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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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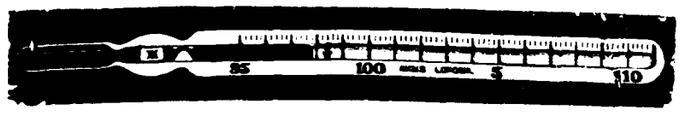

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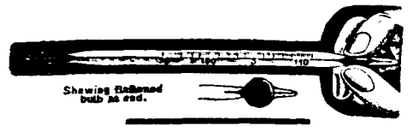

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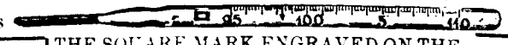
OUT OF FOCUS  ACCURATE

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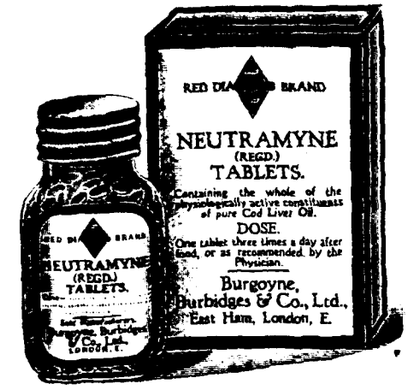

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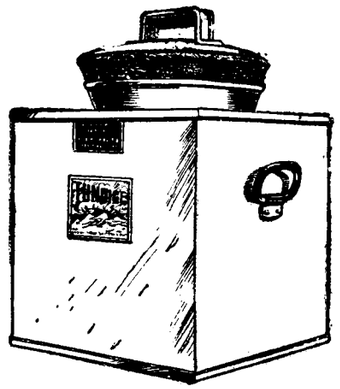

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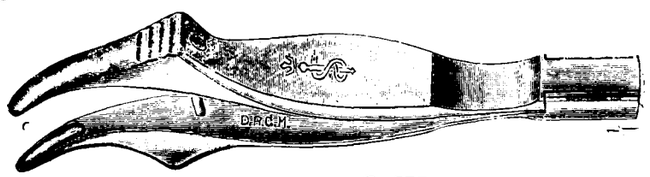

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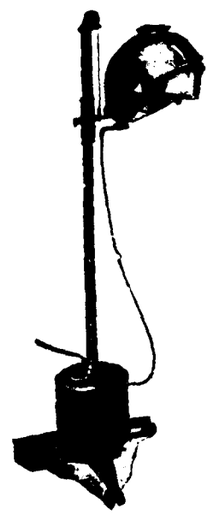

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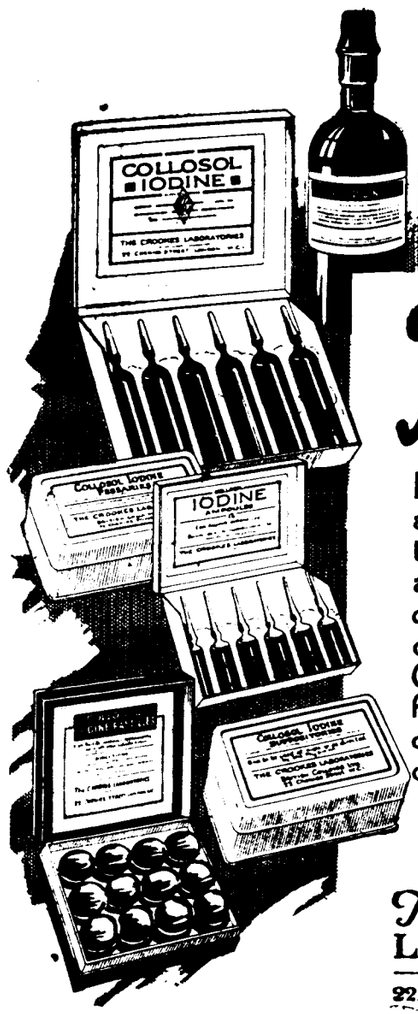

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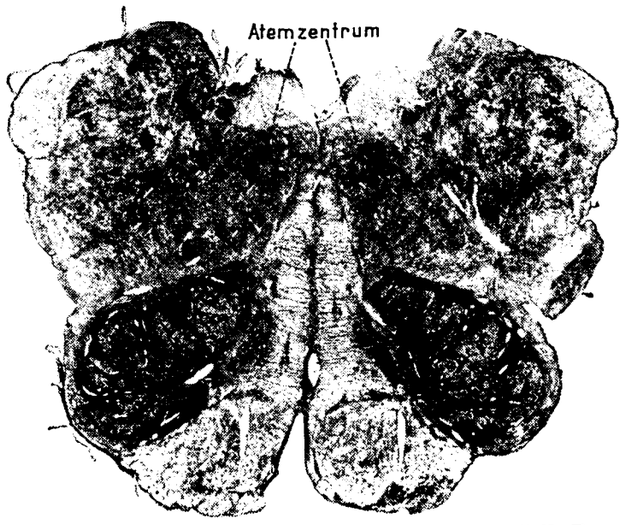

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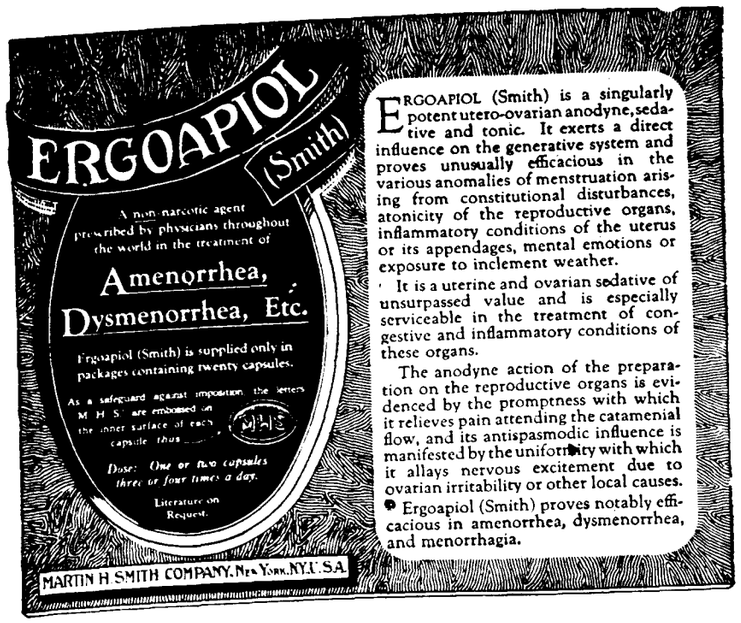

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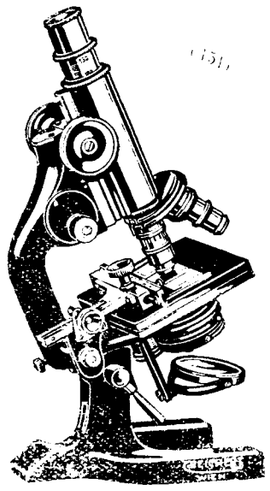

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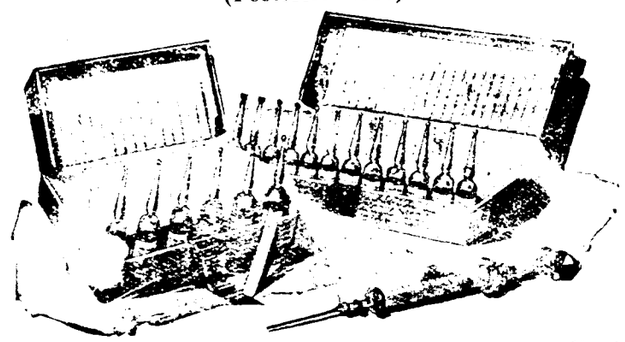

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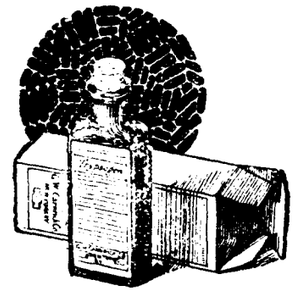

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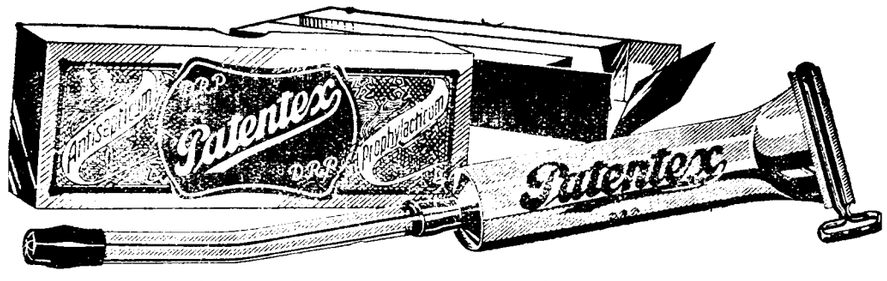

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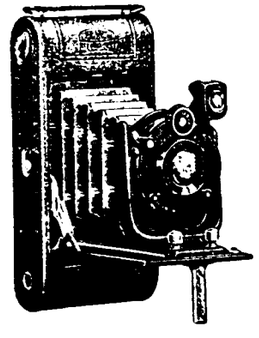

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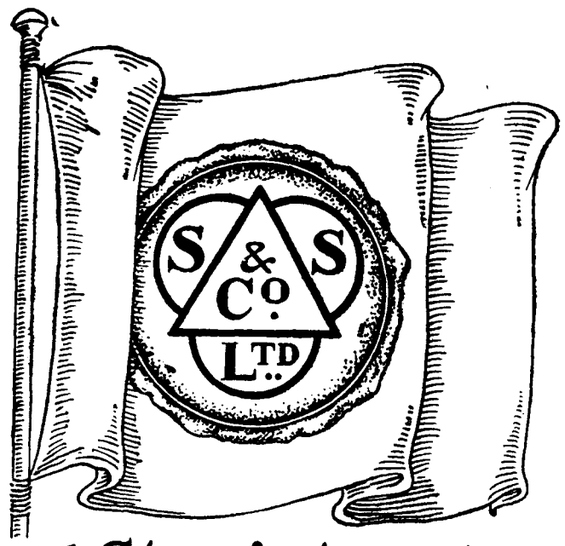

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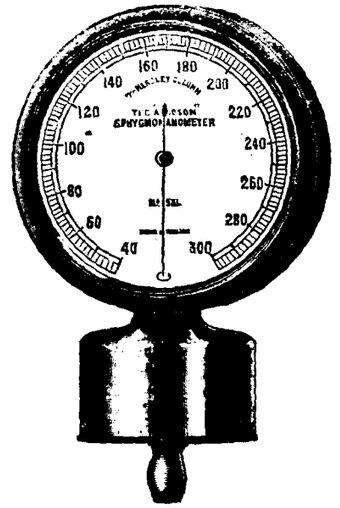

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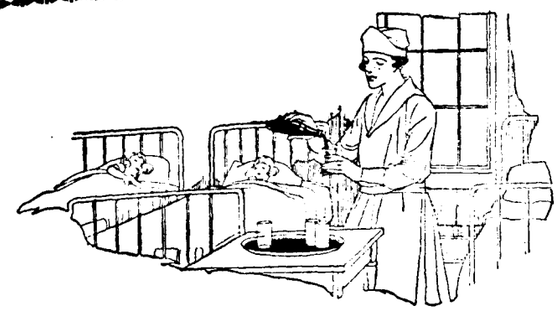

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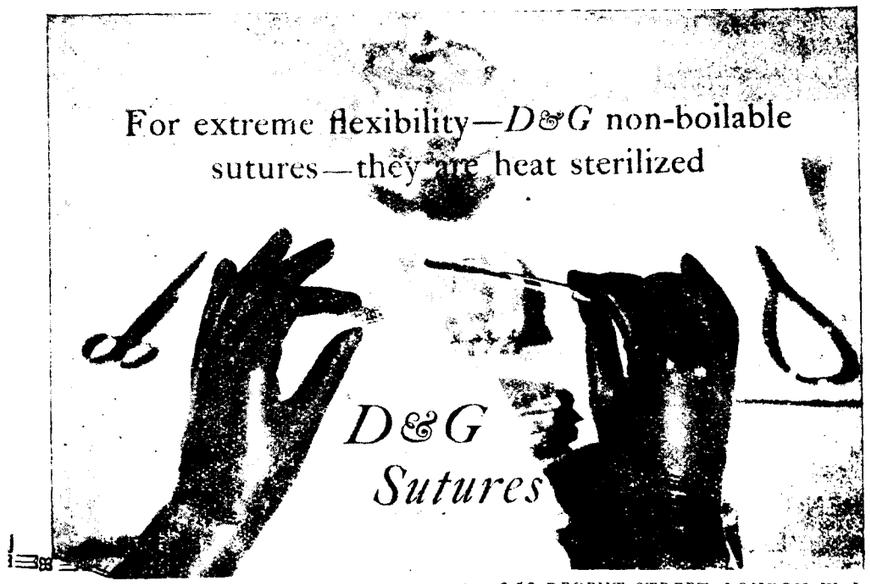

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ORIGINAL ARTICLES.

* LOCAL ANÆSTHESIA.

BY

Dr. T. S. S. RAJAN, L.R.C.P. (Lond.) M.R.C.S. (ENG.)

Trichinopoly.

I have taken up this subject after anxious consideration. To address eminent members of one's own profession on a subject to which nothing new or unknown can be added with advantage made the choice extremely delicate. The subject of local anæsthesia is as old as surgery and volumes have been written with elaborate and minute details by men of eminence, who have devoted their whole life time for it. Names of men like Braun, Matas and Crile have become historical and it will be sheer impudence on my part to lay claim to speak with authority on the subjects handled by them. Any standard book on 'Local Anæsthesia' may give you more illuminating information on this subject than I could ever give in this address. My only claim to engage you this evening is to

* Inaugural address delivered under the auspices of the Trichinopoly District Medical Association and specially sent for publication in the Antiseptic.

report to you the work done in our clinic on this subject during the last two years and eight months, the special features and methods which by experience we found necessary to adopt and also to invite your opinion, so that in the light of your informed criticism I might further enrich my knowledge on the subject.

The subject of 'Local Anæsthesia' is one that claims the attention of all sections of practitioners, the busy general practitioner, the physician, the surgeon and specialists. I believe the ever widening sphere of the utility of local anæsthesia will soon find a permanent place in all surgery, big and small, as people begin to realise the pleasantness of this anæsthetic, Ether and Chloroform may soon get displaced to a large extent in the majority of surgical cases undertaken by us. In our clinic, out of a total of five hundred operations performed during the years 1927 to 1929, covering a period of thirty months, local anæsthesia was the method of choice in 126 cases, of which 86 were major and the remaining 40 minor. Thus more than 25 per cent of the operations which in previous years were done under some kind of general anæsthesia were done under local.

The technique is simple, manipulation easy and the cost so little that even the smallest practitioner can take to it without much effort, provided of course he becomes conversant with the details which are easily learnt. Experience will render the easy technique easier. It is with that hope I am placing these facts before you and taking up your very valuable time.

It is superfluous to take you through the interesting subject, of the history of the development of local anæsthesia to its present state nor to detail to you the various methods employed to induce local anæsthesia. Beginning from snow, cold pressure, ethyl chloride and ending with cocaine, stovain, apothesine and novacain the profession has tried, utilised and discarded one after the other the various substances till to-day only two pre-eminently hold the field-apothesine and novacain. Both these are synthetic products and available in quantities for use. They are as you know protoplasmic poison capable of killing the tissues in sufficiently large doses and whatever may be said about the advantages of Novacain and its group there is no disguising the fact that they are poisons though only in large doses, only they are heaps better in their toxicity than cocain. Care and discretion can never at any time be dispensed with in employing local anæsthesia.

When

In our clinic we use Novacain to the exclusion of all the others for these reasons :

1. Economically advantageous.
2. Can be used fairly dilute and is effective at that.
3. Can be combined with Calcium and Potassium salts which add to the merit of the anæsthetic by making it less toxic by dilution and by prolonging the anæsthetic effect.
4. Solutions can be boiled and re-boiled.
5. Anaæsthesia takes effect much earlier than others of the same strength.

Novacain is rarely used alone. The anæsthetic which we use is composed of :—

1. Novacain Solution 1%.....3 parts
2. Potassium Sulphate 2%.....1 „
3. Calcium Chloride 2%.....1 „

All these solutions are prepared and boiled separately and put up in bulk in sterile bottles. Just before an operation the requisite quantity of solutions are measured out from each, the total quantity depending on the nature of the operation. Thus for a total of five parts of the solution Novacain is just a little over half per cent. To this solution a few drops of adrenaline chloride solution or its various synthetic products on the market, are added at the rate of 5 to 10 drops for each 100 c.c. The whole solution is now ready for use. There is only one point which must be noted : that is the solutions should be mixed only when cold, otherwise Calcium sulphate will be precipitated. The addition of Potassium sulphate intensifies the anæsthetic effect of Novacain thus giving the half per cent solution the effect of an one or two per cent solution without the corresponding toxicity. Calcium chloride has the effect of prolonging the anæsthesia, thus when a ½% Solution of Novacain can give an anæsthesia lasting only twenty minutes the addition of calcium chloride maintains it for an hour or even two. Adrenaline also has the same effect besides acting as a hæmostatic. Of this combined solution as much as 400 c.c. can be given without any ill effects. I have given as much as 500 c.c. in one case without experiencing any bad or untoward result. The duration of anæsthesia has not been inadequate in any case.

The preliminary use of morphia and its compounds before inducing local anesthesia has been reported variously by different authors. My opinion is that it has its special advantages in particular operations. While it may not be adopted as routine

practice in all cases it is a necessity in some. Of the 126 cases under review 34 cases had a preliminary injection of Morphia. The 34 cases comprise Herniotomies, removal of Ovarian and Broad ligament cysts, Appendectomy, Radical cure for Hydroceles and Gastro-jejunostomies. I generally inject one tabloid Scopolamine co. twenty minutes prior to the operation. The particular advantages as I have noted are :—

1. It dulls the sensitiveness of the patient and makes him less susceptible to the fear and fancies of an impending operation. Some of the patients were quietly sleeping when being brought to the operating table.
2. It makes the first prick of the needle as painless as possible.
3. It diminishes shock.
4. It allows the patient to have good rest for a few hours after the operation.
5. If during the course of the operation a general anæsthetic like Chloroform or ether becomes necessary on account of the field of operation being extended to non-anæsthetised areas, it is easily done without prolonged waiting, the patient getting under in a few minutes.
6. Absence of Post operative nausea and vomiting.
7. Absence of pneumonia after abdominal operations.
8. Absence of bladder complications after operations on Rectum and Bladder.

The only disadvantage in its use is that it brought on post-operative nausea and vomiting in some of our cases and temporary retention of urine for the first 24 or 36 hours. I have made it a point to administer morphia in all major operations done under local anaesthesia in sipte of this inconvenience.

There are various ways of inducing local anaesthesia with this solution, the chief of them being nerve block and infiltration. To use nerve block successfully a thorough knowledge of the anatomy of the nervous system is an essential precondition. To produce an effective nerve block it is not necessary that the nerve sheaths should be penetrated by the solution. It will be enough if a sufficient quantity of the fluid is placed in the neighbourhood of the nerve sufficient to produce pressure on the nerve trunk con-

When wi..

cerned. Both the motor and sympathetic nerves respond equally to the anaesthesia.

The technique that we have found efficient in our clinic varies considerably with the nature of the operation. A good majority of our cases have all been done under infiltration from beginning to end. We have not used any special type of syringes or needles except the common ones available in the market. A number of fine and medium bore needles and three syringes, one of 2 c.c. one of 5 and one of 10 are the ones employed. The usual preliminary preparation of the skin is done as for any other method. A fine bore small needle is first introduced under the skin to produce a small wheal and that should be the only painful puncture to which the patient should be subjected. From this nucleus of anaesthetised area we give large quantities below the skin, the deep fascia and even under the muscles to anaesthetise the entire field of operation.

Thus in the case of abdomen, after having infiltered the skin subcutaneous fascia, the muscles up to the transversalis fascia we wait for a period of 5 to 10 minutes for the solution to take effect, For an incision of 3 to 4 inches in length we roughly use about 100 cc. After carrying the incision up to the posterior rectus sheath or the transversalis fascia as the case may be, we infiltrate the fascia, the sub-peritoneal tissue and the perietal peritoneum. It is a delicate procedure and has to be done carefully without puncturing the viscera beneath. (When once the peritoneum is opened we are in the cavity of the abdomen, the visceral peritoneum and the organs are less sensitive.) We squirt into the cavity about 50 to 100 cc of the solution bathing all the organs round about the area we want to deal with and then pack with wet pads keeping in view the particular part of the organ to be treated. No further injections are necessary. The toilette of the wound is done layer by layer and the anaesthetic has been found satisfactory. It has lasted for an hour and a half which was quite enough for our purpose.

For operations on hernia the same procedure is adopted and the sac also is anæsthetised like the parietal peritoneum. The spermatic cord is then infiltered with one or two cc. of the solution an that enables painless manipulation of the testes. For the w ole operation we use about 100 cc. of the soultion.

For carbuncles we infiltrate the skin and subcutaneous tissue half an inch beyond the indurated margin and produce a circular block. A liberal quantity of the solution is put in deep under the subcutaneous tissue and if necessary deep under the healthy muscles. This we have found effective in all cases except in big

carbuncles in the back and neck where the gangrene spreads deep below the muscular layers up to the spine.

For hydroceles we generally employ the high incision. A small area over the external abdominal ring is infiltered, up to the cribriform fascia extending downwards for a couple of inches. After exposing the tissues up to the cord, the cord is infiltered, the sac reversed and the wound closed by two or three stiches. The whole procedure does not consume more than 30 cc. of the solution and the time taken is not more than twenty minutes.

For piles and fistula the loose connective tissue in the ischio-rectal space is infiltered round the anal region and a few cc is put in under the mucus membrane of the anal canal. In all about 30 cc is ample for the whole technique. It is astonishing to note what a perfect anæsthesia this gives particularly when one remembers the stertorous and sometimes suspended breathing that occurs during the administration of a general anaesthetic, when the anus is dilated preparatory to any surgical procedure in that area. The patient is in the lithotomy position and is not in a position to see the field of the operation. You may stretch the anal sphinctor to the utmost without the patient feeling the least discomfort.

For the amputation of the extremities we use the combined method of nerve block and infiltration anaesthesia. First of all the area of skin incision is anaesthetised, then the nerve trunks are blocked and finally the periosteum is infiltered. The sawing of bones does not cause any pain. The time taken for this is about fifteen or twenty minutes more than that done under general anaesthesia. But the time taken is of no consequence. All the dangers attendant on a general anaesthesia are completely absent and there is no anxiety either on the part of the patient or the surgeon. In the amputations on the upper arm about 250 cc of the solution will be enough while in the lower extremities particularly in the thigh quantities up to 400 or 500 cc may be necessary. In one case I used 500 cc without any ill effects. There is only one doubt in my mind with regard to the use of these bulky injections. There is the possibility that this may cause such damage to the skin flaps that they may be liable to gangrene. It is unlikely that this would happen in a normal body except in that of a diabetic. In one of my diabetic cases the flaps did become gangrenous but I have grave doubts whether the same would not have happened even under a general anæsthetic. Against it I have had four others, non-diabetic, in whom the flaps united by first intention.

Operations in the nasal passages, tonsillectomy in adults abscesses, extraction of teeth, hare lip and plastic operations on

the face, removal of tubercular and other diseased glands and witlow, all these have been successfully performed by novacain infiltration.

Text books give a warning against injecting the solutions direct into the blood vessel on account of its toxicity. In infiltration anæsthesia where you carry the infiltration layer after layer in an open field there is absolutely no risk of sending the solution into a blood vessel. But in nerve block such a possibility may happen. When you plunge the point of a loaded syringe deep into the tissue near the region of the nerve trunk it is quite likely that fairly big vessels in the neighbourhood may be exposed to the risk. But such a risk can be easily overcome by plunging only the needle without the syringe and if no blood escapes through the opening it is certain that no blood vessel is punctured and you may attach the barrel to the needle and inject the solution. A small Faradic battery from which the current could be conducted along the needle is a very useful device in locating nerve trunks. The moment the tip of the needle touches a nerve the muscles supplied by it will be stimulated by the current. This will give an indication that the needle is at or near the nerve and the solution may be injected. In places where the necessary apparatus is not available Keen suggests a toy motor which could be worked by hand and similarly used.

In preparing cases for operation under local anaesthesia absolute fasting is not necessary. The patient can have light-nourishment like milk or coffee till about an hour before the operation except in abdominal operations. The patient may have a drink even while the operation is going on and may have light nourishment as soon as he is put to bed. The post-operative technique is just the same as in other kinds of anæsthesia and the wounds heal as rapidly.

The particular advantages which we have noticed are:—

1. That patients in whom constitutional defects like valvular disease, wasting diseases etc. render any serious operation highly risky can well be undertaken under local anæsthesia.
   - (*a*) Post-operative shock is practically absent even after an operation like gastro-jejunostomy.
   - (*b*) There is no fall in blood pressure.
   - (*c*) Pulse and respiration are not affected.
   - (*d*) Time factor does not come into account since the anæsthesia induced is maintained for about two hours.
2. It can be well undertaken even in places where experienced anæsthetics are not available.

doubtful whether any recent research work has appealed more to the public fancy than the discovery of these vitamins, so much exploited commercially and held up as a panacea for many of the ills to which human flesh is heir.

Even Punch chronicled their advent—

Vitamins, Oh! Vitamins

Ye vital sparks of eggs and beans.

Vitamins are not foods in the ordinary sense of the term as tissue builders or producers of energy. Their part is to aid the body to utilise food material sufficiently to get the cells to function. They are essential to growth and normal nutrition—their absence leads to disease and death. They are found in the germs and outside coverings of seeds such as wheat and rice, and throughout the whole seed in peas and beans. They are abundant in the cells of yeast, the yolk of eggs, the green leaves of plants, the brain, liver and kidney of animals.

A diet to maintain health must contain them in small but definite quantity and quality, which as McCarrison shows 'vary with age, sex, species and individual idiosyncrasy.'

Animals derive them directly from plants or fresh animal foods. Some are soluble in oils and are found in animal fats and fish oil. Butter from the milk of cows fed on green pastures prevents Polyneuritis and oedema in pigeons, whereas that from the milk of cows dry fed does not.

Without vitamins, proteins, carbohydrates, fats, and salts, are dead foods, and cannot sustain life and growth.

Vitamins provide the cells of the body with the capacity to work as is demonstrated by the recovery from certain conditions when such are added to the diet.

Specific deprivation of any one of these vitamins, which have already claimed a fifth of the Alphabet in their designation, produces a specific syndrome which has been designated as deficiency disease. These are Xerophthalmia due to lack of the Vitamin fat soluble A; Beri-beri, a multiple neuritis due to lack of water soluble B.; scurvy due to lack of water soluble C., and Rickets from lack of the fat soluble Vitamin D.

Another fat soluble substance recently discovered as essential to production is known as Vitamin E.

As Vitamin B. has recently been shown to comprise two substances both essential to growth, it has been suggested that the two fractions of the Vitamin B. complex, be called Vitamin F. and

G. by a Committee of the American Public Health Association, "F" for the Antineuritic substance associated with the name of Funk, and "G" for the factor which Gold Berger believes to be the preventive of Pellagra. The latter has also been designated P.P. or Pellagra Preventive, in contradistinction to the B.P. or Beri-beri preventive factor. A better nomenclature is B1 (Antineuritic) and B2 (Antipellagra).

The first observation of the inadequacy of a diet consisting solely of proteins, carbohydrates, fats, salts and water was made in 1888 by Lunin. From the effects of diets on mice, he noted that "substances indispensable for nutrition must be present in milk besides casein, fat, lactose and salts."

In 1906 Gowland Hopkins showed that young rats declined and died on this purified food, but throve with the addition of a little milk to the diet.

In 1911 Mendal and Osborne having shown that rats were unable to thrive on a diet of proteins, starch, sugar, lard, agar and inorganic salts, hinted the cause to be the lack of some essential element supplied by a small ratio of milk.

In 1913 McCollum and Davis found that the ether-soluble fraction of butter and eggs supplied the missing factor, whilst lard and olive oil failed to do so.

In 1915, investigating the dietary deficiencies of rice, they concluded that "there are necessary for normal nutrition during growth two classes of unknown accessory substances," which they termed "Fat Soluble A" and "Water Soluble B."

Funk meanwhile invented the term "Vitamin" in connection with his study of Fat soluble "C".

Each Vitamin is but a member of a team, and the team itself but a part of a co-ordinated whole.

Colonel McCarrison refers to suitable protein, inorganic salts and vitamins as the essential constituents of a diet.

An insufficient proportion of any one of these meant a lowered standard of physical efficiency, as was seen in man and his domestic animals in many parts of India.

Minor manifestations of ill-health which escaped observation might follow, although as HOPKINS said twenty years ago they "affect the health of individuals to a degree most important to themselves."

Dr. James Lind published a treatise on scurvy in 1756, embodying his observations among sailors, in armies, in prisons, and in besieged cities, and among the civil population of Russia. He showed that the deprivation of fresh uncooked vegetables caused scurvy to occur within a few weeks. On the 20th May, 1747, he took twelve patients with scurvy on board the "Salisbury" at sea. Two of the cases had two organges and one lemon a day. "The most sudden and visible good effects were procured from the use of oranges and lemons; one of those who had taken them being at the end of six days fit for duty. The other was the best recovered of any in his condition; and being now deemed pretty well, was appointed nurse to the rest of the sick."

The celebrations recently of the Bicentenary of Captain Cook records how successfully he prevented scurvy on his voyages.

The "Endeavour" left Plymouth on August 26th 1768. Twenty-seven days previous thereto the Lords of the Admiralty wrote to Lieutenant Cook; "whereas there is great reason to believe from what Dr. MacBride has recommended in his book entitled "Experimental Essays on the Scurvy and Other Subjects" and his pamphlets entitled "An Historical Account of the New Method of Treating the scurvy at Sea" (of which you will herewith receive copies) and from the opinion of other persons acquainted with Scorbutic and other putrid diseases; and whereas we think fit experiments should be made of the good effects of it in your present intended voyage. and have with that view directed the Commissioners of the Victualling to put a quantity on board barque you command." There follow directions for the making of the infusion of wort and the prescription of a quart a day. "The Surgeon is to keep an exact journal of the effects of the wort in scorbutic and other putrid diseases.....noting down.....the cases in which it is given, describing the several symptoms and relating the progress and effects from time to time, which journal is to be transmitted to us at the end of the voyage."

Assistant Surgeon Perry reported at the end of the voyage:

"Sauerkraut, mustard, vinegar, wheat, inspissated orange and lemon juice, saloup, portable soup, sugar, molasses, vegetables (at all times when they could be got), were, some in constant, others in occasional use. These were of such infinite service to the people in preserving them from scorbutic taint, that the use of the malt was (with respect to necessity) almost entirely precluded.

"We passed Cape Horn, all our men as free from scurvy as on our sailing from Plymouth.

"Three slight cases of scorbutic disorders occurred before arriving at Otaheite. Wort was given, with apparently good effect, and the symptoms disappeared."

To this it may be added that no opportunity was, as appears by the Journal, ever lost of getting wild celery and any other wild herb that presented itself.

On his second voyage it is recorded, after 20 months, on 6th February 1774, that all this time there was no scurvy and very little sickness of any kind; an indisputable proof of the untiring supervision Cook exercised over the health of his men.

In the last voyage of four years and two months, it is recorded that not the slightest symptom of scurvy appeared in either the "Resolution" or the "Discovery," so completely were Cook's precautions successful.

Captain Shorton speaks of Cook's greatest triumph as the suppression of scurvy.

It is evident that it is to Cook's personal action the success was due. Wallis and Byron had anti-scorbutics but they suffered from scurvy; Furneaux, sailing with Cook in the second voyage under precisely similar circumstances, suffered from scurvy. It was only in Cook's ships and in the "Discovery" commanded and officered by men who had sailed with Cook and seen his methods, that exemption occurred.

Contrast Cook's experience with that of Vasco de Gama who in 1497 in his voyage to the East Indies lost a hundred out of a hundred and sixty men from scurvy. No one who has not actually seen the ravages of this disease can realise the terrible conditions caused thereby.

It was my painful privilege when serving in the Egyptian Quarantine Service, to witness the plight of the remnants of the Turkish garrison which had been besieged in Sana by the rebels in the Yemen, from which they were rescued by Frizi Pasha in 1906. The first relief column so far from bringing success to the starving garrison, added to their distress, as, before entering Sana, their transport was captured by the Bedouins. When the remnant of the garrison ultimately reached the coast and took ship at Hodeida, they presented a spectacle reminiscent of the sieges of ancient times.

A German colleague, Dr. Vy, stationed at Suez told me that over a hundred died before or after reaching Suez. In such a state of desolation was the ship that she went into voluntary quarantine and quite a large graveyard marks the spot at Moses

Wells, the Suez Quarantine Station, where her freight was camped.

It was the " Hakim Anglesy's " day on duty when the ship reached Port Said. I shall never forget the picture presented by the gaunt, haggard human skeletons, smitten with scurvy, their bodies covered with sores, their spongy gums bleeding. They could hardly crawl about the ship. One had died whilst passing through the Suez Canal, so that I was able to make that an excuse to keep the ship in quarantine and have quicklime and other disinfectants sent on board before sending the ship out to sea.

No doubt Scurvy defeated Scott, Wilson and Oates in the Antarctic. Probably it was responsible to some extent for the condition of the survivors of the recent Nobile Arctic expedition.

Recently a Norwegian Barque was brought to Melbourne with the crew in a helpless condition, the result of the deprivation of fresh food.

Our modern knowledge of the cause of scurvy dates from the discovery of Holst and Frohlich in 1912 that guinea pigs speedily develop the disease when fed solely on cereals or bread. They showed that the antiscorbutic principle in fresh vegetables are destroyed by cooking or drying. They also showed that pulses acquired anti-scorbutic principles when allowed to germinate. This fact was put to practice in Mosopotamia during the war by making peas and beans germinate before they were cooked.

Prevention: Fresh citrus fruits and vegetables are the recognised preventatives of scurvy. Germinated haricot beans and peas have been effective, Kafir beer made from fermented Kafit millet is effective in preventing and curing scurvy. Dried vegetables are useless. Fresh meat has slight anti-scorbutic properties as was proved by Stetanson in the Arctic.

Rickets- Vitamin "D" Although Rickets had been recognisd as a definite disease by Clisson in 1650, and Barlow in 1894 described the relationship between Infantile Scurvy and rickets, it was not until 1918, when *Mellanby* by feeding young puppees on diets which produced the disease and showed how it could be prevented by Cod-liver oil, demonstrated that it was a deficiency Disease apparently associated with Vitamin A.

Previously Rickets had been ascribed to various causes such as intestinal intoxication, defective hygiene, disorders of the ductless glands or acidosis.

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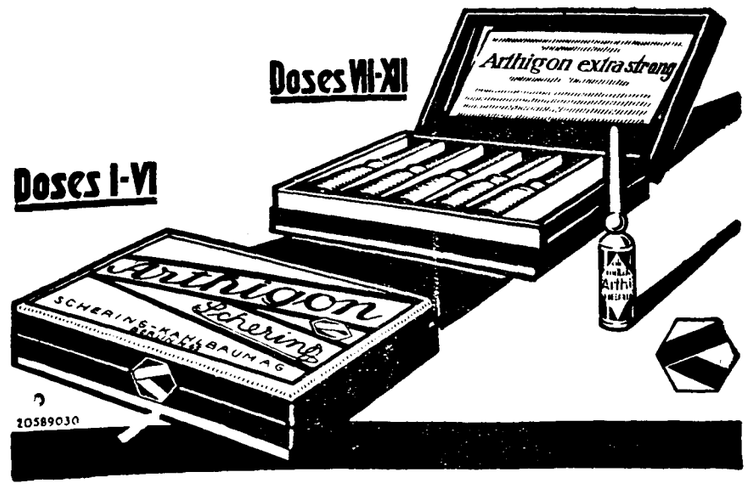

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McCollum, Sermons, Shipley and Park severally showed that Rickets could be produced in rats by feeding with diets poor in calcium or phosphorus or by diets either with a minimum of phosphorus and an excess of calcium or vice versa.

In 1916, Sherman and Pappenheimar showed that whilst rickets could be produced in rats on a diet low in phosphorus, it could be prevented by the addition of alkaline potassium phosphate and the withdrawal of an equivalent amount of calcium lactate.

Five days feeding with codliver oil was shown by McCollum and Simonds to cause the deposition of lime salts at the distal end of the femur and the proximal end of the left tibia, the so called Shipley Lime Test showing a broad linear deposit which after standing with a one per cent solution of silver nitrate and exposure to an arc light appears like a section of block honeycomb when examined by a binocular microscope.

McCollum, Simonds, Becker, and Shipley proved that the anti-richitic substance in codliver oil was distinct from the fat soluble A. by showing that this growth promoting principle was killed by oxidation, whereas the anti-richitic agent designated Vitamin D, was not destroyed.

In 1912 Bosanvi demonstrated that the subcutaneous inoculation of aqueous extracts of normal bone marrow caused the healing of richitic bones in the rat. Extracts of bone marrow of richitic rats which had starved for five days and showed healing were not antirichitic.

In 1919 Holdcomidsky cured rickets by exposure to the short invisible ultra violet rays of a quartz mercury lamp.

Dr. Harriet Chick and Elsie Dayell found that exposure to direct sunlight prevented and cured rickets in Vienese children.

Hess demonstrated a rise in inorganic phosphate in the blood of richitic children exposed to ultra violet rays. It was found that codliver oil had the same effect.

Rickets was produced in rats by diets poor in phosphates and diets poor in calcium. With the addition of cod liver oil it was shown that the blood had a large calcium to phosphorus ratio in the one, and a low calcium to phosphorus in the other and that the structure of the bones depended on the concentration of the calcium and inorganic phosphorous in the blood.

Telfer found that extra calcium decreases the absorption of phosphorus in rats and infants.

Of interest to orthopædists is an experimental study in 1924 by Petersen of un-united fractures with regard to the inorganic

boneforming elements in the serum. By dietetie management he lowered the phosphorus content of the blood of dogs until the product of calcium and phosphrous was less than thirty. When bones of those dogs were fractured, they would not unite. When the phosphorus and calcium content were raised to their normal level, the fractured bones united.

Applying these principles to the treatment of un-united fractures with suitable additions to the Hospital menu supplemented with codliver oil or ultraviolet light, he found the fractures united as the progressive blood changes approximated to that of the normal adult.

In my examination of employees of the City Council, I had noted the comparatively rapid recovery of fractures in the case of men from the West of Ireland. I ascribed this to the excellent condition of the bones of these people reared largely on a diet of milk and bacon in a district where breast feeding is practically so universal that the infant mortality is even less than in New Zealand, where the mothers make a religion of the teachings of Sir Truby King as to regimen before and after child bearing.

No baby will ever have rickets, and should have the foundation of good tooth laid, whose mother during pregnancy and lactation, has a diet with abundance of milk, eggs and green vegetables. The pregnant woman should eat spinach, celery tops, cabbage, turnip tope, lettuce. Fruits, carrots, turnipe and beets as well as leafy vegetables prevent constipation and correct the defects of a diet composed mainly of bread, meats and potatoes. Cod liver cil is a preventive of rickets and effective in treatment.

Although Palm in 1890 studying the topography of rickets considered that sunlight was a therapeutic agent, and in 1904 Buchole treated rickets successfully with artificial light it is only recently that it has been proved that animals of a rachitic producing diet are protected against rickets when irradiated with ultra violet rays and excreta faeces containing a substance which causes calcification in other rachitic rats. The most remarkable fact, however is that when natural non rachitic in character are irradiated they acquire antirachitic properties. This is seen in the sawdust even of the cages in which rats are kept. Vitamin D. is sparsely distributed in nature the best available source being egg yolk, of great value in the dietary of the nursing infant. Chicken liver and fat are also of high protective value.

Hess found that Cholesterol when irradiated with ultraviolet light acquired the power to induce calcification of the bones in rickets.

Ergosterol a fractional product of Cholesterol has the same properties as the principle present in codliver oil, to which it owes its antirachitic properties.

Research has shown that Vitamin D. is produced by ultra violet irradiation of ergosterol a derivative from cholesterol, which has been termed a provitarium.

The effective rays in the formation of Vitamin D. are those occupying the middle portion of the ultra violet spectrum (260—300). The shorter ultra violet rays actually destroy Vitamin D. and should be screened off.

Peanut oil, other vegetable oils and olive oil become antirachitic on irradiation. Ergosterol shows these characteristic bands in its spectrum. Yeast fats show these absorption bends.

The reason why rickets is not a tropical disease is that the ultraviolet rays of the sun activate the cholestrol of the skin and some of the Vitamin D. is mobilized in the capillaries and transported throughout the body.

The Vitamin D. of codliver oil is a chemical substitute for sunlight and one can replace the other which is why the women of Lewis in the Hebrides who eat large qualities of fish oil, but do not get much sunlight, do not have children who suffer from rickets. This probably explains some of the remarkable results of the treatment of children by rubbing mutton bird oil on them as recently reported in the lay press.

Vitamin E. Evans and Bishop have published a series of observations on the relation between fertility and the presence of a substance in seeds and green leaves. Ether extracts of wheat germ or lettuce leaves give oils claimed to be efficacious in daily single drop administration. The Vitamin E, is fat soluble, stable to heat, light and air.

* MEDICINE IN VEDIC TIMES

BY

DR. EKENDRANATH GHOSH, M. Sc, M. D.,

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Introduction:—The study of the healing art is found to have extended to such a remote period of time when the vedic hymns were composed and sung. We know from the researches of the oriental scholars that the collections of vedic hymns, particularly in Rigveda, handed down to us, were composed at different times extending for about one thousand years or more. Thus begun at a very remote period, the art went on developing and, at the time when the hymns of the Atharva Veda (many of which we compiled from Rigveda) were composed, it had a fairly good progress, athough much primitive in comparison with the Ayu Science developed during the time of Sustruta, Charaka and othe. At the same time it should be remembered that the amount of information we receive from the Vedas must be a fractional part to the actual amount of the knowledge on the healing art, as we are tracing the subject from the hymns of poets only, of course including many charms and incantations we get in the Athurvaveda. The present paper aims at briefly discussing the amount and nature of the information we get on the healing art in the Vedas.

Anatomical knowledge. The knowledge of the outer bodily members and their parts was fairly complete and perfect. The larger internal organs of the body were also recognised and named. In Vaja Saneyi Samhita XXV. 1—9 we have got a list of bodily parts of the horse sacrificed in *Asvamedha Yajna*. Here we have not only a fairly complete list of the external bodily parts, but we have the names of many internal structures as well. Several bones are mentioned, as the patella (*jambila*), ribs (*pakshati*), clavicle (*jatru*); the costal cartilages are also mentioned. The shoulder joint is also referred to. Of the internal structures, we get the mention of the uvula and palate in the mouth cavity. Of the organs of the thoracic cavity, we find the mention of the heart, pericardium and the large vessels arising from the heart. The right lung (*Kloma*) is also referred to. According to *Kshira swami* the *Kloma* is the right lung and *puppusa* is the left lung. Of the abdominal organs we find the mention of the spleen and the kidney and the ureter. The bile is referred to. The small intestine, colon and rectum are also mentioned. The veins are referred to as *hira* both here and in the Atharvaveda as well. The urinary bladder, testicles and penis with the glans are also included in the list. The stout tendons of the feet are also mentioned. In a similar list in the Taittariya samhita (V. 7. 11-23). we have among others the mention of the liver, stomach and probably adrenals (two parts near the Kidneys). We have also the mention of the vertebræ and specifically those of the neck and pupaps the spinous processes of the dorsal vertebræ. In the Atharvaveda (as in IX. 8-21, 22) we have similar mention of various external members of the body. We have the mention of *dhamanis* (large vessels) *hiras*, small vessels forming net works evidently referring to veins, and *nadis* in the same work. The *dhamanis* are mentioned in several places (A. V, I. 17. 2. 3; II. 33. 6; VI, 90. 2; VII. 35. 1 2.) They are said to be distributed in hundreds in the limbs (VI. 90. 2.). In another place they have been said to occur in a thousand number and are mentioned to have the opening covered with a stone: this no doubt refers to a hæmorrhage from the *dhamani*. Perhaps the pulsatile nature of the arteries was known at that time. The *hiras* are said to occur in hundreds (VII. 35. 2.) and were specified as with red garments, no doubt referring to the purple colour of the superficial veins seen so nicely through the fair skin. It is fairly certain that the distinction between arteries and veins was in a state of confusion even down to the time of Susruta. The word *nadi* seems to have been very loosely used. They have been described as teemingly distributed. The vas deferens seems to have been referred to as a *nadi* (A. V. VI. 138. 4). Hence the term might have been employed for a duct, nerve and perhaps for a tendinous cord as well. The term *nadika* (A. V. V 18. 3.) has been used in a passage and is perhaps meant for the trachea or œsophagus.

Medicine and Medical Practitioner. We have numerous references to medicine and physician in the Vedas. In general the annual herbs (growing on land) and many water plants were used for medicinal purpose (R. V. X. 9. 7. X. 16, 14; X. 137. 6). There is also mention of medicinal plants growing on stones (R. V. I. 89. 4). Many deties, as Aswins (R. V. I. 34. 6; I. 116-13: etc) Rudra (R. V. II. 33. 2). Varuna (R. V. I. 157. 6.) and Agni (A. V, V. 29. 1) were invoked as physicians and for bestowing medicine. Even water is invoked for medicinal plants growing in water (R. V. VI. 50. 7). In Atharvaveda (VI, 109. 31.) *Pippali* is mentioned as a remedy for the Vatikrita and bruise. It is also mentioned in Rigveda (IX. 111-1) that a medical practitioner prays for diseases

* Specially contributed to the Silver Jubilee Issue of the Antiseptic.

Again the ruddy colour (like a sprinkling) and roughness and ruggedness of the skin (V. 22. 3; VI. 20. 1-3) may have reference to the scarlatiniform type of malignant tertian characterized by a diffuse scarlatiniform rash with desquamation of the horny layer of the skin. Again the autumnal fever referred to in many hymns (V. 22. 13) and particularly mentioned as one making a man tremble (IV. 8. 6,) is undoubtedly the malarial fever which shows its ravages during the autumnal months. The plant *Kushtha* (costus speciosa or Aucklandia costus is mentioned as a remedy for fever (V. 4). The *Satamuli* amulit (XIX. 36. 1-4) and *guggula* XIX. 38. 1-3) have been used for relieving fever.

In connection with fever in general we get the mention of the fever of the hot season, fever of the rainy season (V. 22. 13, fever of the forest (VI. 20. 3), and a fever accompanied with cough *udyuka* (boisterous delirium) and *haman* (herpes labialis ?) (V. 22. 11, 12). The fever of the hot season (summer) may be well made to represent the heat-hyperpyrexia (heat-stroke). The fever of the rainy season may be some form of the lung affection due to exposure to rains. The forest fever or jungle fever again seems to be malaria.

The last type of fever accompanied with cough, boisterous delirium and herpes evidently refers to an acute lobar pneumonia.

Again we get the mention of a train of symptoms as *angavedu* (tearing pain of the limb). *angajvara* (fever with limb pains), *visalpaka* of visvanga (redness extending throughout the body IX. 8. 5), that which sucks out the marrow and breaks apart the joints (IX. 8: 18). These collectively no doubt refer to the Dengue fever which is appropriately called the break-bone fever. We have further the mention of *Asarika*, (A. V. XIX, 34 10) which evidently means a disease which extends through the whole body and perhaps indicates the severe pain throughout the body, and *visara* or *visarika* (A. V. II. 4 2; XIX, 34. 10) meaning tearing to pieces and again pointing to the severe aching pain of the body. Both these conditions perhaps refer to Dengue fever again.

We may here refer to the diseases known as Jayanya already referred to in the etiology of diseases), It no doubt indicates a tubercular disease in general. It has again been divided into akshata and sukshata. The akshata refers to those tuberculous affections where there is no external leison. The other variety, sukshata, characterized by an ulcer (VII. 76. 4). This refers no doubt to carries of bones with formation and easeating tuberculous glands bursting outside.

(*To be continued*).

CASES AND COMMENTS.

HICCOUGH IN MALARIAL FEVER

BY

J. C. BAGCHI L.M.F.,

Medical Officer Durgaganj Dispensary, Purnea

In September 1928, a man named Hiralal Bhagot of Majhowa was placed under me for the treatment of fever.

(*a*) He was constipated.
(*b*) Tongue coated.
(*c*) Temperature 103 F.
(*d*) Pulse 120.
(*e*) Spleen enlarged.
(*f*) Nothing abnormal in any other organ found.

Treatment: -(*a*) Bowels moved by Oleum Ricini ℥i.
(*b*) cold water applied on the head.
(*c*) (1) one diaphoretic mixure

and (2)

one Quinine mixture given. No. 1, to be continued during fever and No. 2 during remission. The case was not a serious one. Within two days the man was free from fever and resumed his household duties.

After 8 or 9 days I was called in to see him at once as he was attacked with a serious type of hiccough. I hastened to the place and saw him in the following condition—

(i) The man was restless.
(ii) There was incessant hiccough which did not allow him to take food or to drink.
(iii) Temperature Normal.
(iv) No enlargement of spleen.

On enquiry I came to know that the temperature rose daily at noon with slight rigor.

