VITHALDAS ADALJA,
M.B.B.S.
Nairobi.

BOOK REVIEWS

PULMONARY TUBERCULOSIS

By David C. Muthu, M.D., M.R.C.S., L.R.C.P., Medical Superintendent, Mendip Hills Sanatorium, Wells, Somerset. Second Edition. Enlarged. Pages 381. Plates 28. [Bailliere, Tindall & Cox, 7 & 8 Henrietta St., Covent Garden, London W.C.2]. Price 12/6 net.

In this book which is the outcome of Dr. Muthu's experience in open air sanatorium treatment of Pulmonary Tuberculosis over a period

of about twenty seven years, the author urges "that we should adjust our angle of vision and study life's processes from social, economic and psychological aspects" which he claims "to offer a more satisfactory solution in the æteology and treatment of Tuberculosis." In the treatment of Tuberculosis, while upholding the use of the well-known remedies based on constitutional theory, such as sanatorium treatment, psychotherapy etc, he is rather inclined to criticise the principles of treatment based on the germ theory, e.g., segregation, tuberculin injection, vaccine therapy, artificial pneumothorax etc. He seems to rely more on psychotherapy than on the modern scientific treatments and he seems to call back the challenge which the profession has thrown against this dreadful disease, acknowledging the futility of man's tools to eradicate it, and proposing to rely on mother nature to do her best. He says that we cannot assess the merits of the modern remedies by setting up any standard of judgment or even by the cures they are professed to bring about, as the fact of spontaneous arrest of the disease vitiates all their claims of successful results, and that nature is tolerant with our mistakes, can dispense with our methods of treatment and bring about healing in spite of our blunders and remedies. But one is inclined to think that he forgets this very statement when he praises the usefulness of psychotherapy in Tuberculosis, which he claims to be one of our main weapons against many a disease. He opines that one of the causes of failure of sanatorium treatment is due to medical men not sending their cases at an early stage. One has to take it for granted that this very same fact may be a cause of the failure of many other varieties of treatments in vogue also. Moreover in another chapter he himself says that the family physicians may not be conversant with the early signs and that in some cases even specialists themselves may diagnose differently. Therefore, where is the possibility of deriving the benefits of a sanatorium treatment and especially in a country like India where the patients seek the aid of medical men in a fairly advanced stage? Thus according to Dr. Muthu other remedies are useless in this disease and sanatorium treatment is not going to benefit the patient if not seen early. With such controversy between the different schools of thought as to the procedure in the treatment of this deadly disease, general practitioners have to think twice before they advice their patients as to the best method of treatment.

It is a well-known fact that regulated sanatorium treatment with proper rest, fresh air, exercise and diet is all important in the treatment of Tuberculosis. But why not the great advantages of the sanatorium treatment and psychotherapy be combined with some of the selected modern remedies at least in those socalled late cases where the sanatorium treatment is likely to fail; and when the sanatorium treatment is impossible

due to various reasons, these remedies may be given a trial instead of leav- the patient to nature and fate. At least these remedies can have a psychic effect, which the author himself seems to believe in.

As to the procedure of sanatorium treatment, the author has in this book struck out fresh lines for himself and a perusal of the same will prove of great help to the ordinary practitioner to understand and carry out this method of treatment. The present book is one of the few books of its kind which includes such widely different subjects as heredity, environment, psychology, bio-chemistry, ethics, sociology etc. It gives food for plenty of thought.

THE ANTIQUITY OF HINDU MEDICINE

By David C. Muthu M.D., M.R.C.S., L.R C.P., Lond., Associate of King's College, London, etc. Second Edition. Pages : 52. Price 1 s. 6 d. [Bailliere, Tindall & Cox 7 & 8, Henrietta Street, Covent Garden, W.C. 2 London.]

This little book presents a brief account of the antiquity of Hindu medicine and civilization covering a period of about 6000 years. In it the author describes how the ancient Hindus were making use of certain preparations as anæsthetics and their advance in midwifery etc. Further he says that the ancient Hindus were the first to build hospitals, to employ minerals in medicine, to practise plastic and ophthalmic surgery, to dissect the human body, to do major operations as amputations tri- phining etc., and to make use of medicinal plants and drugs of various kinds. Western Scholars who are perhaps prejudiced by the present position of India and have been reluctant to admit the claims of the Hindus as to the antiquity of their great civilisation will surely alter their opinion on a perusal of this fascinating little book.