I prescribed the following mixture—which was to be continued every 2 hours—

℞	Sodii Bicarb	... gr.v
	Oil of Dill	... mi
	Spt chloroform	... mv
	Tr. Ginger	... mxv

Tr Hyoscyanus	... mxxx
Tr Belladona	... miv
Tr Cardam co	... ʒss
Chloroform	... mii
Aqua ad	... ʒi

Mft. mist—Send 6 such doses

In the following morning I came to know that there was no good effect by the mixture. Then Chloreton, Adrenaline solution, Acid Hydracyanic oil and cocaine Hydrochlor were tried separately with no effect.

Suddenly I remembered a case of the same nature which I treated at Shadullapur in the District of Rangpur (Bengal) in 1925 and I had been successful at last only by injection of Acid Quinine Hydrochlor. I, at once injected intramuscularly 10 grains in 2 c.c. with ½ gr of Emetine Hydrochlor in 1 c.c. and stopped all the medicines. Next morning I got news that after the injection, hiccough began to subside and within 2 hours it stopped completely.

Last year I got about a dozen cases of the same nature and every case was cured only by this injection. I found Acid Quinine Hydrochlor with Emetrine Hydrochlor acted marvellously. Those patients who were very weak were injected Acid Quinine Hydrochlor with Adrenaline Solution and got good result.

AN INTERESTING CASE OF AMOEBIC DYSENTERY

BY

B. GUNAWARDENA L.R.C.P.S., (EDIN). L.R.F.P.S., (GLAS.)

Civil Hospital, Galle, Ceylon

J. G. Male aged 17 was admitted to Civil Hospital Galle on 6—8—29 with a history of frequent passage of loose motions of three day's duration. After admission he had several motions and the stools were greenish and offensive and contained blood mucous. No Amoebae found on examination of the stools under the microscope. Temp. on admission was 100°: Pulse 104. and Respiration 28. Anti Dysentery serum was given and he was put on

℞ Sodii Sulph
Mag Sulph aa gr 30
Acid Sulph Aromaticus mx
Tinct card co mx

Aqu ad ʒi
a tablespoonful T.D.S.

The passage of blood did not cease and the patient was passing about 20 motions per day. Though no amoebae detected I gave him an injection of Emetine Hydrochloride gr 1. and also put him on

℞ Bismuth carb
Pulv crete Aromations aa gr xx

One powder T.D.S. in addition to the already prescribed mixture T.D.S. 8—8—29. The number of motions became less but still there was blood mucous in the stools and also shreds of the intestinal mucosa were detected in the stools. At this stage I washed out the bowels with Normal Saline. Temp 100 F. 9—8—29. Temp 101 F. condition of patient almost the same. 10—8—29 Temp 99 F—condition of patient a little improved. Emetine was continued in ½ gr doses daily upto now. 11—8—29 patient complained of pain in the lower abdomen, increased when passing stools. Complained of sleeplessness and to combat it morphia was used in the form of a draught at bed time. A starch opium enema was given and hot fomentations applied to the lower abdomen to overcome the abdominal pain. On this day I decided to try stovarsol Tablets and I gave 2 tablets T.D.S. On the following day stools became scanty but contained streaks of blood. Abdominel pain was less. 12—8—29 Temp 99 F. I reduced the dose of stoversal to 1 Tablet T.D.S. At this stage I cancelled the original mixture prescribed and put him on

℞	Creta Preparata	gr xv
	Tinct. opii	mvii
	Tinct catechu	mx
	Mucilage	q.s.
	Aqua ad	ʒ
	ʒ ½ T.D.S.	i

13-8-29.—Patient much improved and temperature came down to normal, but still passing streaks of blood. 14-8-29 stools forming but still blood continued in streaks and at this stage mixture and powder were both cancelled and I gave the patient only stovarsol 1 Tablet T.D.S. Emetine gr. ½ daily. The diet of the patient consisted of arrow Root, lime juice and orange juice for the thirst, and Albumen water. In the morning he complained of a little stiffness of the joints and general weakness. I ordered also brandy in half ounce doses T.D.S. Temp. 97o Pulse good. At 4 A.M. on this same day I was suddenly

sent for to see the patient having fits in which his hands and feet were bent and the patient was wrangled up during the fit which lasted for about a minute. The patient was drowsy and unconscious. Pulse was low. The patient's abdomen was distended, tender and rigid all over. At this stage I omitted all the mixtures and also stovarsol and gave him camphor and ether injections and brandy and also gave N. Saline injections with glucose. Ice bag to abdomen was ordered and the diet to be only sips of iced water. Temp at 6 p.m. was 97°. With these stimulants the patient's pulse greatly improved but the abdominal distention remaind the same. At about 9 p.m. he again developed a fit similar to the one he had in the evening on that day. He was kept on stimulants all throughout the night. The patient expired at 7·25 in the morning.

On opening the abdomen to investigate., the cause of death " Rectum, sigmoid, descending and the transverse colon were ulcerated with hardly any healthy mucosa. The whole of the sigmoid Flexor was blue and was in the first stages of gangrene setting in. No perforation to be detected ". The interesting points in this particular case are:—(*a*) The apparent marked improvment of the patient's condition on the 14th morning. (*b*) How to account for this sudden collapse of this patient on that evening.? (*c*) what are the fits due to.? (*d*) how so much of gangrenous damage to the intestines could take place without marked external symptoms. The patient was not subjected to Epileptic fits prior to this.

Would any practitioner be good enough to comment on this interesting case through the medium of your valuable journal? I shall also be thankful to anyone who could give me the main ingredients contained, in *stovarsol*.

ROLE OF DIET IN TREATMENT

BY

B. NARAYANA RAO B. SC. M. B.

Medical Officer, Koppa Kadur

All of us agree that unless we clearly advise a diabetic patient about his diet when he comes for treatment and give him to understand a list of starch free articles, the prescription is not complete and treatment will be haphazard. But how many of us prescribe a diet for other patients who really need one? How often are we not consulted as to what to eat and what not to eat

before the patient or his friend goes back from the dispensary with the medicine bottle. We are too busy prescribing drugs to other patients and we rarely give him even a hint as to the patients diet. If he insists we ask him to take his routine diet if he is not too ill. or the routine and much disliked Conjee if he is ill, even if he is disgusted to the point of nausea, having taken it for a long time.

A little sympathetic advice, and a little alteration of diet to the patient's taste would not only cut short the course of illness but also keep him comfortable and more at ease. I think it is here, in the point of dieting, that our Ayurvedic brother scores, and the patient has double the faith in his medicines on account of his strict dietetic regime. I am not, of course, advocating all the rigors of an ayurvedic dieting, but I fancy that our slip-shod method of dieting is only a too frank confession of our ignorance of the principles of dietetics and more so of a study of the routine diet and food value of what our own people, nay our own constituency eats and lives upon. We have dabbled a little in European dietetics and its principles —with all due deference to some who have made a real study and we satisfy ourselves by prescribing albumen water and essence of Chick, as medicines, we dare not prescribe them as food despite the horror with which some of the vegetarian patients entertain all the food from the source of animal kingdom.

Even in convalecent stage we perpetuate the same blunder. We prescribe tonics, beverages and patent medicines and rarely give a thought to his diet. He goes perhaps with the best of tonics and eats at home a little pepper water and polished rice! What is the use? Is it not a blessing that the digestive tonic has no power to make the digestive organs digest themselves?. Would not an extra cup of milk, a couple of eggs or a supply of fresh fruits be of more value than all the tonics and patent medicines?. There is already a craving for food in a convalscent and the same money invested on milk, eggs green vegetables and fresh fruits. instead on patent medicines would benefit him more and sooner.

The Salt-free diet, rather the avoidance of additional salt to the diet, prescribed so often by the Ayurvedists, is so useful in cases of dropsy and oedema. I have found that diet help him in cases of water loggedness but also in arterial sclerosis and high blood pressure. I remember one of my professors of medicine declaring that a salt free diet does more good in hypertension of the arteries than medicines. He used to say, "Salt is as much of a poison in arteriosclerosis as Sugar is in diebetes." The withholding of chlorides helps the absorption of bromides and iodides prescribed as medicines.

Talking of Iodides, I should mention here, that a simple hint to take a cup of hot milk morning and evening, when putting the patient for a considerable time on iodides, prevents iodism. sufferance by running from nose and eyes. and the consequent constipation on prescribing a couple of dover's powders to combat the symptoms of iodism.

Diet is a more important factor than drugs in gastro intestinal disorders. The strict avoidance of all undigestable articles and condiments in cases of diarrhoea and dysentery, putting the patient on plenty of milk and fluids would do more than a prescription of an astringent mixture. In constipation, when it is habitual. an advice to take more green vegetables and fresh fruits (cellulose) with more fatty and fluid diet, would help the patient more than a routin aperient. When giving an opening dose, as well, advice as to taking light diet is necessary. I know cases of rustics, who after an aperient take a festive meal and are more uncomfortable after treatment than before, In cases of ulcers of the eastrodeodenum also a modification of the patients' diet to accord with several dieteries, say Sippys' would be of much value to the patient.

Water is one of the articles which is looked upon as a grave danger by the patients and friends, specially when it is most needed as in pyrexias and oedemas. When toxins require dilution and flushing out, when the parched up tissues cry out most for water in pyrexia, when the dehydrated patient is in urgent need of water, it is witheld by the anxious and well-meaning relatives. Is not an imperative advice to give any amount of pure, clean, boiled water, as much as the patient desires, essential in all such cases? Some ask for advice and some do not, yet it is the duty of the doctor to prescribe water when there is need.

The abnormal use by some of Chillies, condiments and tamarind call for necessary prohibition in all cases of intestinal cattarh, gastric irritation and mouth and throat inflammations The tendency to use most fried stuff, and using bad and decomposing Oil in the preperation of the same must also be prohibited. Well baked soft and freshly prepared food, whatever they are used to take, taken in small quantity helps.

I remember a Mohamadan friend of mine telling me that he was cured of a particular variety of rash, by the advice of a Hakim to eat two tolas of Cow's ghee at each meal regularly. He was troubled by a dry exfoliative type of constant skin trouble which rarely yeilded, and cropped up again, inspite of all allopathic Ointments and dusting. He was tired of greasing his linen and

of a musty odour of his underwear and all that he needed perhaps was a little regular supply of fat to the skin from within and he was cured permanantly by the Hakkim's prescription and naturally the ingestion of good ghee improved his general health as well.

Advice, regarding diet so as to include the vitamins in food is many times necessary. When I casually advised, without giving reasons to a relative of mine to use unpolished rice (rice with endocap) and whole meal wheat flour, he laughed and said that he would regularly supply me with a ball of rice-polish after every meal when I went to him. I then explained to him and he is using the unpolished rice with much benefit, he now says, to himself and his children. The use of lemons, tomatoes, green vegetables and fresh fruits do more good to infants and children suffering from marasmus, along with the cod liver oil mixture. It can replace all tonics and alien tinned food stuffs.

He who practices among the poor and illiterate knows how many of the diets, advised in books cannot be preseribed by them. A little sympathetic enquiry as to what he usually eats when in health, what are the little luxuries (a cup of milk, an egg or a lb of butter) he can easily command and a prescription of diet to suit his condition and requirements will be gratefully appreciated by him. There must be an earnest effort on our part to understand his difficulties and an endeavour to help him, even a midst our busy duties.

There is another idiotic belief among the illiterate that without rice (anna-rasa) for a couple days even, the bodily fighting powers begin to wane. It is, in such cases, better to leave definite instructions to mince some well boiled rice in milk or sweet butter milk and give it to the patients, when it can be allowed (unlike Typhoid etc.) than prohibit the use of rice entirely and tolerate smuggling behind your back. We have to fight a lot of erratic belief and superstition, but a little sympathetic understanding of the patients' needs and means, and a careful scientific study of our dietetic conditions in health and disease are duties which we have neglected. In our ardour, we try to inflict a non-vegetarian diet on a strictly religious vegetarian patient, when there is absolutely no need for it and when we can find an easy substitute in his own dietery, and often lose the patient.

If this paper arouses our enthusiasm to take up a study of Indian dietaries and Indian conditions, I feel more than repaid.

A FEW DONTS FOR A MEDICAL JURIST

BY

S. D. METHA M. C. P. S. B. M. S.

Lecturer in B. J. Medical School, Ahmedabad.

1. Don't fail to get the dying declaration recorded of a serious Medico. legal case admitted in the Hospital or dispensary, provided the patient's mental condition is good.

2. Don't omit to take the minute details in a wound case (length, breadth, position direction &c.)

3. Don't fail to examine the wounds, contusions, abraisons &c in broad day light.

4. Don't sign a medico-legal or death certificate without verifying the facts of the case.

5. Do't fail to, read the Panchnama and the Police report, before performing a p. m. examination.

6. Don't neglect to compare the description of the injuries on the dead body with those in Panchnama.

7. Don't fail to examine all the internal organs during the P. M. examination.

8. Don't fail to preserve the viscera when the cause of death is doubtful.

9. Don't be ashamed to say that the cause of death could not be ascertained if you are unable to find out the cause of death after p. m. examination.

10. Don't fail to take the consent of the parties (female or male) before examining them in rape cases.

11. Don't fail to keep a female with you while examining a woman (preferably her relative).

12. Don't fail to consider very carefully before signing a lunacy certificate.

13. Don't fail to inform the Police in suspected poisoning cases.

14. Don't delay the treatment in a case of poisoning.

15. Don't be under a delusion that the case is trivial. Trivial things sometimes turn out to be very serious.

16. Don't neglect to keep the patient under observation if he has sustained injuries either on the head or abdomen.

17. Don't be overzealous to volunteer to say in the court anything more than what is asked.

18. Don't lose your temper in the court during the cross examination.

19. Don't fail to refersh your memory by your previous statement given in the court of the 1st. Class Magistrate when summoned in the Sessions Court.

A CASE FOR DIAGNOSIS

BY

DEWAN SINGH BHALLA *Lieut.*, M.B.B.S.

Ferozepore City.

A girl aged 14 years unmarried, felt all of a sudden an acute pain in her abdomen. It was on the 29th May. She was the sister of a doctor. He tried first of all homely remedies, but to no benefit. At night he gave an enema of soap and water with castoroil. Hard scabylae was the result. Next morning i.e. 30th: I was called in to see that case. On taking history, I came to know that she had constipation for the last 6 or 7 days. She was feeling very thirsty. On examining I found her abdomen full and hard, tender on the left side just below the spleen. On enquiry about the origin of pains she replied, that it started from the Macburney's point, then it went round her umbilicus where it became stationary on the left side. Her tongue was broad, flabby and dirty. She gave history of taking of "Mitti" which many of our Indian ladies are accustomed to take. There was no temp: She was very healthy. I advised to give her one more enema of castoroil, olive oil, turpentine with soap and water, as a result of which she again passed Scabylae. I advised her to repeat it again in the evening and put her on chloral Hydras, grs 7, Tr. cannabis Indica m iv, Tr. Belladonna mv. with sufficient mucilage and water up to one ounce, three times a day. After the first dose she felt relief and slept. At 5 p. m. 2nd dose was given and the enema was repeated. She was given nothing but milk and soda, with barley water occasionally. In the evening at about 9 p. m. I was again called to see her. She was crying with the pain. Mustard plaster was applied over the painful area, but to no effect. However at 11 p. m. an injection of morphia gr 1 6 with atropine gr. 1/200 was given hypodermically

and she slept within 20 minutes. On the 31st, I went to see her in the morning. She was cheerful and bright and the pain was only slight. Another enema was given, which had no effect except a little mucus. I thought of four conditions as she was feverish as well.

i. Left sided appendicites i.e. Diverticulitis.

ii. Intestinal colic

iii. Ovaritis.

iv. Renal colic.

I advised her brother to consult a lady doctor for the exclusion of no 3. She had her mensturation a week ago. At noon time, I was again called to see her, when the attack appeared to be just like that of Renal colic. She was crying and wriggling on the bed, as she could not bear the pain. Turpentine Stupes applied, to no effect. Then H. 1. of morphia gr. ¼ with atropine gr. 1/200 was given. She again went to sleep. In the evening the lady doctor was called who diagnosed the case to be one of Billiary colic and prescribed Tr. Belladonna mv, Tr. Opii mii. Tr. Card Co. mv Spt. Chloroform mxv, with ℥i of Mag. sulph in an ounce of water three times a day. Up to 9 p. m. only two doses were given, when I was again called in to see as she was feeling drowsy. There was at that time one more doctor. who was simply wonderstruck at the lady doctor's diagnosis. All of us thought it better to stop the medicine prescribed by the lady doctor. She was asleep that night and passed 2 motions containing blood mucus. On the next morning i.e. 15th June, she again passed a big motion chocalate coloured with blood and mucus. I came to know only that day that she had been visiting her neighbour's house, where an old lady was lying ill with amœbic dysentery and from that very house she brought the mitti and took it. Her stools and blood were examined. She had fever as well. Stools showed no cyst, one ova of ankylostomiases Dendenale, and charcot leydon crystals in good number. Blood showed increase in large mononuclearis and Eosinophilis.

At about 1 p.m. an injection of Emetin gr. 1 was given, thinking it a dysentery case. Pain had not subsided, so Turpentine stupes was given after every 3 hours. Another doctor, our friend, was called in, who also agreed to above diagnosis of dysentery. For the ensuing night, we prescribed Paraldehyde ℥i with Tr. and Syrup of auranti ℥i each in an ounce of water at bed time.

At about 10 P. M. this was given to her, but she began to show signs of failing heart as she was already poisoned with Chloral

Hydras. Emetics were given to her, but she could not vomit. She liked to take a bottle of Soda water as she was confident she would vomit, and she did vomit the same water by tickling her throat. An injection of Pituitrine ½ c.c. was given at 10-30. Her pulse was better then. Another doctor was called in and both of us tried to wash her stomach but we failed. In this exertion she again showed bad signs, the effect of Pituitrine being off. At 11-30 p.m. an injection of Strychnine gr. 1/60 with Digitalis gr. 1/100 was given as her pulse was very feeble and weak and rapid. This state of affairs continued up to 3 a.m. during which time I and her brother watched the pulse throughout which was at one time weak and rapid and at other times full and bounding. We gave her brandy, hot milk and Salvolatile throughout as needed, and kept her busy in talking. At about 3-30, one more doctor was called in. He gave 10 minims of Adrenalin by mouth and an injection of 1/100 gr. Digitalis. During the whole night she passed about 20 motions containing blood and mucus. At about 6 a.m. on 2nd June she was very bad. Her pulse was imperceptible. Hands and feet were cold, Temp was 101°. She was packed with hot bottles and brandy was given to her. We thought of giving her Saline intravenously. By this time four more doctors came in. At about 7 A. M. the Civil Surgeon stepped in, examined her and diagnosed the case as one of Acute Sigmoiditis and dilatation of stomach and he guaranteed that she would never die of heart failure. He prescribed (1) creasote mii, menthol gr 1/6, Ext. Belled gr. ¼ Bism Subnit gr. 3, Ext Gentains O.S.—one pill every 3 Hrs, up to 3 pills (2) Leeches on the stomach (3) Atropine injection if needed, and (4) Turpentine stupes and he went away. We gave her one pill at 8-30 a.m. We began giving 1, V Saline at 8-45 p.m. and gave in all 400 c.c. of Normal Saline with glucose. Just after it was finished she got an attack of severe shivering, she had temp about 103. We packed her with hot bottles and blankets. At 10 she was very bad. Heart was failing and respirations were 56 p.m. An injection of pituitrine ½ was given. She at last died at 10-30 a.m. After she had died, she bled profusely from her nose.

Now I want to know what could be the diagnosis, so that in future I might act accordingly in similar cases and I hope the readers of the Antiseptic will enlighten me.

in abundance. No ring or crescent could be seen. On 2nd July Quinine injection gr v strength was given intramuscularly and fever appeared to be yielding to it. On 3rd July the temperature was normal, but there was no improvement in the mental condition, even while there was no fever the child was still senseless and talked a lot of nonsense specially when the temp. was high. Her mental condition was always delirious whether there was temperature or no temperature.

On 8th July temperature again took a sudden upward course and so Quinine gr. v intramuscularly was injected when the temperature was 102. 8 F. Temp came down to normal in the evening.

On 9th: morning seen shivering with fits 5 times at intervals of about 2 hours. At this stage, blood was taken and sent for examination the result of it was as noted above. The cold stage was very long, followed by a short hot stage, a little perspiration and again a long cold and shivering stage. This has happened 5 times during the day.

Temperature remained constant 102 on 10th July and on 11th night there was crisis, temperature started falling rapidly and went down to 96. 2. The body was cold and perspiring. Pulse very weak and thready. Stimulants failed to raise the temperature and so two digitaline injections were given. It appeared that quinine treatment brought the temperature under control. So Quinine intramuscular injection every 5th day was continued for 20 days in 4 injections of gr. V strength, but the brain symptoms did not abate in the least.

From 18th July, Pot Iodide mixture was started to relieve brain congestion; very gradually the mental condition appeared to be improving.

On 27th: She started talking single words and gradually made progress and now she talks anything and everything but crack headedness continues.

From August 1st. she was able to stand and is improving rapidly physically. She regained her full strength and she runs about and takes normal diet but her mental condition is not at all normal.

Will the readers of the antiseptic give now expert advice as to

(i) Whether she can be mentally restored to normal state.

(ii) Whether time alone will do this or any treatment is required.

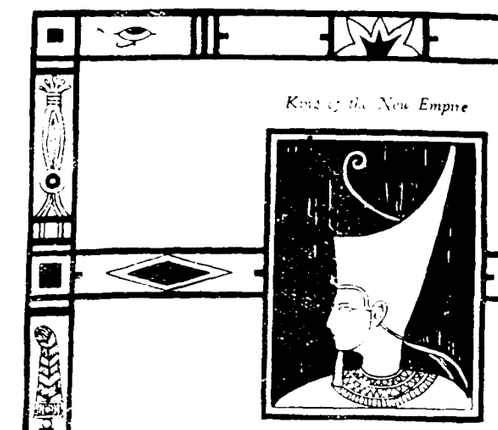
(iii) In the latter case, what treatment?

(iv) Whether delay in treatment would make the cure more difficult.

(v) Whether cure is uncertain.

(vi) Whether complete and absolute cure is not possible and some defect must continue throughout life.

(vii) Whether any great improvement in present condition is impossible.



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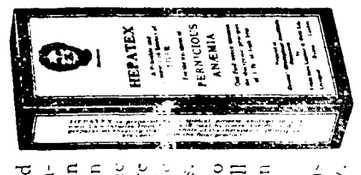

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TUBERCULOSIS IN CHILDHOOD.

The high incidence of tuberculosis in children, its characteristic forms which differentiate it so markedly from the consumption of adults, the inevitable fatal prognosis of some types, and with correct treatment, the favourable outlook of others, make the subject of considerable interest and of utmost importance.

The Tubercle bacilli does not have the same effect on the various age periods. It is uncommon during the first eight months of life but the liability to infection increases thereafter and reaches its maximum at the second year of life. From then onwards the body acquires a certain degree of immunity aided in later life by the lymphatic glands which act like a second line of defence.

Much has been written about the three varieties of tubercle bacilli known—human, bovine and avian—and on their relative preponderance but really this differentation is of no great practical value. One thing that is accepted is, that in children, infection is acquired through drinking tuberculous cow's milk or by continuous close contact with an adult suffering from the disease.

The exact route taken by the tubercle bacilli has been the subject of much discussion. While one school believe, that in both thoracic and abdominal tuberculosis, the infection is through the mucous membrane of throat or alimentary tract, there is another school who believe that inhalation is the route of infection. Foci of infection and invasion are also said to exist in the tonsils

and intestines and their identification is oftentimes evident only by the caseous enlargement of glands draining these areas. From such infected areas the disease may spread to lungs and intestines or ulcerate through into the blood stream taking on the extremely fatal form of generalised septicæmia.

Various tests have been devised to detect the presence of tuberculosis. The most valuable is the von Perquiet test, performed by the inoculation of Koch's old tuberculin into the scarified skin. This, when a tubercular lesion is present, produces a red wheal in twentyfour to fortyeight hours. The Mantoux test which is practically the same as the Von Perquiet except that the solution is injected intradermally is more reliable. This reaction is positive whether foci of infection are active, latent or healed and the test is therefore of great value in children who are less likely to have old tubercular lesions.

A hard and fast demarcation of the various forms in which Tuberculosis is found in childhood is not possible but a briet description of some of the more common and more important forms will not be out of place.

Generalised tuberculosis closely resembles ordinary marasmus and is often difficult to recognise in children. Peevishness, indigestion, loss of appetite, wasting, langour, sleeplessness are the usual complaints at first. Later symptoms in lungs, brains or abdomen often clear up the diagnosis. The presence of an enlarged spleen or the discovery of an epididymitis or dactylitis or small shotty glands help to diagnose obscure cases. The temperature often remains normal and shows as a pyrexia in the very last stages or with complications. All these signs are often absent and the child may die without the condition having been suspected. Once tuberculosis has become generalised, no treatment is of any avail and the patient can only be kept as comfortable as possible. Thoracic tuberculosis may manifest itself in various ways. Mild and repeated attacks of Bronchitis may be the earliest sign but their true significance usually passes unnoticed. Miliary tuberculosis of the lung is another form. The condition may at first be puzzling and be mistaken for Influenza or Bronchitis, but the increasing pallor, wasting and cough give the clue. Irregular pyrexia may be present and the illness often terminates in Meningitis. Tuberculous Bronchopneumonia is also common. A simple Broncho pneumonia in association with measles or whooping cough often stirs up a latent tubercular focus harmlessly situated in a caseous bronchial gland and causes it to spread into surrounding bronchi. Tuberculosis is suspected in a case of Bronchopneumonia which fails to clear up after-

several weeks, the patient meanwhile becoming emaciated and pale. Rapid breathing and irregular pyrexia are additional indications. Pleural involvements are common and tubercle bacilli are also found in the sputum which can be collected on a gauze by touching the throat with it, exciting cough. The presence of opaque fluffy shadows in an X. Ray picture of the lungs gives deciding evidence. No treatment is likely to meet with success but in older children and if lesion is confined to one lung, collapse of that side by artificial pneumothorax may meet with success. Chronic consumption of the adult type is rare in children and when it occurs is usually situated near the hilum or at the base of the lungs. Haemoptysis is a rare event and should suggest adenoids rather than tuberculosis. The Bronchial glands are often the site of chronic tuberculous disease in childhood. These children are never seriously ill but minor maladies and debilitating diseases awaken this dormant infection. The treatment of these cases is very important. Immediately the disease is suspected the child must be sent to the country or sea-side and should be made to stay in the open air as much as possible. Sun-baths or ultra violet rays, nourishing diet and tonics are important items in treatment. Septic tonsils should be attended to.

Abdominal tuberculosis is one of the commonest forms of tubercular infection in children. It is the form most amenable to treatment. The infection is generally bovine through contaminated milk and reaches the abdomen and mesenteric glands through the intestines. Several clinical varieties exist but there are only a few common ones. Tubercular ascites. Tabes mesenterica, adhesive peritonitis, tubercular ulceration of bowels, intestinal obstruction and acute peritonitis may be the clinical manifestations. The symptoms are generally gradual and insidious and depend largely on the part first and most severely affected. The child's strength is noted to be failing, he is pale, thin and feverish and the abdomen is enlarging. The appetite is capricious, the stools are unhealthy and there is usually alternative constipation and diarrhoea. Attacks of colic are not uncommon. Tenderness in the right iliac fossa is present if the ileo-caecal glands are infected. Enlarged glands or tubercular masses are sometimes felt in the abdomen and one sometimes mistakes it for enlarged liver and spleen. The outlook in these cases is certainly favourable if severe tuberculosis does not exist elsewhere. The treatment of these conditions is very important. The patient must live in the open air day and night and remain flat in bed as long as ascites, temperature and other symptoms continue. The general resistance is increased by giving as much nourishment as possible without upsetting the digestion. Irradia-

tion of the abdomen by natural sunlight or ultra violet rays is oftentimes beneficial. Ascites, if it continues, must be tapped.

A word about Tubercular meningitis will not be out of place. In fact no disease in the whole of pediatrics can appear in so many unexpected ways as tubercular meningetes. It has no classical picture and the characteristic physical signs appear rather too late to be of any real use. Headache, persistent vomiting, prolonged pyrexia, drowsiness or a sudden fit, enlarged spleen and unilateral extensor reflex with a positive result in an examination of the cerebro spinal fluid may help in the diagnosis.

CURRENT TOPICS

SURGERY

The Prevention of Peritoneal Adhesions.—Gellhorn, *G. Surg. Gyn. & Obst.* 47 : 817, June, 1929.

Dr. Gellhorn cannot unreservedly accept the view that it is impossible to prevent peritoneal adhesions after laparotomy. He admits that there are patients whose peritoneum is abnormally sensitive, and there are cases in which infection makes adhesions a certainty. But putting these aside, he thinks that in the majority of these operations there is something wrong with the technique which allows the formation of adhesions.

Many remedies have been advocated, and continue to be evolved, but we should not expect too much of any one procedure. The best and soundest method is to take precautions throughout the entire operation. Some of the common slips in operative technique are mentioned: for example, the gloved hand should not be introduced into the abdominal cavity without being first rinsed in saline, as otherwise it will carry in irritating chemical substances, such as picric acid, iodine, or other skin disinfectants. The same possibility is to be kept in mind when loops of bowel are allowed to escape and lie on the abdominal skin. The unprotected pressure of retractors leads to mechanical irritation of the peritoneum. Energetic sponging of the abdominal cavity, or even sudden or forcible flooding with saline solution, may lead to damage. Closure of the peritoneum should always be done with broad adaptation of the cut edges and eversion.

These are mistakes which are frequently made, but which can be easily avoided with care. Further suggestions are made. The walling off of intestines should always be done with wet, *warm* materials. Gauze or towels have the disadvantage of irritating the peritoneum and tending to cool it by evaporation. Dr. Gellhorn uses sheets of pure rubber, which are kept in warm saline solution till needed. These are smooth, are easily boiled, and do not irritate the gut. The giving of a large enema at the close of the operation sometimes is useful in straightening out the kinks of intestines and preventing them from adhering. If this distension of the gut forces the intestines and omentum against the anterior abdominal wall too much, air or oxygen may be pumped in to separate them.

Finally, details are given of the author's method of covering raw surfaces upon the fundus with peritoneum.—*C. M. A. J.*

The Tripod of Healing.—The alterations of the structure or functions of the human body, which we call disease, can, as a rule, they have not advanced too far and too fast, be restored to normal by purely natural forces, unaided by medical art and science. These spontaneous recoveries, however, require so much time and such heavy expenditures of the patient's energy that dependence upon them seems as foolish as walking from New York to Chicago (a perfectly possible feat), when trains—and now airplanes—are running every day.

Sometimes an organ or tissue becomes so seriously or extensively altered that its restoration is impossible and it may even endanger other structures. In such conditions, *surgery* exercises its proper function by mechanically correcting or removing the damaged or dangerous part.

So long as anatomic or functional restitution is possible, it may be accomplished by means of *drugs* or by *physical measures* —sometimes one; sometimes the other; often both together.

The body's various activities are under the control of the central and autonomic nervous systems, frequently through the medium of the ductless glands. Some drugs act upon the various divisions of the nervous system, producing increase or diminution of certain glandular secretions; stimulation or sedation of certain functions; contraction or dilatation of certain blood vessels; and many other changes.

Physical measures will, in many instances, accomplish the same purposes, if applied with equal intelligence and judgment. Drugs will do certain things which physical agencies will not do; and the converse is also true. Sometimes the successful application of one or both of these methods depends upon preliminary surgical intervention.

Before a man is legally permitted to apply drugs or surgery in the treatment of disease he must secure the degree of Doctor of Medicine and convince the officials of some State of his ability to carry on such practice with safety to the community. During his time of preparation he must study anatomy, physiology, pathology, bacteriology, materia medica and therapeutics and a score or more of other fundamental scientific subjects.

Before the embryo surgeon gees into the operating room, he must have a sound knowledge of the structures he is about to cut and handle, and of the way they behave, in health and disease; otherwise his ignorance might result in incalculable damage to his patient. He must also know what instruments are available for the work in hand, how they are constructed and what they will do.

Before the budding internist or practitioner is permitted to write a prescription for drugs, he must be reasonably familiar with their pharmacologic effects—the changes in body functions produced by their administration; how they act when given in overdoses and the most prompt and effective means for combating undesired effects; and the best way and time to give them so as to produce the maximum of therapeutic effect in the minimum of time.

Physical agencies are powerful remedies in the treatment of disease, and many of them are applied by complicated and potent apparatus. Some of them may produce unpleasant or even dangerous results, if used unintelligently. Is it asking too much to require that the physical therapist shall know as much about anatomy and, especially, physiology, as the surgeon or internist knows; and sufficient of electricity and other branches of physics to understand the workings of the machinery to whose influence his patients are being subjected?

Why would not a course of lectures and a text-book or two on the pharmacology, toxicology and therapeutics of physical agencies be enormously helpful to those who purpose to use them or are using them? How many physical therapists are as familiar with the indications and limitations for light, heat, baths of various kinds, massage, vibration. etc., as a physician is (or should be) with those for calomel, digitalis, strychnine, insulin, quinine and many other drugs?

If non-medical healers and incompletely educated technicians are permitted to administer physical remedies (except, of course, under the direction and instruction of a ***qualified*** physician—which does not, just now, mean *all* physicians), the results are almost certain to be as unsatisfactory as would those of the promiscuous and irresponsible giving of drugs by persons who knew little or nothing of their nature and effects.

Only when physical therapy is placed upon the same sort of basis as that upon which surgery and drug therapy are founded, and prescribed or administered by men who thoroughly know the human body and the agencies and apparatus they are using, will these newest factors in the amelioration and cure of disease be in a position where they can be honestly placed where they of right belong—by the side of medicine and surgery, as the third leg of the tripod of healing.—*Clinical Medicine.*

Chronic Ulcer of the Leg.—Dr. Joseph W. Sooy (*Jour. A. M. A.* of Baltimore, Md. has used a modification of the original zinc gelatin paste devised by Unna, of Vienna. The paste was originally made by combining gelatin 4 parts, zinc oxide 4 parts, glycerin 10 parts, and water 10 parts. This mixture, when cold, forms a homogeneous white mass having a rubbery consistency and a melting point of about 160° F. After its preparation it is placed in a double boiler and heated to just above body temperature, at which point it becomes fluid and has a viscosity not unlike that of ordinary paint. In this form it is applied with a paint brush directly to the skin of the leg from the base of the toes upward to just below the knee. It is allowed to come into intimate contact with the ulcer, no preliminary dressing being necessary. A simple spiral bandage without crosses or reverses is applied over the paste, and then more paste is applied over the bandage. This is repeated until there is a total of three layers of bandage and four layers of paste. The final preparation, when cool, become rubbery hard and makes a pressure bandage which, because of its slight porosity, will allow escape of the discharge from the ulcer

Certain criticisms may be made of this dressing, In the first place, it is only slightly antiseptic, and must be changed frequently because of the growth of infecting organisms. It is also, because of its high melting point, not flexible enough to be an ideal paste; and it is only slightly porous and does not adeqately take care of the discharge from a large ulcer. The formula of the paste used by Sooy is given in the accompanying table.

Formula for Sooy's Modified Unna Paste.

Glycerin	1,900 Gm., 1,425 cc.
Gelatin	625 Gm.
Water	1,900 c.c.
Zinc oxide	250 Gm.
Phenol	1,50% of total volume
	4,675 Gm. — 10 pounds (sufficient for seven dressings)

The addition of phenol has a threefold beneficial action as it makes an antiseptic dressing beneath which infecting organisms cannot thrive; it increases the porosit. of the paste, and it stimulates the granulatign surface. Changing the zinc oxide from 4 parts to 2½ parts increases the flexibility, allows the maintenance of greater elastic pressure, and prevents crumbling. The gelatin which form) the basis of the adhesive qualities of the paste has been increased from 4 to 6¼ parts. This addition lowers the melting point of the paste and increases its flexibility. The modified paste is applied exactly as originally described, except that a figure of eight bandage is carried from the instep around below the malleoli for three thicknesses with each layer of bandage. Attention is thus directed toward obstruction of the normal cirulation of the foot in order that collateral circulation may be established in the region of the ulcer.

In no case has there been any untoward result. All the patients are ambulatory and are allowed to follow their daily occupations without restriction. A maximum of one hour a week is required for the application of the bandage. The length of time that a single bandage may be left in place depends on the amount of edema and the amount of exudate from the granulating surface. A light gauze bandage may be placed around the more permanent paste bandage and the patient instructed to change the former when necessary. In this manner the exudate which escapes through the pores of the paste will be satisfactorily cared for and the dressing will always present a clean and dry external surface. A paste bandage which has been cared for in this manner has been left in place for as long as twelve weeks, and when at the end of such a period the bandage has been finally removed, the ulcer has been found in excellent condition, sometimes completely healed.

The bandage is suitable for use in any climate. When the temperature is very high it may be dehydrated and fixed with a solution of 85 per cent. alcohol, a diluted "solution of formaldehyde U. S. P." (6 percent.). and 9 per cent. ether. This solution is applied by simply sponging the bandage.

This form of treatment has also been used in cases of varicose veins with considerable relief on the part of the patient and marked lessening of the edema of the ankles and lower leg. He has also used it in two cases of unhealed secondary burns with very satisfactory results. ***M. World.***

Carbuncle.—C. A. Sheely (*New Orleans Med. and Surg Jour.*, June, 1928) presents the following conclusions based upon his observations of carbuncle with special reference to that of the upper lip: 1. Carbuncle is caused by staphylococcus aureus infection under pressure by the elastic skin, held down by the connective tissue strands, resulting in necrosis. 2. The surface elevation does not correspond to the area of necrosis which is going on in the deeper parts, so that center injections, puncture with knife or cautery, and inadequate crucial incisions do not meet the indications of the pathology, present. 3. The area of greatest pressure is at the "rim," and treatment to be adequate must be so designed as to relieve this pressure. 4. Carbuncle in its second stage is definitely surgical in all parts of the body, and adequate operation, in conformity with the pathology, is effective. 5. Thrombophlebitis and widespread septicemia are not primary, but are the result of late or inadequate measures.—*I.J.M.S.*

Surgical Treatment of Quinsy.—D. DE LAMOTHE (*Arch. Int. de Laryngol.*, February, 1929, p. 216) emphasizes the difficulty of successfully opening a peritonsillar abscess when complicated by trismus, and claims that all such cases should be operated upon under general anaesthesia. He describes his own technique, which, he states, has always been successful in his hands. The author inserts a closed Doyen gag between the teeth, and induces anaesthesia with ethyl chloride. The mouth is then widely opened and the throat examined with reflected light. In this way the exact position of the abscess can be seen and the most favourable position for incision selected. Before incision the patient's head is strongly turned to the side opposite to the abscess, and in this position the author claims that no pus or blood can enter the air passages.

Warts—Warts are rather successfully destroyed by severe application of strong nitric acid application, once daily; this having the great disadvantage, in the home, of danger application. Formaldehyde solution, 40 per cent, may be used twice daily for several days with good success. As soon as the wart is destroyed the scab should be kept soft with some oil or glycerine application until it lifts.—*M.H.*

Thyroid Gland in Infections.—All the data presented by W. H. Cole and N. A. Womack, St. Louis (Journal A. M. A., April 21, 1928), point strongly to the fact that the thyroid gland takes an active part in the mechanism combating diseases of the body in general. Especially does this seem true in acute infections and fevers. Since the iodine content of the gland is reduced so markedly during acute infectious processes experimentally, it seems logically to assume, that the administration of iodine to patients with infectious processes, especially of the acute type, might be beneficial.—*Ill. M.J.*

Actue Abdominal Disease.—The principal lesions simulating acute, intraperitoneal abdominal diseases are:

1.—Pleurisy.
2.—Central pneumonia of the lower lobes.
3.—Embolism of the pulmonary artery.
4. -Angina pectoris.
5.—Kidney stone or *B. coli* infection of the kidney.

Pulmonary diseases begin with a rigor and the temperature goes to 103°F. or above. When pain is due to pleuropulmonary affections and the abdomen shows board like hardness, if the patient lies on his back and breathes deeply the abdomen will move up and down *as a unit*.

A case of pulmonary embolism has been diagnosed as a perforated gastric ulcer.

The first pain from ureteral stones and other urologic diseases is at the costovertebral angle or between the ribs. and is most severe just under the ribs. whiie the early pain in appendicitis is severest in the epigastric or umbilical region.—FARQUAHR MACRAE, F.R.C.S., Glasgow. Scotland.

Treatment of Varicose Veins by Injection.- ELIZA A MELKON (*New England Journ Med.*, April 4th, 1929, p. 690) describes the method she uses when treating varicose veins by injection. Four solutions have been employed (1) sodium salicylate 20 to 40 per cent.; (2) metaphen 1 in 500. (3) sodium chloride 18 to 25 per cent.; and (4) quinine hydrochloride and urethane. When the skin is healthy she prefers the first of these, but when the veins are surrounded by unhealthy skin quinine and urethane is said to give more satisfactory results, and this solution is effective also in cases of haemorrhoids. The patient is kept recumbent when the veins are large, but when they are small the injection is given in the sitting posture. Thin-walled sacs should be avoided,

"When its mother's milk lacks vitamins the infant suffers from marasmus—general feebleness."
Indian Medical Gazette, Feb, 1927.

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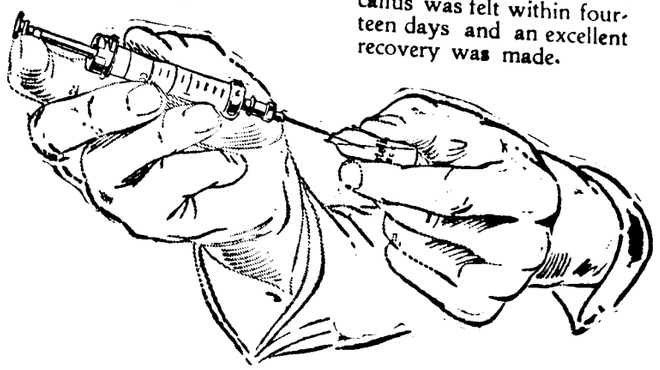

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a quick puncture be made, and the fluid injected slowly. Treatment is generally repeated two or three times a week. There are rarely any marked after-results, though occasionally a mild cellulitis occurs due to leakage of the fluid into the surrounding tissues; this clears up in about a week. This type of treatment is said to be contraindicated where there is extensive oedema; when the patient is cold and in poor health; in cases of cardio-renal disease; or where there has been recent phlebitis. The patient is able to continue at his daily work. The author believes that this method will supersede surgical methods on account of its safety, ease of administration, relative inexpensiveness, and satisfactory results.

Dilatation of Oesophagus for Cardiospasm.—E. S. JUDD, P. P. VINSON, and D. G. GREENLEE (*Surg., Gynecol. and Obstet.*; April 1929, p. 494) report two recent cases, a man aged 60 and a woman aged 52, in which dilatation of the oesophagus for cardiospasm was performed from below through a gastrostomy opening. Treatment from above with the hydrostatic dilator, guided over a previously swallowed silk thread, 20 to 24 feet water pressure being used, gave good results in approximately 700 cases at the Mayo Clinic. The method was classed as effectual in 75 per cent. of the cases; recurrence was expected within a year in the remaining 25 per cent., necessitating further dilatation. In the two cases recorded, after several unsuccessful attempts with the hydrostatic dilator from above, the cardia was dilated from below by passing first one and then two fingers into it through an opening on the anterior wall of the stomach, a guiding thread having been previously swallowed. The opening in the stomach was finally closed with chromic catgut and interrupted silk sutures. In the case of the man there was a mild recurrence of symptoms after nine months, but it was then perfectly easy to pass the hydrostatic dilator from above and to stretch the cardia; this afforded complete relief. In the case of the woman, three weeks after operation, *x* rays showed diminution of the previous oesophageal dilatation and tortuosity and a good-sized opening into the stomach; in three months she was eating all types of food without difficulty. In these cases failure to dilate from above was due to marked angulation of the lower oesophagus, but it is added that the majority of such cases generally yield to treatment with the hydrostatic dilator without resort being necessary to dilatation from below. It was found that the silk thread was as valuable a guide to manual dilatation from below as it was to

dilatation from above, and that, though seldom necessary, manual dilatation from below was successful when needed,

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The Evils of hot Fomentations and Poultices.—The hangnail, the thorn-pricked hand of the gardener. the needle-prick of the seamstress or surgeon, the bites of the gnat, lesions too trivial to figure in examination papers, are often the nightmare of medical practice. Wounds kept dry suppurate less frequently than those kept moist, so a liberal application of any mild spirit preparation, such as tincture of iodine, may complete the treatment. Squeezing to remove a thorn or needle or pus is just about as sensible as to try to squeeze water out of wet socks without taking off the boots. Such treatment can only disseminate the organisms beneath the skin, and by further injuring the tissues provide a nidus of extravasated blood, wherein bacteria may multiply in security from the surrounding lymph and its protective qualities. When a patient with a sore finger feels it becoming tender, instead of protecting it with a thimble, into carbolic acid, lysol or whatever antiseptic is being boomed by the chemist or the press the unfortunate finger is plunged, in ignorance of the fact that organisms cannot be killed in the body without necrosis of the underlying tissues. For the production of the greatest physical misery, however, the prize must be given to hot fomentation. The advice to go home and soak a finger in hot water is criminal. For an acute inflammation with an unbroken skin, a hot poultice is a valuable application. With an open sore it is a very septic application, especially if not renewed each time. The best treatment for a sore is to keep it dry, and protect it from squeezing by a thimble or celluloid guard. If a thorn is in do not squeeze. Take a safety razor and slice off the overlying epithelium. This will drag the thorn out, and should the spot suppurate the denuded area will provide an easy exit for pus, and so limit the outward spread. If the finger is throbbing an incision should be made by the doctor to relieve the tension, followed by the application of moist dressings at body temperature.—R. Kennon (*Lancet*, 5500 167, 1929, through *Phar. Jour.*).

Pruritis Ani.—At the last annual session of the American Proctologic Society a very interesting paper was read by Dr. Granville S. Hanes of Louisville, Ky. upon a treatment for this condition which when well established has resisted all treatment as far as permanent relief is concerned. After using many medicaments in solution in skin injections, Dr. Hanes used C. P. Hydrochloric

Acid. Strong solutions gave violent reaction. Ultimately a solution of Hcl 1-3000 was used with immediate, pleasing results. Itching ceased within 24 hours. In some cases a second or third injection is used. From 40 to 80 C. C. are used at one sitting. The needle enters the skin an inch away from the rectal margin and the solution pushed until the surface becomes boggy. Some of those who discussed the paper who had used the method had preceded the injection with novocain, others had employed no sedative. Those who discussed the paper—Dr. A. B. Graham of Indianapolis. Dr. E. J. Clemons, Dr. Burr Ferguson of Birmingham and Dr. J. F. Saphir of New York—all commended the procedure. The philosophy of the treatment is in debate. Dr. Hanes argues it may act by stimulating leucocytosis or by destroying bacteria within the tissues.—M.H.

Auto-nerve-stretching in sciatica.— R. Jacqerod describes a method for the speedy relief of sciatica which he discovered by chance in his own person. While suffering from an attack of the complaint, he was during a remission, taking horse exercise when the pain suddenly returned and he was forced to sit upright stiffening and involuntarily rotating the limb. Keeping his foot in the stirrup with the heel well down, with a simultaneous rotation of the trunk in the reverse direction to that of the leg, but so as to look over the shoulder of the same side, he obtained immediate relief. In view of the stretching of the nerve involved in these movements, Jacquerod devised a technique of a similar kind for his sciatic patients. It consists in lying on a hard mattress with the leg extended and the foot bearing firmly on the bed-rail; the leg is then rotated from the hip and the body held rigidly, is also rotated but in the reverse direction, the result in relieving the pain permanently being almost invariably successful. (*Geneva: Revue Medicale de la Suisse Romonde.* xliv.)—Med. World.

OPHTHALMOLOGY

The etiology and treatment of Hypopyon Ulcer.—G. H. Burnham, M. D., Tor., F.R.C.S., Edin. commenting on the discussian in the treatment of hypopyon ulcer in the transactions of the Ophthalmological Society of the United Kingdom, 1927, refers in the British Journal of Ophthalmology of October, 1928, to the "combined treatments" which he has used for many years with satisfaction. This treatment consists of the hypodermic injection of pilocarpine and the internal administration of mercury and the iodide and bromide of soda. In a typical case of hypopyon

ulcer with iriris his procedure is as follows:—Freely drop into the eye soln. of argyrol or Neosilvol gr. to dr. 1, then a few drops of atropine gr. ½ to dr. 1, each once daily, and at the same time begin the use of "combined treatment."

The first of these remedies is to check the conjunctivitis and the second to act on the pupu; these being of "unintrinsic value" he lays them aside and relies mainly on the "combined treatment." This latter he inaugurates by giving a series of 20 hypodermic injections of pilocarpine, one every day. The strength of each injection is to begin with gr. 1/12 and increased to gr. ¼ or even to gr. 1/3. Simultaneously the mercury is given twice daily one half hour after eating and the iodide and bromide of soda twice daily one hour after eating. Very generally the eye feels easier and the edges of the ulcer may be seen to be more sharply defined, the cornea brighter and towards the end the ulcer is healthier and the pupil dilated.

In 4—6 weeks a series of 10 injections of pilocarpine is again given and these are kept at these intervals till the cornea becomes clear and vision good. This is his only mode of treatment in these cases. He speaks very enthusiastically of the invariably good results even in instances of too diseased cornea where the contour of the eye ball is helped to be maintained although vision may be obscured by a nebula or leucoma.

The writer adopted this treatment in a few instances of hypopyon ulcer and was gratified to be able to confirm the beneficial effects of the above treatment.—*M. M. J.*

Optical Iridectomy in Congenital Cataract.—Fox, in the *Journal of the American Medical Association*, discusses the operative treatment of congenital cataract. He describes the unsatisfactory treatment by numerous needlings and states that it often results in poor vision and the necessity for the use of high convex glasses. If the periphery of both lenses is clear, the most suitable operation is a small optical iridectomy at the nasal side in each eye, performed under general anaesthesia and placed to permit binocular vision. This procedure is sometimes inapplicable, but since adopting this method the author is surprised at its wide range of application. Should the lenses subsequently need removal, the iridectomy is useful and suitably placed.—*E. E. N. T. Monthly.*

Ultraviolet Light in the Treatment of Ophthalmic Disease.—II. Local Phototherapy: Duke-Elder, W. S., Brit. J. Ophth, 1928 xii. 353.

The action of ultraviolet light is primarily destructive, Following exposure of living tissue to ultraviolet rays, there is a photochemical denaturation of the cell and later a coagulation of its proteins, i.e., a destruction of the cell which is partial or complete according to the amount of radiation. Subsequently, the neighboring cells attempt to repair the injured cells. This active response occurs in practically all superficial living tissues.

In the case of the avoscular crystalline lens, however, repair is comparatively lacking, the damage tends to be cumulative, and coagulation of the cells results in cataract. Duke-Elder says that when the radiation is not of sufficient intensity to produce a cataract immediately, changes occur in the colloid system of this tissue which render the proteins more liable and favor their subsequent coagulation by other influences. Small doses tend to produce a complicated cataract.

In the case of the tissue behind the lens, ultraviolet light treatment is useless since wave lengths in this part of the spectrum cannot pass through both the cornea and the lens.

The size and direction of the beam, the intensity of the irradiation, and the time of exposure must be accurately controlled, and the dosage must be kept below that which will produce an erytheme of the skin. The sensitivity to the treatment varies with the individual.

The author discusses at length the biological action of ultraviolet light on the various tissues, normal and pathological, and recommends ultraviolet light treatment especially for old indolent and recurrent corneal ulcers, severe hypopyon keratitis, recurrent phlyctenulosis, tuberculous conjunctivitis, and trachoma. *D. S. M. A.*

Dark Room Harms Eyes In Measles.—Probably more harm has been done by the old-fashioned notion that a child with measles must be kept in a dark room than by any other single nursing fault, declares Dr. B. F. Royer, writing of eye care in measles in *Hygeia*, the health magazine of the American Medical Association.

Fresh air and light are imperative to help kill germs of pneumonia and other germs that are often responsible for the serious eye complications that develop after measles.

Dr. Royer suggests various means of obtaining comfort for inflamed eyes. The head of the bed should be toward the window thus giving light without having the direct rays strike the eyes. If the light is too strong, a dark screen near the head of the bed or an eyeshade, if the child is not annoyed by it, will help. Perhaps nothing is so soothing in the early stages of measles as laying on the eyes little pledgets of cotton that have been dipped in cool water. These should be kept on the eyes only a few minutes at a time, since most specialists feel that it is inadvisable to use long continued cold applications and to exclude the light far too long. *L. I. M. J.*

The "Three T's" and the "Reform Diet" in Ophthalmology Dr. G. H- Bell, of New York, in *M. J.* and *Record*, Feb. 6, 1929, says the "three t's" (teeth, tonsils and toxemias of the intestinal tract) are responsible for a large number of infectious diseases of the eye. The necessity for the removal of diseased teeth and tonsils goes without saying.

As regarde intestinal toxemias, Dr. Bell says that the prevailing methods of combining proteins and carbohydrates at the same meal are wrong. He gives the following rules for a reformed.

1.—Do not mix heavy starches and proteins at the same meal;

2.—Do not eat fresh fruit and heavy starches at the same meal;

3.—Do not combine fats with concentrated proteins.

The heavy proteins include meats of all kinds, fish, shell fish, duck, chicken, turkey, eggs and cheese.

Over 50 cases of glaucoma, in addition to numerous cases of other ocular infections, have been treated following the "three t's." *C. M. S.*

THERAPEUTICS

Kurchi bark in the treatment of amoebic infections of the bowel :—Lt. Col. Hugh W. Acton and Lt. Col. Chopra, M.A.M.D., as a result of their combined work on the action of Kurchi bark and its alkaloids have come to the following conclusions :—

1, In the laboratory, and to a great extent clinically, the total alkaloids of kurchi bark are superior to emetine.

2. The kurchi alkaloids can be given in large doses, and so far no depressant, emetic, or irritant effects have been observed by us. They are much less toxic than emetine.

3. Intramuscular injections of 2 grains of the total alkaloids cause transient hyperæmia and oedema; This is not visible to the eye unless the dose is injected subcutanecously, and the swelling passes off in 24 to 48 hrs. Injections should be used for acute cases of amoebic dysentery.

4. The kurchi bismuthous iodide can be given orally in 10-gr. doses twice a day for 10 days without any deleterious effects.

5. In chronic amoebic colitis, 4 grs of kurchibismuthous iodide given orally twice a day for two days cured 12 out of 18 cases, compared with one out of every two with emetine bismuthous iodide.

6. Intramuscular and oral administration of the total alkaloids of kurchi bark cure non-suppurative hepatitis, their action on suppurative amoebic hepatitis has still to be investigated. (*I. M, G.* Sepr., 1929).

Ground-nut oil in Leprosy.—Chaulmoogra Oil and its preparations have so far been considered as very effective almost specifics in the treatment of leprosy. Recently, however, extracts published in vernacular press about a remarkable cure of a leper who ate the fruit of the cacheu or Kazoo nut for some time, have stirred the scientists to action again. A preliminary report by Dr. F.D. Ellis, M.D. Islampur (Satara), appears in the *Journal of the Christian Medical Association in India for January*, 1929. It shows the successful results obtained by ground-nut in the treatment of this nasty disease. A sample of the oil obtained from a well-known reliable firm of Bombay was sent to Dr. Muir for analysis, who reported that the sample contained no chaulmoogra at all, but an adulterant, which was probably ground-nut oil. The report says:—"We had used it for several months, both intravenously and subcutaneously, as well as intramuscularly, with very gratifying results. One man, who was brought in a cart and who was unable to take any solid food at all from ulceration of the oesophagus, improved so greatly that he was able to resume his occupation of carpenter, was able to walk considerably without tiring, and began to eat solid food. Furthermore, the oil when taken by mouth was well tolerated and the patients did not complain of nausea and vomiting, as they did when pure unadulterated oil was given them. Later, oil from the Ernakulam Trading Co., of South India, was ordered and used, but from the first the lepers complained that it

caused nausea and vomiting; and they requested me to order some of the old stock. However, it could not be had in the Bombay market. We started diluting the pure oil from South India with equal parts of ground-nut oil, which was well-tolerated and the complaints have ceased. Then we started injections with the pure ground-nut oil, both intravenously and subcutaneously, with gratifying results. For the last three months injections have been continued, with the lepers preferring the intravenous injection with ground-nut oil to the subcutaneous injection with oil chaulmoogra iodized to half per cent strength. In the three centres where we have leper clinics there are about 200 lepers who come as outdoor patients for treatment. One Brahmin, who has come almost daily for a subcutaneous injection of ground-nut oil, has been greatly benefited. The oil is well tolerated intravenously and does not produce much cough. In Western India ground-nuts are grown in large quantities for market, and the oil, after extraction, is used by the people largely for cooking purposes. It is cheap and easily procurable locally. It will be experimented with further, and it is hoped that others who have lepers under treatment will try it and report to the writer their findings. —*The Indian and Eastern Druggist.*

Quinine in pneumonia.—Lolita M. Flewelling (*Med. Journ. and Record*, through *B.M.J.*, calls attention to the prophylactic and therapeutic action of quinine in pneumonia. By the comparatively painless intramuscular injection of a preparation containing a 3 per cent. oily solution of quinine with camphor and the terpenes a means is afforded of administering basic quinine alkaloid. Within a few minutes of the injection a marked odour of terpenes appears in the breath, pointing to the fact that the drug is conducted to the lungs, where it exerts a considerable antibacterial effect. The author's experience confirms the suggestion that the concentration of quinine in the lungs by such methods is capable by its antibacterial effect of producing favourable reactions in infections and even in tuberculosis; it is said to be of considerable value in prophylaxis and treatment in the earliest type of broncho-pulmonary infection, especially those occurring in influenza. From experience in 27 cases of acute influenzal broncho-pulmonary infections, treated with such intramuscular injections, it was found that the majority of patients began to improve clinically with the initial dose, and so uniform were the results that a fall in the temperature was the rule after the first injection. These observations agree with those of other observers, and the author hopes for further investigation of the method both

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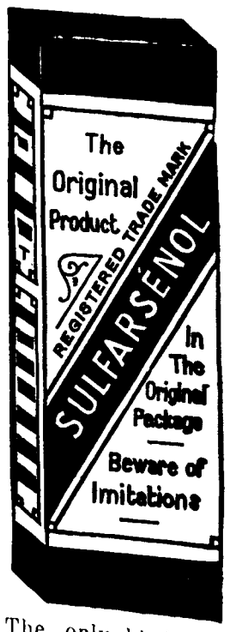

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Nicotine in Cigarettes.—The practitioner is handicapped in forming an opinion of the clinical effects of smoking by the lack of scientific data concerning the actual toxicity of tobacco in the various forms in which it is taken. Some useful work has lately been done by Dr. A. Winterstein and Dr. Ernst Aronson, of the Department of Agricultural and Physiological Chemistry at the Technical High School of Zurich, on the actual and effective nicotine content of various kinds of cigarettes.' They point out that previous estimates have been compromised by the absence of a satisfactory method of measuring nicotine, but that Fuhner's method gives readings of great accuracy; he estimates with a Cymograph the muscular contractions of a leech under the influence of nicotine. They found that the toxicity of a cigarette is determined not only by its nicotine content but also by the variety of its tobacco, and its humidity, shape, and density. Those who inhale absorb three times as much of the poison as those who do not, short, thick cigarettes produce twice as much nicotine as long and slender ones, and loosely rolled cigarettes 30 per cent, more than those which are rolled tightly. The nicotine given off by damp cigarettes is 30 per cent, less than that produced by dry ones. The quantity of nicotine which reaches the mouth therefore depends on the resistance offered to the smoke in its passage through the tobacco; if this resistance is low the amount passed will be high. Dark and strong tobacco yields more than light. An important feature of the investigation was the discovery that "hygienic" or "denicotinised" cigarettes contain just as much of the alkaloid as ordinary ones, and that a cotton-wool filter does not diminish the quantity in the smoke. It was found impossible to reduce the output of nicotine by chemical means. The authors suggest that legislation should be passed to restrict the use of the term "nicotine-free" or "low nicotine" tobacco containing not more than 0·8 per cent., which would deliver at the mouth not more than 0·4 mg. of nicotine per gramme of leaf. They point out that so far it has not been possible to produce a tobacco with this low content that has an acceptable aroma, but that selective cultivation should solve the difficulty. It is, they say, a fact that certain tobaccos contain only one-third to one-seventh of the quantity of nicotine present in a high-niocotine brand, and they hope that propaganda will encourage a demand which will make the necessary research worth while. They make no mention of other toxic bases in

cigarettes, such as pyridine, and presumably their method of measurement gives the mass result of all the toxic constituents. Nevertheless their tables, which are very full, will provide valuable information for those interested in this question.—*Lancet*

The Uses of Luminal.—W. Blumenthal *Med. Klin.*, p. II. finds this drug the best and most trustworthy remedy for stopping vomiting. It can be given as the sodium salt—subcutaneously or intravenously, or as a suppository. Whether the vomiting be due to acute nephritis, ptomaine poisoning, or pregnancy, the remedy rarely fails. The dose is 0.2-0.3 gm. and ol. cacao 2 gm. is added for a suppository. The effect takes place in 15-20 minutes. In babies 0.03-0.04 gm. of the sodium salt can be given with safety. In older children from 0.1 to 0.15 gm. In spasmodic conditions of all kinds, and in hiccough, its action is not so quick as chloral, but more lasting. In megrim it can be given in pill form as follows: acid phenylæthylbarbitone, 0.6-0.9 gm.; Caff, purim, 1.2-1.8, makes 30 pills. One pill thrice daily and gradually reduced to one daily. The drug increases the anti-spasmodic effect of other drugs such as opium and pyramidon.—*M. R.*

BOOK REVIEWS

Endocrine Diagnostic charts.—By Henry R. Harrower M. D. 1929. P.P. 144 Price $ 1.00. The Harrower Laboratory. Glendale: California.

The book under review contains a lot of carefully compiled information from various sources on endocrinology. The author has given in this book in a condense form the present day knowledge of endocrinology, giving all the diagnostic data in the form of charts of the various endocrine affections.

The first few preliminary chapters have been devoted to explain the basic principles of endocrinology, which will greatly help the reader in understanding the glandular inter-relationship.

The book contains in addition to the charts a clear description of endocrine therapy with the essentials of pathology, symptoma tology and treatment. The value and usefulness of some of Dr. Harrower's organotherapeutic agents are also given.

There is an useful appendix to the book where the author gives in a very good and instructive way the method of handling an endocrine case.

All physicians and general practitioners will find Dr. Harrowers' book a valuable aid in diagnosing and treating endocrine disorders.—V. C. S.

Elements of Surgical Diagnosis.—By Sir Alfred Pearce Gould. Revised by Eric Pearce Gould, M.D. M.Ch. (Oxen) F. R. C. S. (Eng.) 1928 7th edition, illustrated. Pp. 706 with 26 radiographic plates. Cassel & Co., Ltd., London Price Sh. 12/6 net.

Little need be said by way of introduction to this book to students, as it has already won their favour eversince its appearance in India. However it may be mentioned here for the benefit of those who are just entering their surgical studies that they will find it invaluable as a suitable basis, on which to build their knowledge on the subject.

The most obvious alteration to be found in this edition is the substitution of an introduction for the first three chapters of former issues. The introduction summarizes the method of investigation of surgical cases and forms an easier and more interesting approach to the rest of the book.

The 1st chapter deals with the Diagnosis of the constitutional effects of certain complications of injuries and operations. The following eleven chapters treat about the diagnosis of various injuries. The next few chapters treat about the diagnosis of various tumours, of ulcers, sinus and Fistula and of gangrene.

Conditions affecting the various organs or parts of body are considered next.

The value of making a thorough systematic examination is well emphasised in every chapter, while the characteristic clinical manifestations of various affections are given in bold types.

The inclusion of chapters on cholycystography, and the use of lipodol with X. Rays make the book up-to-date.——— V.C.S.

Notes on Chronic Otorrhoea with special reference to the use of Zinc Ionization in the treatment of selected cases.—By A. R. Friel, M.A., M.D., F.R.C.S.I. 1929 P.P. 87 with 54 illustrations Price Sh. 6/- net Bristol: John Wright and Sons, Ltd.

The author after a wide experience in the working of the Ionization method of treatment of chronic otorrhoea has written this book explaining fully the value and usefulness of zinc Ionization in selected cases of chronic Otorrohea. The opening part deals with the technical aspect of ionization and the procedures associated with its application in ear diseases. The second part gives a vivid description of the application of the method in selected diseases of the ear, and its extreme usefulnesss in chronic Otorrohea.

In the third part of the book the author explains, the necessity of establishing aural clinics on ecconomical basis.

The book is invaluable for the otologist who will have ample scope to use Physical therapy in his daily work; while the medical inspectors of schools and public health units will find in it many useful suggestions and hints:—V.C.S.

What you should know about heart disease.—By Harold E.B. Paradee, M.D., 1928. P. P. 120 Price $ 1.50 net. Philadelphia: Lea and Febiger.

The author has written this little book for the use of layman and describes in very simple language, avoiding all technical expressions as far as possible, all the important factors regarding normal and pathological heart.

The book gives a clear idea of the normal and diseased heart and will help any patient suffering from heart disease to understand his illness better and cooperate with his attending physician intelligently in his attempts to make him well.

The various precautions which one with heart disease ought to take have been well described.

The book also contains a useful dietary for those suffering from heart disease.—V. C. S.

Diabetic Surgery.—By Leland S. McKittrick, M.D., F.A.C.S. and Howard F. Root. M. D. 1928 Pp. 269 illustrated: Price $ 4·25 net Philadelphia: Lea and Febiger.

The book under review is written by two specialists, a surgeon and a physician and is the product of their wide experience covering the whole range of surgery in its relation to diabetics.

The subject is treated most thoroughly explaining fully the metabolic handicaps of the diabetics and their control, the choice of an anæsthetic, the special type of operation to be adopted in various cases and the post operative care of the patients.

The first part of the book gives the various surgical complications of diabetes and the risks run by diabetics undergoing operation &c.

The diagnosis and treatment of most of the complications are dealt with adequately with practical suggestions whereever necessary. The section on diabetic gangrene is very practical and instructive. We are sure, all practitioners and medical students alike will find it a trustworthy guide to diagnosis and treatment of diabetics.—*V.C.S.*

Bronchial Asthma.—(Its Diagnosis and treatment) by Harry L. Alexander, M.D.1928 Pp. 171 illustrated. cloth $ 2·25 net Philadelphia: Lea Febiger.

This little monograph on Bronchial Asthma is divided into eight chapters.

Chapter 1 deals at some length on historical considerations and definition of Bronchial Asthma followed by a chapter on the anatomy of the Bronchii. The author has given in this section a very good description of the intervation of the Bronchii and the role they play during an asthmatic paraxysm. Chapter three is very interesting and contains a vivid description of the mechanisms of the asthmatic Paraxysm. The various theories regarding paraxysm are dealt with in a concise form. In this chapter the factors that initiate a paraxysm (a) Physic, and nervous influences the stimulation of the vagus nerve endings are described.

The author lays stress in more than one place that this type of asthma is not a disease entity but a clinical expression of a constitutional defect.

The clinical history, symptoms and signs, varieties, diagnostic methods, skin tests, differential diagnosis, complication etc. are considered in detail.

The chapter on treatment is complete and dwells at length on modern methods of therapy. The value and use of Ephederines Epinephrin and other drugs, desensitization, non-specific therapy,

prophylaxis, radiation and surgical measures have all been fully described by the writer.

A distinct feature of this monograph is the inclusion of well arranged list of references at the end of each chapter which greatly enhances its usefulness specially for those interested in the advance study of bronchial asthma.

This is a comprehensive yet concise review on Bronchial Asthama, and we have no doubt that physicians and medical students will find it a useful addition to their book shelves.—*V.C.S.*

Thyroxine.—By Edward C. Kendal, M.S., P.H.D., D.Sc. Pp. 265 1929. New York: Chemical Catalogue Co.

This monograph deals chiefly with the chemistry and physiology of the thyroid gland. The author of the book isolated 'thyroxine' in 1914, and a book written by him on 'thyroxine' is in itself sufficient to recommend the monograph.

There are 21 chapters in the monograph.

1st chapter gives a full account of the work previously done by many on the subject. The succeeding chapter deals with the 1st isolation and identification of 'thyroxine' by the author. This is followed by a good review of the various methods used in isolating the compound and its true chemical formula Chapter iii is very descriptive and interesting and contains an account of the finding of the various Iodine content of Thyroid glands with reference to geographical situation and seasons.

The chemical properties of Iodine in thyroid glands not in the form of 'Thyroxine' are dealt with exhaustively in chapter vi.

From Chapters 7 to 21 the author describes very vividly the influence of Thyroid on health and disease and may be profitably read by all practitioners.

The monograph is a brief review of the thyroid study, that is necessary for a proper understanding and management of disease of the thyroids. We have no hesitation in recommending this work to the medical profession to whom it is bound to be of immense help.—*V.C.S.*

Handbook of Physiology.—By D. D. Halliburton, M.D., L.L.D,, F.R.C.P.F.R.S. and R.J.S. McDowall, M.B., D.Sc., F.R.C.P. (Edin).

18th Edition Pp. 902 with 508 Illustrations and three coloured plates: Price Sh. 18 net. London: John Murray.

The book under review has been for generations a great favourite of students and practitioners.

The present 18th edition has been thoroughly revised and much new matter added with the help of Professor, R.J.S, McDowall.

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Among the additions, the formation of blood and the bile, Fractional Test meals, Blood Groups, the Polygraph, recent work on spleen and the control of Respiration etc. are worth reading. Many of the anatomical details have been omitted in this edition, and only the essential anatomy and Physiological histology for a proper understanding of the subject are kept up. In spite of all these changes the book retains the requirements of the medical students in emphasizing the fundamentals of Physiology.

On the whole the present volume is excellently arranged, and contains as before the essentials of Physiology in descriptive yet concise form. We are sure that the present volume will continue to be popular among students and practitioners far more than the previous edition.—*V. C. S.*

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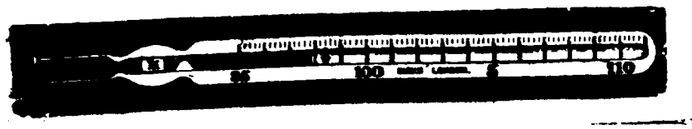

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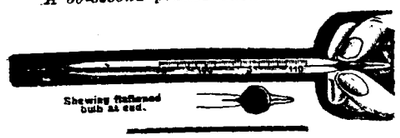

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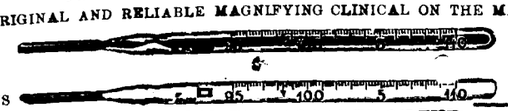

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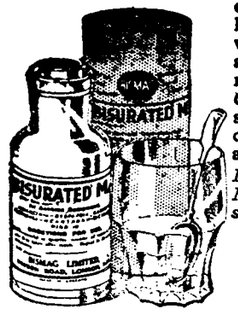

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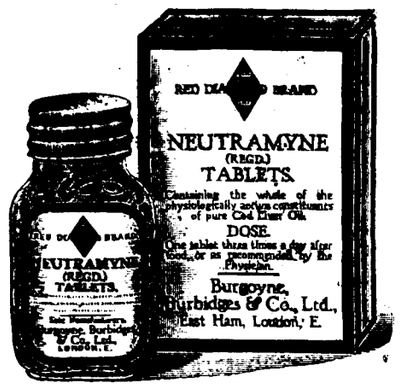

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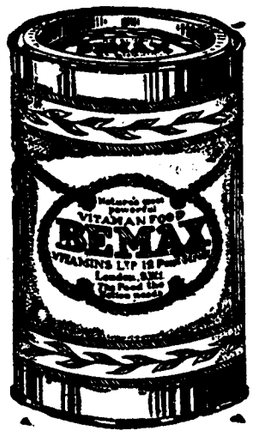

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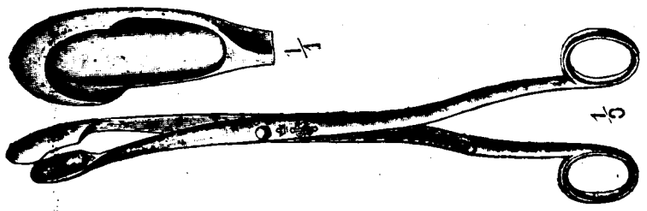

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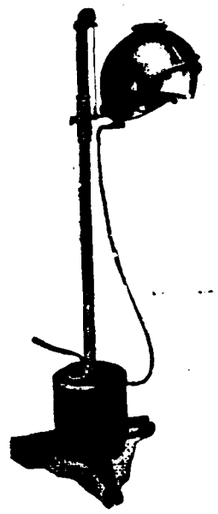

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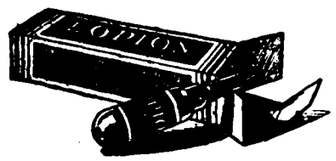

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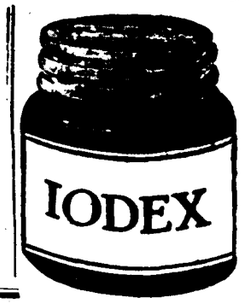

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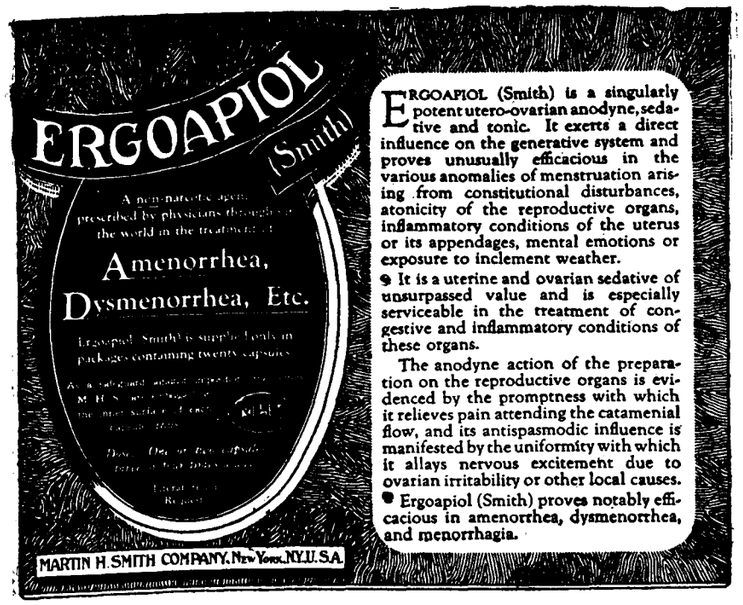

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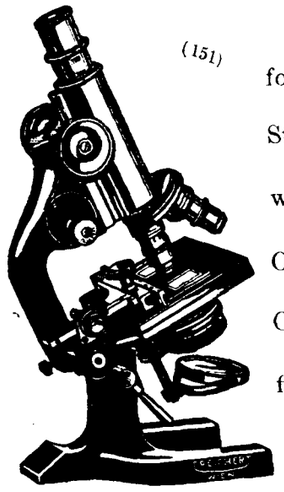

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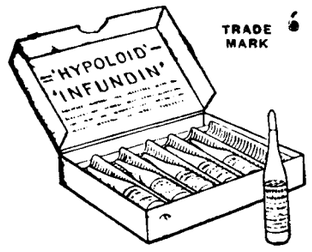

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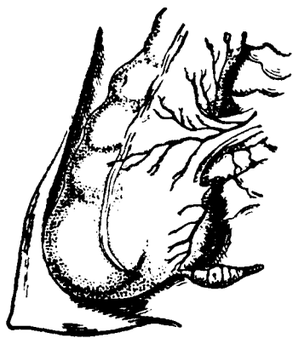

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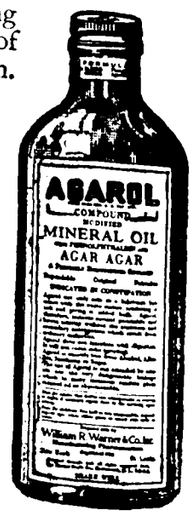

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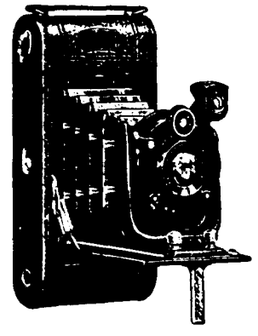

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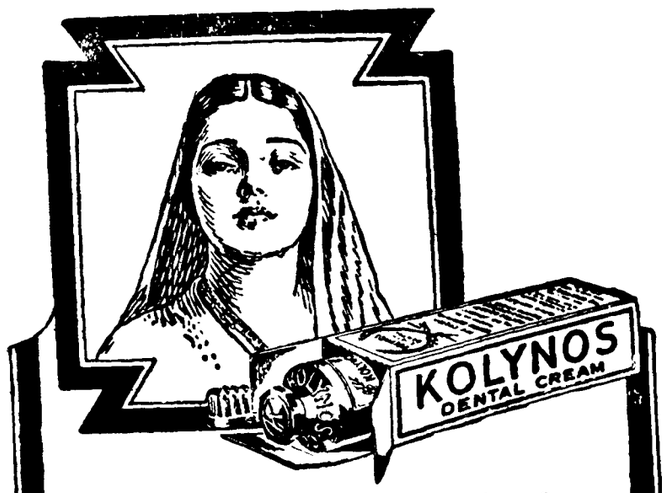

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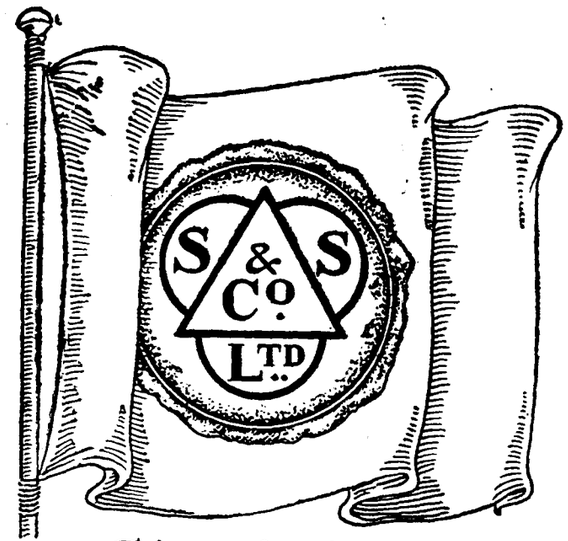

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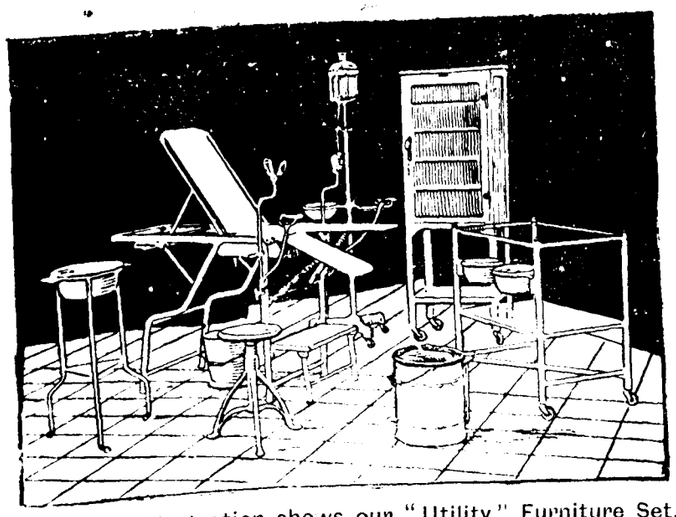

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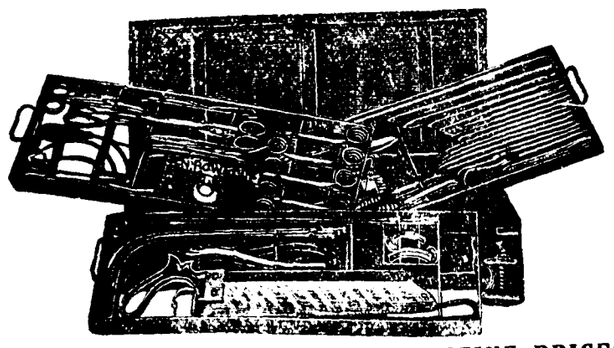

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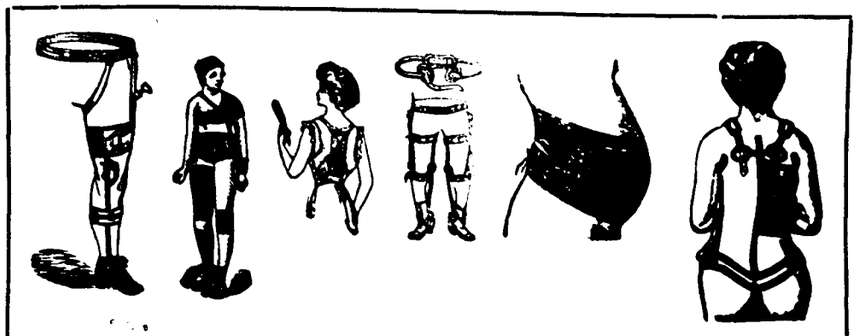

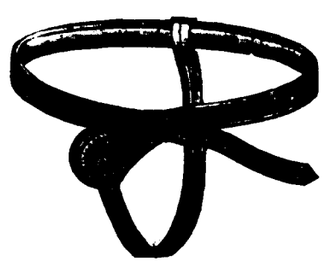

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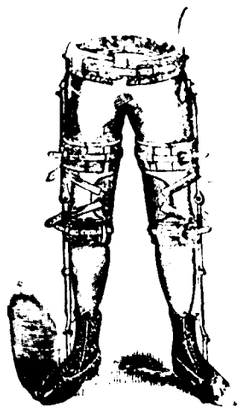

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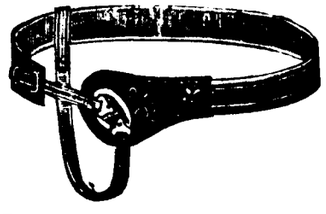

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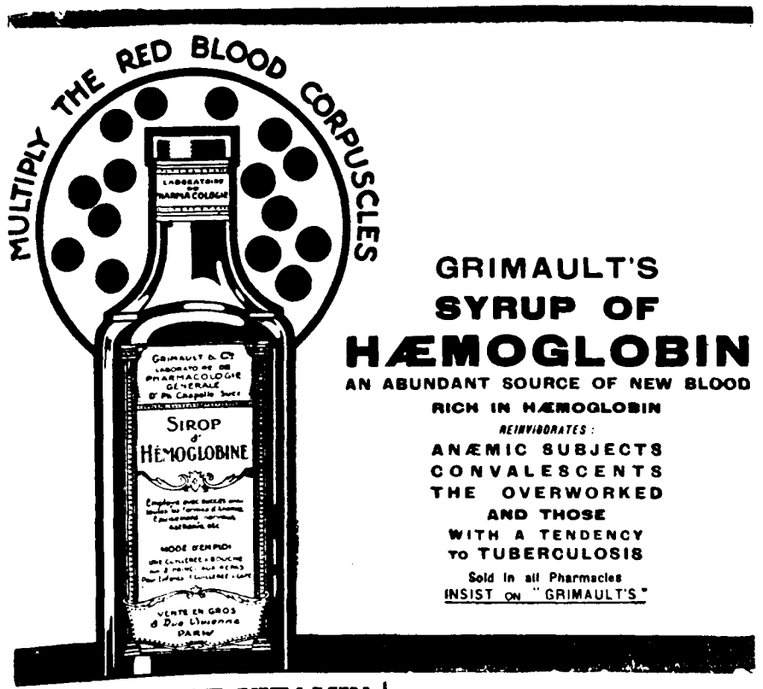

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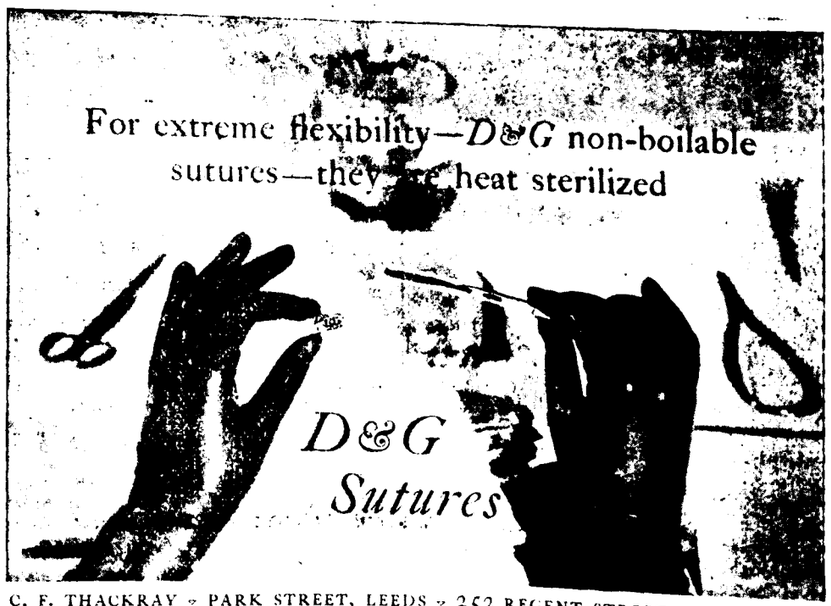

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Lt. Col. C. A. F. HINGSTON, I. M. S.

Surgeon-General with the Govt. of Madras.

Lt. Col. C. A. F. Hingston, I. M. S., received his Medical Education at the Middlesex Hospital, London, before passing into the I. M. S. Service. He was House Physician and resident Obstetric Officer there. When he came to this country he first served in Madras in the Fort. He was on Military duty in Madras District for one year. He was then attached to various regiments during the next five years serving in the 76th Punjabis, 84th Punjabis, 67th Punjabis at Bellary, Secundarabad, Sangur and also serving on the Frontier. Joined Madras Civil in July 1907 and was appointed Assistant Superintendent, Govt. Hospital for Women and Children. There he remained for three years and was appointed then Personal Assistant to the Surgeon General with the Government of Madras for about 10 years serving under 4 different Surgeons-General. He was for a short period in the General Hospital and returned to the Govt. Hospital for Women and Children as acting Superintendent and subsequently became Superintendent. During the whole period of his service he had been interested in Midwifery and Gynaecology. While in the Military duty he was specialist in Midwifery and Gynaecology to the IX Secundarabad Division. During this time he had seen and introduced many changes in the Women and Children Hospital, Madras. For some years he has been Principal of the Medical College, Madras. During this period a great many changes have taken place in the teaching staff and in the curriculum and clinical teaching. On 22nd of August when Major-General Megaw went on leave he was appointed as acting Surgeon-General with the Government of Madras. He is a companion of the Indian Empire. Officer of the British Empire and Officer of the Order of St. John of Jerusalem.

Lt. Col. C. A. F. HINGSTON, I. M. S.

The Antiseptic

ESTD., 1904.

A Monthly Journal of Medicine & Surgery.

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Vol. 26] NOVEMBER, 1929 [No. 11

ORIGINAL ARTICLES.

* APPENDICITIS.

BY

DR. V. M. KAIKINI, B.A., M.B.B.S., F.R.C.S. (ED.)

Principal and Professor of Surgery, National Medical College, Bombay.

Anatomy and Physiology—The appendix is a blind tubular diverticulum arising from the inner and posterior aspect of the Cœcum about 2" from the Ileo-cœcal valve. In the fœtus and infants it forms the apex of the cœcum. After the middle age it starts atrophying. It is about 3" to 4" long and has a diameter of about ¼". Where the appendix opens into the cœcum is interposed the valvular fold called 'The Gerlach's Valve."

Position of the Appendix—(1) It may lie behind the cœcum and point upwards—retrocœcal appendix (2) It may lie pointing downwards hanging over the pelvic brim—pelvic appendix. (3) The appendix may lie in close relationship to the terminal portion of the Ileum and may acquire attachment to the upper or under surface of the mesentery Mesenteric appendix. (4) Due to an error in

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the third stage of rotation of the intestines the cœcum and appendix may lie in subhepatic or pyloric position. (5) A late rotation error may result in the cœcum and appendix occupying the left Iliac fossa apart from any transposition of viscera.

Surface markings-McBurney's Point—is 2" internal to the Iliac spine in the line joining the umbilicus to the anterior superior iliac spine. It is not the site of the appendix but the point of greatest tenderness in an appendicular attack. *Munro's point*—is the spot where the spino-umbilical line crosses the outer border of the rectus muscle.

The Ileo-Cœcal valve lies underneath this Appendicular orifice, an inch below and to the outer side of this point.

Structure—The mucous membrane of the appendix consists of Lieberkuhn's glands. The submucous layer is rich in lymphatics. The muscular coat has got an inner circular and an outer longitudinal layer. Outermost lies the peritoneal coat with the meso-appendix.

Blood-vessels—The main blood supply is from a branch of the Ileo-Cœcal artery, the termination of the superior mesenteric.

The lymphatic supply—is through four or five trunks ending in the Ileo-Cœcal glands lying in the Ileo-Cœcal angle.

Peritoneal relation—The Ileo-Cœcal fold passes from the anterior aspect of the termination of the Ileum to the front of the appendicular mesentery. This bounds the Ileo-Cœcal fossa and the appendix lies in this.

Physiology—The appendix is credited with the provision of some secretion which prevents fœcal hardening in the Cœcum, digestion of vegetable material, a fluid stimulating peristalsis in Cœcum and disposal of bacteria by its lymphoid tissue. It empties and fills with the Cœcum.

Misplacement of the appendix—It is due to (1) Arrest of development. During development of colon, cœcum passes from the left hypochondrium across the upper part of abdomen to the under surface of the liver and then in the right Iliac fossa. Abnormally it may be found, beneath the spleen, epigastrium, beneath the liver etc. (2) Mesenteric abnormality—due to long meso-colon and elongated meso-appendix. It may be adherent to uterus or in the left side of the body. It may be found in hernias also.

Etiology of Appendicitis—The large amount of lymphoid tissue especially during young adult life, is an important etiological factor.

Appendicitis is rare in early infancy and old age, on account of the small amount of lymphoid tissue present. Sometimes it may run in families also. Dietetic errors and chronic constipation, are constant items in the history of the case. Injury caused by the constant action of the underlying psoas muscle, or abdominal injury, may help the pathological process. Foreign bodies, and fœcal concretions, are many a time found in a pathological appendix, also parasites like threadworms and round worms; and they may be at the bottom of the inflammatory condition. Exposure to cold, rheumatism and influenza etc, which cause a generalized inflammatory condition of the lymphatic tissue in the body, may cause inflammation of the lymphatic tissue of the appendix also. Inflammatory condition of adjacent structures, like salpingitis, ovarian cysts etc may carry the inflammatory process to the appendix. The appendix may get inflamed when lying in abnormal positions as in hernia, or when utilized for appendicectomy.

Pathology—The disease usually begins as an intramural infection, the inflammation being first manifest in the mucous membrane. From there it may extend to the lymphoid tissue, in the submucous coat where the dissemination may be very wide, and further extension may take place through the muscular coat to the sub-peritoneal and peritoneal tissues.

The pathological condition may vary from ordinary catarrh to total gangrene. In complete obstruction of lumen with mild bacterial activity a cyst may result. In partial obstruction the lumen may be full of inspissated mucus and fœcal matter (which may act like a foreign body).

Inflammatory change is more pronounced when bacterial activity is more marked. The inflammation may cause (1) thrombosis of appendicular vessels and general gangrene. (2) localized gangrene (3) ulceration over the concretion and rupture.

Clinical Features of Acute Appendicitis—Acute appendicitis may be divided into four varieties viz (1) Acute attack without perforation or gangrene, but with localized peritonitis. (2) Formation of localized abscess (3) Acute attack with ulceration, perforation and gangrene (4) Acute attack with passage of virulent bacteria into the peritoneal cavity.

(1) *Acute attack without perforation or gangrene but with localized peritonitis*—As long as the inflammation is exclusively confined to the appendix, the clinical signs of an attack of appendicitis are

not manifest. These arise after the inflammation involves the neighbouring serous surface. The peritoneum is slightly reddened, and some fibrin is found on the appendix. In the majority of cases the abdominal cavity contains some exudation which is turbid and contains large amount of leucocytes, but is either sterile or contains very few bacteria.

The onset is sudden and unexpected or sometimes preceded by some prodromal symptoms like indefinite feeling of malaise, indigestion, constipation etc. Pain is not localized to the appendicular area but is generalized all over the abdomen but more referred to the epigastrium or unbilicus. Occasional attacks of testicular pain on the right side might occur as the testes also receive nerve supply from the 10th dorsal segment. Pain is followed by nausea and vomiting succeeded by rise of temperature sometimes with rigor. Bowels may act once or twice after this but constipation becomes a prominent feature. Rarely there may be diarrhoea. Examination shows that the abdomen is rigid, motionless and uniformally tender. These symptoms become soon localized to the right iliac fossa. There might be slight distension and soon a palpable swelling may be felt in the right iliac fossa. The local muscular rigidity may be mistaken for a tumour. If the appendix lies below the pelvic brim symptoms may be referred to the bladder like retention of urine etc. Rectal symptoms like pain, tenesmus etc may be present. In these cases abdominal rigidity may be slight or even absent, but on rectal examination a tender inflammatory mass is felt on the right side. Temperature is raised, tongue furred and appetite lost. In mild cases the symptoms are less severe and the attack may subside within a few hours or may continue from three to seven days in more severe cases.

This description applies to the condition where the disease is strictly limited to the appendix, and the early aseptic exhudation is confined to the immediate vicinity. This condition is further confirmed if we find that the upper half of the abdomen and the left side are still soft, and not tender, if there is no pain in the lumbar region, at any rate the left, and if the pain on pressure and localized reflex contraction are limited to the suspected sites of the appendix, without any extensive dullness or definite resistance.

If the attack does not subside it may reach the more advanced stage when either a localized abscess may form or there may be a severe general involvement of the peritoneum by perforation or gangrene of the appendix.

(II) *Formation of a localized abscess.*—The collection of pus may be intraperitoneal, retroperitoneal, or even subfascial (beneath the fascia of the Iliacus muscle.) If the abscess is intraperitoneal, there is pronounced reflex contraction of the anterior abdominal wall; if it is retroperitoneal there is contraction of the flexors of the hip joint; and if this contraction is very much pronounced the collection of pus is under the iliac fascia. Abscesses confined to the lumbar region are either intraperitoneal or subperitoneal and those which track under Poupart's ligament are always subfascial. A temperature between 102° and 104°F and rigors point to an extraperitoneal position.

If the lumbar region is painful on pressure, is dull and the muscles are rigid, it signifies that the abscess is extending towards the kidneys, along the outer side of the ascending colon. If the patient complains of bladder trouble the suppuration extends towards the true pelvis. If rectal symptoms are also present and jelly like mucus escapes from the rectum, the abscess is situated in Dougla's Pouch. If the abscess cannot be determined by palpation on account of the rigidity of the abdominal wall it means that the pus is directly in contact with the peritoneum of the abdominal wall. If its limits are very easily defined it means that there is a free peritoneal space between the abscess and the anterior abdominal wall. An abscess situated deeply between the loops of intestines may completely elude palpation but only produce symptoms resembling intestinal obstruction and also meteorisim.

In short severe symptoms of acute appendicitis continue their progress, a tumour like mass is felt in the right iliacfossa which increases in size and definition, especially the initial constipation being replaced by diarrhoea. The existence of a tender pelvic mass with vesical symptoms at a time when an ordinary attack of appendicitis would naturally clear up indicates the formation of an abscess.

Patient lies with right leg drawn up. Leucocytosis may not be present if the pus is completely walled in. In neglected cases the abdominal skin may become odematous and reddened. The abscess may burst into the rectum bladder or into the peritoneal cavity. Sometimes it may burst externally also.

(III) *Acute attack with ulceration perforation gangrene and general involvement of the peritoneal cavity.*—If the abdomen is everywhere sensitive to light percussion if pressure on the lumbar region elicits pain and if palpation produces expulsive reflex muscular contraction it is certain that there is considerable involvement of the peritoneum even if there is no dullness to be

detected in the lower portion of the abdominal wall. The exudation from the gangrenous or ulcerating appendix is septic from the start and contains more bacteria than leucocytus. The patient's face is pale and cyanosed, pulse is rapid and thready, temperature may be normal or subnormal in the axilla and extremeties but is very high in the rectum, the tongue is dry and there may be persistent vomiting with general toxæmic condition, and even semi consciousness. This may lead to a fatal termination.

(IV) ***Acute attack with passage of virulent bacteria in the peritoneal cavity*** (*I*) *In retro cœcal position*—the appendix may be partly extraperitoneal in many cases. In this case the pain tenderness and rigidity may be referred to the loin, vomiting may not be present because peritoneum is not early or so definitely affected. On account of close proximity, the iliopsoas muscle may be Oedematous and tender, thus causing persistent flexion of the right hip making extension painful.

(2) *In mesenteric appendix*—Signs of acute intestinal obstruction are likely to appear as the appendix has a tendency to exert an obstructive influence upon the small intestine.

(3) *In subhepatic appendix*—The local evidences are in the subcostal region and vomiting is a persistent symptom. The proximity of the infection to the subphrenic region may result in symptoms resembling diaphragmatic pleurisy or pneumonia - moist rales etc may be found in the lung. Jaundice is frequently present.

(4) *In left Iliac appendix*—The ordinary symptoms of appendicitis are transposed to the left iliac fossa and diarrhoea is frequently present.

Diagnosis—Importance should be attached to the sequence of symptoms, viz first pain, then vomiting and finally fever. Some pyrexia is always present even in the mildest cases. Pain in the first acute attack is never local. Appendicitis should not be the first but the last thing to be thought of when pain is complained in the right side of the abdomen. Pain may be local only if the appendicitis is chronic when the appendix is found buried in adhesions. Right sided pains are due to ptosis, leaking deuodenal ulcer, torsion of ovary renal conditions, Coecal carcinoma, thoracic conditions, and lymphadenitis of glands in the right iliac fossa.

Differential diagnosis--Pelvic Causes.—Salphingitis, pyosalphix, ruptured tubal pregnancy, inflamed or twisted ovarian cyst, presence of vaginal discharge, history and bimanual examination will help in their exclusion.

Renal Causes—Movable kidney renal and ureteral calculus, Pain shoots downwards the perineum. Fever and constipation are absent. Examination of urine and Xray are useful.

Hepatic Causes—Cholecystitis and cholelithiasis. When inflammatory process occurs above the line joining the anterior superior spine to the unbilicus we should think of appendicitis if the pain or resistance reach far towards the side and if the lumbar muscles respond to pressure by contraction. But any inflammatory process internal to the external border of rectus must be ascribed to gallbladder.