A TREATISE ON MATERIA MEDICA AND THERAPEUTICS INCLUDING PHARMACY, DISPENSING, PHARMACOLOGY AND ADMINISTRATION OF DRUGS.

By the late Rakhaldas Ghosh-Eleventh Edition by Birendra Nath- Ghosh F.R.F.P. & S. (Glas.), Examiner in Pharmacology, University of Calcutta and State Medical Faculty of Bengal, Fellow of the Royal Society of Medicine etc. Pages 740. Published by Hilton & Co., 109 College Street Calcutta. London agents: H. K. Lewis & Co. Price Rs. 7/8 (10s. 6d.)

This is one of the few successful attempts by the Indian authors to write a treatise on Materia Medica. Every pain to condense the

subject matter and treating it in a simple style has been taken. In addi- tion to the usual pharmacopial subjects, most of the non-official remedies also are described in detail. In the present edition, special descriptions of the more recent remedies, such as of Insulin, Mercuro- chrome, Hexyl-resorcinal, and the organic salts of Bismuth and Antimony, is introduced. Reference has also been made to anaphy- laetic shock, serum sickness and protein therapy. A new sec- tion on Radiation Therapy has been added, giving a short resume of the essentials of Ultra-Violet Rays and Radium treatment. The book is divided into eight parts dealing with materia medica proper; pharmacy and dispensing; administration of drugs ; pharmacology ; materia medica and therapeutics ; vaccine and serum Therapeutics; Organotherapy; and Radiation Therapy. The author has endeavoured to make this un- attractive subject as interesting as possible. It is a book worthy of being prescribed as a text book in the Medical Schools and Colleges in India.

THE DIAGNOSIS & TREATMENT OF TUBERCULOSIS OF THE HIP

By G.R. Girdlestone, B.M. (Oxon), F.R.C.S. Hon. Surgeon, Wing- field Orthopædic Hospital, Oxford etc. Pages 94. Illustrations 60. Published by Humphrey Milford, Oxford, University Press, London, Bombay, Calcutta, and Madras etc. Price 8/6 net.

This book consists mainly of clinical matter being a description of everyday work and presenting a plan by which the series of processes applied to the patient vary with the indications but follow each other in logical sequence. As the author says in the preface, "this book has been writen with the hope of helping the medical man to find for each of his patient the safest and most direct method to obtain a permanently useful limb." The practice described in this book is based on the authority of others as well as on the author's own experience. There are about sixty plates illustrating the skiagrams of the hip in the various stages of the disease and also the applications of the various appliances etc. which by themselves form an intresting study. We congratulate the author for presenting this useful book in a simple style to the profession.

PHYSICAL DIAGNOSIS.

By W. D Rose, M.D., Associate Prof. of Medicine in the University of Arkansas. Fifth Edition. Pages 819. Illustrations 310. Coloured plates 3. [The C.V. Mosby Company St. Louis.]

This book under review endeavours to incorporate briefly the principles of Physical Diagnosis, together with the physical findings in

the common diseases of the respiratory and circulatory systems, as well as the principal diagnostic signs referable to the head, neck and limbs. together with the main points in the examination of the nervous system. Anatomy and Pathology have been considered from the clinical standpoint, emphasizing these subjects as they influence the physical manifestations of disease. In this edition the whole book has been carefully revised. The book is profusely illustrated. Every competent practitioner should be familiar with all the diagnostic methods so that he may be quite fit to do justice to his patients. Perusal of this book will surely help every student who is thirsty after knowlege and every practitioner who is anxious to be a good diagnostician.

AIDS TO GYNAECOLOGY.

By Richard E. Tottenham, B.A., M.D., D.P.H. (University of Dublin), F. R. C. P. I. Prof. of Obstetrics and Gyanaecology, University of Hong Kong etc. Seventh edition, Pages 131. Illustrations 25. Published By Bailliere, Tindall & Cox 8 Henrietta Street, Covent Garden. W. C. 2, London.

This book has had seven editions within a very short time. It is needless for us to mention that it is a very useful and popular little book, containing most of the essential points in Gynæcology in a nut shell. We do not see much change in this edition from its predecessor, excepting for the fact that the whole book has been revised and the operation of anterior Colporrhaphy and a brief account of Sampson's work on Hæmorrhagic cysts of the ovary have been added. Every student will find this book of immense help before the examination.

INVALID DIET.

By Dorothy Morton, Member of the Institute of Hygiene etc., with a foreword by J. Johnston Abraham, C.B.E., D.S.O., M.A., M.D. (Dub.), F.R.C.S. (Eng.) Pages 98 [William Heinemann Medical Books Ltd., London.]