Perforated gastric or duodenal ulcer—Shock and rigidity occur first. Fever is later and occurs when peritonitis sets in.

In children especially the following conditions have to be excluded.

Acute pyelitis—It is most common in female children and starts with indefinite abdominal pain, high temperature, rigors, vomiting and constipation and general disturbance. On examination of urine pus cells and colon bacilli are found, urine is acid and opalescent. Female sex high temperature, situation of tenderness over the kidney region, absence of true muscular rigidity will help in the diagnosis.

Cyclic vomiting--The child is pale, irritable and tired looking and complains of indefinite pain localized to the pit of the stomach. There may be a preceding period of constipation and flatulence. But the child looks drowsy and ill. The abdomen is retracted although on account of frequent vomiting and retching it may be a little rigid and tender to touch.

There is history of similar attacks before. The breath has got odour of acetone and urine shows the presence of acetone together with casts and small quantities of albumen and blood.

Ileo-Coecal Lymphadenitis—In the condition which is really tuberculous there is a preceding attack of diarrhœa. Abdominal pain appears, there may be vomiting and fever with general disturbance. The symptoms rarely last for more than twenty four to forty eight hours and abate with characteristic suddenness. But the pain is local from the commencement and never referred. The tongue is usually clean. Fever introduces the illness while in appendicitis it is comparatively late in appearing. It may be possible to palpate the enlarged glands.

Basal pleuropneumonia and diaphragmatic pleurisy—If an inflamed appendix occupies an abnormally high position difficulty may arise in distinguishing this variety from acute pulmonary

conditions involving the base of the lung and diaphragm. In pleuropnuemonia the initial fever is high, the pulse respiration ratio increased the alae nasi are working vigourously. The hand is pressed firmly into the left side of the abdomen, if the origin of the pain is abdominal, an accentuation is referred to the site of the infection, if the pain is thoracic, no alteration is produced by the left sided pressures. (opposite side palpation test).

The diaphragm developes in the region of the fourth cervical segment, its musculature is derived from this segment and its nerve supply the phrenic is derived from the fourth cervical segment. In later development, the growth of the thoracic contents displaces the muscle caudalwards, so that it ultimately takes up its position at the thoracic abdominal junction. Its connection with the higher segment is valuable from diagnostic point of view, for any irritation of diaphragm is referred along the distribution of the fourth cervical nerve and an area of hypersensibility can be marked out which is roughly of a collarshape (Collar test).

Sgambatti's test in acute peritonitis—2 to 3 c.c. of concentrated nitric acid are added to 8 or 10 c.c. of urine so that a contact zone forms without mixing. Under normal conditions a reddish brown fringe appears at the zone of contact, but if peritonitis exists a bluish grey area developes above the red zone. If the specimen is allowed to stand for some time the blue grey colour diffuses itself throughout the urine and by the addition of chloroform a ruby red tint develops. The change in colour is due to oxidation products pathognomonic of peritonitis.

Malaria.—In some cases of malaria abdominal pain is present. But Leucopenia is diagnostic.

Complications of appendicitis--Residual abscess—They develop in Dougla's pouch and left flank during the first and second week.

Subphrenic abscess—May develop after the third week.

Intestinal obstruction—Partial or complete may develop after the fifth or sixth week. It is due to kinking or adhesion and may sometimes disappear spontaneously.

Metastatic pneumonia or parotitis.—May also develop though rarely; so also *phlebitis.*

Treatment.—There is still difference of opinion as regards the time of operation. Some are in favour of expectant treatment, and others in favour of immediate operation. On the whole expectant treatment seems to give better results than immediate

operation. If the patient comes within twentyfour to thirty six hours of the beginning of the attack i.e. if the disease is confined to the appendix and its immediate neighbourhood, operate immediately. If he comes later than that he is put in Fowler's position, as much water as possible preferably with glucose and soda bicarb is given by mouth, all other food being interdicted. If there is vomiting, continuous saline is given per rectum, and stomach is washed out. No aperient or enema is given. If necessary morphia is given subcutaneously, enema is given twenty four hours after pulse and temperature are normal. Too early feeding gives rise to temperature. Patient may be kept like that for six to seven days. Large swellings may even disappear in this way.

If the general and local symptoms show no signs of subsiding at the end of the first week or if they increase, an operation should be performed without any delay not so much for the purpose of removing the appendix but in order to evacuate the pus and thus avoid the immediate danger. We should act in the same way if primary or secondary collection of pus forms anywhere during the second or third week. The abscess should be opened at its most superficial situation and with as little anatomical damage as possible.

Large incisions should not be made as they are responsible for the development of hernia. If pus is behind the peritoneum it must be approached through the side. Exploratory punctures should not be made except in subphrenic and pelvic abscesses. No special attempt should be made to remove the appendix if it is not easily found. It can be removed about three months after opening the abscess. Drainage tube is put for about forty eight hours.

Chronic Appendicitis,—The etiology and pathology are practically the same as in the acute condition and the lesion may be the after result of an acute attack which has apparently subsided. In many cases the appendix is found to have kinked the lumen obstucted by a concretion or a distinct stricture present. In the young, a capricious appetite, colicky pains at times with nausea and vomiting are suspicious of chronic appendicitis. The boy is afraid of playing rough games or he might not bear anything firm round the abdomen. This combined with tenderness in Munro's point makes diagnosis certain.

Sometimes there is persistent abdominal discomfort increased by exertion or constipation, not necessarily referred to the right iliac region. Side by side there may be anaemia. Sometimes there may be chronic diarrhoea and colitis. Duodenal ulcer may be

simulated by the presence of hunger, pain, hæmatemesis and mataena.

There is present at times a small area of tenderness a little below and to the left of the unbilicus and occasionally over the pylorus. If pressure is kept over Munro's point and at the same time applied over each of these other two tender points it is often found that the tenderness over these two points is abolished or lessened.

Differential diagnosis:—***Tuberculous glands in the right iliac fossa***—There may be local pain and distress. But there is not the same digestive disorder, and the tenderness is nearer the middle line and more diffuse. It is always well to examine the tonsillar lymphatic glands which when they show enlargement suggest tuberculosis.

Neuralgic spots:—May occur in adults similar to those in intercostal neuralgia. These spots are nearer the middle line, bilateral and on palpation of the terminal ends of intercostal nerves, areas may be found there as well.

There may be a condition of *Incipient Inguinal Hernia* in which the pain and tenderness are situated over the internal abdominal ring. But night's rest and spica bandage give relief.

Rupture of Rectus fibres:—The condition is rare, the pain is superficial and is situated over the outer border of the rectus.

Visceroptosis in woman:—Movable kidney is always felt and rest gives relief.

Early tuberculous Coecum:—Frequency of colicky pains in the right Iliac fossa without nausea is suggestive of obstruction up the coecal region generally due to tuberculosis.

Treatment.—Operation should be done as soon as appendicitis is diagnosed. There is always the risk of chronic condition flaring up into an acute attack. In the majority of cases the Burney's incision gives a good view of the region and facilitates removal of the affected appendix. But where symptoms of obstruction due to chronic adhesions etc are present the abdomen is best opened through the fibres of the right rectus. It is better than opening the abdomen by retracting the right rectus inwards as there is every likelihood of cutting the nerves which may bring on the formation of a ventral hernia later on.

REFERENCE.

Surgery of childhood	*John Fraser*
Surgical Diagnosis	*De Quervain*
System of Surgery	*Choyee and Beaty*
British Medical Journal	*18th April 1925*
British Medical Journal	*10th December 1927*

ARTIFICIAL PNEUMOTHORAX TREATMENT OF PULMONARY TUBERCULOSIS. *

BY

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Of all the means suggested for the treatment of pulmonary tuberculosis during the last quarter of a century, none has stood the test so well as the Artificial Pneumothorax Treatment. Although recommended on theoretical grounds more than a century ago, when James Carson of Liverpool urged its trial in 1821, it is only during the last few years that the method has been used extensively enough with the result that it has now come to occupy a very high place amongst the various methods of treatment of tuberculosis. It was over 60 years after its first recommendation, that Forlanini and Potain (about 1888) reported the first cases to actually receive the treatment. However upto the beginning of the present century, the methods of controlling and safeguarding the treatment were practically nonexistant; till Saugman (in Denmark) made the important addition of a water manometer in 1904. Very soon after this however, the treatment spread far and wide over the Continent, Forlanini in Italy being rapidly followed by Brauer in Germany, the method passing to France in 1908 and to America and England in 1911. It is now occupying a prominent place in the therapeutics of pulmonary tuberculosis in all the well advanced civilised countries who are unanimous about its influence in the properly selected cases.

Perhaps the chief reason why this method of treatment has received so universal an application, is the fact that while almost all the other remedies and methods put forth for the treatment of pulmonary tuberculosis are applicable for their supposed curative effects only during the earliest stages of the disease, this—the A. P. treatment can be recommended for the far advanced cases, cases showing signs of destruction and cavitation, which were up to now considered doomed to a fatal end. Almost all the workers all over India have the most unfortunate experience of getting far too many of such advanced cases, and it is rather unfortunate that this method which gives at least a ray of hope for the many doomed before, should not have attracted sufficient attention in our country where it is probably most needed.

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In all the methods of treatment, " rest " fills a place of great importance. The part affected should get as complete a rest as possible. However, till the elasticity of the lungs was discovered and the knowledge put to practical use by the production of pneumothorax, it was possible to give only partial rest to the lungs by indirect methods e.g. complete bodily rest etc. By introducting air in the pleural cavity of the affected side, we form an air cushion which acts as a splint to the affected lung, and just as an ordinary splint prevents movements at the joint or bones where it is applied, so this air cushion prevents the lung from movements of expansion and contraction during the process of respiration, thus giving more or less complete rest to the diseased part--the affected lung. This is one of the main effects of the A. P. treatment. The more complete the pneumothorax, the more complete is the contraction of the lung and the more complete the rest it gets; thereby giving the best chance to the fibrous tissue to form and envelope the diseased part and produce " cure ". Again where there are cavities in the affected lung, by contracting the lung, we bring the walls of the cavity nearer each other, thereby diminishing and finally obliterating the space, which often acts as a reservoir of toxins and bacilli. It is for this reason, that often during the earlier part of the Art. Pneumothorax treatment, the patient brings forth large quantity of sputum, as it is squeezed out of the cavities and the tubes by the contraction of the lung. The diminution and obliteration of the cavities with the removal of the constant touch of the toxins together with the stagnation of lymph brought about by the collapse, stimulates the fibrous tissue to gain the upper hand and obliterate the cavities more or less permanently. Another effect is that as a large amount of the sputum which was collecting in the cavities and the tubes is squeezed out, there is so much less toxaemia and therefore greater chances for the bodily forces to fight against the remaining infection. Thus often the collapse of the lung has a direct influence on and stops the spread of the disease which would not yield to any other form of treatment. Again the spread of the infection to the other lobes of the lung on the affected side and particularly to the opposite lung is usually caused by the bacilli-laden spit being coughed up the affected side and aspirated down into the tubes of the healthier lobes. By collapsing the lung and thereby preventing the cavities and the tubes from accumulating spit, we greatly minimise or prevent the danger of the spread of infection to the other side.

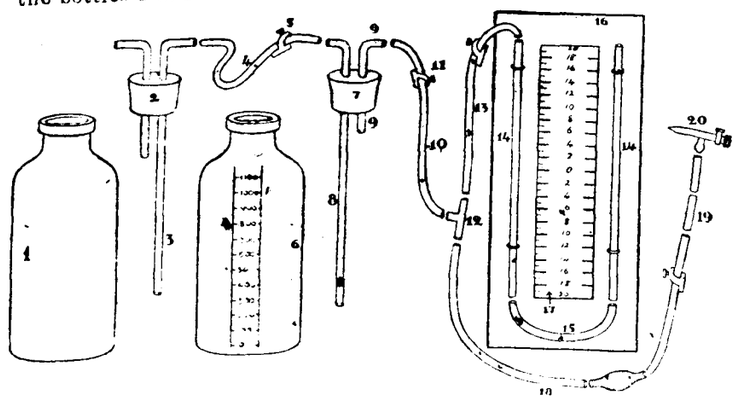
The apparatus required to carry out the treatment is very simple and inexpensive. Although a good apparatus can be obtained very cheaply, yet quite a nice apparatus can be made up

in 1/5th its cost or even less, by assembling the following parts, most of which can be found in the dispensaries of practitioners even in far off places.

Nos. 1 and 6 (Fig. 1) are empty glass bottles, any shape will do but they should have a capacity of at least 1000 c.c. No. 1 is called the " Pressure Bottle " and is filled with some antiseptic solution. No. 6 should have markings in 50c.c. from the bottom. This can easily be done by painting a straight strip on the bottle with any ordinary oil paint and after it has dried, measured quantities of fluid in 50 c.c. are added to the bottle and the levels pencilled on the painted strip. This is the " Gas Bottle "

Both the bottles should have tightly fitting corks (Nos. 2 & 7) bored with two holes through which pass two glass tubes, one of which should be long enough to reach just the bottom of the bottle. (Nos. 3 & 8).

The two bottles are connected by a piece of ordinary rubber tubing (No. 4), with a clip (No. 5), so that the flow of fluid from the bottles No. 1 to No. 6 can be stopped whenever it is so desired.



The smaller tube (No. 9) passing through the cork of the Gas bottle (No. 6) is connected by a bit of rubber tubing (No. 10) with a clip (No. 11) to a glass T-piece (No. 12), another end of which is joined by another bit of rubber tubing (No. 13) with a clip to the top end of the Manometer tube.

The Manometer can similarly be very easily rigged up. Take two glass tubes (No. 14) of about 4 mm. bore and about 35 to 40 cm. long, connect them at the lower end by a piece of rubber tubing (No. 15) and fix the tubes on a piece of thick cardboard or wood (No. 16). Take a strip of white paper as long as the tubes and mark out in half centimeters both upwards and downwards

from the middle which is marked as zero (No. 17); each half cm. mark is then marked up and down 1, 2, 3, etc. Paste this strip of paper on the cardboard between the two glass tubes and pour any coloured fluid in the tube till the upper level reaches the point zero, and the manometer is ready for use.

To the third remaining end of the T-glass piece (No. 12) is attached a piece of rubber tubing with a clip (No. 18) with a small piece of glass tubing near the other end (No. 19) to act as a window. The other end of the rubber tubing is attached to the needle (No. 20).

This is all the special apparatus that is required for efficiently carrying out the treatment and I have particularly gone into the details of each part to show how easily and how cheaply the whole apparatus can be made up from things found in most distantly removed dispensaries.

As in the case of all other treatments, the success of Art, Pneumothorax treatment will greatly depend upon the proper selection of cases. The ideal case is one which is not very far advanced, where the disease is localised to more or less one lung, where the other lung does not show any clinical signs and the general condition of the patient is not so bad as to prevent further surgical interference. While it is advisable that the other lung be free from the disease and be able to stand the strain of physiological functions single-handed during the collapse of the affected lung, it will often be found in practice that it is affected as well. This will particularly be the case, if X-Rays are employed in checking the diagnosis and extent of the disease. A slight infection of the better lung, particularly when there are no clinical signs is not a contraindication and should not prevent one from giving the patient a chance. On the other hand, no clinical signs may be present at all and still the disease might have involved practically the whole of the better lung except the surface. If such condition is found under the X-ray examination, the case is unsuitable. If the disease on the other side though extensive appears arrested by the X-ray examination, the treatment need not be ruled out. Very early cases need not be rushed for Art. Pneumothorax treatment but should first be treated on conservative lines e.g. sanatorium treatment, absolute rest, fresh air, good food etc. If the infiltrative process progress inspite of such treatment, no more valuable time need be wasted and one should not wait till the lung has broken down into cavities, but should give the patient a better chance by instituting pneumothorax. Another indication for pneumothorax is the serious recurrent hœmoptysis

or a severe hoemoptysis uncontrollable by other means, endangering the life of the patient. In such cases the Pneumothorax is an emergency operation and the quantity of gas passed in should be large enough to produce positive pressure at once and contract the lung, thereby stopping the bleeding.

Advanced disease in the better lung, advanced emphysema, Asthma, severe dyspnœa, severe toxæmia, cyanosis and engorged right heart, serious heart trouble, diseases of the kidneys, intestinal tuberculosis, diabetes and such other debilitating diseases usually contraindicate Art. Pneum. treatment.

Before actually commencing the treatment, the patient should take complete rest in bed and a proper record of his temperature and pulse be made. His sputum should also be examined and the daily quantity noted.

All cases, at least for the first puncture should be given Morphia with Atropine about half to one hour before the operation. The point of first puncture should be as far away from the affected part of the lung as possible as there are likely to be adhesions near the diseased part which may come in the way of the operation; and as, usually the upper part of the lung is the most affected, first puncture may be made in the 5th or the 6th space in the anterior axillary line. The skin over the spot selected is thoroughly cleaned by spirit and painted with Tinc. Iodi. Then take 2% Novocaine solution (in normal saline) and inject the whole tract from the skin down to the pleura slowly drop by drop, the skin and particularly the parietal pleura receiving thorough attention. One of the chief dangers is pleural shock but if care is taken to thoroughly anæsthetise the pleura, the chances are very greatly reduced.

Then take the pneumothorax needle (Fig. 1, No. 20) which should always be kept in spirit, and flame it. It is very necessary that there should be no atom of moisture in the needle. Examine the apparatus and see that the syphon is working and that there is fluid in the gas bottle upto the zero mark. Next, close the clip No. 11 but clips on the needle and the manometer tubes must remain open. By closing the clip No. 11 the needle still communicates with the manometer but is entirely cut off from the gas bottle i.e. no gas can enter pleura or a vein or artery when punctured by the needle. This is very essential, as thereby we prevent the second great danger—viz. air embolism. Having thus examined the apparatus, fit the needle to the rubber tubing, and pass it slowly down the same passage as the anæsthetising needle

till the resistance of the pleura is felt and then gently push forward. As soon as the needle enters the pleural space, the fluid in the tube of the manometer attached to the rubber tubing will be sucked up above the zero mark and will show marked inspiratory and expiratory fluctations the fluid in the other tube of the manometer similarly following below zero with fluctuations i.e. the manometer shows negative pressure. Until the manometer shows wide fluctuations during inspiration and expiration which is a certain sign of the needle being in the pleural sac,—gas should not be liberated and if this precaution is strictly followed there will hardly be any danger of gas embolism. When it is certain that the needle is in the pleura the pressure is noted down and the clip No. 11 is opened up, so that the gas in the gas bottle passes into the pleura. As the intrapleural pressure is always negative, before opening the clip on the gas bottle, the two bottles may be so arranged that the level of the fluid in the "pressure bottle" is lower than the level of the fluid in the "gas bottle", thereby producing a negative pressure, which should however be less than the negative intrapleural pressure to allow the gas to pass in freely. About 200 to 300 c.c. of gas are quite enough for the first fill, (the intrapleural pressure should not be made positive till about the third or fourth puncture at the earliest). Having put in the required quantity of gas, the clip No. 11 is again closed and the final pressure taken and noted down. The needle is removed and the puncture sealed with collodion. A pad and bandage to prevent surgical emphysima is rarely required in those cases where there is incessant spasmodic cough.

The gas used varies between Oxygen, Nitrogen and purified Air. Oxygen is very rapidly absorbed and except in the first fills is now rarely used. There is little to choose between Nitrogen, and purified air, and as the latter is available any where and at any moment, most of the workers now use air, purified by passing it through some strong antiseptic solution, and allowing any suspended impurities to settle for some hours.

The refills are usually easier than the first puncture and the same procedure is followed except that the Morphia-Atropin may be omitted after the second puncture. However Novocain must be used thoroughly, and the other precautions must be taken as in the first puncture. The second puncture is usually made the next day and the following ones are done after longer and longer intervals according as the gas gets less and less absorbed. At least about 3 or 4 fills are made before the negative pressure is brought down to near the zero or the positive side. After that it is advisable

to check the increase of pressure by X-ray screening and the pressure need not be raised more than is necessary just to keep the lung thoroughly compressed, thereby preventing undue stretching of the mediastinal pleura.

I have entered into these details just to show how easy it is to rig up the apparatus even in the far off places and how the treatment can be given safely by any careful Medical man, without having any extensive experience of doing the operation before. It is a matter of regret that even in the far advanced cities, it is difficult to find even a single practitioner doing the A.P. treatment, with the result that the sanatorium patients (who begin their A.P. in the sanatorium) find themselves stranded and they have either to stay for a very long period in the sanatorium, which many of them cannot afford to do; or to give up the treatment in the middle with all its consequences. Government can set an example by giving facilities and training to all their Civil Surgeons at least, so that they may be able to give refills. This will relieve a certain amount of unnecessary strain on the sanatoriums, while it will not cause any increase in expenditure as most of these refill cases do not require hospital accommodation. They come in for refills on the appointed date and leave the hospital within a couple of hours. The Municipalities and District Local Boards should also have certain centres in larger cities and towns to enable their patients to stay in their own districts and be treated. It should be remembered that even if the A.P. treatment does not cure all far-advanced cases, it enables many of them to be self-supporting, it makes the sputum of many more, free from bacilli and therefore renders them free of danger to others, a great advantage to our poor country, where unfortunately hardly anything is being done in the prevention of the disease.

BACTERIOPHAGE.*

BY

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The subject of Bacteriophage has attracted a great deal of attention at present. It no longer remains to be of academic interest. It has entered into the domain of practical therapeutics

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since bacteriophage—the natural enemy of bacteria, has been yoked to the service of man. What is there that the human ingenuity is incapable of achieving? It sets even this ultra-microscopic organic life to work for man's advantage. Dr. D. Herelle, the famous French bacteriologist, really deserves the compliments of the profession, for discovering this wonderful agent and setting it to work, to destroy the micro-organisms which cause cholera, dysentery, typhoid, plague &c, He believes that not only dose it cure Cholera but also if the contaminated water were inoculated with the phage, it prevents the epidemic, by killing the germs outright. If his claims stand true, even partially, the benefit to humanity will be enormous. Our treatment then will be very simple, easy and natural, We have simply to let loose this enemy of bacteria, to make sport work of our enemy. It is alleged, that this is all that is needed to make us free from such a dreadful disease, cholera, which takes a large toll of human heads every year. This conception sounds funny and difficult to comprehend but the idea of little 'Fleas have lesser Fleas' and so on ad *infinitum* is not quite so novel to a Hindu mind.

Hindus do believe in the existence of numerous forms of life, too small to be perceived by physical agencies, in the human body. Probably it was reserved for the materialistic west to take cognisance of this natural and fierce antagonism in the bacterial world and use it to its advantage. To understand the rational use of this wonderful agent, which promises to prove so useful, it is essential to know about it in detail. I propose in this short paper to give broad facts about its nature, source, use and utility.

It is a well-known fact known to Bacteriologists that bacterial culture, very often without any apparent cause dissolves and disappears. This has been noted by several bacteriologists long ago. So early in 1896 Dr. Hankin, had observed that many species of bacteria and especially the cholera vibrio are destroyed in the water of the Jamna River. He was unable to solve the mystery and vaguely attributed this power of dissolution of Bacteria to some antiseptic principle in the water. Thanks to the genius of Dr. Herelle, who has solved this riddle and explained what remained a sealed book to us for such a long time. Nature seems very jealous. It does not divulge her whole secret all at once. Gradually and grudgingly it parts with its treasure in parts to those who coax her. We are not yet fully acquainted with this phenomenon, but nature holds out hope to reward with further light those who work in this field.

It was in 1915, that nature first unfolded her design of causing destruction of micro-organisms to Dr. Twort. While doing research work on the ultra-microscopic viruses he hit upon this phenomenon. He observed that his culture of cocci, which he had obtained from glycerinated small-pox vaccine was attacked by, what appeared to be some foreign agent. In the culture, this foreign agent first appeared in small circular transparent spot and started destruction from without inwards. He further observed that a very very minute particle of this transparent circular area —say a filtered drop of its dilution one in a million, when transferred to other vigorous cultures of micro-cocci, it exactly worked in a similar way. It would start work at the periphery and in a short time make a clean sweep of the whole culture. This process could be continued at will and indefinitely. It was however hedged round by one condition. It acted only, when the micro-cocci were living and actively proliferating. It retained its vitality for over six months but it will never develop and regenerate on any other medium but on the living micro-organisms. It does not stand excessive heat. It is destroyed when heated to 60°c. for an hour. As this agent, neither grows nor acts independently of living micro-organisms, Dr. Twort believed this lytic agent must be an enzyme, secreted by the micro-organisms, Evidently no body paid any attention to the researches of Dr. Twort and the matter rested there till nature again made a further revelation to Dr. D. Herelle, who not only put new life into the subject but brought it to the fore-front, by putting this agent to use in the treatment of diseases.

Dr. Herelle stoutly denies that the phenomenon observed by Dr. Twort is the one, which, he claims to have discovered but it is now unanimously agreed that the phenomenon is the same.

Dr. Herelle discovered this lytic agent in the intestines of man what Dr. Twort found in nature. In the intestinal contents of normal individuals and convalescents, there always exists those lytic principles which dissolve and destroy a certain number of bacterial species, belonging generally to the Coli, Typhoid and dysenteric group. Their action is thus not strictly specific, however confined to a certain number of microbial species. There also exists a lytic principle for plague which can be found in the excreta of convalescents from Bubonic plague. It can be easily filtered off, from the dysenteric stool, by passing emulsion through a procelain filter, as the bacteria fail to pass the filter. The filterate thus obtained is free from micro-organisms, both visible and cultivable. The lytic principle in the filterate shows the same

attribute. When a drop of this filterate is added to fresh broth culture of the dysentery baccillus, in a few hours it completely destroyes it. As stated above, it acts in a series i.e. a very minute quantity of the phage transferred to other fresh culture, it acts precisely similarly. It destroyes it in no time. Not only the virulence of the phage is neither lost, nor modified during its transference from culture to culture but on the contrary it is so much increased that it is active in a thousand million fold dilution. This appears so fantastic but none the less true.

Dr. Herelle's researches have been verified by a number of independent workers. In India Dr. C. R. Avari, has isolated a powerful strain of phage for B. Pestis. Strong strains of phage for Dysentery organisms (Shiga and Flexner), for B. Coli; B. pyocyaneus and for the gonococcus. Thus far every body is agreed. What is the nature and origin of this lytic agent, whose existence and power of destruction has been accepted? Here one comes at cross ways. Different workers lead you to different roads. Some believe it originates from the host. When the system is attacked, while preparing for a self defence against bacteria, it manufactures this agent for counter act. Some believe that this lytic agent is produced by some other species of bacteria on account of microbial antagonism. While others think that bacteria dig their own grave. This lytic principle—the autolytic ferment is secreted by the bacteria. Again some think that this lytic principle is nothing but filterable fragments—splitters of bacteria. It might be asked why bacteria break into splitters, which destroy the class which give birth to them. Does this not sound unnatural? One would reply in the negative when he would understand the design of nature which appears to be so uncharitable and cruel. With a view to perpetuate the vitality of the species, it is so provided by nature, that some of them after attaining maturity, should break into fragments and lead to independent existence. Their growth and development like all other living beings, depend upon the amount of food. They cannot out grow their food supply. Malthu's law of population is operating also in the bacterial world. When the food is limited, struggle for existence begins between these young splitters who have started independent existence and the original matured bacteria. As always happens in this material world, the fittest survive the struggle and weaker go to the wall. The design of nature thus operates not only to perpetuate their existence but keep the species fit. The study of these different theories, regarding the nature and source of this lytic principle is certainly very ineresting but it is not possible to supply the detail in a short paper. Let it be said in passing that none of the theories, including one

by Dr. Herelle which is mentioned below commands general credence.

Dr. Herelle holds that this lytic principle is secreted by "an ultra-microscopic organism, a filterable being, parasite of bacteria, endowed with functions of assimilation and reproduction".

This view is seriously challenged by other workers but Dr. Herelle has made out a case in favour of his theory, by advancing the following arguments :—

I. The dissolution of bacteria under the influence of the bacteriophage principle takes place in series.

II. The lytic enzymes emanate from material corpuscles which traverse filters; these corpuscles multiply in the course of the bacteriolysins.

III. All bacteriophagic ultra-microscopic corpuscles grown at the expense of any bacterial species, constitute one and the same antigen.

IV. The ultra-microscopic corpuscles possess a variable virulence.

V. By successive passages it is possible to increase the virulence of a feeble strain of Bacteriophage.

VI. Bacteria attacked by bacteriophage do not remain passive; they defend themselves and are even capable under certain conditions, of acquiring an immunity towards the parasite.

VII. The behaviour of the bacteriophage towards physical and chemical reagents is that of living being and does not agree with that of an enzyme.

VIII. It is possible to extract the lytic enzymes, free from the living bacteriophage micro-organism.

IX. Bacteriophage is capable of adaptation.

X. The properties of bacteriophage are essentially variable.

Those who are in a position to judge the worth of his work still remain unconvinced. He explodes the theories of other workers and probably successfully. In view of the fact the lytic principle acts in series and instead of getting exhausted, when transferred from culture to culture, its virulence is increased, the view that it originates from the host attacked does not look plausible. As the phage only grows in the presence of living bacteria,

at first sight, it would seem, that, it is these living beings which secrete the lytic principle—enzyme, but it is contented that these bacterial bodies only constitute its nutritrine medium, without which no living being can grow. From these conflicting claims, only one inference is possible, that, nature still withholds the secret on this and many other important points in connection with this discovery.

Dr. Herelle hasmade further progress. He carried his conviction to a logical conclusion. He proposes to treat cases of dysentery and cholera by bacteriophage. He claims to have successfully treated a very large number of cases of baccillary dysentery in Sudan where he is carrying on his researches. Recently, in Malay States, where the dysentery (Flexner) is very fatal, bacteriophage, which was supplied by Dr. Herelle himself, was tried in 22 cases. Every 12 hours, one tube of the phage was given orally to each patient. Total dosage of 3 tubes were given to each. Some were given a second course of the treatment. The results proved disappointing. The workers conclude that "it had no apparent influence upon the course of the disease due to this organism, nor did it eradicate the baccilli, from the intestines of those to whom it was administered."

To condemn a cure, after its limited trial, by a few workers, however competent is certainly not judicious. It deserves a further trial.

In India it was tried in three cases of dysentery (Y) by Majors Malone and Bird of the Central Research Institute of Kasauli. All the three patients were placed on rest and regulated diet and were given only Bacteriophage, which was prepared from a dysentery stool from a Calcutta Hospital, by diluting it with peptone water and passing it through a Chamberlain filter. This filterative was active against several strains of dysentery—Shiga; Flexner; Hiss and Y. The results of the treatment were very satisfactory. All the three patients got completely cured in a shorter time than usually taken when other treatment was adopted. There was a parell change in the clinical condition of the patients and in the fecal flora. The baccilli disappeared and the lactose Fermenters and streptococci appeared in large numbers. To draw any inference either for or against the value of any agent for a disease like dysentery (y) which is apt to be cured naturally is difficult. After giving due consideration to all possible factors, which affect the results, the workers still believe that Bacteriophage is a potent therapeutic agent and is well worth a further trial." Very recently, bacteriophage was

tried in an epidemic of Bacillary Dysentery (Shiga and Flexner) by Drs. Choudhry and Lt. Col. Morison of the Pasteur Institute Shillong with the following results:—

	Severe	Moderately severe	Mild
Number	18	19	43
Deaths	3	nil	nil

All the patients, who suffered from severe attacks were past recovery as they were merely living skeletons. These results are very encouraging. Last year in the Punjab Major Malone conjointly with Dr. Herelle, tried bacteriophage in the treatment—both curative and preventive—of cholera. As many as 41 cases were treated with only 3 deaths. The results are so very striking when compared with the results—68 deaths among 107 cases—obtained in cases treated by other methods, under identical conditions. In a village-Nawar in the Punjab it was used as a prophylaxis. The contaminated well water when inoculated with 30 c.c. of a culture of a selected bocteriophage completetly prevented further attacks among those who used this water. These observations and experiments have strengthened Dr. Herelle's belief that recovery or death depends entirely on the behaviour of the bacteriophage." If it is absent in the intestines of the patient, he invariably dies. If the bacteriophage is virulent, the patient makes a rapid recovery. Again if it is weak and gets stronger gradually, the recovery is protracted. He describes how the epidemic of Cholera begins and ends:—

"At the beginning of an epidemic there are disseminated in the environment the pathogenic bacteria, this is the period of the propagation of the disease. Then from the first convalescent, there are disseminated bacteriophages, which have acquired the power of killing and dissolving the pathogenic bacteria in his intestine. From this time more and more patients recover, bacteriophages become more and more disseminated. And the epidemic declines, finally to cease when contamination by bacteriophage becomes general."

Our treatment is thus reduced to simplicity. The aim and end of treatment is solely to help this nature's method of cure. These are extensive claims. In view of the fact that in India, a very large number of deaths from cholera take place every year, it is never too early to put this powerful remedy on a trial on an extensive scale. Roger's method of treating cholera is too clumsy to be of much use in Rural India. Rural India is too poor, too

ignorant, too superstitious and too conservative to take advantage of costly, clumsy and complicated agents of cure. Rural India still solidly stands for simplicity in all departments of life, medicine included. Will bacteriophage supply the want? Let us hope it will.

MEDICINE IN VEDIC TIMES.*

BY

DR. EKENDRA NATH GHOSH, M.Sc., M.D.

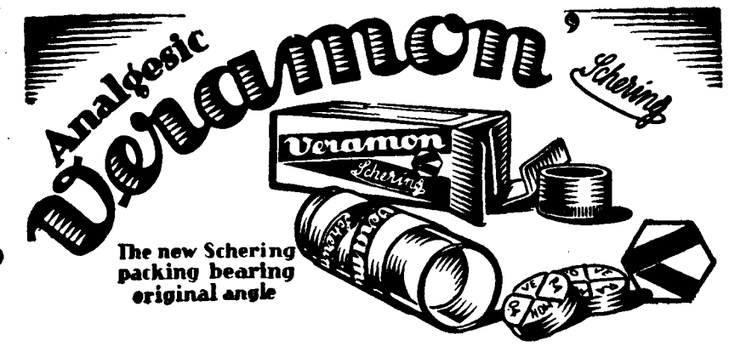
Professor of Biology, Medical College, Calcutta.

(Continued from p. 846 of the October '29 issue of the Antiseptic.)

Diseases of the Alimentary Canal. The diseases of the mouth have already been noticed. Next comes the *batasa*. Although, following the work of Susruta, we place the disease under this heading, the term seems to have been used in a general way, perhaps for inflammatory swelling. The frequent accompaniment of *batasa*, cough and delirium (A. V. V 22. 2) and the definition of Susruta make us think it as an inflammatory swelling of the pharynx (acute septic oedematous type). The batasa of the limbs and joints (VI, 14.1) necessarily leads to the idea of inflammatory swellings. The *batasa* with its "red" epithet further confirms the above idea (VI, 127. 1). Lastly (VI, 127. 2) the version, that the two testicles which are yours, are laid away in your armpits, perhaps refers to some septic condition accompanied with inflammation of the two testes and later replaced by those of the axillae (axillary glands); the meaning of the passage perhaps indicates that let the testicular affections subside and be replaced by the inflammation of the axilla which is far less harmful.

Next we get the term *hedyota* (R. V. 1. 50. 11; A. V. 1. 22; 1; VI. 24. 1,). It has been taken to be a heart burn In Rigveda the association of this condition with jaundice perhaps indicates some actual relationship. It evidently means the chronic gastric catarrh which extending to the duodenum may lead to jaundice. From the mantra we understand that the exposure to the sun's rays and the use of red colour (perhaps covering the body with red cloth) were in vogue for treatment. The chronic gastric catarrh caused by excess of alcohol and giving rise to (morning) sickness is mentioned as *surama* in Rigveda (X, 131. 5; V. S. XXI, 42).

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



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Next we come to Apva (R. V. X, 103. 12; A. V. III. 2. 5; IX. 8, 9; Vaj. Sam. XVII. 44). It is distinctly said to be a disease of the abdomen (inside). The disease is found to have been invoked for entering into the body of the enemies and seizing their limbs. It has also been requested to tempt the mind of the enemies before entering into their body. Lastly, it has been said that let their hearts burn from grief. All these passages lead us to the following conclusion: The disease generally used to break out in armies, perhaps caused by partaking of unwholesome diet. It used to produce cramps of the limbs and had a high mortality. It is some form of acute entero-colitis, perhaps cholera.

We have mention of a condition *ropana* (IX. 8, 19) meaning a griper. It indicates intestinal colic.

We get the name of Kahavaha (IX. 8. 11) which is said to flow out of the abdomen through external aperture. The name perhaps means one flowing with sound, The lenicographers take it to be "a rumbling noise in the bowels" (Monier-Williams). It is thus a condition of intestinal flatulence giving rise to barborygmi.

The name *visuchika* does not occur in Rigveda or Atharvaveda, but it is found in white yajurveda (XIX. 10). The term is at present meant for cholera. The name indicates one which gives rise to pricking sensation. Evidently it is diarrhoea due to indigestion. It does not seem to be cholera.

Lastly we have the mention of hæmorrhoids in white Yajurveda (XII. 98).

The name of the disease *hariman* is seen in many places (R. V. 1. 50. 11; A. V, I. 22. 1: IX. 8. 9; XIX. 44, 2). The disease was characterized by the yellowness of the limbs and the colour has been compared to several birds with greenish yellow colour. It is jaundice. The exposure to sun and enclosing the body with red-coloured cloth are also indicated in the incantations against the disease.

Diseases of the Respiratory system.—We have the mention of cough (XI. 2. 22) accompanying the fever. The term *Viklindu* is found in Atharvaveda (XII. 4. 5). We have a term *vikleda* which means moisture and the present illness may have been so named as arising from moisture, that is, exposure to damp and rains. The lexicographers call it a catarrh. It may be a catarrh of the throat or bronchial catarrh.

Lastly we come to consider the disease *Rajayakshma*, which indicates pulmonary tuberculosis (R. V. 1, 161. 1; A. V. III, 11. 1:

XI, 3. 39; XII 5.; XII. 7 II; XX 96'6). The disease is simply mentioned and no detailed description is available.

Diseases of the circulatory system.—We have the mention of *Hridayamaya* in Atharvaveda (V. 30. 9; VI. 14. 1; VI. 27. 3) We have the disease named in connection with the mantra against batasa. We also find it noted that it affects the bones and joints. Under the circumstances we may probably take it to be infective. Endocarditis accompanying septic œdematous pharyngitis with infarctions in bones and joints. It may also indicate the oedematous condition of the body (with limbs and their joints) accompanying myocardical affection with failing compensation.

We find the name of a disease, *vilohita* in the Atharvaveda (IX. 8. 1; XII. 4. 4). The meaning of the name is usually taken as want of red colour and in that case it may indicate anæmia.

Diseases of the Lymphatic System.—We find the mention of at least three conditions which indicate the affection of the lymphatic system. One of two goes by the name *grahi* (R: V. X. 161. 1; A. V. II. 9. 1; II. 10. 6; III. 11. 1; III. 2. 5; VI, 113. 1; VIII. 2. 12: XII. 3. 18; XVI. 8. XX. 96. 6.) From the number of references to the disease, it appears to have been a common complaint. It is said to seize the joints and in one passage it has been said to have attacked a boy. The commentator wants to say that it attacks the joints of the body in new moon and others (full moon). From these notes we many think it to be a filarial disease which, as we know, manifests its attack at regular periods often coinciding with the full moon and new moon days.

In Rigveda (VII. 50. 2) we have the mention of *sipada* which is said to give rise to swelling of the knees and ankle joints. This seems to be no other than *slipada*, the elephantiasis of the leg. The swiftly flowing rivers have been invoked for its prevention. It was also known as *simida* (R. V. VII. 50. 4; A. V. IV. 25. 4.)

The next affection is one of the lymphatic glands and is known as *apachit* (A. V. VI. 25. 1; VI. 8. 3, 1: VII. 74 (78). 1; VII. 76. (80). 1.) It has been said to affect the glands of the neck, back of the neck, armpit, and those of the groins. It has been known to burst out and throw out dry (caseous) matters. The disease has been divided into several varieties, one reddish white (perhaps the first stage of the simple enlargement), one white (perhaps a stage in which the skin overlying the gland is pale and bloodless from pressure), one of black colour (one with pigmented surface) and one of red colour (with the overlying skin inflamed). The *apacit* has also been known to give rise to suppuration. All these pass-

ages distinctly point to the affection as tubercular lymphadenitis. Lastly the treatment of the affection by exposure to sun and moonlight has also been referred to.

Diseases of the Nervous system.—In addition to the several nerve symptoms, as headache, etc., referred to already, we find the mention of *pramota* (dumbness) A. V. IX. 8. 4) and *jambha* (A. V. II. 4. 2; VII. 1. 16) The latter affection has been called jaw-snapping and tongue-wrencher. Therefore it seems to be either lock-jaw or epilepsy.

Diseases of the sense organs.—We have already referred to the diseases of the ear. Of the diseases of the eye we find the mention of *dushika* (A. V. XVI. 6. 8), that is, the rheum of eyes (pathological when formed in excess) and *alaji* (IX. 8. 20) found in later Ayurvedic works. The *alaji* is an inflammaatory swelling at the cornea-scleral junction. It may be phlyetinudar or some other form of conjunctivitis.

Diseases of the skin.—We have the mention of *pakaru* (ulcer) in vajasaneyi samhita (XII. 97), *paman* (A. V. V. 22. 12; T. S. VI. 1. 3, 5) and *svitra* (in Panchavinsati Brahmana). The *paman*, accompanying the fever seems evidently to be herpes. It has been described in Ayurvedic works. The *svitra* is Lucoderma.

Diseases of the joints.—We find the mention of two diseases under the names of *Viskandha* (A. V. 1, 16. 3; II. 4. 1; III. 9. 2. 6; IV. 9. 5; IX. 9. 5; XIX. 34. 5; T. S. VII. 3. 11) and *Samskandha* (A. V. XIX. 34. 5), both pointing to the affection of the shoulders. The first named disease, as seen from numerous references, seems to have been very common. As the joints are said to have been held fast (with claspers), it seems to us that the affection is a chronic arthritis (or fibrositis) of the shoulder joint greatly limiting its movement. Its treatment by hemp and *jangida* has been mentioned. The other disease seems to be an ankylosis of the shoulder joint. Mentioned in the same hymn as the other one, it seems to be an advanced stage of *Viskandha*.

Surgical diseases.—We now deal with a number of affections which are at present included in modern surgery. *Upachit* is mentioned in Vajasaneyi samhita and has been thought to be a tumour by the commentator. *Glan*, (boil), mentioned in A. V. VI. 83. 3, in connection with *apachit*, represents its suppurative stage. *Pakaru* (ulcer) is mentioned in V. S, XII. 97. *Vidradha* (abscess) is mentioned in A. V. (VI. 127. 1; IX. 8 20); the mention of a splinter of patasa is found in the incantation against the disease. *Visalpa* or *Visalpaka* (A. V. VI. 127. 1; IX. 8. 2, 5, 20; XIX. 44. 2) mentioned in many places has been said to affect the limbs, ears

and eyes. It seems to be the *visarpa*, that is, erysipelas. The creeping extension of the disease, which the name indicates, is well-known to us.

We find the mention of a remedy for fracture or dislocation in Paippatada recension of the Atharvaveda (XX. 5. 2) under the name of *vilishta-bheshaja*, the name pointing to the indication for its use. Is it *asthisamhara* (*vitis quadrangularis*) ?

Lastly we find the treatment of external hæmorrhage by *dhanu* (A. V. 1. 17-4) which has been taken to be a sandbag by the oriental scholars. It is more probably a flexible (bowed) stick which can be applied to the proximal region of a bleeding part and pressure adjusted by cords round the other side of the limb and tied at the ends of the stick.

Obsterical Notes.—In A. V. VI. 17. we find a prayer for the prevention of premature labour.

In the same work (I. 2. 4; II. 3. 2; VI. 44. 2) we find the mention of *asrava* which has been wrongly defined as diarrhœa by the oriental scholars. We find it mentioned that let *munja* (a kind of grass—*Saccharum arundinaceum*) stand between the *asrava* and disease. In the Punjab there is still a custom of burning this grass during labour (See Indian Medicinal plants under the plant). We thus think it to be a delivery and the passage evidently means to prevent any disease after delivery (puerperal infection). It is to be understood that puerperal diseases were then recognised and dreaded. The ant's earth (ant hill of white ants) was also considered preventive of any disease after delivery.

Concluding Remarks.—We have made a brief survey of what is available of the healing art in the Vedas. However poor and primitive the knowledge might have been, it distinctly presents before us the gradual development of medicine beginning from the most primitive stage at the time of Rigveda and slowly developing through the periods of the other vedas, particularly that of the Atharva-veda. It should also be remarked that the science and art of medicine, so far developed in the Atharva-veda times must have formed the ground work of the highest development we see in the classical Ayurvedic works.

CASES AND COMMENTS.

AN ACTIVATING CAUSE OF ACUTE RHEUMATISM.

BY

DR. SHAPURJI ARDESHIR BANKER, M. D. BOMBAY.

In India though acute Rheumatism is not so common as in England from observations in early cases, I have noted that it occurred even in children of well to do persons where there was no question of dampness or deficiency of food arising.

In these early cases, I have noted the infection occurring after an attack of tonsillitis, caused by the children inhaling dust coming from neighbouring houses which were being newly built.

The particles of lime and cement contained in the dust, wafted to the children by the wind, which they inhaled were the chief cause of trauma to the mucous membrane lining the tonsils and naso-pharynx through which the causal agent of acute Rheumatism a streptococcus enters the system. The tonsillitis is a part of acute Rheumatism in many cases, and the virus can enter the system through even a partially removed tonsil or other parts of the naso-pharynx specially the lymphoid tissue. Dr. Miller regards environment as the chief factor and finds that industrial towns suffer more.

It is probable according to my view, that the air of such towns is full of dust laden with other irritants besides lime and cement plus the streptococcus of Rheumatism. Such dust contains gross particles visible to the unaided eye.

If these children be protected from inhalation of dust from such buildings under construction, of those undergoing repairs and replastering and limewashing, to me it appears a great deal of acute Rheumatism could be prevented.

The children should be removed from such houses to another locality till this sort of dust nuisance has been entirely done away with.

I will narrate one recent case bearing on this point:—

A young boy M. N. aged 11 years was keeping good health and attending school; he had his tonsils partially removed about four years before the present complaint;

he was of the lymphoid type. He developed fever, sore throat and nasal catarrh which could be attributed to Influenza which in sporadic forms is prevalent in Bombay; as acute Rheumatism is not common in Bombay my suspicions did not arise, but the only thing that kept me thinking was the muffled and weak first sound of the heart at the apex, weakness out of proportion to the illness with a temperature ranging from 99 to 100°F. The boy was given complete rest and a mixture containing Potassi Citras and Capsules containing Quinine Bihydrochloride were prescribed. After three days the temperature was said to be normal and in spite of instructions some solid food was given and he was taken to enjoy a cinema show. The next day the temperature rose to 103° F. and acute pain developed in the right foot metatarsal joints.

The diagnosis was settled as to acute Rheumatism having affected the myocardium even before the serous lining of the joints. He was put on a mixture containing Sodii Bicarb, Sodii Benzoas, Sodii Salicylas and Pot. Citras and complete rest in bed was ordered.

Within three days the pain in the right foot subsided, but one night about the sixth day he developed acute pain in the appendicular region which disappeared after enemata of glycerine ond olive oil, and increasing the dose of Sodii Salicylas in the mixture. This showed the Rheumatic virus had affected the appendix. After about 18 days the fever came down to normal.

As Acute Rheumatism is not common in Bombay, the father, an educated man, asked me whether Rheumatism affected young boys, as he thought it was a disease of elderly people. With that idea, in spite of my warning him, he was not alive to the seriousness of the complaint and finding the temperature normal and having remained so for a week and the boy asking to be allowed to move about, the father thinking lightly of the matter permitted him to move about in the house, read his lessons and play a game of chess. The boy at the same moment developed a bad attack of Tachycardia from which after great anxiety he improved after complete rest, and internally Potasium Bromide, Adrenalin Chloride solution by mouth. Tinct strophanthii. Tinct Digitalis and Sodium Salicylas given guardedly.

The father now throughly alive to the situation asked me how the infection of rheumatic fever was carried to his son; the

repairs going on his house before the illness at once occured to me and I told him the infection of Rheumatism was carried to his son through inhaling the dust; as the boy was very playful he was constantly on the ground floor flat where the renovation of the walls was carried on. He was of a lymphoid type, the tissue most receptive to the virus.

In older persons the lymphoid tissue shrinks and does not allow easy access to the Rheumatic streptococcus, hence acute rheumatism is a disease of children.

In this case the boy had abundant supply of rich food containing all the vitamins, his surroundings were healthy, there was no dampness in the house, the only cause was the dust flying about in the air from the scrappings of the walls of the house having been inhaled.

The dust contained lime and cement and possibly the streptococcus of Rheumatism.

One cannot say whether the streptococcus in the lime and cement medium assumes the special characteristics of Rheumatism streptococcus or that the lime and cement first irritate the lymphoid tissue and in conjunction with the streptococci ordinarily present in the nasopharynx with the lymph and serum media present there, make the streptococcus assume the specific virulence of Acute Rheumatism.

This can be ascertained by bacteriological researches.

I have seen other such cases in which my suspicion as to such sort of dust being the cause of Acute Rheumatism has been previously aroused and later confirmed.

Ordinary dust does not cause acute rheumatism, but either the trauma caused by the lime and cement to the lymphoid tissue is the initial cause through which the Rheumatic Streptococcus enters the system or lime cement and streptococci with a favourable medium in the tissue juice, the streptococcus assumes a charcteristic virulence and entering the system does not cause septicæmia, but the lesions in heart, joints etc, which are specia, features of acute Rheumatism a kind of subacute septicæmic fever.

In industrial towns of England there might be other irritants present in the dust laden air, which might be looked forl which in association with streptococcus Rheumaticus cause Acute Rheumatism.

The Virus of Acute Rheumatism is not conveyed from child to child through naso-pharyngeal secretions but through the gross particles of dust which are visible to the naked eye in the form of

cloud of dust wafted through the neighbouring houses, factories or places of industry to the house in which the child stays or such cloud of dust is raised in the house itself which is inhaled by the child or boy unconscious of the danger.

Acute Rheumatism is not common among elderly people though exposed to the same dust; it is because their lymphoid tissue is not so receptive as in young children, due to shrinkage.

In the light of the above causation the following simple measures adopted would prevent to a great extent the crippling ravages of the disease:—

1. If the children be grown up and able to understand, a face mask put on during the day when the work of repairs is going on in the house would prevent the inhalation of such dust.

2. Removing the children from the course of infection, that is the dust laden environment, that raise irritant clouds of dust to a locality where no such works are carried on.

3. In industrial towns regulations as to protection of streets from the factories spreading out dust in the air.

4. Houses under construction to be shut off from the streets and neighbouring residential quarters by large canvas or other protections.

Dampness aids the development of catarrh and tonsillitis but not Rheumatism, unless the particular kind of dust laden air is inhaled; but once acute rheumatism has affected the system, dampness makes the affection more severe, both the joint and cardiac lesions, in the latter case even leading to death.

Success in treatment with medicinal measures is achieved during the acute stage by absolute rest, mental and physical, and the exhibition of Sodium Salicylate; after recovery the recurrence and further inroads of the disease could be lessened by removing the children to a drier place; stone slabs flooring causes dampness and the children on the ground floor suffer more. Some sort of protection could be given to the feet from dampness by supplying cork soles in the boots of rheumatic children attending schools.

SUMMARY.

1. Rheumatism can occur in more than one child in the same family exposed to the same surroundings but such children do not convey the disease to other children in healthy surroundings; otherwise there would be an epidemic of Acute Rheumatic Fever as in Influenza, Diphtheria etc.

2. Dampness, poverty and endocrine deficiency play a part in preparing the soil for the above chief cause.

3. Children of lymphoid type are more receptive to the virus of Acute Rheumatism and therefore suffer more than normal children.

4. Rheumatism might be prevented to a greater extent by removing children from the source of infection, the environment in which the dust laden air containing some irritant plus the rheumatic streptococcus is present.

5. Rheumatism of joints and the lesions in the heart are made worse, in fact, the virus of acute rheumatism is aided in its activity by dampness indoors and outdoors, hence inprovement by medicinal means is hastened by removal to a dry place of residence.

6. By bacteriological investigations through cultural and animal experiments it can be ascertained whether the streptococcus of Rheumatism acquires special characteristics through its association with lime, cement, or other irritant media of convection or the latter act as irritants to the tonsils and lymphoid tissue and the ordinary streptococcus present in the mouth and pharynx acquires thereafter the pathological characters causing inflammatory rheumatic manifestations in the joints and heart. By experiments on animals by raising near their cages a cloud of dust containing cement, lime etc, from materials obtained from buildings under construction and thus imitating natural conditions, before trying artificial ones some conclusion might be reached.

A CASE OF PEMPHIGUS VULGARIS.

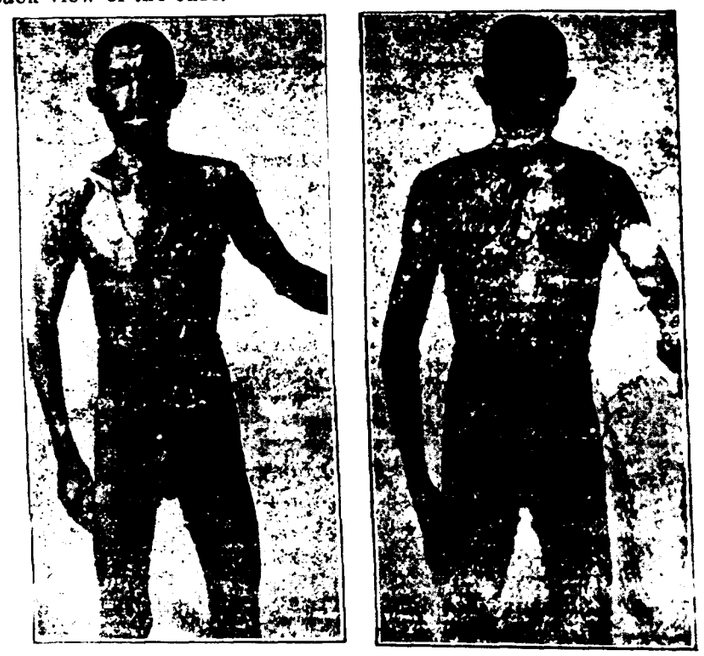
BY

M. K. KANE, M.B.B.S.

Mahuva (Kathiawar.)

A young Mohamadan came to me with blebs all over the body except head and face. He tried some house-hold remedies for a week but finding no relief came to me.

I am herewith sending you two photos showing the front and back view of the case.



The blebs were opened and dressed with the following ointment.

℞

Zinc Oxide	℥i.
Acid Boric	℥i.
Camphor	grs. xx.
Chloral Hydras	grs. xx.
Vaseline	℥i.

Internally he was put on a tonic mixture containing iron, arsenic and Quinine for a fortnight. During the time he was

having the above mixture his blood was examined for Wassermann reaction which was found to be negative.

Finding no change by the above mixture after a fortnight's trial, I injected ·45 Neo-Salvarsan inspite of the negative Wassermann and put him on a mixture containing Pot Iodide, Liq H. P. and cal. chloride etc., for ten days with no improvement in him.

Next I got some auto-vaccine prepard for him and gave him four injections two every week and watched the effect for a week after the last injection. But there was no benefit. The appearance of the crop continued.

All efforts having failed I was disappointed and did not know what to do. Lastly I gave him three injections of 4 c.c. each of his blood every alternate day and then stopped. A fortnight after the last injection, the condition of the patient improved very much and in a week more there was no trace of any eruption old or new.

I tried so many different things for the patient and somehow he got a cure at last after a long time.

But when I ask myself the question as to what cured him I don't know. Was the benefit due to medicines, injections etc., or was it a natural cure ?

CALOMEL IN TYPHOID FEVERS. *

BY

J. DE'SILVA,

NASSIRABAD ROAD, AJMER.

I wish you to publish in your esteemed paper and also get confirmed the results, obtained during the last 5 years, of injections, intramuscular of calomel in typhoid fevers.

The injections are to be done within the first 10 days of the disease.

The earlier they are made the better.

If done on the 7th day and 9th, the better but always before 10th day. Sometimes 3 injections are necessary, otherwise 2 only in alternate days or daily if later than the 7th day.

* The following further points have been elicited from the writer, which obviously are indispensable for a thorough understanding of the subject. [Ed. Anti.]:—(1) The exact dose of calomel: 2 grains for adults, half-dose for children. (2) In solution of a sterile oil: e. g. Olive oil. (3) Dosage to be followed 2 grains in each injection. 2 Injections daily between the 7th, & 10th day. (4) No precautions needbe taken at all; it only gives in some cases an asceptic abscess which requires only opening and dressing with Iodine for a day or two.

The results are:—

1. The fever gets down by degrees every day. one or 2 degrees or even more.

2. There is no temporism and even if there be any it disappears.

3. Delirium if any disappears at once.

4. No need of baths and other devices for lowering the temperature.

5. There is no necessity for any strict diet.

6. There is in every way a bright outlook for the patient.

7. No hemorrhage.

8. The fever does not last more than fourteen days atmost.

9. Convalescence more rapid; the only disadvantage in some cases is a small aseptic absces at the seat of injection and which, when opened, heals at once.

A FEW FACTS ABOUT PULMONARY TUBERCULOSIS.

BY

R. M. JHALA, L.C.P.S., (BOMBAY)

Medical Officer, Bhusan Dispy. Bhusan. (Sorath) Kathiawad.

There is a standing accusation against the Medical Profession that we are dilating on the literature of Tuberculosis with no corresponding increase in our knowledge regarding treatment. That whilst the literature on the disease is becoming fat, patients are getting thinner. But no, we are to acquit ourselves of this heavy charge. Medical Science has discovered a specific for Tuberculosis. Early diagnosis and Prophylaxis are our specifics. It is this incurable nature of Phthisis, that has inculcated in the minds of young outgoing students the faculties for minute observation and examination of patients for early diagnosis of the disease. To think of Tuberculosis in a doubtful case is a wise blunder. We must reserve our opinion and advise the patient to live a rational life, with plenty of fresh air and sunlight, till definite diagnosis is made after a few days further observation of the case. Patients or their relatives must be impressed that there is no medical treatment for Phthisis and the main line of treatment is open-air and sunlight.

Patients would not follow the sound advice of open-air and plenty of sun-light in the same spirit as we advise. In certain cases it becomes absolutely impossible to convince the parents or the patients of the benefits of light and air. Some amount of aversion exists on the part of these persons for open-air and sunlight, just as it was few years back for Hydrotherapy in Typhoid. It will take few years more to make the average patient understand the advantages of two of our mighty agents—light and air—in the rational therapy of this disease.

Patients and their relatives must be distinctly told to shake off their faith in the bottle of medicine in Phthisis. Ninety-nine per cent of cure depends upon the amount of good fresh air with plenty of tolerable sunlight, and hence it is more reasonable to avail themselves of this chance than to linger their faith on mixtures and powders. Ideal treatment would be to spend most of their time (except perhaps few hours at noon) below a tree in a cot or an arm-chair, in an open place, in a garden or such other place. The ridiculous fear of exposure to cold shown by some patients is at times deeply-rooted. Patients must be made to understand that no amount of cold would do harm when the body is well-covered with the exception of face. The whole success and secret of treatment rests upon plenty of open-air and sunlight. There is every chance for early cases to be cured if they follow this sound advice and avail themselves of the maximum amount of sunlight and open-air, with good nourishing food and rest.

Slow rise of Temperature and slight indisposition are frequently concealed, particularly by female patients and the disease is only recognized when these patients are compelled to take to bed.

Another important question is about Prophylaxis. Tuberculosis is a disease which should always be prevented. What we can easily prevent to-day, will be difficult or rather impossible to cure to-morrow. The two broad facts concerned in Prophylaxis are to make the soil resistant by plenty of good nourishing food, outdoor life and exercise in open air and secondly to avoid the seed, that is infection. Measures adopted to make the soil unsuitable for the seed are likely to yield more fruitful results as the germs of Tuberculosis are so broad-cast, in towns and cities that it is impossible to avoid the infection altogether. All infected persons do not get the disease. Most of us—thanks to our resistance—do not develop the disease. It is only in those persons who are weak and under-nourished, irregular in habits, spending

most of their time in dark unhealthy surroundings that the disease takes its root and induces Phthisis.

The patient suffering from Phthisis is the main factory for the production of Bacilli T. B. and hence the sputum coming out of this factory should be destroyed. In this way the number of T. B. germs can be definitely reduced. When the disease is well-advanced this factory in lungs cannot be closed but its products, that is sputum, which carries countless germs, and which is the fertile source of wide-spread dissemination of the disease, ought to be destroyed. This will do much to prevent infection to others. If the average public realizes these facts about Tuberculosis much can be done to lessen its incidence in towns and cities. The iron-hand of Tuberculosis when once grasps its victim just little firmly, it is impossible to rescue the victim from its clutches even by the long and mighty arm of our various remedial measures.

A CASE OF MALARIA WITH VERY PECULIAR AND VARIED COMPLICATIONS

BY

T. S. SURYANARAYANA IYAR, L. M. P.

Civil Hospital, Pauk. Upper Burma

The treatment of Malaria is considered to be very easy and simple, but this is not so in all its phases-especially when a case is accompanied with a series of baffling complications which have no bearing to one another. In such a case one is at his wit's end to adopt a proper line of treatment and has to be satisfied only with symptomatic treatment. The following illustrates such a case. U. H. M. aged 49 Burmah Male came under my charge for the treatment of high fever on the morning of 17-7-29. He said that he had the fever from the previous night.

Condition on admission. Temp. 104. Spleen enlarged 3 finger-breadths below the costal margin. Patient is pale and anaemic. Heart and Lungs normal. Tongue clean and dry. Pyorrhoea Alveolaris present. Appetite poor. Bowels regular.

Previous History. Patient is subjected to frequent attacks of fever accompanied with rigor and he comes from an area where Malaria is endemic in nature.

Treatment. Mist. Diaphoretea Oz. 1 every three hours. The temp. was 100 in the evening. Quinine Bihydrochloride (B. W. & Co's) Grs. 5 administered intramuscularly at 4 P.M.

18-7-29. Temp. normal. I was surprised to find the patient's scrotum inflamed and the epidermis was peeling away. The scrotum was cleaned and dressed with Boric Ointment (¼ B. P. Strength.) Patient was put on Mist. Quinine (grs. X) t. d. s. Bowels were regular. There was no fever in the evening.

19-7-29. Temp. normal. The inflammation of the scrotum is subsided and the skin is also getting healed, but another complication had set in. The patient had not passed any urine since last night. In fact he had no inclination to pass urine although his bladder was full. Urine was drawn and examined. Sp. Gravity, 1030. Reaction. Acid. Alb Nil. Dep. R. B. C. in fairly good numbers. Patient was put on Mist. Diuretica Oz. 1 t. d. s. with plenty of Barley water to drink and a hot water bag to the pubic region was also given. There was no appreciable improvement with this. Urine had to be drawn twice during the day. In the evening temp. was subnormal 95. Patient was in a collapsed state, with beads of perspiration on his forehead. A hypodermic injection of Strychnine 1/60 gr. and Digitalin 1-100 gr. was given at once and the patient came round. Passed urine thrice in the night.

20-7-29. Temp. normal. Passing urine himself. Bowels are constipated. Condition of the scrotum much better. Abdominal wall was slightly bloated. Patient uneasy on account of this. Enema was given but the result was not good. No fever in the evening. Condition of the abdomen same as in the morning. Enema was repeated with the same result as in the morning. Turpentine stupes was ordered.

21-7-29. Temp 100. in the morning. Condition of the abdomen worse. Tympanitis was marked. Liver and Splenic areas resonant. Abdominal wall rigid and tender. In fact the patient had all the signs of Intestinal obstruction. Enema was tried very cautiously but was not taken. Patient had not passed any flatus also. Pulse fast and thready. Patient's talk is in-coherent at times. Strychnine and Digitalin inj. repeated, Rectal Saline Oz. VIII was given and was retained.

21-7-29. 10 A. M. Condition same as in the morning. Constipation is absolute. Rectal Saline was repeated. Patient passed urine by himself 3, P. M. The patient is distinctly worse. Pulse failing. Abdomen very much bloated. Respirations shallow and laborious. Strychnine and Digitalin injection repeated but with temporary improvement. Patient slowly sank and died at 5-30 P. M.

SUMMARY.

The ultimate cause of death of the patient is apparently Intestinal obstruction. Laporatomy alone could have saved the patient

and this was suggested but had to be given up, on account of the un-willingness of the patient. Anyway this case had such a variety of complications quite un-connected with one another. I shall be very much obliged if any of the readers will enlighten me if they had come across such cases.

A CASE OF EXCESSIVE HAEMORRHAGE FROM THE EYEBALL.

BY

A. K. GHOSE,

M. O. Ambari T. E. Carron P. O. (Jalpaiguri).

On the 8th May 1929, I was called in to attend a case in an adjacent tea-garden. I reached the place at about 9 A. M. and found the patient in the following condition :

The patient, a hill-man (cooly) aged about 36 years was rather sickly in appearance. He was lying on his chest, with face turned downwards and head supported on a pillow, and blood was falling down in drops almost continuously from his left eyeball. Blood was coming out from beneath the upper-eyelid and no bleeding point could be detected. He was much exhausted from the excessive bleeding for the last 12 hrs. I was much frightened to see the pool of blood in front of him.

Previous History:—I heard from his relatives that on the previous night he was talking with his friends and enjoying a smoke; all of a sudden he noticed that blood was coming out from his left eyeball. They also told me that he had been suffering from chronic cough for the last 5 or 6 months and he had a violent fit of coughing that evening. The blood continued falling for about 2 or 3 hrs; they poured cold water over his head and eye and the bleeding stopped. Again after 3 or 4 hrs. blood began to fall down as before and continued to do so till I saw him at 9 A. m. next morning.

Circulatory system:—His heart was all right. Hands and legs were very cold probably due to excessive loss of blood. There was no rise of temperature. No history of Hæmophilia could be ascertained.

Resp. system:—There were a few rales over his chest.

No other abnormality was found.

Treatment:—The eye was thoroughly washed with normal saline; Sol. adrenalin chloride (1 in 1000, P. D. &. Co.) was dropped into the eye and a tight bandage was applied. One dose of Castor oil was administered and a soap water enema given to move his bowels which was much constipated. After 2 hrs. the bandage was soaked in blood; so I opened it and re-applied it after dropping Sol. adrenalin into the eye. This time I injected Haemastatic serum 2 c. c. (P. D. & Co.) intramuscularly; it acted marvellously and bleeding was stopped in no time.

Conclusion:—As regards the cause of bleeding my idea is that it was due to the rupture of blood vessel of the eyeball during the act of coughing in that evening; but no bleeding was visible at that time, probably, due to the formation of some blood clot beneath the eyelid, which got dislodged during the act of smoking and bleeding started.

I shall be much obliged if any gentle reader of this Journal can suggest any other probable cause of bleeding in this case.

A CASE OF CEREBRAL TYPE OF MALARIA

BY

J. C. BAGCHI L.M.F.,

Durgaganj, Ch Dispensary, Purnea

In the early morning of the 13th. August '29. I was called in to see a patient at Kumhri a nearest village.

I saw the patient in the following conditions :—

(*a*) A boy of 6 years of age was lying unconscious in the bed.

On examining I found

(*b*) Only breathing was going on.

(*c*) Spleen slightly enlarged.

(*d*) Temperature 103°F.

(*e*) Tongue protruded towards left side.

(*f*) Eyes were closed.

(*g*) By separating the eyelids I saw the pupils were cloudy and pushed on each cone. There was no response.

(*h*) Abdomen stiffy.

(*i*) Head very hot.

(*j*) Pulse very rapid. I could not count the beat.

(*k*) Both wrists bent downwards.

(*l*) Neck slightly stiff.

(*m*) The boy had no movements of head or hands.

I enquired his father about his illness. He said :—

The boy was playing yesterday i.e., 12th at noon with other boys of the village. The boy fell suddenly with a cry. The boy was brought to his house and many remedies were applied but without effect. There was no rise of temperature upto 5 P. M. After this period the temperature began to rise. A Bengali gentleman who lives near my house took a great interest and applied cold water to his head. But he was opposed by villagers who began to say that the boy was under the influence of the "spirit." Ojas tried their utmost to drive the spirit away but were unsucessful.

Thinking it to be a case of a cerebral malaria I, without any hesitation, injected intramuscularly 7½ grs Acid Quinine Hydrochlor and advised them to pour cold water continuously.

The following medicines were sent from the Dispensary'—

℞

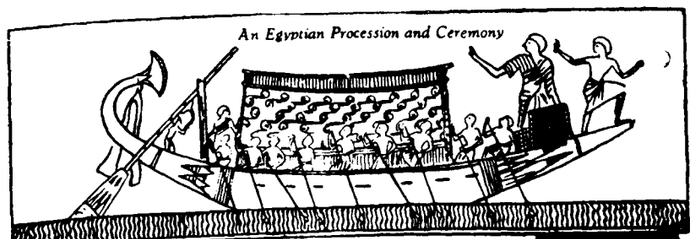
(i)	Calomel	gr ii
	Santonin	gr 1½
	Sugar	qs
	Mft one powder.	This powder to be given at once.
(ii)	Sodii Benzoas	gr ii
	Oil of menth pip	m ¼
	Spt. Chloroform	m iii
	Tinct. Digitalis	m iii
	Pot. Bromide	gr iii
	Ext. cascarasaq Liq	m xv
	Syrup Aurantii	m xx
	Aqua	ad ℥iv

Mft Mist. 6 doses—To be given each 2 hours.

At 4 P.M. I came to know that the condition was slightly improving. Bowels did not move. I went there again. Bowels were moved by Glycerine, and when the boy wanted to drink, about 4 chhataks of milk was given. Now the boy was able to see. There were no other complaints except rise of temperature. Another injection of 5 grs Acid Quinine Hydrochlor was given intramuscularly.

On the following day the father of the boy came to me and said that the boy had been cured perfectly and wanted to eat rice. Milk and Barley were given this day.

On the 15th rice as diet was given. There was no rise of temp. after the 2nd injection.



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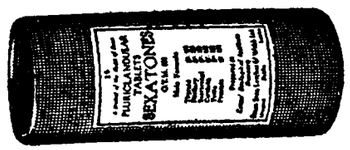

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MODERN CONCEPTIONS ON THE ETIOLOGY OF ASTHMA

Recent researches have created an entirely new situation in the general opinion on asthma. There is no consensus of opinion among the medical profession as to its genesis. Different theories have been put forward as to its causation; but no two cases are alike and they reach differently to the same treatment. It is asserted by all that the different cases of bronchial asthma possess widely varying etiology and also more than one factor is involved in the development of the disease.

There is great similarity between asthmatic paroxysms and anaphylactic reaction. It has been shown that the lungs of guinea-pigs killed in anaphylactic shock show extreme constriction of the bronchioles as in Asthma. Moreover asthmatics show marked anaphylactic tendencies and high persensitive ness to injection of foreign proteins as antitoxic sera. All these evidences have been put forward to prove that asthma is an anaphylactic reaction. An asthmatic patient is generally supersensitive to foreign proteins or "allergens" and when these gain access to the body in susceptible individuals produce an attack of asthma.

Allergens are of various kinds and the offending allergen in each case is noted by going thoroughly into the history of the

case as to what condition generally produces an attack. It is important to know this, because avoidance of that factor generally gives relief to the patient. More than 50 per cent of asthmatics give a cutaneous reaction on intradermal introduction of an extract of the particular allergen. Observations of Freeman and Coke have demonstrated that many asthmatics show hypersensitiveness to foreign proteins and pollen extract. On these researches have developed the treatment of desensitization of the patient by injection of small quantities of the extract of the proteins, pollen grains or other allergens. In each case the causative allergen is different, and in some it is a polyvalent hypersusceptibility. It may be proteins taken as food, as egg or milk, which is a more common cause in children; It may be emanation arising from animals, as contact with horse, dog, cat or other animals generally produces an attack in sensitized individuals. Professor Karl Hansen reports a series of cases in which asthma persisted as long as the patient was troubled with ascaris and disappeared the moment they were removed. The house dust allergen discovered by Coke is an important factor in asthmatics. The dust from some substances as corn, barley, rice or oats, the smell of certain drugs, pollen of grasses and flowers may also act as allergens. Contact with feather or hair may also determine an attack in susceptibles.

Statistics have shown that 70 percent of all asthmatics going to a high altitude become free from all symptoms within three days and another 20 percent distinctly improved within a few weeks. This is proved to be due to the absence of what are called climatic-allergens at high altitudes. Among the asthmatics who react to an allergen, 90 percent are hypersensitive to allergens in the air. These are formed by the dust containing destructed micro-organisms moulds, insects, hair or dandruff, feathers from pillows and many others, and these are called climatic-allergens. These occur for the most part inside our houses especially in towns; but in high altitudes air is much purer and free from these allergens. This explains the beneficial effects of climate on asthmatics. Investigations have been made by Prof. W. Storm Van Leeuwen of Leyden in this field of climate allergen, and he has proved the correctness of this conception by the effect of allergen-proof chambers on asthmatics. These chambers contain dust-free air, either the outside air being blown in after purification or pure air from a height of 35 metres above the soil. In his hands about 80 percent of the patients become free from asthmatic symptoms after residence in this chamber for about 3 or 4 days. After this they are allowed to go out during day time, but must sleep inside during the night. The practical application

of this method is worked out by Dr. Einthoven by installation of such chambers in private houses with marked success.

But there are also some eminent men who discredit the theory that asthma is purely an anaphylactic phenomenon. Prof. W. E. Dixon believes that it is a reflex stimulation of the medullary respiratory centre by a peripheral stimuli so that the vagus is stimulated producing the bronchiolar muscular spasm. Hurst says that an individual who is hypersensitive to one or more proteins only suffers from asthma if he has the constitutional tendencies and there are many asthmatics who are not hypersensitive at all, their attacks being caused by reflex and occasional psychical stimuli; Oriel has demonstrated that even in the intervals between attacks the blood of asthmatics show certain divergencies from the average normal, and this deviation in blood chemistry is responsible for the upset of balance between the vagal and sympathetic constituents of the respiratory centre in the medulla, and in such predisposed individuals certain chemical, reflex and psychical stimuli will excite the spasm of the bronchial muscles. This asthma diathesis is often congenital and hereditary.

The role of the internally secreting glands should not be lost sight of in these cases. Supra-renal exhaustion diminishes the activity of the sympathetic, so that the vagal constituent of the bronchial nervous system becomes easily excitable having lost the antagonistic action of the sympathetic. Blood pressure in asthmatics is generally low, show well-marked hypoglycaemia and high sugar tolerance, proving that there is also suprarenal upset in these cases. Cannon has shown that emotions like fear and anger stimulate the secretion of adrenalin, and under the influence of sudden fear or anger often an asthmatic attack immediately ceases. This shows clearly the connection between supra-renal organ and asthmatic attack.

Brodie and Dixon have proved that stimulation of the mucous membrane of the septum especially at its upper and back part produces bronchial spasm. This points conclusively that nose and nose-pharyngeal defect is an important exciting cause of asthma. When the mucous membrane is sensitive to a stimuli, allergens may stimulate this and thus produce an attack. Dr. Francis has shown that cauterization of the mucous membrane of the septum, where very little defect is found in the nose, has relieved many cases of asthma by destroying the sensitive area in the nose. In many of these cases of asthma there will be often seen hypertrophy of one or both middle turbinated bodies, polypoid out-growths from this body or from the ethmoidal cells coming into contact with the septum, or else a deviation or swelling of the upper part of the septum meeting the turbinated

body. The treatment of these conditions has proved of highest value in curing or relieving asthma. Sir James Dundas-Grant rightly states that a medical adviser who omits to consider the question of an intranasal cause, at all events in cases, which do not readily answer to other treatments, is withholding from his patient a very important means of obtaining relief or even cure.

Lastly, it should be remembered that there may be a toxic factor as the exciting cause of asthma paroxysms. Just as the asthmatic subject is sensitive to various protiens of aimmal and vegetable origin, there is no reason why he should not be sensitive to toxins resulting from autogenous bacterial infection. A thorough search should be made for any signs of focal infection in all cases of asthma. Nose, pharynx and teeth must be thoroughly examined for any septic foci. Septic tonsils and adenoids must be looked for. Radiological examination of the sinuses and teeth must be made. Many cases have been reported of frequent occurrence of opacity to-Xrays of the maxillary antrum in cases of asthma in which no localising symptoms have existed. Strut's statistics show that 20 percent of the asthmatics had antirities and 16 percent ethmoiditis. At the same time intestinal sepsis, including gall-bladder and appendicular infection, needs to be investigated and treated accordingly.

Though allergen is a decisive factor in the creation of asthma, it would certainly be premature to seek in it the one pathogenetic factor. In most of these cases there is an asthmatic diathesis, which may be due to constitutional defect, hereditary tendency or endocrine upset. In such predisposed individuals a reflex stimuli form the exciting cause, which may be a nasopharyngeal defect. focal sepsis or allergen reaction in hypersensitive individuals. If the treatment of a case to be successful, all these etiological factors deserve to be considered and investigated.

K. LAKSHMINARAYANA RAU, M.B.B.S.

LT. COL. C. A. F. HINGSTON, I. M. S. SURGEON-GENERAL WITH THE GOVT. OF MADRAS

We offer our hearty congratulations to Lt. Col. C. A. F. Hingston I. M. S. on his elevation to the post of Surgeon-General with the Govt. of Madras. Since the late lamented Lt. Col. Giffard's retirement, this coveted appointment had gone out of the hands of the Madras I. M. S. Officers and our provincial jealousy was naturally roused, at the time of the appointment of Lt. Col. Hutchinson, to such a pitch that we were obliged to

animadvert, in these columns on the Government of India's policy or rather, want of policy, in the matter.

Reparation has come none too soon, and we take it that the present appointment of Lt. Col. C.A.F. Hingston, though for a short period, is indicative of the change in the angle of vision on the part of the powers that be at New Delhi. We trust that, in the fulness of time, Lt. Col. C. A. F. Hingston will be confirmed as Surgeon-General, Madras, and he will be able to give the benefit of his wide knowledge and vast experience in the healing art to the people of this Presidency, amongst whom he lived and moved for a pretty long period of his meritorious official career.

REVIEWS OF THE SILVER JUBILEE ISSUE (APRIL 1929) OF THE ANTISEPTIC.

The Canadian Medical Association Journal, September 1929.- The Silver Jubilee number of our Indian contemporary, *The Antiseptic*, so-called after Lister's immortal discovery, lies before us, and is full of interesting reading. Twenty-five years ago there were only two medical journals in north India, the *Indian Medical Gazette* and the *Indian Medical Record*, and none of importance in South India. The problems relating to the profession of medicine were numerous and calling for solution. To inform and unify the medical profession was the first crying need. Accordingly a new journal was established through the efforts of the Honorable Dr. U. Rama Rau and the late Dr. T. M. Nair, the latter of whom became its first editor. The aims of *The Antiseptic* are summed up in its first issue in the following words :—

To bring the medical profession in India to its legitimate place in the forefront of all learned professions will require the united efforts of all its members, official and non-official, European and Indian. The parliament of man and the federation of the world is still a poetic dream but it rests with the medical profession in India and in Great Britain too whether the idea of a united medical profession in India, a General Medical Council for India, and a Medical Registration Act for India should remain a dream indefinitely or be brought within the range of practical politics within the next few years.

Besides these laudable aims there were other problems to be attacked, including improvement in the relations existing between the members of the state medical service and the independent medical men, the raising of the status of the various classes among Indian medical practitioners, medical education, and, by no means least, the enlightening of a whole people in the matters of vaccination, sanitation, and public health generally.

The journal prospered in the face of great difficulties and is a monument to the foresight and courage of its founders. On the death of Dr. Nair, ten years ago, the destinies of *The Antiseptic*,

have been guided most efficiently by the Honourable Dr U. Rama Rau, whose activities have been widespread in the effort to better the condition of his fellow countrymen. As an example of his valuable work may be cited the establishment of health journals which are published in four of the most used languages, English, Tamil, Telugu, and Canarese.

It is not for us, at this distance, to presume to judge of the medical needs of India or of the value of the efforts of the Indians themselves to improve their local conditions in regard to medicine and the public health, but, at least, it seems clear that the call was there and the opportunity great, and that *The Antiseptic* has played a forcible and meritorious part in bringing about reforms. The journal has our best wishes for success in its attempts, to better the condition ot the Indian people, to improve the status of the profession, to bring about more harmonius working between its members, English and native, and to raise the standards of medical service and medical education.— *A. G. N.*

The Burma Medical Practitioner's Associatian, Rangoon :— "Your Silver Jubilee Number deserves all the credit due and is a source of pride to the whole Indian Medical Profession."

CURRENT TOPICS

SURGERY

Resume of the History of Local Anesthesia. – The first recorded attempt at local anesthesia is credited by Plinius to the Egyptians, who utilized Lapis Memphiticus with vinegar and applied it by friction. The first authentic method, however, is that of Magister Salernus, who, in the seventeenth century made cataplasmas of poppy. Hyoscyamus and Mandragora were applied to the operation areas. Later nerve sensibility was dampened by compression, this being especially employed in amputations. In the same century Marco Aurelio Severino and his pupil, Thomas Bartholinus, utilized the anesthetizing qualities of ice and snow.

James Moore in 1781 improved upon the older method of compression though the invention of mechanical appliances, which enabled him to apply the compression directly into the nervesinvolved.

James Arnot in 1848 revived the use of cold for local anesthesia, employing as freezing mixture ice and salt.

Richardson in 1868 furthered this method by the utilization of Liquor Hollandicus (ethyl-chloride).

None of the above mentioned methods proved entirely effective or satisfactory. Following therefore, Thom saWo od's in-

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vention of the hypodermic syringe in 1853, various attempts were made to induce local anesthesia by the injection of narcotic substances. In 1867 Pelikan employed without much success sapomin. Following the discovery of cocaine (1884, Carl Koller), it was utilized in various ways for local anesthesia. Orloff and Reclus used it intracutaneously. Wolfler, Link, Landerer and Oberst used it subcutaneously. While cocaine proved superior to the other substances, it was inapplicable in major or extensive operations.

No entirely satisfactory method for local anesthesia was available before Schleich developed, in 1894, his method of infiltrating anesthesia.—*Medical Life. J. A. A. for Medico Physical Research.*

Epididymitis Due to the Colon Bacillus—Vintici discusses ta length the role of the colon bacillus in the etiology of epididymitis. Sometimes the colon becillus is the only micro-organism at work, and sometimes it is a secondary invader after the gonococcus has prepared the soil. The two important characteristics of an epididymitis due to the colon bacillus are the cure without further complication, and the frequency of relapses. Even when suppuation occurs, healiug will be rapid as soon as the pus is evacusted and there will be no resultant fistula.

The bacteriological diagnosis is based upon an examination (a) of the urine, and especially a culture, for many cases are not discoverable except by means of a culture ; (b) of the fluid drawn from the tunica vaginalis ; (c) of the pus in case of suppuration ; (d) of the semen and finally (e) of the blood in case there is a suspicion of a septicopyemia.

Vaccine therapy is recommended and especially with an auto vaccine. It is therefore important to make the differential diagnosis—*.O. S. M. A.*

The Treatment of Enuresis in Children.—The psychological causation of nocturnal enuresis in children is much emphasised nowadays, and many writers discredit all forms of treatment by medicaments, diet, restriction of fluid, or the various forms of surgical intervention. Two recent papers illustrate possible methods of approach along the lines of what is called psychiatry. Dr. R. C. Hamill holds the view that enuresis is a conduct disorder and can be perfectly well stopped when the child so desires. He explains to both child and mother that the only reason why the bed is wet is that the child prefers a wet bed to getting up, and once the child admits this and assumes responsibility for its conduct a cure is effected. In Dr. Hamill's

opinion any other suggestion will only be detrimental to the child's interests; to accuse the tonsils, prepuce, hereditary influences, and so on will merely furnish the child with excuses for its ill-behaviour. With a young child the mother must quietly assume that nothing short of a dry bed every night can possibly be expected from her offspring, and with an older one, who can understand Dr. Hamill's ingenious explanation of conscious control during sleep, a few talks at the psychiatric clinic will usually complete the cure. Out of 80 cases thus treated 40 were entirely rid of the habit, and of the other 40 some were improved, some not improved but still under treatment, and some had been lost sight of. Dr. Hamill claims that this treatment is "specific," and Dr. I. S. Wile makes a similar confident claim of great success for two methods of treating enuresis which he brings forward. Dr. Wile says that for cases of enuresis in institutions the method of personal approach to each child is quite impossible, so in the first of his two methods a "group approach" was employed. In this scheme the inmates of the institution—the Hebrew Orphan Asylum in New York City—were divided into teams, and the object of the campaign was explained separately to the boys and girls. Each team elected a captain, and each week the percentage of dryness was calculated for the various teams so as to foster the competition spirit. The method employed by the teams was left to their discretion, but the usual plan was to wake up the offending members or to encourage the weaker members to greater efforts by means which are not stated but can be imagined. When a member of one of these enuritic teams had remained dry for four weeks he or she was allowed to enter a regular dormitory. This scheme worked very well over a year, and for the second year the boys and girls were allowed to carry on without the interference of the "psychopediatrician" with equally satisfactory results. The second plan which Dr. Wile employed was to wake all male enurectics at 9 P.M., 12 midnight, 2 A.M., and 5 A.M., the child being made to get up and visit the closet. The percentage of cures in this group was somewhere in the neighbourhood of 30 to 40 per cent. while by the "team" method the results seemed slightly lower although their assessment was more difficult. Dr. Hamill claims for his plan of putting the responsibility on the child that it greatly aids in the development of character, by encouraging the inhibition of impulses without conscious effort, while Dr. Wile says that the cured children in his series "reflect their new power in personality and in physical health, together with some intangible immeasurable advantages along the line of better emotional stability, greater intellectual application, and finer social balance." Such claims have never been made for the old fashioned belladonna

method, but the percentage of cures obtained was probably very much about the same.—*Lancet.*

Acute Osteomyelitis in Children. R. B. Wade. Med. J. Australia. xvi, 264, March 2. 1929.—"Acute hematogenous osteomyelitis is an infection of the blood stream, of which the inflammation in the bone is the local manifestation."

The initial focus is always in the juxta-epiphyseal region. The tissue involved is the bone marrow,—both the yellow marrow of the medullary cavity and the red marrow of the cancellated bone. The deep layer of the periosteum is continuous with the marrow through the canals of the haversian system.

The arrangement of the capillaries in the metaphysis slows the blood current and favors the deposition of emboli. The causative organisms in order of frequency are: staphylococcus aureus, pneumococcus, streptococcus, and staphylococcus albus. The staphylococcus aureus is far the most virulent. In a series of one hundred cases, the disease was more frequent among boys, from ten to fifteen years, and among the poorer classes. The bones involved in order of frequency were: tibia, femur, fibula, humerus, ulna, os calcis, mandible, clavicle, ilium, radius, metatarsal bones, phalanx, astragalus, and scaphoid. The only other parts infected in this series, were endocardium, pericardium, and joints. The case mortality was fifteen per cent., caused by septicæmia, pyæmia. endocarditis, pericarditis, and pneumonia. The causative organism undoubtedly has a specific selective action.

Pus may travel under the periosteum, perforate it, and come to the surface (mild cases); or may involve red marrow and medullary canal (severe cases). It may extend into the joint. Sequestra are usually of dense cortical bone which necroses because of stripping of the periosteum. In infants under three months of age the source of infection is usually the umbilicus, and the causative organisms, the streptococcus or pneumococcus. Commonly there is a septic arthritis. The outlook is usually good, although with hip joint involvement there often follows an ankylosis.

X-ray is of no value in diagnosis until about the fourteenth day. Infection of the neck of the femur is always associated with arthritis of the hip and ultimate ankylosis. When the lower metaphysis is attacked, the knee joint is often involved; as is the ankle joint in infection of the lower tibial metaphysis and the elbow joint in the lower humeral; but upper tibial involvements

seldom invade the knee. In the ilium the subperiosteal effusion is usually on the inner surface of the bone and the mortality rate is high. Tarsal osteomyelitis usually involves the neighbouring joints.

The progress depends upon the relationship between virulence of infection and individual resistance. A favourable issue can be expected only if pus is produced. Many of the secondary bone infections are of such lessened virulence as to be recovered from without operation. Septicæmic and severely toxic attacks are grave; otherwise the outlook is good, fatality seldom occurring from prolonged suppuration and absorption.

No treatment of the blood stream infection seems of value. The author hopes that the day of "guttering" the whole length of the spongy bone is gone. He feels that a small opening through the cortex at the region of the metaphysis is enough, together with free incision of the periosteum and the removal of that shell of white avascular cortex from which the periosteum has been stripped off by pus, and with removal of sequestra later as needed.—*J. O. S. M. A.*

Abscess of the Brain Simulating Encephalitis Lethargica.—Georges Guillain, I. Perisson, and Ivan Bertrand reported the case of a man aged 22, presenting the following symptoms: He was febrile, complained of pains, with ptosis, diplopia and somnolence. The case was diagnosed as one of encephalitis lethargica, and he was removed to the Saltpetriere Hospital. The somnolence was regarded as the chief symptom. The patient, it was found on inquiry, had been discovered to be asleep, at home, in tramways, and on the underground railway; he had also been proved to be completely lethargic for five days. The diagnosis already mentioned was confirmed at the hospital, where optic neuritis in each eye was found to be present. Further, there was hypertension of the cerebro-spinal fluid with hypercytosis, and a change in the curvature of the precipitation with colloidal benzoin. In the end the diagnosis of cerebral abscess was decided upon, despite the normal temperature, but it was impossible to determine the precise locality of the abscess in the absence of any motor signs, sensory or cerebeller, or any modifications of the tendon reflexes or skin reactions. Surgical treatment was restored to, but the patient suddenly died in the course of it. Post-mortem examination afterwards revealed an abscess of the right temporal lobe. The authors called attention to the fact that the temperature was often normal in cases of cerebral abscess, and that blood leucocytosis was generally deficient. They further remarked that sud-

den death was a complication well known in these cases, also that there should be no delay in operating as soon as the diagnosis had been agreed upon.—Societe des Medicale des Hopitaux de Paris, June 21, 1929.—*F. B. M. R.*

Classification of Various Forms of Bladder Neck Obstructions.—In a well presented paper, Frederick E. B. Foley offers the following classification of bladder neck obstructions.

I. Extrinsic Causes.

1. Bladder tumors.
2. Vesical calculi.
3. Foreign bodies.

II. Intrinsic Causes.

A. Disturbances of Innervation—
   1. Central Nervous System:
      a. Functional retention.
      b. Diffuse lesions.
      c. Localized lesions.
   2. Peripheral Nerve Lesions.
   3. Atony of Bladder (myoneural?)

B. Anatomic Change—
   1. Inflammatory:
      a. Cystitis vesicæ colli (female).
      b. Acute prostatis (male).
      c. Contracture of the vesical neck.
      d. Prostatic calculi.
   2. Neoplasm and Pseudo-neoplasm of the Prostate
      a. Benign:
         1. Laternal lobe.
         2. Bar.
         3. Mid-lobe.
         4. Collar.
         5. Albarran lobes.
      b. Malignant:
         1. Carcinoma.
         2. Sarcoma.
   3. Hypertrophy of Trigone.—*J. O. S. M. A.*

THERAPEUTICS.

Parathyroid Extract in Otosclerosis.—Watson Williams in *The Lancet* (216, 5512) obtained in eighteen cases improvement of subjective symptoms of otosclerosis by the administration of 02-03 grms. of desiccated parathyroid substance cautiously increased to ·1-·15 grms. daily without regard to objective findings. Even in cases which had resisted numerous other forms of treatment valuable results were obtained. In a few instances, there were symptoms of pain in the ear which disappeared when treatment was interrupted. There were no other symptoms of intolerance. Without the use of any other form of treatment the following results were obtained: Complete improvement, three cases; marked improvement, eight cases; some improvement, two cases; little or no improvement, five cases.—*A. M.*

Effect of Thymus on Bone Fractures.—The experiments of Glæssner and Hass on cats (*Presse Medicale*, February 6, 1929) showed that the consolidation of fractures was considerably more rapid in nonthymectomized cats than in thymectomised cats. The administration of thymus extract to the latter stimulated ossification of the callus, and in a higher degree than did the administration of extracts either of testicle or of parathyroids. Similar results were obtained in experiments on men after (osteotomy) and in the study of the effect of thymus extract in cases of delayed consolidation of bone fractures.—*Medical World*, *A. M.*

Dangers in Postoperative Use of Insulin.—Andrews and Reuterskiold (*Surgery, Gynecology and Obstetrics*. November, 1928) assert that the use of insulin and dextrose in patients who are suffering from postoperative conditions, and are, therefore, unavoidably dehydrated, is a highly dangerous and useless procedure. It must be rememered that in toxic conditions, fluids are fixed by colloids and are not available for physiologic purposes and that the "free" water in the organism is therefore reduced even more than the total water. The condition (fixation of "free" water) is physiologically equivalent to dehydration. What these patients need is dextrose and water. They are starved and thirsty and have a constant hypoglycemia, and insulin not only does not produce any glycolysis but tends to lower the already low blood-sugar still further. This insulin hypoglycemia not only is marked but often reaches the danger point and the symptoms of hypoglycemia are so similar to many other postoperative complications that their recognition is exceedingly difficult. Therefore, in postoperative acidosis and dehydrated conditions, dextrose and water are needed. Not only is insulin not needed, but its use is definitely contraindicated.—*A. M.*

Tuberculosis: A Confession of Faith:—It seems worth while, at times, to make a direct statement of our present position on a subject, so that we may observe progress and invite intelligent criticism. Here, then, are some of the things we *now* believe regarding tuberculosis.

1.—An appearance of ruddy health does not exclude the presence of tuberculosis.

2.—Long contact with a tuberculous patient frequently leads to infection, but a condition of lowered resistance is necessary for the development of clinical signs and symptoms of the disease. The hectic life now being led by many persons, especially young women, is an important factor here.

3.—Cases of fistula in ano, otitis media, pleurisy with effusion etc., which run a very chronic course should be suspected of being tuberculous.

4.—Symptoms are better guides to the condition of a tuberculous patient than are physical signs.

5.—Failure to examine sputum *frequently* for the presence of tubercle bacilli, in cases of chronic cough, is inexcusable.

6.—No one sign or symptom is pathognomonic of tuberculosis. Rales in the upper chest, following coughing, are second in importance only to the repeated demonstration of tubercle bacilli in the sputum.

7.—Persistance of physical signs in one locality is a highly suggestive finding.

8.—*Anyone* may contract tuberculosis. It is a grave mistake when a physician seems to feel that the members of his family and his intimates are, for some mysterious reason, immune.

9.—No study of suspected tuberculosis is complete without *stereoscopic* roentgenograms of the chest. These usually show more extensive involvement than is indicated by the physical signs, which latter give better information regarding *non-tuberculous* lesions.

10.—Serologic methods give little help in distinguishing between active and latent cases.

11.—The presence of two or more of the following five diagnostic criteria are practically conclusive evidence of the presence of tuberculosis:

A.—Tubercle bacilli in the sputum.

B.—Hemoptysis of one dram or more.

C.—Chronic pleurisy with effusion.

D.—Rales above the third rib after coughing.

E.—Mottling in a *well-taken* x-ray film.

All of these signs must be absent in order to ***exclude*** tuberculosis.

12.—The value of treatment in tuberculosis varies as the ***square*** of the time it is continued.

13.—Few physicians are temperamentally suited for the care of an essentially chronic disease like tuberculosis.

14.—Tuberculous patients can and do recover anywhere and everywhere, if properly treated. Only about five percent of them require a change of climate; though *any stimulating* change in the mode of life is often beneficial, and the development of a "fresh air conscience" is a great help.

15.—The best place to treat a patient with tuberculosis is in a good sanatorium, where he should remain for at least three months to arrest the disease, and two years for a cure.

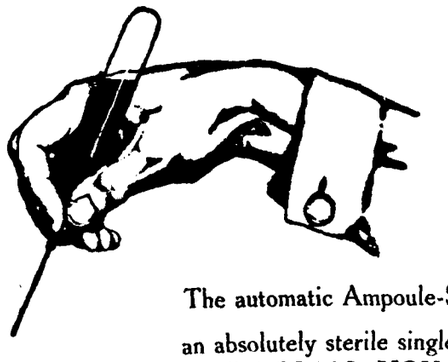
16.—The diet should be sufficient, in quality and quantity, to maintain the optimal condition (8 to 10 pounds above the standard weight for height and age) *and no more*. It is a pity to waste good food, as some do.

17.—Rest, general and local (by thoracic surgery), is a valuable part of the treatment.

18.—Exercise is a potent remedy and, if unintelligently prescribed, may be deadly.

19.—Drugs are helpful in treating many cases of tuberculosis, but there is, as yet, no ***specific*** for the disease—either drug, serum or vaccine.—*C. M. S.*

Method of Estimating Cardiac Efficiency:—The aim of a cardiac test was to secure some objective method of estimation which could be used to determine the efficiency of a heart on more than one occasion and by which a second observer could estimate the changes noted by the first. Vague terms and varied opinions



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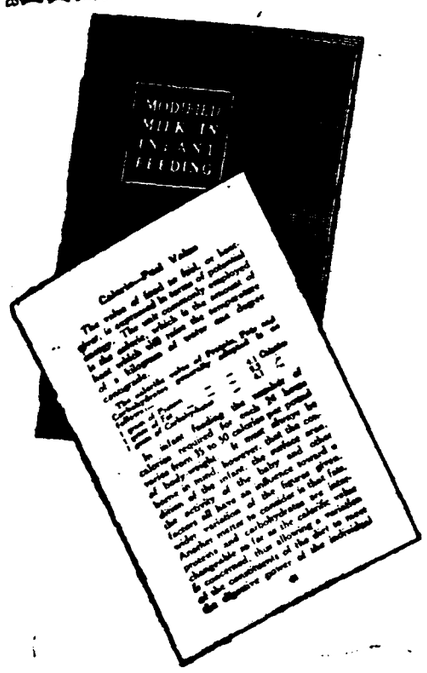

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made it very difficult to trace the history of a heart through other people's notes. The six factors taken were: reclining pulse-rate, standing pulse-rate, difference between reclining and standing pulse-rate, pulse-rate after standard exercise (touching the toes 20 times), time in which pulse-rate returned to normal, and difference between standing and reclining blood pressures. The fact that the nurse could take the pulse-rate obviated errors due to excitement at the doctor's visit. A system of marks varying from 3 to -1 was allotted to each test, so that a meximum of 18 could be obtained. Eight marks constituted a pass, 7 was doubtful, and below 6 some cardiac damage was indicated. The test was subject to the fallacies of all numerical tests, but had been based on a large number of cases, and it did give an index by which progress could be gauged from time to time. It was essential that the elements of a test should be obtainable in any bedroom, and elaborate ciinical methods were therefore inadmissible. The test was especially useful in those cases where there was a rapid heart but nothing else. The heart that gave a poor response to the test often developed symptoms of damage later on. The scheme was put forward with all reserve and with no claim at all to finality.—*Lancet, 1929.—C. M. A. J.*

Clinical Value of Electro-cardiography:—In an article in the *Military Surgeon* for March, 1929, Dr. Wm. J. Tindall gives a brief and simple discussion of the electrocardiogram and states his conclusions regarding this aid to diagnosis, as follows:

1.—Electrocardiography is the one method of heart study which, in many cases, gives incontrovertible evidence of heart muscle disease.