This book describes a series of suitable dishes for certain well-known conditions of ill-health, interladed with advice as to the best methods of cooking them. In compiling these recipes it is aimed to suggest a suitable variety in their arrangement and preparation to meet the requirements of the patients. Medical Practitioners and Nurses have often to give directions as to what diet to administer to the patient and how to prepare the diet. Often a recently qualified doctor feels himself

quite incompetent in prescribing the diet to his patient, He will find this book to be a useful reference book on diet.

THE TREATMENT OF ORDINARY DISEASES.

By Beverley Robinson M.D. (Paris), Emeritus Clinical Professor of Medicine at University and Bellevae Hospital Medical College, New York etc. Pages 126. [American Medical Publishing Co., New York City.]

In this book the author has endeavoured to solve many of the problems in the treatment of most of the common diseases. The book is the outcome of his large and long experience as a general practitioner. It deals with the treatment of many of the acute infections, diseases of the liver, stomach and kidney, venereal diseases; Rheumatism, Gout, Neuralgia, diseases of the nose, throat and ear; Tuberculosis, Heart disease and many other common ailments as well as local measures, Spas, Proprietary remedies etc. It is a fine book written in a simple language. We commend this book to our readers.

MEDICAL VIEWS ON BIRTH CONTROL.

By H. Crichton—Miller, M.D., Prof. Leonard Hill, F.R.S., Mary Scharlich, C B.E., M.D., A.E. Giles, M.D., F.R.C.S., R.C. Buist M.D., L.D. Fairfield M.D., Sir Arthur Newsholme, K.C.B., M.D. and John Robertson C.M.G., M D. with an introduction by Sir Thomas Hordu, Bart, K.C.V.O., M.D. and edited by Sir James Marchant K.B.E., L.L.D. Published by Martin Hopkinson & Co. Ltd., London.

This volume on this much discussed subject is written by eight eminent persons in the field. The book deals with many points which call tor a pause before we should decide to advocate birth control and popularise the principle and exposes many fallacies. It is a useful book for medical as well as lay people. It is a written in a simple style and is very interesting to readers.

NEW AND NON-OFFICIAL REMEDIES, 1926

Published by American Medical Association, 535 North Dearborn Street, Chicago. Pages 459 + XLIII.

This book under review consists of descriptions of the articles that stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on 1st January 1926. The description of the articles are based on investigations under the direction of the Council

and on the information supplied by the manufacturer. Articles of a similar composition or actions are grouped together and a general description of each group is given. The article on Radium and Radium salts is revised. It is a useful book to keep the busy general practitioner up-to-date and in touch with the most recent advances in pharmacology and materia medica.

SOME OF THE HUMORS AND PATHOS OF OBSTETRICS.

By H. D. Fair, M. D., Muncie, Indiana. Third Edition. Pages 267. Published by the Scott Printing Co., Muncie Indiana. Price Dol. 2.85 net.

This is an interesting little volume. The author has prepared this book for the entertainment of the Physician in his liesure hours and also for perusal by the intelligent layman. This third edition under review has been further revised. All the cases reported in this book are authentic and are selected from the case reports listed in the record of the private and consultation practice of the author. It is a book interesting to read.

HEALTH THROUGH PREVENTION AND CONTROL OF DISEASES.

By Thomas D. Wood, M. D. and Hugh Grant Rowell, M.D. Pages, 122. Published by World Book Company, 2126 Prairie Avenue, Chicago.

Through this book the authors have presented the best scientific methods for the control of disease in a lucid form. The material in this book is intended for teachers, Medical Officers of Schools, and parents, to give them the best and efficient knowledge of preventing disease in the younger generation in school as well as at home.

CHEMISTRY IN INDUSTRY.

Edited by H. E. Howe-Chairman, American Chemical Society Committee on Prize Essays, Editor, Industrial and Engineering Chemistry. Pages 392. Published by The Chemical Foundation, Inc. 85 Beaver Street, New York. N. Y.

This book is published with a view to providing a convenient source of information on the contributions made by chemistry to industry in its several relations. The book deals with many chemical problems in relation to industry such as Catalysis, Chemical, Rainbow, application of chemistry to the confectionery industry, electroplating and electroforming military and industrial explosives, chemistry of glues, inks, lubricants, matches, soap, Portland cement etc. It will be useful for those who are interested in the modern industries,

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