2.—Electrocardiography will enable the physician to distinguish between pulse irregularities that are not serious, as in premature contractions, and those which are indicative of grave heart muscle fault, as auricular fibrillation and heart block.

3.—In persons who have none of the usual clinical evidence of heart defect and who are up and about, electrocardiography may establish the presence of a serious heart disturbance, and thus furnish information for heart care and treatment which could easily result in the prolongation of life.

4.—Electrocardiography is a definite aid in arriving at the prognosis in an affection of the heart.

5.—Electrocardiography is a guide in the selection of heart drugs.

6.—Electrocardiography gives information of the physiologic condition of the ventricular muscle.

7.—It is possible, by written heart records, to detect heart affections that cannot be recognized by any other method of examination, despite the practised skill of the physician.

8.—Electrocardiography is necessary in any examination where a knowledge of the physical fitness of the individual is of the first importance.—*C. M. S.*

Potassium Permanganate in the Treatment of Pneumonia. John L. Chester, M. D., Detroit, Mich., Annals of Int. Med., May, 1929:—The British Medical Journal of March 7th 1925, reported the first known cases of pneumonia successfully treated by Potassium Permanganate, Dr. Herbert W. Nott of Birkenhead, England, having been responsible for the therapeutic experiment. The patients received standard solutions of the drug as retained enemas, recovered promptly, and convalesced more satisfactorily than by more orthodox methods. Later, Dr. Nelson J. Roche of Southsea, England, obtained equally satisfactory results with similar injections, which he reported in the same publication on March 12th 1927.

Becoming cognizant of the original experiments. Dr. Chester's first case was an advanced and seemingly hopeless one of flu-pneumonia of tuberculous origin, which, having failed to respond to other methods of treatment, was given 4 oz. of a standard solution of Potassium Permanganate every 3 hours rectally, at Providence Hospital. The patient recovered with more celerity and less fatiguing effort than is customary in such circumstances. Through the co-operation of various Detroit physicians, (names given), an additional 23 cases of lobar and broncho pneumonia were thereafter subjected to the same treatment at Providence Hospital, with consistently good results, and but two deaths.

Under very adverse conditions at Eloise Hospital, through the courtesy of the superintendent and his staff, 20 cases of pneumonia were selected at random. All were severe and complicated, some with the chronic heart conditions of long standing, and nearly all admitted chronic alcoholics. Ten of these cases were handled by other than the Potassium Permanganate method, and all died. The remaining 10 received appropriate doses of the standard solution of the drug, with the result that there were 50 per cent recoveries in what was considered well-nigh hopeless circumstances.

Dr. Chester provides concise case histories in his paper, with detailed progress notes in each of the institutional cases. In addition, he reviews the chemical action of the drug, explains its method of preparation and administration, and intimates its possibilities in other diseases.—*S. N. M.*

Bogy of Heart-block in Digitalis Therapy.—William D. Reid, Bosten (*Journal A. M. A.*, June 22, 1929), asserts that the fear to the production of heart-block by digitalis medication seems to indicate a misconception of the therapeutic use of this drug. Heart-block is not a prominent feature of the toxic action of digitalis. In fact, some degree of impairment in auriculoventricular conduction usually appears at the dosage associated with the therapeutic effects. There are no records of adequately studied patients who have died solely as a result of digitalis-induced heart-block. Complete heart-block may sometimes be present for years in patients who experience little if any reduction in their ability to perform heavy muscular work. The ventricle possesses tissue that is capable of initiating contractions, and the circulation adjusts to the slowed rate without untoward symptoms. Heart-block, not drug-induced, is usually associated with some serious form of heart disease whose lesions are not limited to the junctional tissues. It is the wide-spread and often progressive lesions of these diseases which doubtless have caused heart-block to be considered serious. The production of therapeutic heart-block of a degree sufficient to slow the ventricular rate to normal, in such conditions as auricular fibrillation with an accelerated heart (ventricular) rate, is an established principle in the use of digitalis medication.— *N. W. M.*

Heart Rate During Sleep. The tremendous variability of the normal heart rate, as well as its marked reduction and relative stability during sleep, have been demonstrated by Ernst P. Boas, New York. and Morris M. Weiss Louisville, Ky., (*Journal A.M.A.*, June 29, 1929). In exophthalmic goiter, in the presence of cardiac insufficiency, of active myocarditis, and at times of mitral stenosis, the drop in rate during sleep is greatly diminished. This may serve as a valuable aid in diagnosis, particularly since patients with neurogenic tachycardia, whose condition may often be confused with one of these disorders show a decided lowering of heart rate during sleep. Patients with auricular fibrillation show a marked instability of ventricular rate, and the observations suggest that neurogenic factors are of great importance in deter-

mining the ventricular rate in certain of them. These neurogenic factors in the tachycardia of auricular fibrillation cannot be controlled by digitalis alone.— *Indianopolis Med. Jonl.*

Nervous Complications Following the Use of Therapeutic and Prophylatic Sera. Kennedy *F., Am. J. M. Sc.* 177 : 555, 1929.— In a brief report the author cites cases illustrative of different types of nerve palsies which may follow the use of sera or vaccines for therapeutic purposes, and suggests a method by which these complications may be overcome. He points out that serum sickness with the clinical picture of high fever, urticaria, leucopenia, and acutely inflamed joints is well recognized, but that angioneurotic œdema affecting the brain and meninges in the course of serum sickness is also not uncommon. Focal œdema in the central nervous system may give rise to transient aphasis, transient swellings of the ocular papillæ, and transient palsies and convulsions, synchronizing with urticarial manifestations outside the nervous system. The paresis may involve half of the body or a single muscle' It is often of the lower motor neurone type, resulting in muscular atrophy and loss of function for six months or longer.

Although these manifestations when they occur, usually follow the giving of serum they may rarely result from the giving of typhoid or other vaccines for prophylctic purposes. The urticarial œdema of the perineural tissue is probably of more importance than the toxicity of the serum or vaccine.

The intravenous injection of sodium bicarbonate prior to injection of serum is advocated as a preventive against serum reactions.—*C. M. J.*

A Common and Easily Mistaken Form of Radicular Sciatica, N. Gierlich (*Med. Klin.*, p. 1621) reports the case of a man aged 41, who complained of pains in the right leg extending from the back over the posterior surface of the thigh and leg as far as the heel. The pains in the calf and foot were severe, but disappeared on lying down. The outer side of the calf and the outer and middle parts of the foot showed diminished sensibility. Radicular sciatica affecting the fifth lumbar and first sacral nerves is easily mistaken for inflammation of the peripheral ends of the sciatic nerve. A very tender spot about 3 cm. from the side of the spinous process of the fifth lumbar vertebra is characteristic of radicular sciatica. In all severe cases there is paresis of the peronei with more or less marked R. D. Decrease of the plantar and patellar superficial reflexes suggests a radicular affecti n. Lasegue's sign

is not characteristic of the condition, The above signs were present in the case described.—*Med. Review.*

The Plantar Response in Insulin Coma.—P. M. D'A Hart and H. P. Bond (*British Med. Journ.*, p. 895).—Insulin hypoglycæmia severe enough to produce coma, is likely to be accompanied by an extensor plantar response. The same occurs in other toxic states associated with coma, including cholæmia, eclampsia, and uræmia, While, however, in the latter two conditions epileptiform fits seem to be essential for the appearance of extensor response, this does not hold in insulin coma.

The plantar reflexes in insulin coma is in striking contrast to that obtaining in ordinary diabetic coma, in which, unless there is some associated organic disease affecting the pyramidal tract, an extensor response apparently never occures. Therefore, the plantar reflexes may prove useful in quickly distinguishing diabetic coma from that due to insulin hypoglycæmia. Mild hypoglycæmic attacks without coma are not accompanied by an extensor reponse and it is possible that even deep insulin coma may not show the extensor phenomenon. But inasmuch as diabetic coma, unless complicated by an organic pyramidal tract lesion, does not give an extensor response, the occurence of this sign in a comatose diabetic an insulin treatment should be evidence that the coma is due to excess of insulin, and consequently sugar (intravenous 10 per cent by preference), with subcutaneaus adrenalin, should at once be given very freely. The state is dangerous when once an extensor response has appeared, and there is little time to be lost. The quick recovery of the patient, upon adequate treatment with sugar, is totally unlike the very slow emergence from diabetic coma.—*Med. Review.*

Monaural and Binaural Hearing.—"Two are better than one; because they have a good reward for their labour," And if the preacher was wise, so indeed has Nature done all things well in creating Man to be bilaterally symmetrical. But we are sometimes forgetful or ignorant of the fact; and indeed it is generally assumed, in estimating and recording the hearing of our deaf patients that the hearing distance which may be considered as serviceable in any particular case, is idential with the hearing distance of the *better* ear. In a very interesting and valuable communication* Mr. J. A. Keen, aural surgeon to the Leicester education committee, brings forward some new facts to our knowledge of the threshold perception of sounds.

In the course of the application of hearing tests it was found by Mr. Keen that the hearing distance of both ears together often exceeded that of the better ear. This was only noticed when the hearing distance was determined in a *forward* direction; in these tests special precautions are taken to prevent lip-reading. Mr. Keen suggests that with both ears listening, the hearing power (expressed in distances) is really the hearing power of the right ear plus that of the left; and evidence is produced that this actually occurs in mathematical proportions. As the intensity of of sounds varies as the square of the distance, the difference in the hearing distance when both are tested together, is not always very obvious. The combined distance x would be given by the formula $x = \sqrt{D^2 + d^2}$, D and d being the hearing distances of the better and of the worse ear respectively.

Mr. Keen gives examples of hearing tests, many of which show this relation; and although some do not show the exact relation, this is not surprising in view of the very approximate nature of all voice tests for hearing. The wireless earphones and the stethoscope provide further illustrations of this greater power for intensity perception of both ears together, as compared with that of each ear separately, while the audiometer type of appratus may possibly supply the actual proof.

In discussing the various theories of *intensity perception*, the author points out that examples given tend to show that the threshold value becomes lowered when both ears are receiving the sound impression, as compared with the minimal intensity required when one ear is listening. And in hearing tests generally, we deal with "threshold" values, i. e., intensities which are just sufficient to cause a sensation of sound. The explanation of the difference in monaural and binaural hearing is "fairly and easily explained on Boring's hypothesis, although a more laboured explanation is also posssible along the lines of the 'intensity frequency' law of Adrian."

Mr. Keen's paper is well thought out and logically constructed, and we congratulate him on an able contribution to an important subject.—***Medical Officer.***

Value of Stramonium in Parkinsonian Syndrome. Moren reports (*Kentucky Med. Jour.* through *Jour A.M.A.*) his experience with stramonium in twenty-three cases, sixteen of which showed the parkinsonian syndrome and seven classic paralysis agitans. He started with I grain (0.065 Gm.) given by mouth three times a day, and increased the dose gradually to from 14 to

16 grains (0·90 to 1·04 Gm.) a day. As soon as favourable optimal results were obtained, he decreased the dose gradually from 7 to 8 grains (0·46 to 0·52 Gm.). He allows one day of intermission after five or six days of medication. Excellent results were noted in fourteen cases eleven parkinsonism and three paralysis agitans, nine cases showed slow improvement. The main improvements were in muscular rigidity, over salivation, posture, speech and mental condition. Toxic symptoms even with this large dosage are rarely severe, and they may be combated in various ways. They appear to be more common in elderly patients with idiopathic paralysis agitans than in the younger postencephalitic patients. The whole tincture of strammonium is more efficacious than atrophin or levorotatory and dextrorotatory hyoscyamine. The action of stramonium is palliative and not curative.—*I.E. Druggist.*

Hcl As a Phagocytosis Stimulant.—Following the observation of Dr. Grainville S. Haines of Louisville that dilute solution of hydrochloric acid injected into the tissues increases the number and activity of white blood cells, Dr. Burr Ferguson of Bermingham, Ala., Medical Journal and Record, reports good results in the use of Hcl in a case of myocarditis with a pyogenic infection. Man age 61 years, profound weakness, diffused cardiac impulse of 110. The beat regularly irregular losing 18 beats per minute. White count 7000 per c.m.m. Intramuscular injections of Hcl. C.P. 1-1000 ten c.c. In twenty minutes a second injection. Within twenty-four hours white count showed 9300 per c.m. Patient slept well. In a few days pulse dropped to 90 per minute. Within a week there were only 7 or 8 skipped beats per minute. Patient continued to improve. The report is preliminary to further tests. The argument is that the white cells have a slightly acid reaction, the Hcl increases it, tones up the little bodies and increases activity. There is a possibility of a wide usefulness of Hcl in infections and in many cases in which increased number and activity is indicated. It goes back to Metchnikoff argument "the one constant factor in immunity is phagocytosis."—*M.N.*

An Antidote for Morphine Poisoning.—Dr. F. E. Loewy writes: It is of considerable practical importance, but not yet sufficiently appreciated, that we possess a powerful stimulant of the respiratory centre—the alkaloid lobeline, which is now available in sterilized ampoules, and can be used safely under precautions. It has proved very effective in poisoning by morphine, hyoscine, and other depressants of the respiratory centre, and

should certainly be given in cases like those reported by Mr. A. E. Mortimer Woolf on March 16th (p. 499), when respiratory failure occurs after the administration of heroin. An ampoule of 1-20 grain should be injected intravenously very slowly, drop by drop. The effect is immediate but transient, and the injection may be repeated every ten to fifteen minutes. Intramuscular or subcutaneous injection of 3-20 grain is also very useful, but less reliable. Lobeline should be at hand in every operating theatre. *Brit. M. J.* 1: 796, April 27, 1929. *C.M.A.J.*

Cactus Grandiflorus.—"Cactus is practically permanent in its effects, and it influences every part of the body, thus becoming a general tonic. It has only one rival in this respect, and that is crataegus. In long-standing cases of debility with feeble heart action it speedily proves its virtues by changing a worn-out, despondent and debilitated person into one of comfort and hopefulness. If structural disease is present, such as mitral regurgitation or other valvular disease, improvement may not be so rapid, but improvement is almost certain to follow a continued use of the remedy. The heart muscle slowly gains strength and energy, and the remedy improves the nutrition of the weakened organ and aids in its recuperation. If the condition is an incurable one, the remedy will almost always temporarily improve matters and give the patient comfort and confidence. It is a remedy for long continuance and some times this is necessary for the qualities of the medicine to become developed. If auscultation reveals valvular sounds, these will become less marked, as time progresses, under the influence of the medicine, until the patient approaches a normal condition. Some practitioners aver that it will actually cure valvular heart disease, though the writer makes no such claim. However, it will carry apparently hopeless cases along for many months, and even years, where without it life's span would be very short."—*Herbert T. Webster. M. D., in Eclectic Med. Journ. J. A. A. for M.P.R.*

BOOK REVIEWS

The Bulletin of the South Indian Medical Union: Oct. '29 Published by the General Secretary S. I. M. U. Madras.

The long-wished for Bulletin of the South Indian Medical Union has at last come into being and we gratefully acknowledge the receipt of its first number published in October 1929, under the title of 'The Bulletin of the South Indian Medical Union. Its aims and objects are clearly set forth in this number and they can be summarized as under:—

(1) To offer as the best medium for members of the medical profession, not only in this Presidency but in the whole of India, to confer and consult with each other in quest of truth and knowledge, with regard to the healing art.

(2) To aid in the removal of the various disabilities that may come or be placed in the way of the profession in attaining the above object.

(3) To protect and safeguard the interests of the infant Independent medical profession in this country and place it on a sound, honourable and prosperous footing.

(4) To take an active share in altering and improving the method and standard of medical education in this Presidency, so that Madras may rank as one of the foremost centres of modern medical education.

(5) To create a well-knit feeling of oneness in the members of the Profession and foster the ideal of medical *fraternity*, which is the ideal of the union and the goal of the Bulletin.

(6) To promote the interests of the medical profession in the services and never to militate against them.

(7) To raise the bulletin to the status of a good class clinical journal, as opposed to a purely scientific journal.

(8) Lastly, to bring into existence, in this part of the world, conditions which will help the profession to achieve the above aims—conditions which will make the individual members of the profession think less of himself and more of the vast public crying more and more for deliverance from pain and pestilence.

These are noble and laudable objects indeed and if the bulletin of the South Indian Medical Union works up to these ideals, there is certainly a great future before it. The Editorial Board consists of tried and veteran Medical men of this Presidency, who, as general practitioners or surgeons, have gained the good will and confidence of both the profession and the public in this part of the country and this must surely add to its future glory. We wish the journal all success and long life.

The Medical Practitioner:—October 29. Edited by Dr. M.S. Krishnamurthi Ayyar M.B., C.M. and Dr. V. Ramakamath—This is another monthly medical journal that has been newly started in Madras and we welcome its publication as undoubtedly there is need for more independent medical journals in this Presidency to disseminate not only the knowledge of scientific medicine but also to uphold the rights and privileges of the medical profession. It is with reference mostly to the latter aspect of medical journalism that this journal is concerned.

According to it "the object of the journal is to devote a good part of it to medical politics for the regulation of the medical relief". True to its name, 'The Medical Practitioner,' includes within its fold all the four classes of doctors viz government doctors, Mission doctors, rual medical staff and private Medical Practitioners, whose cause it is prepared to espouse and whose wrongs it is ready to redress. We have in the persons of the Editors of this journal two ardent fighters for the profession and we need not therefore despair of its success. Our best wishes go with the journal.

The Treatment of Pulmonory Tuberculosis -by Dr. Marc Jaquerod. Second English edition revised by S. F. Silberbauer, M, D., F. R, C. P.. Published by Bailliere, Tindall and Cox, London, Pages 66. Price 6/-

The author renders into a book form the instructions the consumptive has to follow during the disease and also after. General treatment forms the main consideration in the treatment of tuberculosis, and this can only be carried out efficiently by thorough education of the patient. This eminent specialist has rendered a great service to the suffering humanity by bringing out this book. By reading this he will know the principles of treatment, the advantages of rest, fresh air, nutritious food, and hygienic life, and the patient can be his own physician. This is a book worth reading by one and all.—*K.L.R.*

The Principles of Surgical Dressing By Lt. Col. R.C. McWatters. M.B., F.R.C.S. Published by Thacker. Spink & Co, P. O. Box 54, Calcutta. Pages 110. Price Rs. 3/8.

In chapter I, the healing of wounds is described. In the second, infection of wounds and its prevention are dealt with. Kinds of dressing and methods of dressing wounds are given in the 3rd chapter. Preparation of the patient for operation and management of the wound after operation, inflammation and its treatment, the principles of drainage, irrigation of wounds, and also the common Antiseptics used are all dealt with in this small booklet

In these an attempt is made to explain the general principles and to correct certain mistakes which the student is apt to make in his routine ward work. This is a useful book for the student and the nurse.—*K. L. R.*

Acute Appendicitis—By C. Hamilton Whiteford, M. R. C. S., L .R. C. P. Published by Harrison & Sons, 45, Pall Mall, London; Pages 72. Price 4/-

The author gives in a small book form the findings of his twenty-five years experience in the diagnosis and treatment of acute appendicitis. He discusses in detail the aids in diagnosis and what difficulties might be met with in diagnosing a case of acute appendicitis. The practical points in the treatment of a case, with preoperative and postoperative treatment and complication, are described in an easy and readable style. We highly commend the book to all.—*K, L. R.*

Tuberculosis—By Dr. Chunilal Bhatia, L. R. C. P., L. R. C. S. (Edin). Printed at the Union Press Amritsar Price. As 4.

Tuberculosis is the greatest scourge of mankind and more so of the poverty stricken millions of masses of India. By propaganda, the lay public must be taught to detect the disease in the early stage, so that it might be nipped in the bud, and also the preventive aspect of the disease, and the general treatment, which are all important in checking the spread of the disease. This booklet is presented to the public with a view to educate them about the causation and prevention of this greatest foe of mankind, and is very useful to all those who wish to know about this disease.—*K. L. R.*

Tuberculine in Practice—By F. E. Gunter, D. S. O., M. D., Lieut Col. R. A. M. C., (Retired), Published by the Gregg Publishing Company Ltd. Keru House, 36-38, Kingsway, London. Pages 102. Price 7/6 net.

In this small volume the author describes the value of tuberculin in the treatment of early tuberculosis and asthma. Tuberculin is a drug powerful for good if correctly used, but dangerous if administered without thought and care. The preparations of tuberculin, the indications for its use, the kind of cases in which it is to be administered, and the dosage and method of administration are dealt with in this book, together with a short history of tuberculin treatment, etiology of tuberculosis with channels of infection and mode of conveyance, clinical signs and symptoms and also X-rays as an aid to diagnosis, In the

last Chapter the action of tuberculin in tubercular asthma is explained. Also some illustrative cases, which improved in the hands of the author, are given in the end. This is a very useful book for the specialist and also for the practitioner who is interested in the treatment of early tuberculosis. The object of the author is to induce physicians to take an interest in tuberculin therapy, and this treatment is really worth trying.—*K. L. R.*

Commercial Drugs of India—By N. B. Dutt, M.R. A.S. (Lond.) Published by Thacker, Spink & Co. Calcutta and Simla. Pages 249.

Many of the common drugs, which are useful and which are found and can be cultivated in India, are described in this book. Drugs are arranged in their alphabetical order with also their vernacular names. An useful index is also given at the end. The action and the therapeutic uses of the drugs are described with also the common characteristics of the plant. Author needs to be encouraged for bringing out a book of this description, and his aim is to popularise Indian drugs so as to make capitalists take an interest in drug-collection and drug cultivation. Inspite of her immense drug resources, India is dependent for her supply on other countries, and this must be remedied by the efforts of both medical men and the general public. *K. L. R.*

The cause and control of Sex in Human offspring By R. Clay Jackson, Published by the Author, P.O. Box 1114, Oakland, calif. Pages 205 and plates 34. Price Rs 15. Post Free.

In this small volume the author explains the investigations he carried out, and the conclusions he arrived at, in determining the cause and control of sex in human offspring. His deductions are amply illustrated and supported by case reports of families in different towns and countries. Herein the food factor has been definitely separated from its hoary stronghold as a basic causative, and also the internal factor that one from one or any develop into females only, whilst those from the other or any develop into males only. He comes to the conclusion that environment and external factors are governing primarily in sex determination. Sunlight is the sole prime factor, or motive power, and when the father is exposed to sunlight, and works outdoors, the issue is generally a female, and vice versa. Complexion and weight are definite predisposing factors, as well as many external factors such as cloudiness, shelter housing and clothing. The book is interesting and instructive, and the contents are worth considering by the professionals and the lay people.—*K. L. R.*

Physiology of the central Nervous System and Special Senses—By N. J. Vazifdar, L. M. & S., F.C.S. F.C.P.S. Published by Thacker, Spink & Co. Calcutta. 5th edition, Pages 301, Illustrations 30. Price Rs. 5/4.

The publication of the fifth edition of the book in a short time proves without doubt the usefulness and popularity of the book. The present edition has been carefully revised and enlarged. The structures and the functions of the different parts of the nervous system are explained at great length, and in an easy and understandable style. In the 2nd Section of the book, special senses are dealt with, as cutaneous sensation, the sensation of movement and position, smell and taste sensations, vision and hearing. There are numerous diagrams and tabular statements, which aid in understanding the text and in remembering it. It is a great help for the students in passing their examinations, and for the practitioners for revision and reference purpose.—*K. L. R.*

The A.B.C. of Nerves—By D. F. Fraser-Harris M.D., D. Sc. F. R. S. E. Published by Kegan-Paul, Trench, Trubner & Co., Ltd, Broadway House: 68–74 Carter Lane, E. C. London, Pages 223 Figures 14. Price 4/6 net.

Nervous system is a complicated apparatus of the human mechanism, which controls and influences the proper working of all other systems of the body. But the constitution and functions of such an important system are very little known to the ordinary reader, because there are very few books giving a clear exposition of this complicated system so as to be readable and readily understandable by an ordinary reader. This defect is made good in this book by the author by explaining ina simple and lucid manner the elements of the subject, avoiding all advanced discourses and details, which would only add to the confusion of the reader, The book begins with a brief description of the anatomy and histology of the nervous system, and goes on to the discussion of path and production of reflex actions, how the deep sensations of the body are maintained, what are the functions of the different parts of the brain, how pain, sleep and dreams are caused, and ends withan explanation of physical bases of consciousness. It is a thoroughly admirable work, simple, concise and at the same time complete, and we highly commend it to any reader, who wants to know the working of the nervous system in his own body, and to every one as a stepping stone for higher studies—*K. L. R.*

Birch's Management and Medical Treatment of Children in India.—By Lieut. Col. V. B. Green Armytage, M. D., F. R. C. P., I. M. S. and Major E. H. Vere Hodge, M. D., M. R. C. P., I.M.S.

1929. Pp. 482 illustrated, Seventh edition Calcutta, Thacker Spink & Co. Price Rs. 10/--

The book under review is the seventh edition of a very popular book written by Henry Goodeve in 1844, for the use of the many European mothers living in the out of the way stations far away from proper medical aid in cases of emergencies.

This new edition has been enlarged and completely re-written with the addition of many new illustrations by the present authors.

The book is divided into fifty-eight chapters. The first chapter deals with the infant mortality in India followed by a section on the general effects of climate upon the child's constitution.

The health of the mother during pregnancy is then fully discussed together with complete instruction on the diet of the expectant mother.

The chapters on the principles of diet as applicable to childhood, artificial feeding, dentition, are very instructive. The preventive line of treatment of rickets, scurvy, &c., is well described. The chapter on modes of spread of the diseases of children is very descriptive, while the chapter on examination of sick children is highly practical and may be profitably studied by the general practitioner as well as the mother.

The various causes for fever in childhood are discussed fully and proper stress is laid upon the possibility of B. coli, infection in young children in India as a contributary cause of obscure fevers.

The value of iron and arsenical preparation to build up the body resistance after the malarial fever has been checked by quinine is emphasised.

Disease of the nervous system in children is impressviely written. The section on infantile diarrhoea gives full instructions to handle such cases methodically, and if carried carefully should give good results under the hands of a shrewd, nursing mother.

The authors have devoted much attention to the chapter on infantile liver and give a good dietic and hygienic rules to be followed in handling such cases.

The last chapter on the administration of remedies to young children is very lucidly written. The book contains besides an useful appendix on the preparation of diets and some useful prescriptions for young children which greatly enhance its value.

We are sure that this book will be found very useful both by the European and Indian mothers, more so to the anxious one far away from the expert medical advice. We have no hesitation in recommending this book to all those interested in infant welfare, and it may safely be placed in all the Baby Welfare Centres of this presidency.—*V. C. S.*

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			on entering	on leaving	on entering	on leaving	on entering	on leaving	on entering	on leaving
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P. L. 34 years, Smith	Anæmia Ulcus ventric	4 „	51	64	30%	45%	2400000	3240000	9 „	90 „
H E. 21 years, Servant girl	Anæmia Perimetritis	5 „	53	62½	40!!%	40%	180000	3280000	—	—
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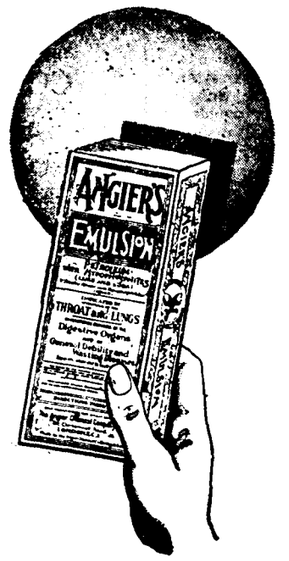

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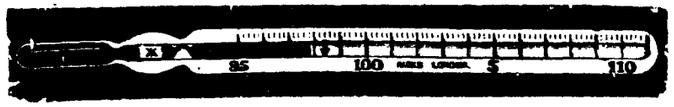

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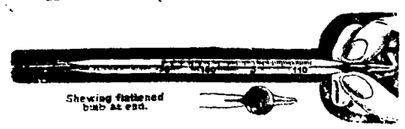

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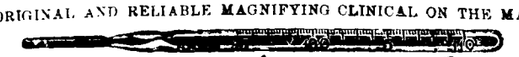
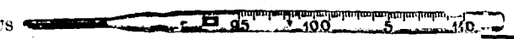
IN FOCUS  GUARANTEED

OUT OF FOCUS  ACCURATE

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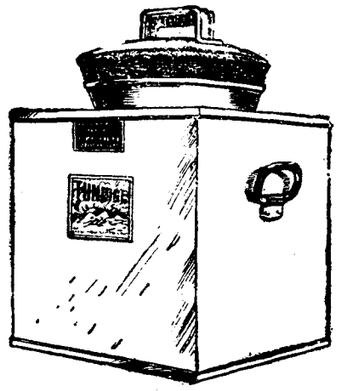

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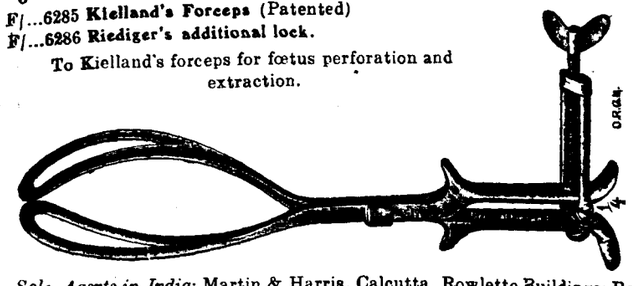

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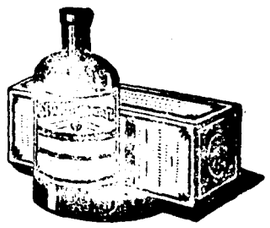

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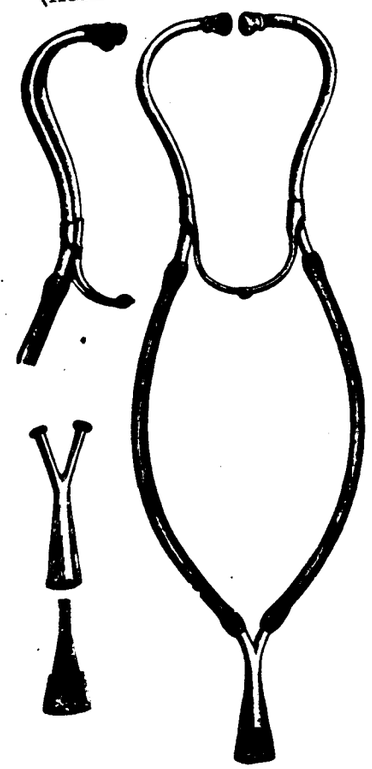

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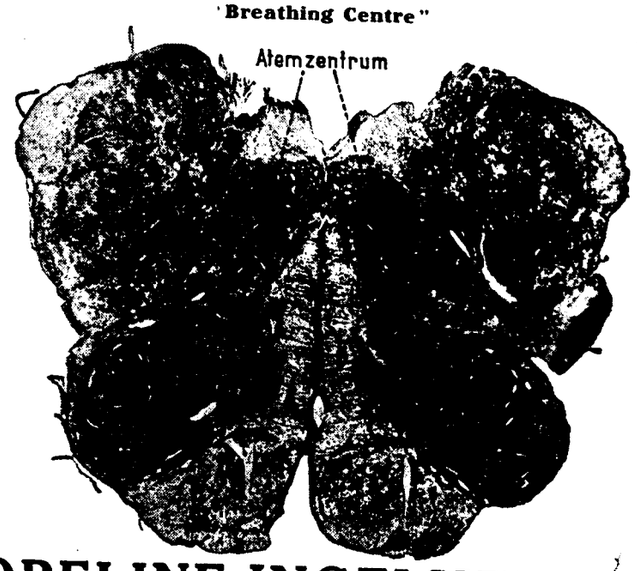

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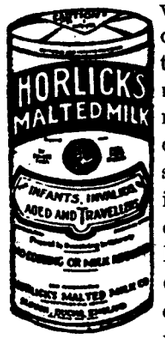

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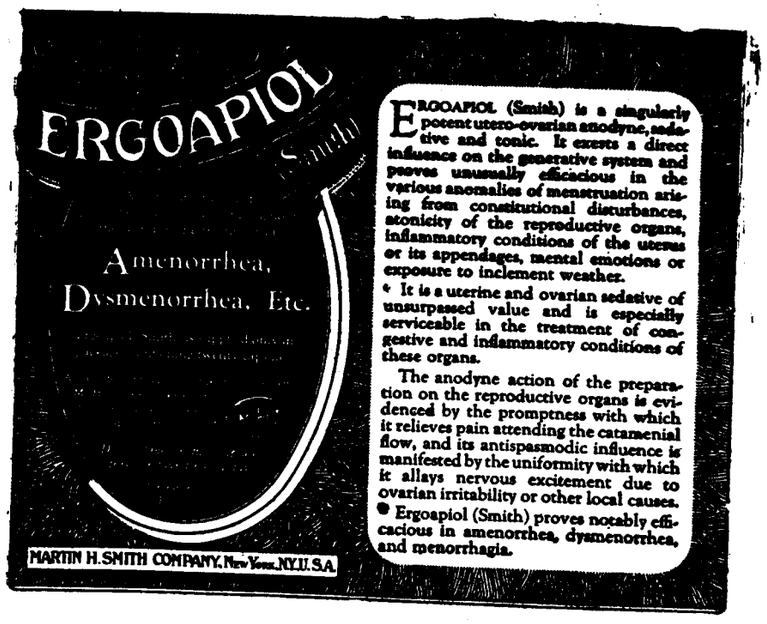

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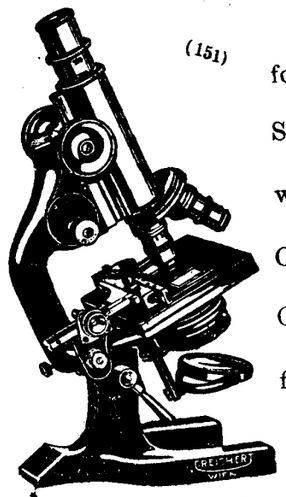

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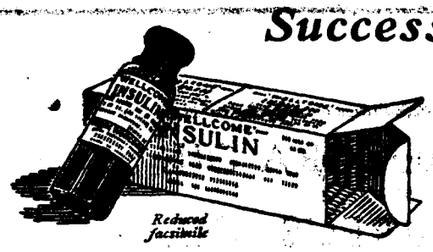

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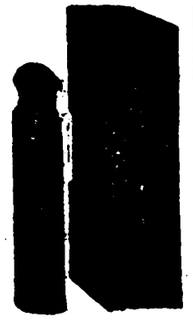

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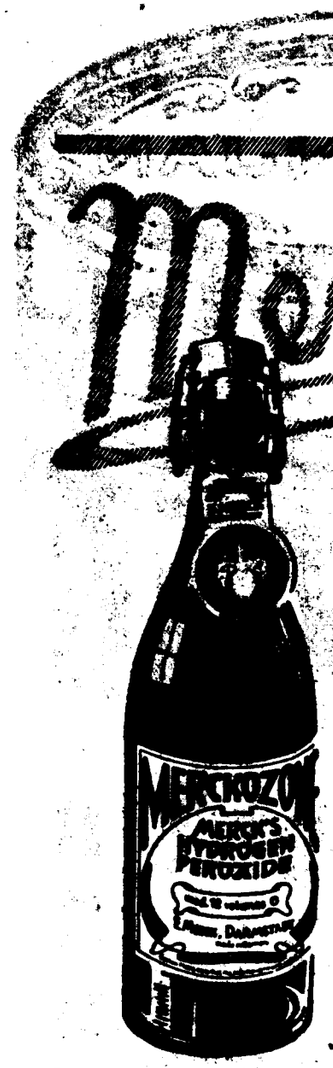

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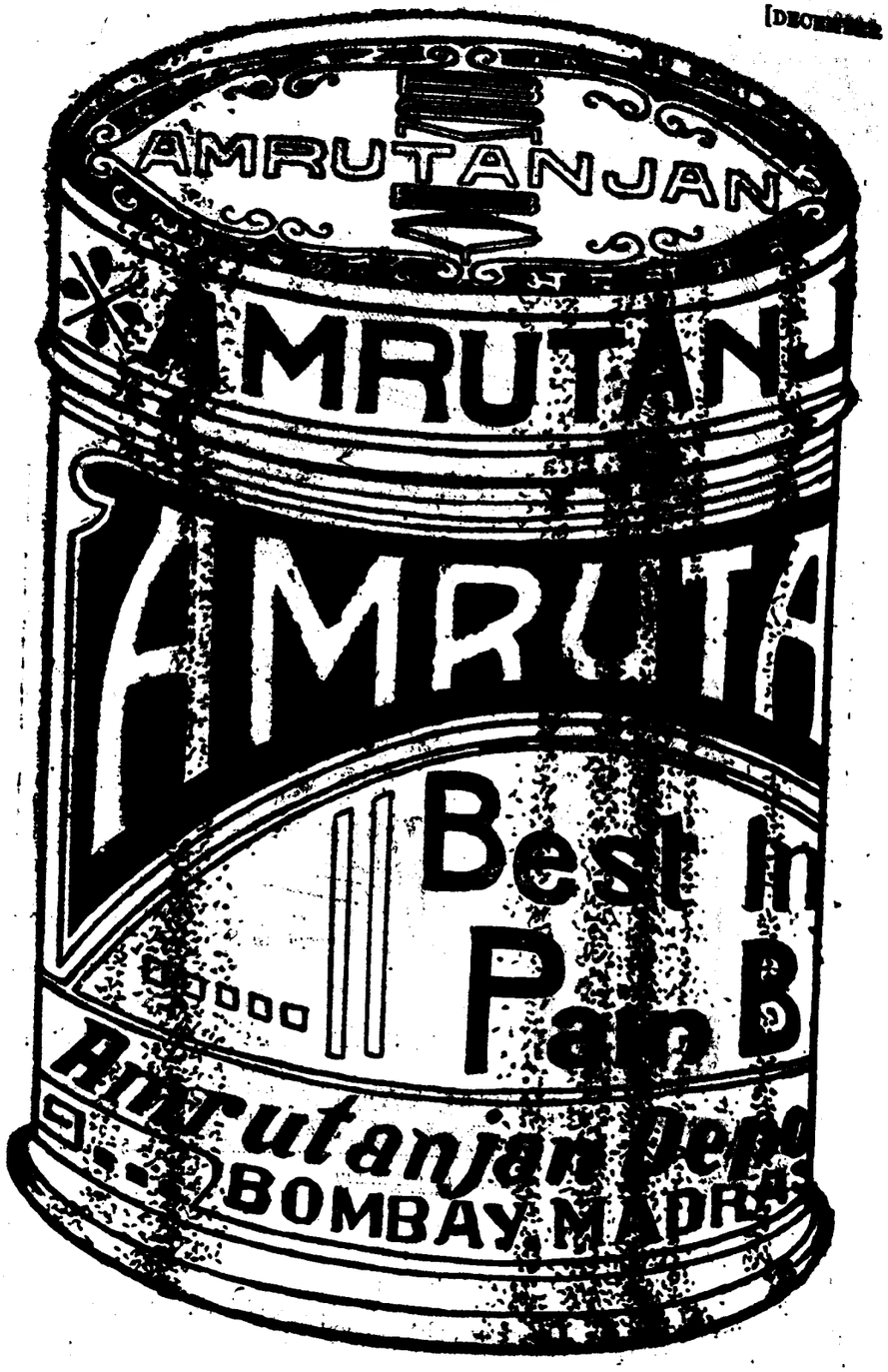
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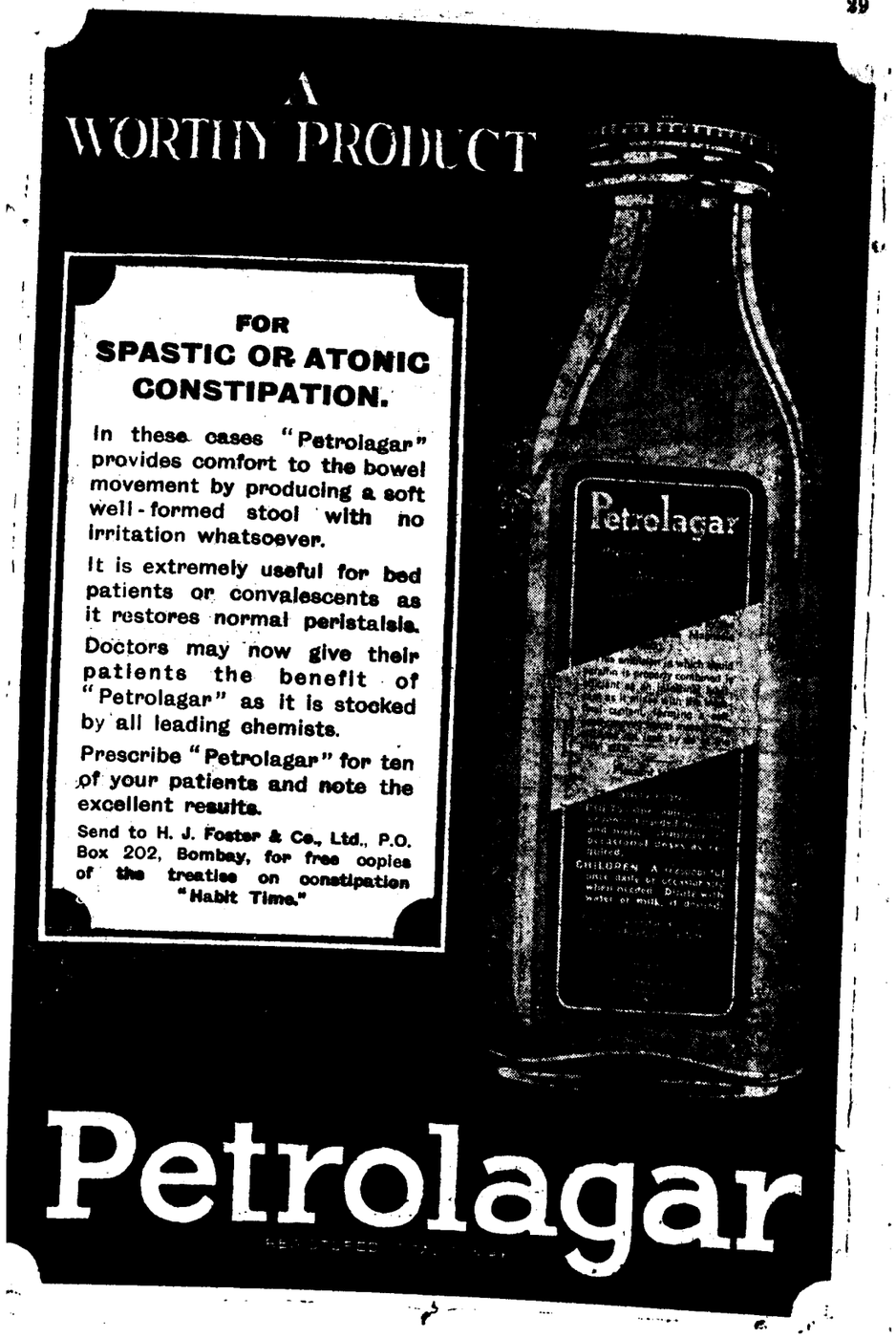
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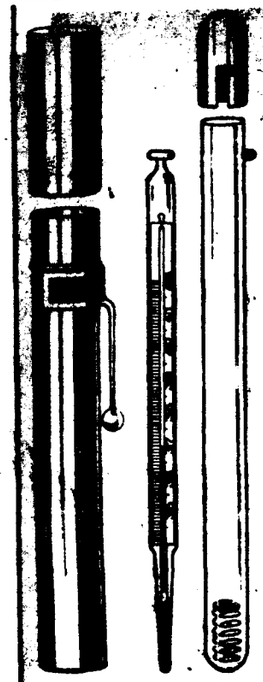

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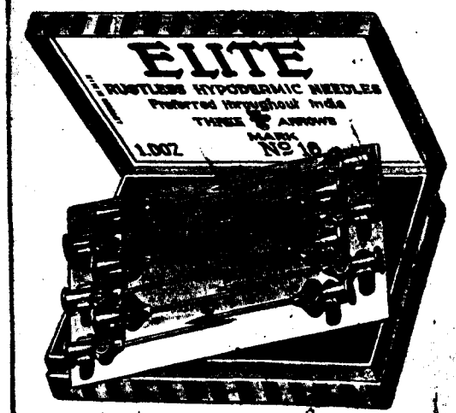

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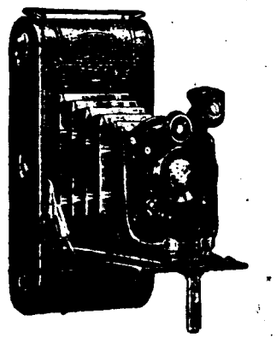

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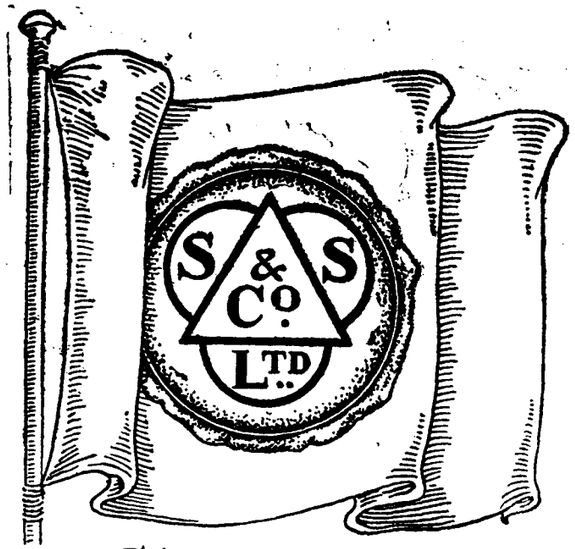

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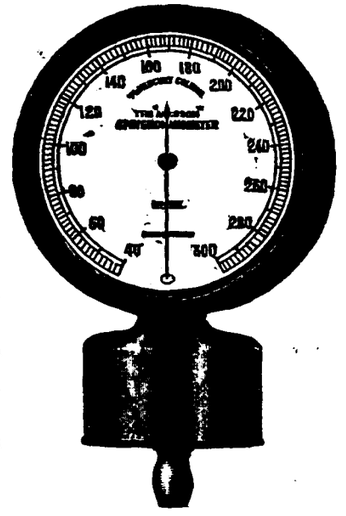

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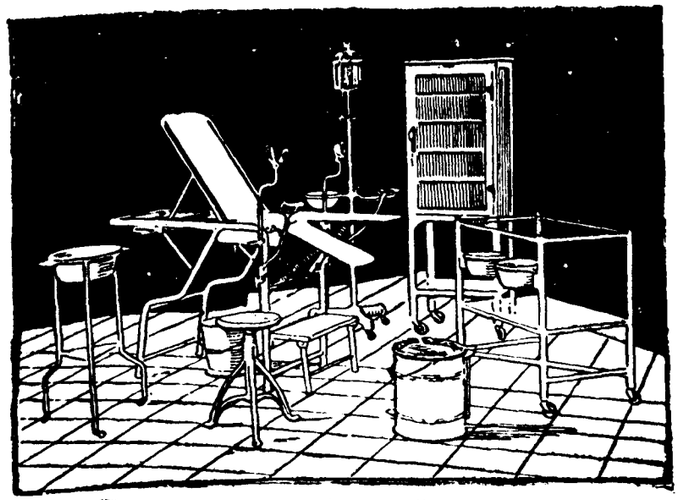

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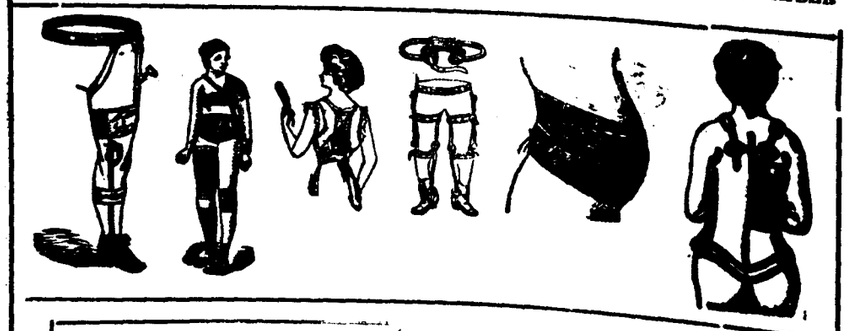

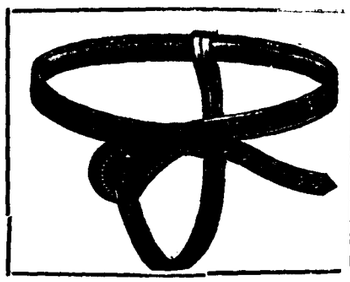

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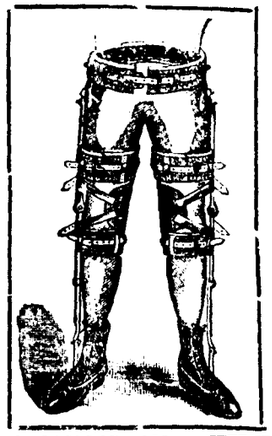

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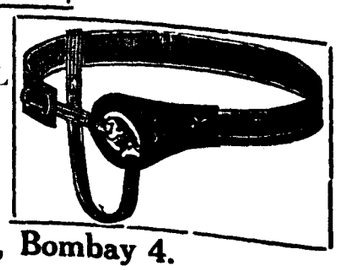

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The Antiseptic

ESTD., 1904.

A Monthly Journal of Medicine & Surgery.

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Editorial and Publishing Offices:—323 Thambu Chetty St., Madras.

Annual Subscription Rs. 5. Foreign, 10 Sh. Post Paid.

Vol. 26] DECEMBER, 1929 [No. 12

ORIGINAL ARTICLES.

* MATERNITY AND CHILD WELFARE WORK.

BY

LT. COL. C. A. F. HINGSTON, C.I.E., O.B.E., I.M.S.

Offg. Surgeon-General with the Govt. of Madras.

The need for such work in this Presidency is very great when we see in 1925 infantile mortality in Madras was 279 per 1000. This, every one will admit, is much too high, the death-rate is higher, in other towns in India. Poona has a death rate of over 600, per thousand while Delhi has 183. The highest infantile mortality in Europe is in Berlin where the rate is 135 per thousand. In London it is only 69 per thousand. Whereas in New Zealand it is only 35 per thousand. The Welfare Associations should undertake the following work, antenatal work, natal, post natal and child welfare work. The Child Welfare work should be divided into two divisions (*a*) infants, (*b*) children. A great deal has already been done in Madras and in the Presidency. Presidents of Municipalities, Local Boards, Collectors, Civil Surgeons and private doctors have to a certain extent taken an interest in the subject and in

* Specially contributed to the Antiseptic.

Madras and in the mofussil we have a number of ladies who do interest themselves in the movement. In some places a small and well organised centres do exist. In Madras there are many child welfare centres, the work done is being appreciated. There is very little hostility now against work of this sort. Ante-Natal clinics are being arranged for in the women's hospitals in Madras, and we hope maternity homes will be started very soon. Let us for a moment consider a few of the problems that can be undertaken in small centres. A committee of ladies can be got together. A room or rooms can be hired or presented to the centre by some influential person. The women in the neighbourhood can be collected together and informal talks on how to feed their babies and on the preparation of baby feeds, can be arranged. A doctor can be attached to a centre to give lectures, and magic lantern demonstrations. Health workers can visit the women in their homes. Pure milk supply can be arranged for. Pamphlets can be distributed to those who are intelligent and who wish to improve their knowledge. The centre should employ a midwife and if possible a health visitor. Health Visitors can generally be got now on a salary of Rs. 75 a month. It should be remembered that she is an highly trained individual far superior to the midwife in questions of Health problems. A knowledge of sanitation has been acquired by her in a health school so that it is really worth while to employ a health visitor if funds permit. The cost of employing a midwife is much less being only Rs. 30 a month. Where possible a midwife and a health visitor should be employed. The midwife will work at a centre, will do house to house visits and attend labour cases. If possible she should be in touch with hospitals and visit the women there and so gain their confidence before leaving hospital. It is always advisable to have a centre in connection with a hospital if possible. The midwife should visit the homes of the women in her district supplying the centre with the names of all pregnant women in her district. She should persuade the women to visit the centre at least once in the early months of pregnancy where the necessary examination will be made. She should visit the pregnant women, if everything is found all right, at least once a month during the first 7 months of pregnancy and then once a fortnight and in the last month once a week. Any patient who is found to be suffering from any complication or disease of pregnancy should be persuaded to attend a centre or the hospital for advice and treatment. If the patient is unable to visit the centre a doctor should be called in to see her. After confinement at home wherever possible the mother and infant should be visited during puerperium (the

first 10 days after confinement). After that she should visit the infant once a fortnight during the first three months and then once a month after that during the first year of its life. Of course if the mother is a highly intelligent woman there would be no necessity to visit the child so often. It is very necessary in small centres to have propaganda work successfully carried out. This propaganda work should include distribution of pamphlets leaflets, and exhibitions; the local papers should be encouraged to write and accept papers which will help to educate and enlighten the public of their district in health matters, and thereby educating the public in favour of child welfare work. Special attention should be given to propaganda work amongst children. I cannot think of anything better than the work which is now being carried out by the Buckingham Mills Centre in Madras. It is highly successful. Instruction in mothercraft, in the management of infants can quite easily be carried out in all centres to prospective mothers. Baby and Health week exhibitions can quite easily be arranged in large centres. A Health Visitor is really necessary in all large centres. She is a highly intelligent person able to keep records. She will attend centres and visit the homes of mothers, visit the hospitals and see the mothers after their confinement at their homes. She will advise the mothers at their homes in all subjects connected with pregnancy and confinements. She will also be required to instill into the women the necessity for hygienic surroundings. She will also be able to advise the people how to protect themselves and the precautions they should take if any epidemics are prevalent. She will also be able to investigate causes of deaths in children and still births. Being of a more educated mind than a midwife, she will more easily be able to persuade the women to visit the health centres and hospitals. Her duties also will be to supervise the work of a midwife in a district. She will be able also to pelhin the notification of births. Her duties also will consist of visiting infants and children in the early years of their life. It is quite possible, if properly arranged, these health visitors and midwives should during the morning be at the Health centre and visiting the hospitals. Most of her visiting will be in the evening and afternoon when women have leisure and are able to see them. Generally the women are employed on their own house duties in the morning and so are not willing to see the health visitors then.

In large Child Welfare centres ante-natal clinics should be established and a separate department for examination of children and infants. There should be a lecture hall if possible where classes can be taken. Various forms of medical records must be

kept. A proper room should be set apart for weighing the children and for medical examinations. Various classes should be formed which should include, mending, sewing knitting etc. and where possible a domestic economy teacher should be provided.

Provision of milk for artificially feeding children should form an important work of this centre.

At some of the centres, where possible, dental work should be undertaken. A centre should be in close touch with the children's hospital where children requiring treatment can be transferred. The ante natal department should also be in close touch with a maternity hospital where beds are provided for ante-natal troubles.

In connection with the child welfare centres creches should be provided.

---

* ANTI-CHOLERA CAMPAIGNS IN THE TROPICS (PAST AND PRESENT)

BY

DR. CH. W. F. WINCKEL,

Inspector, Public Health Service of the D.E.I., Weltevreden (Java).

I. INTRODUCTION

The twenty-fifth anniversary of a medical magazine offers an opportunity for comparison of past and present. In Western countries such a review would register the notable advance of medical science; the same applies in a greater degree for tropical countries, modern tropical medical science being a product of the last decades of the 19th and 20th centuries.

Not only is medical science in these parts of the world quite young, but above all its practical application, to the advancement of private and public health, is a thing of the last few years. Of course I am not entitled to draw comparisons on past and present, concerning India, as I know that country only by a flying visit, paid a year ago during the Interchange of Health officers, organized by the League of Nations Health Section. However, my experience of 20 years in another part of the tropics, the island

* Specially contributed to the Silver Jubilee issue (April 1929) of the Antiseptic.

of Java and the other islands of the Dutch-Indian Archipelago, enables me to compare past and present there.

The difference in anticholera-campaigns, of twenty years ago and of the present time, gives a striking example of the progress of medical science and of its application to the densely populated areas in the tropics.

II. PAST: 1909.

Cholera is not endemic in this Archipelago. Java was infected with it from Sumatra, and that island perhaps from Singapore, which in turn perhaps got its infection from India. At any rate, Java and its capital Batavia, had been some years quite free from cholera, when in September 1909 the first case was reported.

The nature of this first case was quite typical for those times: the patient was a Chinese coolie, who for some slight offence had been committed to a short term in jail. He acquired his infection in town, showed the symptoms in jail, was examined by the civil surgeon, who also made a bacteriologic examination, and his disease was proved to be cholera.

So this first case was detected by chance: if the man had not been jailed, he would have died without medical attendance, and the authorities never would have known of it.

During the days following this first case in jail, several cases of deadly enteritis were reported in port, down-and uptown, and soon there was a real explosion.

Now you can easily imagine how difficult and alarming the situation was. Twenty years ago the health-organization of Java in general, and of Batavia in particular, was in its infancy. A civil surgeon with some native doctors were the only medical officers. For want of a Civil Public Health service they were incorporated in the Military Medical service.* The general hospital without qualified nurses was only fit for convicts and prostitutes. The military hospital had a few primitive wards for infectious diseases, but no native or Chinese patients applied for admittance to them: they died in their shacks and the authorities had no means of estimating the number of cases and casualties, once the town was infected. No adequate watersupply: primitive artesian wells for the better situated, superficial wells and

* Not in the sense of the I. M. S., but of the R. A. M. C.

the river for the population. No sewage system in the town; its 200,000 inhabitants contaminated soil and river.

Thus conditions were hopeless: soon numerous cases were reported in the town of Batavia and in its environs. The disease was spread by the port-coolies, fleeing from the place of disaster. Only a small percentage of the cases was reported to the civil surgeons and to the administration, and the only means to ascertain, not the number of cases, but the casualties, was by counting the dead. In this way they found, that in former years the monthly mortality was about 600, whereas in 1909 in September 1400, in October 1800, in November 900, in December 800 burials were registered.

Thus the mortality of the population was proved to be doubled or trebled, on account of cholera; furthermore, it must be kept in mind that the " normal " mortality-rate of Batavia was (and to a certain degree still is) abnormally high on account of malaria by the saltwater-fishponds.

In these four months about 2500 people died by cholera alone: in the same time only 385 non-European cholera-patients were admitted to hospital; out of these 280 (73%) died.

If one reads the official reports of that time, one is impressed by the impotence of authorities who had to deal with a calamity, and who had no means of combating it. And so the epidemic diminished on its own account to remain endemic during several years: the last cases occurred in 1919, ten years later.

III. PRESENT.

In October 1927 the SS " Tasman " arrived in Java ports from Singapore, at that time slightly infected with cholera. A Chinese member of the crew became sick, and died in port: after bacteriological examination vibrio cholerae was found in the stool. A few days later a prostitute died of cholera, and in the following days 9 cases were reported in port, down and up-town. The bacteriological diagnosis was equal to a sentence of death: no patient recovered, notwithstanding every kind of modern treatment: hypertonic salt solution, glucose etc. etc., everything was tried, without success.

So the epidemic proved to be very deadly indeed; yet, only 9 cases occurred in October and November, and after that time,

Batavia and its densely populated environs were again free from cholera.*

What caused this difference between 1909 and 1927? In these years the following alterations had taken place:

(*a*) A full time port medical officer with an Indian assistant had been appointed.

(*b*) The civil public health service was created in 1911; its officers, all full time men, had the opportunity to examine not only patients, but also their contacts. So a few cases were traced back to their origin: a native cook, vibrio-carrier. So among the prostitutes of the port 3 carriers were found and isolated.

(*c*) Modern equipment of bacteriological laboratories and of the general hospital, with a population of about 1000 native and Chiness patients, and with first rate wards for infectious diseases.†

(*d*) In 1913 a municipal health service with full time medical efficers was organized.

(*e*) In 1916 post-mortem examination by medical officers was made compulsory also for Indians and Chinese; every death case in certain towns has to be reported, and burial is not allowed without a doctor's certificate. Thus it is possible to see the first casualties by epidemics (e.g, Cholera. plague, smallpox), also when the deceased had no medical attendance.

(*f*) Western medical methods have become gradually more popular among the population.

(*g*) Batavia has since 1921 an excellent watersupply: at present only the better situated people and about 10 or 15% of the native people have house-connections, but this number is gradually increasing.

(*h*) This cannot be said of the sewage system: this is still as insufficient as in 1909.

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* For further particulars on the ill-fated trip of SS " Tasman " (Singapore-Java-Australia), on the cholera-epidemic in Batavia and on its eradication see the "Bulletin de l'office international d'Hygiene publique." Paris 1928, Hasc. 8. p. 1232.

† In the Dutch East Indies you will nowhere find special hospitals for infectious diseases: the general hospitals have special wards for these diseases; to explain the advantages of this system would exceed the intention of this paper.

So the main point of the anti-cholera-campaign, besides isolation of patients and contacts, had to be found in mass inoculation of the inhabitants of Batavia, which is at present a town of the same size as Madras: nearly 400,000 inhabitants. Anti-cholera vaccine was introduced in Java in 1911, and on several occasions it was proved to be a very valuable aid in combating local explosions

With the aid of a score of medical volunteers (professors of the university, military surgeons, medical students) we were able to inoculate within a fortnight about 300,000 people. Then the interest of the natives waned, there occurring no fresh cases!

The intention of my paper is only to recall to mind the difficulties of the past (a past not mediæval, but only 20 years ago), and the possibilities of to-day, not only in cities with every kind of sanitation, but also in tropical cities without adaequate water-supply for, "the great unwashed", without sewage system, if the following conditions are fulfilled: full-time health officers, modern epuipped laboratories and hospitals, a certain degree of popular confidence in medical science (and in medical men!), enthusiasm among authorities and doctors, and a good supply of Anti-cholera-vaccine.

I certainly do not intend to pretend that only our measures account for the unusual smallness and shortnesss of the epidemic. To be sure, there were other favourable circumstances: The infection of Batavia occurred just at the onset of the West-monsoon, with its heavy rains. But still, the example of Batavia shows the possibility of successful mass inoculation of an Eastern population.

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*SOME HINTS ON THE STANDARD OF CURE OF CHRONIC GONORRHOEA IN THE MALE.

BY

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'A Gonorrhoea begins and God alone knows when it will end' said *Ricord* more than a generation ago and the aphorism is as true to-day as the day it was uttered. If the invasion of Gonorrhoea is confined only to parts where there are few glands i.e., in the conjunctiva, Gonorrhoea runs surprisingly smooth and acute course and then according to its nature it soon disappears without leaving any permanent deformity on the patient; but in cases

* Specially contributed to the Antiseptic.

when it finds an entrance into genital organs it has a most pathetic story to tell. In this favourable soil where it finds enough room for growth, expansion and development, it causes a chronic glandular catarrrh and periglandular sclerosis. Its marked tendency, it should always be remembered, is to penetrate the glands and follicles as well as the ducts which open in to the Urethra. And in these situations it is a cause of anxiety to the medical practitioners and a never ending pain to the patient which can only be removed by a perfectly correct diagnosis and treatment.

From the male urethra and its glands and follicles, the Gonococci make a quick exit, say, after a period of six months, according to our observation in generality of cases. Persistence of Gonococci after this period or more than 18 months in the male is quite exceptional but undoubted as is proved by the writings of Ricord, Desormais and Hartmann. But the catarrh does continue longer than the usual period for it is worked up by associated micro-organisms which persist after the disappearance of Gonococous. Indeed we may compare the infectiousness of Gonorrhoea with that of Typhoid fever. In some cases the disease does not last long and the patient soon gets cured but in other cases though very small in number the disease continues and remains infectious. It is very difficult to determine the persistent infectiousness of a given case but all this does not alter the fact that almost all infected persons are cured by appropriate treatment.

In women it is very difficult to set any limit to the period of infectiousness and in fact most authorities confess their incompetenee to cure it in some instances, But this again does not alter the fact that many women like most men recover from Gonorrhoea in a few months time.

The test of cure depends very largely on the diagnosis of the disease and appropriate treatment consistent with the diagnosis. Here a word of warning is necessary in view of the fact that most practitioners still persist in the crude empirical and obsolescent methods that were current in by-gone days. Even when they are fully equipped and perfectly qualified to deal with such cases, they totally fail to apply the up-to-date methods either on account of their prejudice against certain procedures or their want of experience in the application of those methods. The result is that the patient's sufferings are thereby increased and very often the patient becomes so depressed and down-hearted that he begins to believe that the ailment he is suffering from is incurable. This state of mind is most objectionable and from the professional point of view most damaging to the reputation of those medical men

who arouse such feelings in their patients. Modern science and Preventive medicine have made much strides in recent times that it can be said with authority that given time and skill there is no inflammation of urethra that would not yield to suitable treatment.

Examination of Gonorrhoea patients entails much care and system to avoid diagnostic errors and to determine the extent to which parts concerned are involved. With modern instruments of diagnostic precision such as microscope, Cystoscope, Urethroscope, Ureteral Catheter, the Roentgen ray and the various laboratory procedures, guess work in the diagnosis of lesions of the genito-urinary tract is absolutely impossible. No doubt all this requires much time and labour and unless this is done thoroughly and conscientiously, much valuable time would be wasted and real focus of infection remain untouched. Next to an accurate diagnosis, appropriate treatment of chronic Gonorrhoea is important and should demand the earnest attention of the medical practitioners. As this paper is confined to the standard of tests, it is not necessary to enter into full discussion on the subject of treatment but this much I can say for the guidance of fellow workers in the field that it is absolutely useless to put reliance exclusively on one method of treatment.

We are painfully aware that this disease is so intractable and persistent that it would not yield to one kind of treatment alone. So the only alternative left to us is to mobilise all our resources and use every method at our command to exterminate the foci of infection. Indeed the choice of treatment is so vast that one need not despair of a cure. Different methods which are generally used in my practice are the following:—

(1) Urethro Vesical irrigation.
(2) Urethral injection.
(3) Massage of glands opening out in the urethra.
(4) Dilation.
(5) Urethroscopic treatment.
(6) Instillations.
(7) Diathermy.
(8) Ionization treatment.
(9) Urethral Suppositories.
(10) Electrolysis.
(11) Ultra-violet Therapy.
(12) Vaccine treatment.
(13) Cauterization.
(14) Medicines taken by mouth.

The question of a standard of cure is a very thorny one. It would appear to us that every urologist according to his own experience has a standard of his own which he usually applies in his own practice and would insist upon its universal application. This subject has aroused so much acrimonious controversy and so much fiery denunciation that it would be impossible to choose among the multitude of views and requirements that are supposed to be essential. Before discussing the fundamentals ot cure, it would be worth while for us to discuss what should be our aim in laying down such a standard, in other words what is our object in applying such a standard ? Our aim must be:—

(1) To satisfy ourselves that the patient is cured.
(2) to give us a reasonable assurance that he will not have any relapse.
(3) to protect the patient from any future sequelae of the disease.
(4) to satisfy ourselves that the Genito Urinary system is normal or likely to return to normal in a reasonable period of time.
(5) to give as little inconvenience to patients as possible
(6) to lay down a workable standard the technique of which would not expose the patient to unnecessary risks.

Now in working out these aims we should not lose sight of the fact that our methods have not become so perfect as not to allow of any defeciency. As we have hinted above each method carries its own short comings and on account of such defects being inherent in them it should be our aim to devise a standard of cure which would not be too rigid and too inflexible. If we remember this, our standard would not err on the side of being too low or too high.

One ot the standards that is generally in vogue is known as the Beer test. After the discharge has ceased and urine has been clear for a day or two, the patient is instructed to drink several bottles of beer with a view to excite relapse. A similar test was used in the Military Hospitals. A patient was placed on fatigue duty "and if there was no obvious relapse, he was discharged as cured. Such mild types of tests were quite common during the Great War when the medical officers vied with one another in inventing useless formulas for tests out of their fertile imagination to the great detriment of their soldier—patients who had to suffer much in consequence. Too severe standards are equally harmful, they tend to drive the patient to despair, make him introspective,

a miserable neurasthenic and an unhappy sexual degenerate. He begins to take too much technical care of his genitals. It is quite common for such an individual in the quiet of his bed room to examine his urine for pus, shreds or mucus. He lives for the pathologist's reports and interprets them according to his mood and whims. Sometimes such patients maul and maim so much their penis in their effort to bring out some discharge from their meatus that they become a veritable enigma to their medical attendants. All this is an inevitable consequences of too much insturmentation and prolonged tests which should be avoided at all costs.

Various factors have been requistioned for arriving at some definite and exhaustive standard of cure. There are several ways the urologists generally follow in coming to a sound judgment whether a person has satisfactorily recovered from his illness. But these different factors or methods are of varying value alone or in combination which should be studied carefully to be understood.

(1) *Examination of urethral discharge*: It is patent to everybody that if discharge is found in the urethra, there is no question of cure. But it generally happens that in chronic cases we seldom find any apparent discharge which possibly exists in the 'Morning Drop.' In such cases it is always advisable not to make any fanatic attempt at squeezing out the 'glans' with a view to secure some evidence of discharge for such practice is dangerous and damaging to the urethra. If there is no discharge, no stickiness of the meatal lips and no apparent moisture, our attention must be directed towards other methods confirming or contradicting our suspicions.

(2) *Examination of the Urine*:—Patients should be advised to bring two samples of their early morning urine. If we find after our examination that urine remains clear for some days it would be a sufficient indication, combined with other tests of cure. If shreds persist for sometime, I have found rather inadvisable to continue local treatment with a view to eradicate the last thread in the urine. Suppose this is the only symptom and the only unfulfilled requirement of our test, we should not hesitate to discharge the patient. For it must always be remembered that "*many men with perfectly healthy urinary tracts go on passing threads in their urine all their lives.*"

(3) *Conditions after Exercise*:—After the disappearance of discharge and of shreds from urine, a patient should be asked to take vigorous exercise for two days during which we should keep

a strict watch on the reappearance of the symptoms. If we do not discover any relapse, we should regard this as a favourable point gained.

(4) *Absence of Complications*:—Vesicles, Prostate, Vasa deferentia Cowper's glands, epididymes, joints and skin should be normal. We should make a searching examination of these parts especially stressing on the elimination of any induration or focus of infection from the whole of urethra.

(5) *Provocative vaccine*:—When all the above conditions have been fulfilled and when we are certain of the absence of complication on the perfect cessation of all treatment, a provocative vaccine should be tried. A dose of 100 Million stock Polyvalent Gonococus vaccine should be administered subcutaneously and the urine be examined the following morning. Such examination should be repeated at least for a week and if there is no relapse, signs are favourable but if the symptoms reappear, we would have just grounds for concluding there is a concealed focus somewhere which wants looking after.

(6) *The search for Gonococci*:—It is absolutely essential to grasp the fact that it is futile to kill the last Gonococus and that all attempts with this end in view have ended in over-treatment. We are certain that with all our skill and ability it is impossible to exterminate every Gonococus. In spite of the most rigid tests no one can guarantee that the last organism is eliminated, Moreover we know that Gonococcus may lead an indefinite saprophytic existence and thus become non-pathogenic. It stands to reason that when it has become harmless and non-pathogenic, we should not waste our time in obliterating the last trace of them. A more reliable guiding principle is our determination to find pus and leucocytes in the prostatic secretion and utter annihilation of these before we can entertain any thought of cure. In this connection we might add a word or two about cultural methods. We can definitely say by our own experience that this is of very little assistance either to the patient or the medical attendant for it would be a perpetual embarrassment and disappointment to both. It is well known that Gonococus does not grow even under the most propitious condition and especially, as it happens in chronic cases, when it becomes phagocyted and degenerate, it is impossible to grow. Lastly we wish to emphasise that clinical observation is of first rate importance in determining a standard of cure. It is no use to go on a wild goose chase of hunting out and destroying organisms.

(7) *Urethroscope.*—It is laid down by certain well known authorities that no cure can be guaranteed and no patient should be discharged without the thorough exploration of urethra by this instrument. As far as I am concerned, I use Urethroscope so often both for diagnostic and treatment purposes that I find it useless to have a final urethroscopic examination before discharge. By my constantly handling this instrument I know from time to time the progress a patient is making towards recovery so that I regard it as unnecessary to reserve this examination to the last. I do not by saying all this mean that urethroscope should be used indiscriminately and without regard to contra-indications but as a rule in my practice I have to use this instrument very constantly. I need not discuss here the points which an operator should have in view while examining the urethra with this instrument which would require a separate article.

(8) *The period under observation*:—It is dangerous to discharge the patient immediately after the cessation of treatment. A period of close observation say from 12 days to 15 days should be reserved before discharge when daily examination of urine and urethral discharge should be carried out allowing the patient enough excercise.

(9) *Subsequent examination*:—The patient returns in three months and again after six months for further examination. The following procedure must be followed (1) Examination of Urine (2) Massage of Prostate and Vesicles and a thorough examination of the Secretion. (3) A Provocative Vaccine (4) Urethroscopic examination.

Conclusion:—The foregoing would give some idea of the right standard of cure. To sum up, my own practice is the following:—

(1) The morning urine should not contain pus cells more than one percent per microscopic field.

(2) Expressed Prostatic massage should contain not more than five pus cells.

(3) Heavy meal, drinking and keeping late hours should not increase the number of pus cells in the urine or prostatic massage.

(4) The Urethroscopic examination should show no abnormality.

(5) The Provocative Vaccine should show no focal reaction.

(6) A curved sound should be passed on the 12th day and a gentle massage must be given to the urethra on the sound. No pus should appear and urine must remain clear.

(7) Disappearance of all clinical symptoms.

(8) Patient should be kept under close observation for 12 days before discharge. His condition should be normal during this period.

(9) In three months and again in six months patients should return for resurvey.

TEMPERAMENT, AN IMPORTANT FACTOR IN TREATMENT*

BY

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Diversity is one of the greatest wonders of creation. Innumerable are the creatures in nature; yet, no two of them are so exactly alike that they cannot be distinguished. This is due to certain peculiar characteristics or features that make their differentiation possible. This truth applies with greater force to man, the highest order of beings, in whom the diversities in size shape, colour, taste etc. find expression in a conspicuous degree. However exact the likeness between two persons may be, they may still have some minute points of dissimilarity between body and mind that they can be easily distinguished from each other. Take for example, a group of four boys of the same or different parents. We observe that they are not exactly alike in stature, features, physical developments, complexion and mood. One may be tall and strong, smart, fair and jolly; another short and plump, dark-skinned, weak and grave; the third different from the two above and the fourth different from all the rest. Take again two convalescent patients, just recovered from a serious illness and kept under similar conditions of regimen, treatment and comforts. We are astonished to see after a time that the one has grown fat and plump; while the other has only put on a surface gloss. These differences are attributed to certain constitutional peculiarities called temperaments, the word coming from the Latin verb tempero—to mix or temper.

Temperaments simply mean in the words of a well-known French Physiologist "Certain physical and moral differences in men which depend on the various proportions and relations among the parts that make up their organisation as well as upon different degrees in the relative energy of certain organs."

People differ greatly in their constitution so that what is agreeable to one is not agreeable to another. Such constitutional disagreements are generally seen even in the common articles of food. Fish causes dyspeptic symptoms in one, while it produces

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no trouble in another. Milk produces diarrhoea in one and constipation in the other. Highly sweet articles cause nausea and vomiting in some people, while they are well borne by some others. This susceptibility of certain individuals is called idiosyncrasy which is a variety of temperament.

Temperament plays no small part in the causation of diseases and in influencing the effects produced by the same remedial agents on different patients. To illustrate this one has only to observe what happens if four persons are exposed to a morning chill. We see that one has caught a cold, another suffers from Rheumatic fever, the third from Bronchitis and cough and the fourth is quite alright. Why is it? Why again a certain remedy cures a complaint in one and utterly fails in the other? Why is it that some, when exposed to infective diseases readily fall victims to the infection, while others similarly placed escape altogether? These differences are due to constitutional defects to which the name diathesis is given. Diathesis and temperaments were used in the same sense in olden days. Now, they have been differentiated, temperament as applying to constitutional pecularities or differences found in health and signifying a purely physiological condition, and diathesis as applying to constitutional defects and implying a pathological peculiarity. In plain words diathesis means a latent predisposition to particular diseases.

A knowledge of one's own constitutional peculiarities and the adaptation of life in accordance with its revelations will help one to maintain health and prolong life. Of greater importance is that knowledge to a physician in so far as it would help him in correctly diagnosing the disease, determining the dosage, prescribing suitable drugs and diets and finally in giving healthful advices. By way of illustration may be mentioned the common but most reprehensible practice of advising brandy to every case of Pneumonia. This would never be the case if the physician knows something of temperament, for, while it is beneficial to certain class of patients in tiding over the most critical phase of the disease, it is certainly injurious to certain other class of patients in that it would only precipitate the fatal end of an otherwise hopeful case. Similarly in the case of most other diseases and with most of the remedies, a proper appreciation of the particular temperament of the individual will help the physician to avoid many a pitfall in treatment. It is to emphasise this very important but most neglected part of the doctor's resourcefulness to combat with diseases that the present article is intended. In this the writer claims no originality, but has made a free use of the authorities on the subject and his labour consists mainly in

digging out the important facts lying buried in an extensive field. Further, being convinced from his personal experience of its place in the practice of medicine as advocated by its exponents, he has only ventured to call the attention of the profession to it to stimulate an interest in this branch of the science.

That the renowned Hindu writers on medicine such as Charaka and Susruta have devoted considerable pages for an elaborate description of temperaments, shows the value they have attached to this branch of medical science. Similar views are seen reflected in the writings of old Western authors such as Prof. Laycock, Hutchinson etc. The vaidians and hakims of the Ayurvedic and Unani systems of the present day still conduct their inquiry and treatment on the main lines of Prakrithi, or temperament. The ancients' classification of temperaments was based on the hypothesis of humoral pathology. Among the recent advances in Western medicine, that of endocrinology is perhaps the most prominent and up-to-date one. And who knows that this endocrinology or hormonic theory and humorology are not one and the same or of kindred origin and that the former humoral pathology has not assumed the name of the present day hormonology as the result of a mere evolution? Whatever that be, there is no question about the influence of temperaments, but only on what they are founded, whether on the humours, or hormones or on certain fundamental properties of the bodily organisation, or if they are only the representatives of the four principal systems of the body.

Different doctrines of temperaments are advanced by the ancient and modern doctors of both the Hindu and the English systems of medicine, a detailed description of which is not within the scope of this article. According to the Ayurvedic system, three humours, Tridosh, are recognised viz., air, phlegm and bile which support the human frame and any derangement of any of which is believed to cause ill-health. The unani system recognises four temperaments according to Hippocrates and eight according to Galen, the former on the humoral basis and the latter on the property basis of all matters. Prof. Laycock makes six classifications based on certain fundamental properties of the bodily organisation and the American Phrenologists three, founded upon the chief systems of anatomical structure in the body. Suffice it for us to take the simple, more convenient and generaly adopted divisions here. They are the sanguine, the lymphatic, the bilious and the nervous which are now believed to represent the four principal organs or systems of the body. Any of the temperament in its pure state or an even mixture of all is rarely seen in

any body. Often these are found intermingled and any one of these, characterises the individual according as which of the four predominates over the other. In some, two of those may be found pretty well developed and the rest relatively weak. In a few cases again, it would be difficult to determine which of these predominates and such people are said to have balanced temperaments. The advantages and disadvantages of two simple temperaments, when found combined in an individual, do not show their respective effect in their fullest degree; but show themselves modified by the influence of combination. The combinations of the four principal temperaments make twelve varieties of compound temperaments. These are:—(1) The Sanguino-Lymphatic, the Lympho-Sanguine. (2) The Sanguino-nervous, the nervo-sanguine. (3) The sanguino-billious, the bilio-sanguine. (4) The lympho-bilious, the bilio-lymphatic. (5) The Bilio-nervous, the Nervo-bilious and (6) the Nervo-lymphatic, the Lympho-nervous. These compound temperaments are named after the simple ones, the name in full placed last representing that which exists in greater proportion.

Now the characteristics and other matters relating to each simple temperament may be summarised so as to enable the physician to appreciate the value of a knowledge of temperaments in the treatment of diseases. Space forbids to deal with them exhaustively here. For a detailed account, the interested readers are referred to original books on the subject.

The Sanguine Temperament:—Those who have a powerful process of sanguification or blood formation and a well developed circulatory system are characterised as persons of sanguine temperament.

Physical Characteristics:—A florid complexion. blue eyes, rosy cheeks, red lips and animated countenance mark out a man of sanguine temperament. He is tall, strong and muscular and has a broad chest. His heart is powerful, arterial system full with a large quantity of blood and plenty of red corpuscles. His circulation is active and pulse strong and steady. The digestion, appetite and general health are exceedingly good. The sleep is sound and undisturbed by dreams. He is calm and not easily excited by nature, but when roused to anger, very violent in rage.

Mentally, he is cheerful and jolly, bold and straightforward. He prefers muscular exercises to intellectual work. His speech is slow and deliberate.

Children of this temperament show great liking for sports, fun and amusements; they are not studious, but more practical in their pursuits.

Of combinations, the nervo-sanguinous is the most frequently seen among the civilised people. They are not only physically strong and healthy, but possess a capacity for mental and literary acquirements.

Predisposition to diseases. This is the healthiest temperament, nevertheless it predisposes its possessors to acute affections of a congestive and inflammatory nature and many blood disorders. Plethora leading to apoplexy and sunstroke are the two most probable complaints they have to guard against. To such people a too dry and hot atmosphere will bring on Epistaxis, exposure to sun and continuous stay in crowded rooms will cause congestive headache, sedentary habits and indolent living will give rise to gout and Pneumatic affections; a too free use of acids and nitrogenous food create lithiasis, inattention to cleanliness and bath in summer, moist and hot weather will produce a lot of skin affections such as boils, prickly heat, eczema etc.

Treatment. In tackling with diseases affecting persons of this temperament, the physician has to take the utmost care in deciding the lines of treatment to be followed. In almost all acute diseases, any ordinary routine line of stimulant treatment will not only prove ineffectual, but disastrous; whereas timely resort to such lowering measures as blood-letting, application of leeches, purgatives, administration of low and non-stimulanting diets etc. might be highly beneficial. Stimulants in such cases should be given with great caution. Experience tells us that cases of Pneumonia occuring in Sanguinous persons get worse under a too free use of brandy in the early stages of the disease. It would pay well the physician, therefore, to find out the temperament of the patient before he advises such remedies or in other words to study the disease in relation to the patient affected. The condition to be treated rests no less upon the manner in which the particular patient reacts to it than upon the disease itself. The convalescence from any acute malady in these people is as easy and rapid, as the susceptibility to invasion, and they require nothing but a simple tonic and nutritious diet to restore them to complete health in a short time. In giving advice to such individuals for the care of their health, stress has to be laid upon certain particular points. Animal diets and foods rich in fat and ghee should be sparingly used especially in hot season. Rice, milk, and vegetables are to be preferred to more

stimulating foods. Tea and coffee are to be altogether avoided or taken moderately. Alcohol especially in the form of spirits and malt liquors which tend to produce Plethora and Gout should be forbidden especially in a hot climate. Smoking, if not within narrow limits, will induce a determination of blood towards the head and ultimately giddiness. The clothing should be light and cool in summer and warm in winter. A daily bath and frequent changes of underwears should be insisted upon to ward off the evil effects of pent-up perspiration. Sanguine people enjoy best health in cool and temperate climates. They should guard against sudden changes of atmospheric temperature. Undue exercises are discomforting to them, because of the headache and throbbing of the temple resulting from the rush of blood to the head promoted by those exercises. These should therefore be light. A walk or a ride in the morning will answer best for them.

The Lymphatic temperament.—This temperament is characterised by the predominence of the lymphatic system and consequent formation of a large quantity of lymph or white portion of the blood in the individual. By this is meant an inherent tendency existing in some individuals to take more of the white and less of the red portions of the blood. This is thus a contrast of the Sanguine temperament and is distinguished by a weak circulation, pale complexion and inactivity. Lack of energy and sluggishness of nutritive processes are its prominent features.

Physical characteristics.—A fat and heavy body of medium stature with full and expressionless features, a sallow complexion, round face, thick nose and lips, bulging cheeks, large and smooth forehead, short and thick neck, flat chest, large joints, broad hands and feet and having soft and flabby muscles and coarse skin endowed with fine, light and lustreless hairs, make the picture complete of a lymphatic constitution. All the bodily functions such as digestion, nutrition, circulation, and sexual functions are slow, feeble and deficient. People of this temperament put on fat too readily and lose it also at the same speed on the slightest illness.

Mentally, they are dull and slow of understanding. Their memory is bad, imagination and perception weak and slow. They are more fitted for mechanical work only.

Children of this temperament have a heavy build round and dull-looking face and lustreless skin.

Predisposition. Any diseases in them are likely to assume chronicity on account of the weak resistive power which, in turn, makes the convalescence long and tedious. Obesity, Leukæmia,

anæmia, fevers, inflammations, glandular enlargements, chronic ulcers, mucus discharges and menorrhagia are the complaints common to them.

Treatment.—Stimulants and tonics are of great help in the treatment of persons of this temperament. As the power of absorption is slow and all the organs are torpid in their action, large doses of stimulating medicines can be pushed on to the point of physiological action. Depressing drugs such as aconite, veratrum etc., are strongly contraindicated and their administration must be avoided, no matter what the condition may be. Iron is the sheet-anchor in all chronic complaints of this constitution. Cod liver oil, chemical food, nutritious and easily digestible food are often indicated on account of their tendency to rapid wasting. Thyroid extracts are reputed to be good for them. Persons of this temperament should pay greater attention to their mode of living to keep themselves healthy. The diet should consist more of animal and less of vegetable substances. Fat, sugar, and substances rich in starch and sugar such as rice potatoes etc., should be taken only sparingly. Seedy articles having more of albumin are beneficial. Tea, coffee and tobacco within limits are not harmful. Alcohol in moderate quantity is permissible. Lethargic habits should be avoided and walking and gentle riding will form suitable exercises for them. A warm and dry climate is the most suitable to live in.

The Bilious Temperament.—The individual who has got a more actively working liver and a larger quantity of bile in him in consequence, takes up the bilious temperament. The dark complexion black hair and eyes, irritable disposition and all other physical and mental characteristics of this temperament are held to be due to the influence exerted by the bile in the blood on the skin and nervous system. Many individuals have known from their experience that their mental activity depends upon the proper working of the liver. This temperament alone or combined is supposed to be the most common of all temperaments in India.

Physical Characteristics.—Lean body of medium stature, dark complexion, black eyes, coarse hairy skin, short neck, prematurely gray and falling hairs, full and prominent subcutaneous viens and serious and gloomy expression of the face characterise this temperament. Though the digestive organs are active, appetite good and liver works well, the slightest irregularity in diet upsets their stomach and brings on dyspepsia. Bilious attacks occur frequently. The circulation is fairly active. The nervous system is irritable on account of the influence of a little bile in the blood, in

the form of Haematoidin which is found to be identical with bilirubin, the chief colouring matter of the bile. The sleep is light, and disturbed by dreams.

Mentally, they are active, ambitious and determined but at times fickle-minded. In nature, irritable, passionate and revengeful, they often exhibit varying moods. Their resistive power is very remarkable. Children show great distaste for hard work and are mischievous, but if properly guided, prove brilliant. Combination with other temparaments show differences in characteristics according to the share contributed by the elements. A large part of the Indians are of Bilio.—lymphatic temperament. There is a balance of activity and sloth in those unions.

Predisposition:—The diseases peculiar to these individuls are dyspepsia, constipation, flatulence, colic, malaria, enlargement of spleen, liver disorders, dysentery, jaundice etc.

Treatment:—People of this temperament even in health should not indulge in delicious dishes. Their diets should be simple. Plenty of green vegetables and fruits should form part of the diet of the dyspeptics with torpid liver. Fish, game and other light kind of meat may be occasionally allowed in cold climates. Partial starvation now and then is of great benefit to them. Saline purgatives, mineral waters, nitro-muriatic acid with infusion chiretta are all indicated for flatulence. Effervescing drinks may be advised for the relief of bilious attacks. Animal food suh as meat, eggs, fatty food etc. are quite unsuitable. Even where milk disagrees, skimmed milk with a little bicarbonate of soda is better tolerated. Bread made of fine flour is likely to produce constipation and colic, but whole meal bread is free from this objection. Alcohol even as medicine is harmful. If urgency makes its use imperative, it should be pretty well diluted and taken along with food. Tea and coffee should as far as possible be avoided. Too much of acids such as too sour buttermilk, lime juice etc. are injurious, but during bilious attacks very useful in moderate quantity. Active exercices in the open air such as walking riding, cycling and those gymnastics in which the abdominal muscles come into play must be taken. These people can withstand heat and cold well. Sultry weather is harmful. The climate best suited for them is where the rainfall is scanty and the atmosphere more or less dry all the year round Malarial districts are to be particularly avoided.

The Nervous temperament.—Those in whom the brain and nervous system are predominating are of the nervous temperament.

Physical Characteristics.—Delicacy and fineness of figure are its distinguishing characteristics. A light figure of tall and thin body which supports a long-necked head having a broad and high

forehead, a pale or pale-red face, elegant nostrills, small and thin-lipped mouth, a pointed chin and an intelligent expression typifies the characteristics of an individual of nervous temperament. His heart beats quickly at the slightest excitement. His viens are full and prominent, sexual passion is strong, digestion generally weak and sleep rather light.

Mentally, he has got a fine memory, brilliant understanding, lively imagination, refined feelings, vivid conceptions and strong emotions.

Children of this temperament are thin and delicate looking and they show a natural aptitude for learning as opposed to sports.

Of combinations, nervo-bilious is the most popularly seen in India, and the Bilio-nervous, the most remarkable found in world thinkers.

Predisposition.—Persons of this temperament are predisposd to such complaints and diseases are paralysis, anaesthesia ; neuralgia. neurasthenia, headache, chronic alcholism and nervousness called by various other names. Nervousness or nervous breakdown sends its advance guard of signs and symptoms pretty early.

Treatment.—In treating diseases affecting this constitution all active medicines especially stimulants, narcotics and other agents which principally act on the nervous system should be given in small doses only. In such people a craving for intoxicating drugs quickly develops and therefore those should not be prescribed except in urgent cases and then withdrawn as soon as the desired results are obtained. Still smaller should be the doses in the sanguino-nervous people in whom, because of an active circulation and great absorptive power of blood, the medicines produce their effect and elimination remarkebly quickly. Too much of eating and that in haste is bad. A mixed diet is sufficient for those who have not much brain-work to do; but those who have to bear great intellectual strain must take a large quantity of materials containing a larger amount of albumin and phosphorous-substances that form the chief constituents of the brain and nervous system. Fish, eggs, milk, wheat etc. answer the purpose well. Too much of sweets and solid meat impair their digestion and should therefore be taken in moderation. Stimulants like tea, coffee and alcohol may be done away with or taken sparingly, lest they should produce tumultuous mental agitation and in excess, sometimes muscular tremors and sleeplessness. Cocoa or ovaltine may be substituted. Excessive smoking is likely to produce shaking of hands and tobacco amblyopia. Exercise is of utmost importance. Riding, cycling and such other exercises that stimulate the internal organs are quite

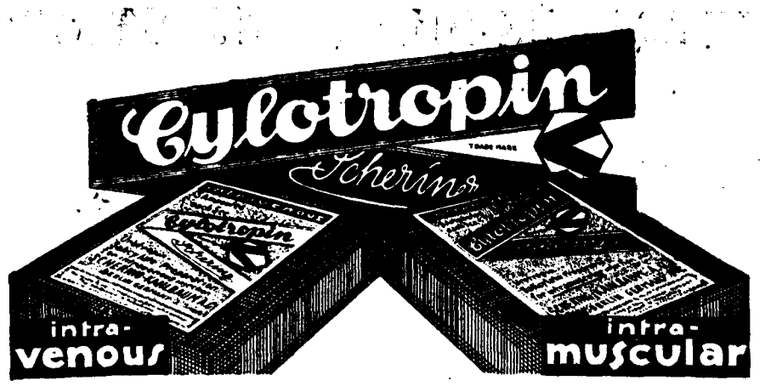
suited for them. Residence in an equable and moist climate would be more conducive to their health. Dry air and high altitudes being very stimulating will bring on sleeplessness and irritable temper in them.

The characteristics of compound temperaments will more or less vary from those of the main divisions and their treatment will have to be adjusted accordingly. No attempt is made here to give the treatment of all the diseases, whether of microbic or other origin that affect the people of these temperaments; here only the broad principles to be kept in view in the exhibition of appropriate remedies, doses, diets and advices etc. are indicated so that they may be so adjusted as to suit the individual temperament.

From the above we have seen what part temperament or constitutional peculiarity plays in the practice of medicine and how important a proper appreciation of it is to the physician. We have also seen that the ancient system has embodied in it the science and art of medicine and that the ancients' success was attributed to a blending influence of the two. The art of medicine was relegated to the back-ground for some decades past. Recently "Constitutional" medicine has received much attention in America, Germany and Italy. The conception embodied in "Constitutional" medicine is how a particular patient reacts to the treatment of disease. In constitutional medicine there is greater display of the art of medicine than the science though the exercise of this art requires a thorough knowledge of all scientific details. This art is the practical application of the medical science at the patient's bed side—an application variously adjusted to suit individual requirements by careful observation. This art can never develop into a science and be taught through books, because a knowledge of a certain persons's bodily system will not enable us to understand that of the other by reason of the unlimited change of the individual constitution. This, therefore, can be learnt only from bed-side clinics and cultivated by bed-side observations. The subject, therefore, claims an important place in any scheme of medical instruction, and merits proper recognition at the hands of the profession.

REFERENCES

1. The Temperaments and constitutional diathesis by Dr. Ram Narain.
2. The Antiseptic March 1928.
3. The Journal of Organo-Therapy, Vol. XII, No. 6.



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CASES AND COMMENTS.

INFANTILE CIRRHOSIS OF LIVER.

BY

M. G. RAMACHANDRA RAO, M.B. & C.M.

Chief Medical & Sanitary Officer, Pudukotta.

With reference to the article on " Infantile Cirrhosis of Liver " by Dr. Gopalakrishnan, in your August issue, I wish to make the following observations of mine on the same dire disease.

While concurring with most of his observations, I shall try to touch points where I am at variance.

Definition.—Infantile Cirrhosis of the Liver is a disease of infants mostly under two years of age. The majority of cases seen by me are between 6 months and one and half years.

Age incidence.—I have seen a case as early as 3 months and as old as two and half years.

Prevalence.- The disease is also prevalent in the Pudukkotah State, just as in Tanjore and Trichy, the neighbouring districts.

So-called Specialists. This is a fact that the old Vaidyans are aware of this ailment and there are various centres in Tanjore and Trichy districts, where these enlargements are said to have been treated successfully. I don't believe the statement, for I know as a matter of fact more then a dozen cases of real infantile liver cases having gone to Kumbakonam Specialist and returning worse ensuring a speedy death.

Their mode of treatment.—All the Vaidyans give very strong Chologogue purgatives resulting in the damage of kidney and producing dropsy suppression of urine, uræmia and death. These Vaidyans are successful in curing enlargements of spleen and not of Liver.

Drastic Results.—I wish to impress on every parent that true cases of Liver are very rarely cured by these Vadiyans and by resorting to them for treatment, we only ensure a speedy grave.

Occurs in Brahmin families. So far as I have observed, the disease is common among Brahmin families. I have seen 2, 3 and 4 children dying in succession in one and the same family.

Careful Study. -I began to observe closely the occurrence of the cases in each Nationality. Broadly I divided the people of Pudukkotah state into Brahmins and non-Brahmins; again Non-Brahmins are subdivided into (a) Nattukottai Nagarathars (Rich

bankers) (b) all other castes including adhi-dravidas. I found out that most of the cases occur in Brahmin families only, about a 10% in non-brahmin caste and not a single case in the Nagarathar family. Why this partiality in the occurrence of the disease?

Social life varies.—Then I examined closely the social lives of each group which varied a good deal. The Nagarathar community live always in spacious, well ventilated, high airy building in contrast to the Brahmin families living in small, ill-ventilated houses. The Nagarathar females, as a rule are more hard-working ladies than Brahmin ladies. The Chettiyars go out to distant places such as Rangoon, Singapore, etc. on professional business and keep away from their families for 3 to 4 years; again coming back and remaining with family hardly a year when again they go out for 3 to 4 years whereas in the case of Brahmins husband and wife live together always except for a few days during delivery and after delivery. In the case of non-brahmins other than Nagarathars, the seperation of husband and wife is atleast more than 6 months.

Social and Domestic life seen to be the important cause. I am inclined to think that the social and domestic life of Brahmin families are mostly responsible for infantile liver. The quick succession of pregnancies and too much indulgence in family life seem to me the important factors. In the Nagarathar's community where the husband and wife are separated for long periods, the pregnancies consequently coming after longer intervals, are facts attributed to the absence of even a single case in them.

I remember to have read in a book on Infantile Liver published in Calcutta that mother's constitution and health are responsible for infantile Cirrhosis and not that of the fathers.

In a man, having two wives, it was told that the children of the first wife developed Liver and one after the other died whereas the children of the second wife were healthy and did not develop.

Signs and Symptoms. The onset is insidious and at times the enlarged Liver is found out accidentally. The first symptoms are intestinal ones-such as constipation, loss of appetite, the mother complains that the child is not cheerful, does not take food so eagerly as before and it gets thinner. Later on, according to the toxaemia, fever and other complications set in such as dropsy ascitis, oedema of lungs, white clay stools. Bile coloured urine, body jaundiced and the child dies after a good deal of miserable suffering. After the development of jaundice and ascities, no

case has survived, and it dies within a week. The liver grows in size and becomes harder and harder. Cases accompanied with high and continuous fever are always hard cases.

Differential Diagnosis.—Differential Diagnosis is rather easy: age, enlargement of Liver, insidious onset, history of similar cases in the family.

Preventive.—This is the best treatment. Improve social life and avoid domestic evils (i.e.) a regulated life avoiding too much excesses. Improve mother's health by proper diet, rich in vitamines and treatment. When once a case occurs in a family it is better the wife is separated from the husband for at least one year, during which period she takes proper nourishment and good tonics. Such mother should not suckle their children, and a nurse must be appointed at all cost. I condemned very strongly the giving of artificial foods and in whatever form they may be.

Treatment.—There is no specific treatment at present known to Medical world. The various propriety drugs in the market are only frauds. I will strongly advise parents to avoid resorting to quackery and too strong purgatives, for as stated above, the hydragogue purgatives, which form the important ingredient in all Native treatment, upset the kidney to such an extent and to bring acute suppression of urine and making them worse, ensuring speedy death.

Most of the deaths are always due to this sort of treatment a good number of them might have been saved, if mild, and rational treatment is adopted. Treat the cases on rational lines, giving plenty of fruit diets, Barley water, well diluted cow's milk (the cow should be a healthy one). Mild purgatives and medicines to tone the Liver. It is said that infusion of Kalmeg and Boldo leaves are good and there is a proprietary preparation named extract Kalmeg Liquidum-Comp, containing both the above drugs which may be tried.

For constipation, yeast powder may be given continuously, diuretics when urine is scanty. On these lines it is possible to save about 25 per cent of cases.

The writer's favourite prescription is :—

℞

Compd. Ext. Kalmeg Liqd. m. 20.
Yeast grs. ii.
Pot. Nitras gr. 10.
„ Acetas gr. 10.
Syrup aurantii ℥I.

Aqua CHCl 3 ad ℥i.
(Fiat) Mixt.
¼th part 4 times a day.

For constipation:
Milk of magnesia.
Sodii Sulph.
or
Tr. Rhei Co.

ENURESIS OR BED-WETTING.

BY

U. VENKATA RAO,

Medical Practitioner, "Sudarsana," Madras.

This is one of the minor ailments of children that affects the moral and mental well being of the child on account of the uncontrollable habit of passing urine when in bed, asleep. In the infant the evacuation of the bladder is a reflex act. Any stimulus that excites the centres in the spinal cord results in the contraction of the bladder and evacuates its contents completely. It is normal in the first two years of the infant. But after a year and a half a careful mother can train the infant to have the evacuation of the bladder at regular intervals. If after the age of two years enuresis is present, it must be considered.

Enuresis in young children is usually dependent on a reflex contraction of the bladder, but rarely the symptoms suggest an overflow incontinence. But these cases are controlled easily. Another condition more difficult to treat is the extreme irritability of the bladder which makes it impossible for the urine to be retained for more than a few minutes at a time. These cases run on to puberty and have the same state as the children afflicted with extroversion of the bladder. These patients besides nocturnal enuresis have precipitate micturition during the day. There are two varieties.

(1) The congenital where the normal control has not been attained even after the second year.

(2) The acquired—where the normal control has been gained and subsequently lost.

The congenital.—The children suffer from congenital defects whether physical as extroversion or mental. Very little can be done in such cases. The child may suffer from fits or mere giddiness or dazedness now and then. In such cases small doses of bromides effect a cure. Thyroid inadequacy may be the cause. Anaemia, malnutrition, rickets, adenoids chronic constipation, rectal polypus, phymosis narrow meatus, preputial

adhesions are other causes. Acquired enuresis is due to some exciting cause as B. Coli, pyelitis and cystitis, the treatment of which will cure the enuresis. Too stimulating a diet with too much liquid at night meal may be the cause or the cause may be traumatic as the presence of stone in the urinary tract, renal or vesical or rarely tuberculosis of the tract or balanitis or vulvitis, masturbation, chronic constipation, faecal acccumulation, and rectal polypus anal fissure, phymosis, exposure to wet and cold ill breeding. terror; hyperacidity of the urine are other causes. Even diabetes may be at the root of the mischief. Presence of worms in the intestines, especially the thread worms may be the cause of the irritability of the bladder and cause enuresis. Essential enuresis is the persistence of or return of the enuresis. In these cases after the removal of any cause, the child should be educated to control the bladder during the day. If the urine could be retained for two hours during the day, then every two hours the bladder must be emptied. After a few days, the period can be lengthened to three hours and the child must be prevented to pass urine except at stated intervals regularly. The interval is gradually-lengthened to four or five hours and lastly three or four times in 24 hours. By this time the child has learnt to control micturition during the day and to this extent the nocturnal enuresis has disappeared. In some cases in spite of such control the nocturnal enuresis has persisted. If the child wets the bed in the first two hours of sleep it should be wakened after an hour and forced to empty the bladder, then the rest of the night there will be no enuresis. Often for some days the child requires waking up every three hours at night and made to pass urine and gradually the interval is lengthened. This must be carried on punctually and carefully for at least six months. Besides such training there is no necessity to restrict much drinking of fluids as this may lead to secretions of concentrated urine which is more likely to excite the bladder. Improve the general health by means of fresh air day and night, good rest and sufficient exercise. Avoid over-study.

Regulate the hours of eating and sleeping and have rest before and after meals. Regulate the bowels; take daily morning warm bath in a warm room followed by a brisk rub down with a coarse towel and have an abundant but non-stimulating diet. Avoid coffee, tea, ginger ale, beer, lemonade, spices and condiments as mustard, pepper etc., acid or sour foods. Reduce meat, eggs and sugar. The supper should be light and easily digestible, La Feure says "many cases of nocturnal polyuria especially in children can be controlled by abstinence from starchy foods and

sugars at the evening meal. Little or no water should be allowed in the evening.

As medicines—small doses of Liq Strychnine 3 to 5 minims T. D. to a child of five years, well diluted with water may be given for a week at a time. To lethargic and inactive children, Thyroid extract may be given in ¼ or ⅛ gr. twice a day. Belladonna is the drug that is usually prescribed in a large majority of cases. But it should be given in sufficiently large doses to produce the physiological effect after carefully studying the tolerance.

Ten minims of Tinct. Belladonna thrice a day in water may be given to children of six years and then gradually increased. Or Atropine may be given beginning with small doses and gradually increased. Pot. Chloras has brought on cure in some cases. If there is much acidity of the urine cut down all meat, keep the patient largely on Milk and Vegetable diet and give some alkaline mixture as Pot. Citras, Pot. Bicarb. Pot. acetas. Iron and arsenic may be prescribed as Tonics to weak children. Faradization of the bladder is also of considerable value.

USE OF SATURATED SOLUTION OF MAG. SULPH IN INTRAVENOUS INJECTION OF NEOSALVARSAN.

BY

CAPT. SHYAM LAL, B.A., M.B.,

Civil Surgeon, Hardoi.

It is my sad experience that one who has to do a good number of neosalvarsan injections intravenously, however expert he may be, occasionally injects a few drops in the tissues either by his own mistake, or by mistake on the part of the patient. In these cases the patient feels severe pain soon after the injection; sometimes the site of injection suppurates and sloughs, and sometimes subcutaneous abscess forms, no doubt, much to the dissatisfaction of the patient.

If a piece of lint sufficiently wide enough to wrap round the elbow is soaked in saturated solution of mag. sulph. and applied at the sight of injection, generally elbow, and is repeatedly kept wet with the same lotion as not to get dry, all pain soon disappears, and all untoward sequelae can be checked.

I have used it in several cases of mine and it has never disappointed me.

ACTION OF EMETINE WHEN INJECTED WITH OTHER DRUGS.

BY

A. MALEK, L.M.F.

Medical Officer, Chowberia Ch. Dispensary-Jessore

The idea of giving combined injection first originated in my mind in March, 1929 when one day I was called in to see a case of continued fever, the temperature rising up to 104°F. in the evening and coming down to 100·4°F. in the morning. There was also moderate enlargement of spleen and liver and frequent attacks of diarrhœa.

The patient was a Hindu male, aged 14 years, suffering from the above ailments for about a fortnight and was under the treatment of another physician for one week, who, thinking it to be a case of K. A., gave him 2 injections of Urea stibamine. But as the temperature did not come down at all and the condition of patient gradually became worse, I was called in.

Emetine with Quinine.—I took his blood and tested the serum with formaline and urea stibamine but the results were negative in both. I, then injected Acid Quinine Hydrochlor in gr. v doses for 3 consecutive days in which the temperature came down from 104°F. to 99°F. on the first day but remained stationary during the other two days. Seeing this I became a bit puzzled at first, but suddenly it appeared to my mind to give emetine hypodermically as the patient's eyes were of yellowish tint. As the patient was very much afraid of taking many injections, I had to inject half a grain of emetine hydrochlor in combination with three grains of quinine bi-hydrochlor intramuscularly. To my utter surprise the temperature became normal on the next day and the patient was cured after two more injections. Since then I have treated several other cases of this nature by the above method and got miraculous effects.

Emetine with Soamine.—Having inspiration from the above I injected Emetine—gr. ½ with Soamine gr 2·3, in many cases of enlarged spleen and liver where temperature has subsided for some time, with equally good results, though individual administration of them did not give me satisfactory result. During this treatment a tonic mixture with small doses of quinine was also given twice daily.

Emetine strychnine and Digitaline:—In a few other cases of chronic diarrhoea and dysentery with cardiac embarrassment I injected Emetine gr. ½ with strychnine gr. 1/60 and digitaline gr. 1/100 and the patients were cured rapidly after 2 or 3 injections

Though immature enough yet I venture to publish the above experiments of mine, in the hope of getting the opinion of my brother practitioners about it, through the medium of this journal, which, I think, will help me much in making further progress in this line if they corroborate my views.

A CASE OF TETANUS

BY

J. C. BAGCHI, L.M.F.,

Medical Officer, Durgaganj Charitable Dispensary, Purnea

A woman of about 26 was laid down with fever on the 20th July 1929.

At first she was under the treatment of a local Kaviraj (Baid) for 6 days. On the seventh day of her illness I saw her when Pneumonia developed. She was treated by me only for 3 days. After this she was again placed under the treatment of a new kaviraj. The husband of the woman wanted an immediate effect. No physician can give such guarantee. Treatment was going on only changing the physician to have the immediate result. By the grace of God she was almost cured and began to take rice.

On the 10th August 1929 she was placed again under one for the treatment of new complication—a serious type of metorrhagia. I went there and saw her and wanted to give an injection to check the bleeding. But both the husband and wife were opposed to injection. I came back only prescribing hæmostatic medicines Bleeding stopped by taking the medicines. Again she was placed under the local "ojhas".

On the 15th I was requested to go there without delay as she was laid up with lock jaw from last night,

She was lying in the following state :—

(*a*) Lockjaw.
(*b*) Neck stiff.
(*c*) Head bent towards back.
(*d*) Pulse weak.
(*e*) Bowels not moved for the last 2 days.
(*f*) Severe pain in the abdomen. There was a tendency of tympanitis.
(*g*) The whole body began to stiffen when contraction occured. This was going on at every 5 minute's interval.

I injected 2% solution of carbolic acid subcutaneously and sent a man to Purnea to bring Anti-tetanic serum.

Before the arrival of the man with serum she expired.

AMOEBIC HEPATITIS

BY

K. V. ADALJA M. B. B. S.

Nairobi

The following case of amœbic hepatitis seems to be worthy of record as it illustrates the difficulty of diagnosis as well as the effectiveness of emetine treatment.

Patient was a young man of 20, He was suffering from excruciating pain on the right side of the abdomen in the hypochondriac region. Pain started at the back and radiated downwards and forwards towards the testis. Patient referred the pain also to the right shoulder. His temperature was 101 and he had dry cough which caused severe stitching pain in the right side of the chest. His bowels were constipated but there was no vomiting. Urine was decreased in quantity and was high coloured. There was history of dysentery two years ago which was treated by a full course of emetine.

Examination showed that there was tenderness at the back in the kidney region. The right hypochondriac and epigastric regions were very rigid and tender on palpation. The chest on the same side showed deficiency of movement and air-entry at the base, Neither tubular breathing nor any adventitious sounds could be made out.

In view of the suddenness of the attack, presence of cough and deficient air-entry a provisional diagnosis of pneumonia or diaphragmatic pleurisy was made.

Next day a consultant was called in. He confirmed the diagnosis of pneumonia. The possibilities of diaphragmatic pleurisy, hepatitis, renal calculus and acute abdomen were discussed but ruled out.

Within the next two days however, the patient made no progress. The pain was as acute and signs and symptoms the same as before. Neither tubular breathing nor rusty sputum appeared.

Another consultant came in. He could not agree with the diagnosis of pneumonia but thought the case to be either diaphragmatic pleurisy or amœbic hepatitis. He advised a trial of emetine.

Patient was given an intramuscular injection of emetine gr. I and cough mixture containing Tr. Camp. Co. by mouth. After two injections were given each on successive days patient felt much better. His temperature which remained previously at 102

dropped down to 100. Pain was decidedly less and so also the rigidity.

The injections of emetine in daily dose of gr. i, were continued till grs. viii in all were given. Patient made an uneventful recovery thereafter.

A CASE OF RAT-BITE FEVER.

BY

M. K. KANE, M. B. B. S. *Mahuva, Kathiawar.*

One of my relations, an old lady, got a rat-bite on her right-hand finger in 1911. In due course, she developed symptoms of rat-bite fever. The only treatment she received was local, for the wound, which was dressed by the usual methods. She was not given anything internally, perhaps because of her orthodox views. Injection of Salvarsan or arsenic in some form was not resorted to, since such specific therapy was unknown then. Salvarsan, as a sure remedy, was, I think known about 1915. The wound took months to heal and then for more than a year she had no more trouble, and the rat-bite incidence was completely forgotten.

Then, all of a sudden the finger got inflamed, and there appeared some serous exudation at the sight of the old wound. There was severe pain along the whole length of the arm, accompanied by fever, head-ache and body-ache. There was recurrence of these symptoms practically once every year till the end of 1922. The wound was dressed as usual, and it healed after a long time. That the rat-bite could possibly be the cause of all this trouble, was, somehow or other not thought possible.

In 1923 however, the trouble recurred again, and I thought of trying a small dose of salvarsan. Accordingly Neo-Salvarsan was injected and to my surprise the wound healed soon and general symptoms disappeared. Upto the present date, there has never been any fresh manifestation of the trouble.

From the above case, a few points seem puzzling to me and I request my brother practitioners to throw some light on them through the medium of this magazine.

The following are the points :—

I. If a case of rat-bite is not properly treated, will it go on showing poisonous symptoms indefinitely ?

II. Is every rat-bite poisonous ? I do'nt think it is, because, there have been cases which never developed any symptoms during the absence of any treatment. Is it because the spirilla are not injected into the part bitten in such cases ; or because the patient's body has enough power to combat and destroy them ?

III. Without the administration of salvarsan or arsenic in some form, is natural cure not possible ?

A CASE OF ROUNDWORM INFECTION SIMULATING CHOLERA

BY

S. C. SENGUPTA, L.M.F.

Resident Medical Officer Lakhipara, T.E. Banarhat P.O, Jalpaiguri.

A tea garden cooly woman aged about 45 years started vomiting and purging all on a sudden at about 1 a.m. on 6-7-29. At 7 a.m. I was informed of the case and saw the patient in the following conditions :—

The patient was almost in a state of collapse. Eyes sunken. Cold clammy sweats all over the body. Pulse—Feeble, Resp—a little hurried.

The patient was very restless and thirsty, cramps at the extremities complaining of colicky pain round about the umbilicus.

Urine said to be not suppressed. Without going into details of the case I at once injected atropine Sulph-gr. 1/100 and gave her a dose of Essential oil mixture by mouth. But the patient at once vomited the mixture.

Previous History.—The patient got 2 days ago a little colicky pain round about the Umbilicus, 2 or 3 times loose motions too. She did not care for all these. She went on with her usual diet i.e., Rice, moosari Dall, Tea etc. But on the night of the occurrence she took her usual diet at about 8 p. m. and after 2 hours or so, she got severe colic pain and vomited all she took. But this condition soon passed into vomiting and purging many times by 1 A.m.

Diagnosis :—I at first thought the case to be one of suspected cholera. So I gave her essential oil mixture for the second time but this time she also vomited with an adult roundworm in my presence. Thinking that roundworm might be the cause of this trouble I gave her a dose of

Santonin—gr. iii.
Sodii Bicarb—gr. x.

She took this powder alright but by the evening she passed adult roundworms with her stool and gradually vomiting and purging stopped and her condition improved much without any more medicines except she was allowed to drink soda water as much as she can take.

Conclusion:—The special feature of this case is that one might be easily misled into diagnosing the case to be cholera, had the patient not vomited out an adult roundworm, when attention was drawn to the real cause. In tea gardens where helminthiasis is so very prevalent especially in rainy-season one may get confusing cases like this.

A CASE OF SEVERE TYPE OF ACUTE BACILLARY DYSENTERY CHECKED BY THE ADMINISTRATION OF SERUM

BY

N. N. BISWAS L. M. S.

Dariapur, (Nadia).

Mintaj Shiekh a Mahomedan male aged 20 years came under my treatment on 1-6-29. I was informed that the patient had been attacked with cholera. From the previous night the patient passed many times copious rice-water stool. No urine for the last six hours. As cholera was prevalent in the adjacent villages at that time, the panic for this epidemic was existing in the minds of villagers. I attended the patient and found the following clinical features.

The patient was extremely restless and was trying to go out of bed; cold skin, goose skin finger; both the eyes were congested; thready feeble pulse; temp 95°; perspiration, tongue coated and dry; no answer on asking; vague look; extreme thirst. Though he could not speak, he took the glass in his own hand, and drank as much as he could. I waited there nearly ¾th of an hour and in my presence the patient passed stool 4 times. Each time he got upon his bed and passed stool on bed and as soon as he finished this he lay down in delirium. The motions were nothing but blood mixed with serous fluid and a little quantity of mucus. *Reaction* neutral.

Previous history:—On the previous day at 5 p. m. the patient had severe rigor with sharp rise of temperature. The temperature rose from 103° to 104° F. The patient had slight headache and severe pain in the groin, extreme thirst and delirium. These lasted for nearly 6 to 7 hours. From 1 A. M. of the previous night

the patient began to pass copious rice water stools. There was no blood in the motion at the time and patient vomited twice or thrice and became restless. The relatives of the patient thought that the patient had been attacked with Cholera. Accordingly they called a Homeopath practitioner in the morning who attended the patient and prescribed medicine but to no effect. On 1—6—29 at 3 p. m. I was called for. I enquired whether any other case of similar nature had come to their notice. In reply to my other questions I was given to understand that they detected blood in stool only an hour before. The villagers at that time were using well water. As there was no river near by there was no outbreak of cholera in this village. No relative of the family *had come* recently from any epidemic area. The members of the family were six in number and they all took same food, only this boy became ill.

From sign, symptoms and facts I came to the conclusion that it *was* a case of acute Bacillary dysentery.

Treatment: As the patient was on the point of collapsing I injected ***pituitrin*** ½ c. c. (P. D. Co) subcuteneously on the deltoid and waited; after half an hour the perspiration stopped but no warmth was felt. They were advised to warm the patient with the aid of hot water bottle. A dose of 20 cc. anti-dysenteric serm poly (Hocchst) was administered into the thigh-muscles and the following medicine was prescribed.

(1) ℞

Sodii Sulph Mag Sulph Tinct. cardom. co.	}	aa m 30
Aqua add		℥i

Fiat. mist send 4 such to be taken every 4 hours,

(2) ℞

Adrenal chloride (P.D. co)	mm 80
Normal saline	oz. 1

Divided into 8, to be taken every hour.

He was advised to take complete rest on the bed but this was not carried out by the patient because the patient was extremely restless and nearly unconscious. The relatives tried their best to give him every possible comfort but failed, he passed sleepless night. He could not retain a single dose of the mixt no 1 and vomited it at once.

2-6-'29 In the next morning at 8 a.m. I attended on the patient, he was then sleeping. I waited, his mother who was nursing him told me that she spent the first part of the night with great anxiety

as the patient was restless and delirious but from the latter half he became calm and slept now and then. Vomiting stopped in the latter part of the night, number of stools decreased, blood disappeared altogether since morning, motions thrice in the morning—contained fæcal matter, pulse though feeble could be counted; temp 96·4° congestion of the eyes gone, but still thirsty, he spoke with me in a low voice, high-coloured urine passed twice in the morning, but the quantity was small.

Treatment:—Injected caffin Sodi Benzoas (Merck).

Both the mixtures repeated.

The patient was advised to take barley water with lemon juice and green cocoanut water was also allowed.

3-6-29 The patient looked much better and cheerful—passed yellow coloured fæcal stools twice, no tenesmus, no blood, pulse better, urine—increased in quantity felt slight pain on the abdomen, Temp 97° he felt little bit hungry, from this day onward the patient rapidly improved. no alteration of treatment except the hypodermic medication. Diet—only barley water and barley with milk. On the 7th day he was given boiled rice prepared in a different way. The only fuel used in boiling the rice was dried cow-dung cakes which ensured slow boiling of the rice. A few pieces of unwashed and green papiya fruit were also boiled with rice so as to make the boiled rice easily digestible.

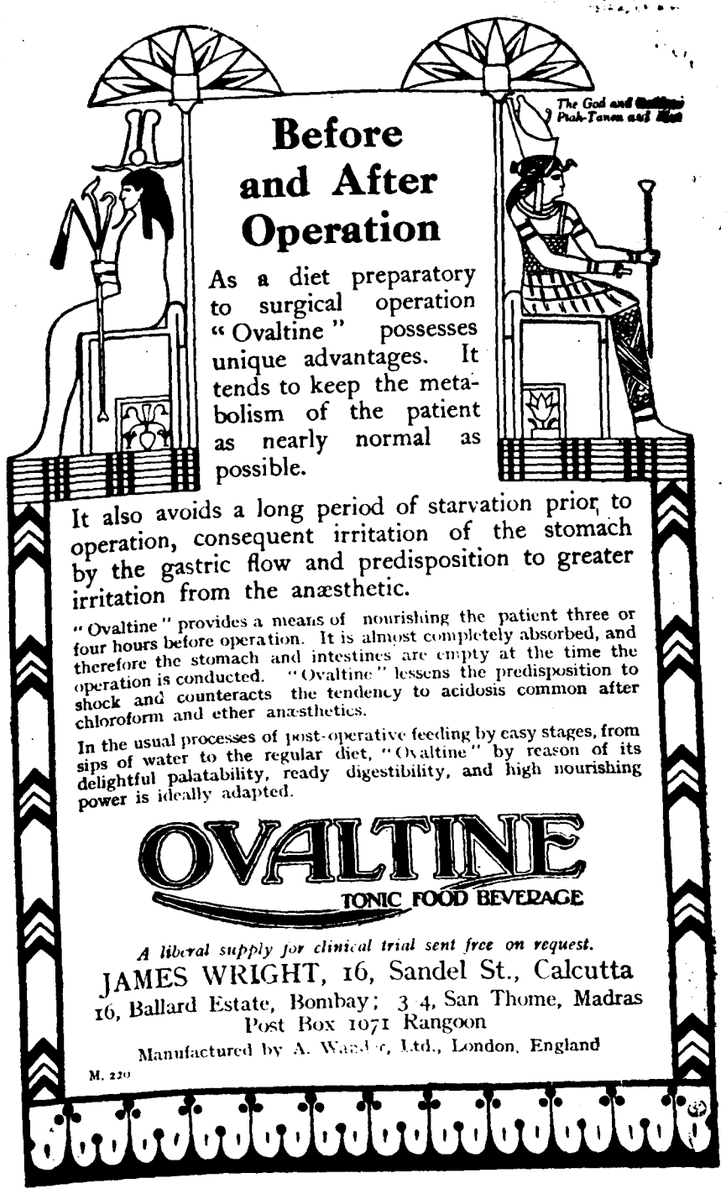
Remarks'-Treatment of acute Bacillary dysenetery with serum is extremely rare in moffusil practice, generally sulphates in the form of magnesia sulph or sodium sulph are used, sometimes sulphates are intolerable in the first stage of the disease when vomiting is severe. Serum in these kinds of cases acts specifically. In cases of acute Bacillary dysentery, it acts like a charm, it neutralises the severe toxin, checks the progress of the disease and cures the patients. Sulphate though acts almost specifically takes a longer course to cure the patient. The following points should be borne in mind in the administration of anti-dysenteric serum.

(1) Early and proper diagonosis of the case.

(2) Treatment should begin within 24 hours.

(3) In moffusil practice polyvalent serum must be used.

In conclusion, my thanks to Messrs Havero Trading Co.. who supplied me with the serum for experimental trial.



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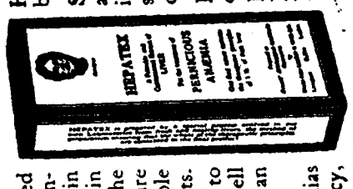

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THE BRITISH MEDICAL COUNCIL ON THE WAR-PATH AGAIN.

The recent decision of the Legislative Assembly, vetoeing the Government of India's proposal to appoint a Commissioner of Medical qualifications and standards has created quite a stir in the British Medical Council and set it again on the war-path. We learn from Reuter, that Sir Donald Mac Alister, in his Presidential address to the British Medical Council had openly declared hostilities against the Indian Universities and said that if the Legislative Assembly should fail to revise its decision in January next and agree to the appointment of Col. Needham, I. M. S. as Commissioner, the Committee of the Council would be deprived by the action taken in India "of the necessary guarantees for proficiency on the basis of which alone it would be in a position to extend such a recognition beyond the current period." At the same time Sir Donald was generous enough, in deference to the wishes of the India office, to postpone the final decision of the Medical Council as regards the recognition of the Indian Medical degrees till February 1930. 'Col. Needham or no recognition' is what this ultimatum amounts to, in substance. Col. Needham was already appointed Commissioner on behalf of the British Medical Council, pending the sanction of the Assembly and had arranged to leave for India on November 1st., but the India

Office on October 15th informed the Council that the appointment had been cancelled owing to the adverse vote of the Legislative Assembly. That was a bold stand, indeed, which the Government of India had taken and we trust it will be followed up in its subsequent dealings with the British Medical Council.

The Legislative Assembly at its next session will have to encounter a very serious situation. Either they must surrender to the dictates of the British Medical Council and agree to the appointment of Col. Needham or find other expedients to tide over the present crisis. The former course is out of question and with regard to the latter, the only wise and permanent expedient we can think of, which can set the whole question at rest and also silence the British Medical Council, is the immediate creation of an All-India Medical Council, entrusted with the duty of maintaining standards of Medical qualifications in India. This question had been hanging fire since February 1926, when the Hon' ble Dr. U. RamaRau introduced his Bill in the Council of State for the constitution of an All-India Medical Council and the dilatoriness and reluctance with which the Government of India had handled this problem were chiefly instrumental, in our opinion, in bringing about the present *impasse*.

That the opposition to the introduction of a Bill by the Government of India, in the Legislative Assembly, in place of the private Bill introduced in the Council of State, should come from the provincial Ministers in conference assembled at Simla some months ago, is indeed deplorable. It would seem that the provincial ministers, jealous of their autonomy, were unwilling to part with their powers to an All-India Medical Council, while they were perpared to be dictated to by the British Medical Council. Better to have had no Ministers at all than to have had ministers of such mentality. But that is by the way. The duty of the Government of India is now clear. They must lose no time in preparing a Bill for the constitution of an All-India Medical Council and making the necessary arrrngements to introduce it early in the next session of the Assembly and have it passed into law. The provincial ministers may he conveniently ignored in this respect, as there can be no question of encroaching on their domain, the regulation of medical standards and qualifications being, strictly speaking, a reserved subject and as such quite within the competency of the Government of India to legislate upon. Should the Government of India fail to follow this course, for fear of offending the provincial ministers, private members must step in and set the ball in motion. As it would take some time before this machinery is brought into being, the Govrnment of India must, as a temporary measure, give effect to the resolution adopted by the Indian Universities' Conference and proceed forthwith to constitute an All-India Medical Board consisting of representatives of the medical faculties of all the Indian Universities, who would do the necessary inspection work and would be able to satisfy the British Medical Council. No manner of objection can possibly be raised to such a course, as the collective opinion of experienced medical men, constituting the Board would be far more weighty than the individual opinion of Col. Needham, I. M. S., however high he might be held in the estimation of the British Medical Council. If the British Medical Council should even then persist in its own nominee being appointed, we must only characterize its attitude as insulting, provacative and aggressive.

CURRENT TOPICS

SURGERY.

Prognosis in Acute Abdominal Diseases—Dr. Zachary Cope in the Practitioner of October 1929, writes :—In acute abdominal conditions the emergency comes suddenly, the anxious relatives are wanting a definite forecast, and the harassed medical man is almost bound to give an opinion. Such an opinion, whether optimistic or pessimistic, should always be gaurded, for if there is one thing certain, it is, that prognosis is uncertain in acute diseases of the abdomen. He therefore gives as a first piece of advice, to give always a prognosis with a slight and spoken reservation in dealing with acute abdominal conditions.

The general constitution of the patient, the surrounding in which he will have to be looked after, the nature and severity of the disease from which he is suffering, the time when operation is performed and the technique adopted are some of the factors stressed by the writer for consideration as regards the nature of prognosis.

While considering the age of the patient, the writer is of opinion, that the young and the very old do not tolerate prolonged intra abdominal manipulation since there is a much smaller reserve of strength in an aged person and a much greater sensitiveness in an infant.

In fatty individuals the prognosis is not quite so good, for the chances of early diagnosis are much less and operative procedure

more difficult and prolonged thus exposing the patient for a prolonged anæsthesia and greater manipulation.

In cases of neurotic patients who often exhibit a will not to get better, one can never tell how matters will go.

The outlook is not so promising when acute abdominal disease complicates some other condition serious in itself—as a weak heart, but most of them it is surprising to note, says the writer, always stand the necessary interference, though there is a probability that a severe after-complication might tax the heart reserve too much.

The duration of the symptoms and the extent to which the pathological process has progressed are very important factors.

Prognosis is gravely increased in cases where the infection has spread to the general peritoneal cavity. Where the acute condition is due to the perforation of a gastric or duodenal ulcer, the prognosis is very often fair, if operative procedure is adopted during the 6 hours following the rupture; while from the 12th hour it is grave.

In these emergent cases pre and post operative care of the patients has much to do upon the chances of recovery.

The condition of the bowels and skin must be attended to, whilst a little time spent in recovering the patient from the shock that immediately follows the injuries, by judicious administration of saline, or transfusion of blood where there has been much loss of blood, is not wasted, but will help the patient to stand the operation better.

During the post operative period careful watch over the patient must be kept up either by a good nurse or the surgeon himself, so that necessary modification of the treatment may be done at the onset of any bad symptom.

The nature of the anæsthetic and the method of administration have a great influence on the prospect of recovery of many patients.

The writer warns against the use of chloroform in toxic and infective conditions; advocates the use of gas and oxygen and local anæsthesia in shocked patients. *V.C.S.*

Treatment of chronic coccogenic Sycosis.—(Barbers rash) James Avit Scoll M.D., B.M.J., Oct. 5, 1929,—Gives the following as a satisfactory and an effective method of treating chronic pyogenic folliculites of the beard, moustache, and scalp regions.

The treatment should be carried out only once a day, and with the average patient should not take longer than ten minutes.

(1) Epilate infected follicles and evacuate pustular lesions with a clean needle.

(2) Wash the affected parts, using Midgtery's 10 per cent superfatted Sulphur soap.

(3) Dry the parts, leaving them slighty damp by mopping with a towel,

(4) Apply.

Iodine (without Potassium Iodide)	4 grains.
Spirit 90 per cent	1 oz.

with a tampoon of cotton wool, all over the affected parts fairly hard.

(5) Allow to dry.

(6) Smear.

Sulphur precipit	1. 2 drachms.
Spts. Camphor	1 dranchm.
Lotio. Calamine	ad. 8 oz.

Sparingly, all over the affected parts.

(7) Allow to dry.

(8) Apply.

Zinc oxide	15 grains.
Neutral Yellow Vaseline	1 oz.

Sparingly a small quantity over the affected parts.

(9) Dust over sparingly pure talcum powder.

The patient is allowed to shave only twice a week with a sharp razor, after epilating the infected follicles—strength of Sulphur when used is to be varied with the degree of inflammatory reaction present in the skin, and the tolerance of the patients skin to sulphur. As an adguvant to this treatment all septic focii especially teeth, should be looked for and dealt with. Patient must be kept in a well ventilated dry place.—*V.C.S.*

An unusual type of Dislocation of the shoulder.—*Normens Hodgson. M.G., F.R.C.S. (Edn.). B.M.J., Oct., 5, 1929.*—Reports a case of Luxatio erecta a rare subvariety of Subglenoid dislocation of the shoulder in which the arm is abducted and displaced vertically upwards, the head of the Humerus remaining below the glenoid cavity.

The patient a man aged 27, was riding a bicycle, which skidded, throwing him to the ground. When he got up he felt his right arm which lay by his side, numb; to relieve this he raised the elbow and abducted the arm with his left hand. The right arm immediately assumed the characteristic attitude of Luxatio excreta. The numbenss was at once relieved.

The Head of humerus on examination was found to lie on the lateral aspect of the chest wall below the axilla. A general anaesthetic was given and reduction was easily affected by slight traction on the arm in an upward direction combined with upward pressure on the head of the humerus.

An X. Ray examination revealed a fracture of the greater tuberosity of the humerus without displacement.—*V.C.S.*

Surgery of the Esophagus.—James H. Saint, M.D. (Arch. of Surg., Vol. 19, No. 1, July, 1929, p. 53). The article furnishes a splendid review of the literature, giving the present status of more important surgical procedures on pathological conditions of the esophagus.

Factors which have hindered progress in this field have been manifold, the anatomy of the structure being not the least.

1. Inaccessibility.
2. It possesses no serous coat to react to traumatic irrritation and in healing.
3. The submucous and muscular coats cut easily with suture.
4. It has a relatively poor blood supply.
5. Post-operative injection.
6. Danger of shock from interference with vagi.
7. Presence of the diaphragm.

Most men are agreed that operations on the esophagus by the posterior mediastinal route are best approached on the right for operations in the region of the hilum, and on the left for the lower thoracic portion of the esophagus. All lesions in the esophagus have a tendency to narrow the lumen.

1. In the lumen—Foreign bodies and tumors.
2. In the wall—Cardiospasm, congenital stricture or stricture from injury or inflammation.
3. Outside the wall—Tumors, diverticula, aneurysm, enlarged lymph nodes and abscesses.

A variety of esophagoplastic operations have been attemptcd, using parts or the whole of the stomach, the jejunum, the colon, etc., in the endeavor to get a tube lined by mucous membrane and preserve peristalsis. The author feels that provided gastrostomy proves inefficient and brings unbearable discomfort on the patient, then antethoracic esophagoplasty is justifiable with the risks understood by all concerned. Regular and systematic dilatation of impermeable esophageal stricture would reduce radical surgical procedures to a minimum.

Concerning carcinoma of the esophagus: Because of the anatomic relationships, the highly malignant nature (90 per cent on Broders classification being graded 3-4 on a basis of 4), frequent metastasis, danger of infection, mutilation and shock, surgical removal cannot be expected to give any degree of success.

Diverticula of the esophagus (so-called) have been definitely proved to be pharyngeal. Although the two-stage method is more popular, the one-stage still has its advocates. Summarizing: The two-stage operation can be done with so little risk that it has been adopted practically universally. Van den Wildenberg has introduced sacculopexy as the first stage in two-stage removal. Statistics show that though ideal from a technical standpoint, the one-stage method means unnecessary risk. Sacculopexy by its simplicity, absence of risk of sepsis and because of results already obtained seems likely to become more popular as time goes on.—*Minnesota Medicine.*

Diabetic Coma. Now that the specific cause and remedy for diabetes mellitus has been discovered, there should be no fatalities from diabetes or diabetic coma.

The following are extracts from a letter from a man prominent in the treatment of diabetes to his State Board of Health.

"In 1044 fatal cases of diabetes reported, coma was responsible for 433 deaths, or 41 percent.

"It is really our own fault, therefore, that mortality from diabetes is not decreasing, because diabetic coma is always preventable and nearly always curable. As one of the best practitioners in the State recently said, 'Diabetes is a chronic disease, but doctors do not realize that it has acute manifestations.'

"Indeed, coma develops because of ignorance, negligence or carelessness. Diabetics go into coma carelessly when they break their diets and overeat; they go into coma as a result of negligence when in the course of an infection, either general like measles or local like a boil, they neglect to make the proper tests to determine whether they are using enough insulin; they go into coma ignorantly, because they stop their insulin when they cease to eat for one cause or another.

"A diabetic should never omit his insulin unless his urine is sugar free. He must never forget that when he stops eating food he begins eating himself—his own body—and so still requires insulin and often very much more insulin than before.

"If he has an infection as a cause of his loss of appetite he should know that an infection lowers the value of insulin and thus makes more insulin than usual a necessity.

"Coma, and by diabetic coma is meant acid poisoning, is a sly fox and will steal away a diabetic before he or his friends suspect it. Within a few hours mild symptoms such as indigestion, lack of appetite and pains in the abdomen may be followed by difficult breathing, drowsiness and unconsciousness. The only safe way, therefore, for the diabetic to protect himself against coma is to keep well and sugar free all the time.

"Whenever a diabetic feels ill and sick he should (1) call his doctor (2) go to bed (3) take a hot drink every hour (4) take an enema (5) keep warm (6) get a nurse or someone to care for him. Another good rule is to have boiled water ready for the doctor when he arrives in case he wishes to use it.

"Minor differences in the treatment of coma exist, but all agree that promptness in diagnosis is everything and next to it comes energetic treatment at the earliest possible moment. If coma exists the doctor must give up everything else until the patient comes out of it. (1) Insulin is usually required every half hour in 10 to 40 unit doses or more, varying with the severity of of the symptoms and if it is given intravenously it should always be given subcutaneously at the same time. (2) Dehydration of the patient must be overcome by the subcutaneous injection of normal salt solution and one cannot rely on fluids given by mouth or rectum. (3) The heart is almost always weak and needs stimulation with caffein sodiobenzoate, 7½ grains and this may be given every hour if need be, for three or four doses. On account of the weakness of the heart, salt solution must be injected very slowly if given intravenously. (4) With children and usually with adults the stomach is distended and unless evacuated presents the subsequent retention of liquids such as, water, gruels, ginger ale or the juice of 2 or 3 oranges, in other words, carbohydrate amounting to 50 grams. Therefore, gently wash out the stomach,"—*Indianopolis Medical Journal.*

Diagnosis of Cornory Thrombosis.—J. P. Anderson warns that the distinction between an acute abdominal condition and the effects of coronary thrombosis is not always clear. While a typical anginal attack is easily recognised by the history, the peculiar character of the pain, and the speedy relief afforded by nitroglycerine, coronary thrombosis causes excruciating agony which nothing but morphia allays, and it may be entirely restricted to the upper abdomen. The local rigidity and the tenderness under the right costal margin suggest cholecystitis, pancreatitis,

or a perforated gastric ulcer, with the apparent necessity of an immediate operation. But if there are signs of heart failure such as enlargement, irregular or galloping rhythm, with a "split" sound at the apex, and possibly a pericardial friction sound, also a distinctly low blood-pressure, the evidence of the electro-cardiograph is alone needed to complete the diagnosis of the trouble. Its usual source Anderson believes to be the rupture of a calcareous plate in the coronary wall, the result of long-standing sclerosis. (*Journal of the American Medical Association.* xci.)—*Med. Officer.*

Accidents with Local Anesthetics.—Andre Klotz states that while fatal accidents with local anesthetics are relatively rare, those that occur are due mainly to overdosage, to injections of cocaine, to the use of solutions of too high concentration, to excessive doses of epinephrine, and a smaller number to peculiar conditions of the patient which are beyond evaluation by the physician. He also agrees that the symptoms of fatal poisoning in man agree closely with those seen in animals in laboratory experiments, that convulsions commonly occur, and that death often results quickly from paralysis of respiration followed by stoppage of the heart.

Klotz states that some authorities recommend that, when symptoms of poisoning arise, the operation be completed as speedily as possible in order to prevent the further absorption of the anesthetic, but only if the operation can be completed with the utmost celerity. One should give, rather, immediate attention to the treatment of the symptoms. Threatening symptoms demand prompt action; but if the danger of further absorption can be obviated with the loss of only a few seconds, it would seem to be worth while. A routine procedure cannot be recommended.—*(Jour. A. M. A.) M. W.*

Osteo-myelitis in Infants.—According to G. Nord there are no grounds for the belief in the rarity of acute osteo-myelitis in very young children. He has met with several cases where it affected the upper jaw during the last few years, four of them occurring in his own practice. He warns that if not diagnosed, the maxillary affection may result in wide-spread metastases in the eye and the sinuses, with involvement of the meninges, the heart, and the lungs. It may commence a week or two after birth when the local signs of œdema and suppuration, especially if there is any exophthalmos, may lead to a wrong diagnosis in which the

ophthalmic surgeon may be consulted; but Nord points out that any doubts should be settled by the presence of discharging fistulae in the mouth. These latter should be enlarged by way of the alveolus, and provided that all the sequestra are carefully removed and antiseptic irrigations persisted with, the condition usually clears up with seldom any fatalities, although the effect of the first dentition may be serious, (*Amsterdam: Nederlandsch Tijdschrift voor Geneeskunde.*

Gonorrhea of the Rectum.—Gonorrhea of the rectum is a comparatively rare disease and one that is easily overlooked unless the condition is kept in mind. This disease was first described in 1884 by Bumm. Gonorrhea about the anus however, is not at all uncommon.

Gonorrhea of the rectum is caused by the direct inocluation of the mucosa of the rectum by the gonococcus. It occurs more commonly in women than in men. Sodomy is the usual cause of the infection in men. It also occurs at times by contaminated instrumentation as in the case of prostatic massage. As a rule it is due to contamination from the vulvovaginal discharge when found in women.

Huber reported a series of seventy-eight cases of gonorrhea of the rectum out of 318 cases in which gonorrheal vaginitis was present. Baer reported 163 cases of it out of 429 cases that he studied. Jullien collected 1037 cases of gonorrhea of the rectum and in 157 of these cases gonorrheal proctitis was found. Blomberg and Barenberg reported a series of forty-one cases of it in children in which the gonococcus was isolated. Yoemans says it is a rare complication in children although at times it occurs in large numbers in institutions.

When the gonorrheal infection reaches the mucosa of the rectum, the mucous membrane becomes acutely inflamed, bleeds easily and becomes somewhat edematous. Not infrequently one will find on the mucosa small superficial ulcers which resemble the canker sores of the mouth. A heavy muco-purulent discharge is usually present.

Yeomans reported seven cases of gonorrhea of the rectum all of which were confined to the rectum. Pennington reported one case in which the entire colon was involved and Birch reported forty-two cases in which the infection had spread into the colon. Because of the resistance of the rectal and bowel mucosa to infection by the gonococcus it would appear that the extension into the colon must have been due in a large measure to a secondary infection. Stricture of the rectum is a very infrequent

complication. In fact Baer reported only one case out of a series of 163 cases that he had studied.

The symptoms of gonorrhea of the rectum are variable but as a rule consist of pain in the rectum which is made worse by bowel movement, a discharge of pus, mucus and blood, and a perianal pruritis. The discharge is of a thick muco-purulent character. Mild constitutional symptoms are not uncommon.

The diagnosis is not always easy to make, especially if the infection is due to sexual perversion. However, the presence of gonorrheal vaginitis or urethral gonorrhea should suggest further study to either prove or disprove the existence of gonorrhea of the rectum. A positive diagnosis of the disease can be made if the gram-negative intracellular diplococcus is found.

The treatment is simple and very effective especially when it is started promptly. It is important that care be taken to prevent continued contamination from the vagina by sterile pads which should be placed between the vagina and the rectum. The patient should be placed at rest in bed. Hot sitz baths and rectal irrigations of 1/10,000 to 1/5,000 potassium permanganate solution two to three times each day should be started. The local application of 25 per cent argyrol should be made. Indulant ulcers should be touched up with a 10 percent silver solution. Warm irrigations of weak boric acid or normal saline solution should be used two or three times daily after the acute inflammation has subsided. Any complicating conditions such as condylomatas fissures, festulae should receive appropriate *treatment. L. I. S. M.*

Transillumination in Breast Lesions.—M. Cutler calls attention to the value of transillumination as an aid to the diagnosis of breast lesions, and especially to their localization in cases of bleeding nipple. The examination is made in a totally dark room with a Cameron transilluminating electric light placed against the under surface of the breast and gradually moved for the inspection of different areas, so that any particular portion is directly between the light and the Examiner's eye. The degree of translucence can be increased by compressing the breast between the hand above and the light beneath. The findings vary normally, depending mainly upon the relative content of fat, fibrous tissue, and epithelial elements. The study of 174 pathological breast conditions showed the value of the method as an aid to differential diagnosis and treatment, it being found that acute, subacute, and chronic inflammations present a diffuse

opacity, which diminishes and disappears as the inflammation subsides. Solid tumours are opaque, the degree of opacity varying with their size and location, but without affording a means of differentiation between benign and malignant tumours. Cysts containing clear fluid are translucent, and this may be of great value in differentiating carcinoma from tense deep cysts with skin adherence clinically simulating a malignant growth. Blood effusions are intensely opaque, and a traumatic hæmatoma shows an irregular outline disappearing as the blood is absorbed. The method is of especial value in cases of bleeding nipple in which no tumour can be palpated, and it affords a means of distinguishing between those due to a single localized papilloma and those caused by multiple papillomata, its practical importance being demonstrated by those cases in which the removal of a duct papilloma has failed to cure, while on subsequent transillumination several opacities point to the existence of multiple lesions. When, however, the discharge from the nipple is not distinctly hæmorrhagic, localization may be impossible.—Epitome,—*Brit. M. J.*, Aug. 10, 1929.

OPHTHALMOLOGY.

Ophthalmoscopic Signs in Heart Disease.—*A paper by Wallen M. Yater and Henrp P. Wakener of the Mayo Institute.* Analyses the post-mortem findings in 137 cases of heart disease, in which the fundi had been examined ophthalmoscopically during life. The cases were classified first according to species of heart disease and secondly according to character of the changes observed in the funds. The writers conclude that ophthalmoscopic examination yields negative results in heart disease unless this is due to or associated with hypertension, coronary sclerosis, or sub-acute bacterial endocarditis. Of the 137 cases, 8 had subacute bacterial endocarditis, death being due to septicæmia in all cases. Embolic lesions were noted in 2 cases. Thirty-two patients were classified under the heading of hypertension; of these, 25 died of cardiac decompensation with or without uraemia, 4 of hemiplegia, 2 after operations, and 1 after an accident. All but one out of the 32 showed scleroris of the retinal arteries of "hypertension type"; by this the authors mean generalised constriction of the calibre of the arteries with exaggeration of the arterial reflex stripe, irregularities in the luman of the arteries, and arterio-venous compression. In addition to these changes, 17 showed retinitis -i.e., scattered cotton-wool patches and hæmorrhages and œdema of the retina, occasionally even œdema of the disk. In three other cases were haemorrhages not severe enough to come under the term

retinitis. In this series, therefore, very nearly all those cases of heart disease which were dependent on high blood pressure alone showed retinal changes. Among 25 cases in which coronary sclerosis was found, 19 deaths had been due to causes purely cardiac and six followed operations. In many of these cases, and also in 11 cases of mixed type, high blood pressure was present and fundus changes had been recorded. These changes were often merely indicative of what the authors term senile arterio-sclerosis — that is, only an alteration in the light reflex, difficult to diagnose without any marked constriction of the retinal veins or alterations in the calibre of the arteries. Leaving these mild cases aside, the investigation showed that out of the 137 cases under review 52 had been diagnosed as having retinal arterio-sclerosis of the more severe or unmistkable type with or without retinitis. Even more interesting is the observation, already recorded, that, in the 32 cases in which hypertension was the only cause of cardiac disease discovered, typical retinal changes had been present in 31.

Severe Types of Corneal Ulcer.—J. C. Douglas (*Med. Journ. of Australia*, p. 619).—Simple corneal ulcer is one of the easiest ailments to treat, healing quickly, but severe types exercise the patience and ingenuity of the surgeon to the utmost. They often end in loss of vision or even of the eyeball. There is no routine treatment, and each ulcer may have to be treated differently.

Virulent Infection of Simple Traumatic Ulcer.

A youth, aged 20, sustained a small punctured wound of the cornea while working in a bacon factory one hour previously. Aqueous oozing occured from the puncture. The wound was carbolized, boric irrigation, argyrol and atropine were used. He was ordered to hospital. Treatment was given every 4 hours. Next day the eye was somewhat red and foments were used. On the third day hypopyon appeared, paracentesis was performed, the cautery was applied to the wound, a sterilized milk injection, 10 c.c., was given. On the fourth day there were a large hypopyon, great chemosis, commencing proptosis of the eyeball. Enucleation was advised, but was declined. On the fifth day the temperature was 102°. Panophthalmitis with extreme proptosis was present and enucleation was insisted upon. The patient's father felt dissatisfied to allow this and took him to Sir James Barrett, who promptly enucleated the eye.

Although what was considered efficient treatment was promptly applied and the patient was in hospital within 2 hours of the

onset, yet the eye was lost and life itself in danger within a few days.

Chronicity of Simple Ulcer.

A woman, aged 37, had a small shallow ulcer of the cornea; slight anæsthesia and some pain were present, but little reaction. Boric irrigation, argyrol, pilocarpine and dark glasses were used. Later the ulcer was carbolized twice and pilocarpine was continued. The ulcer did not heal completely for 3 months.

Chronicity may depend upon the treatment not being efficiently applied.

A child, aged 5 years, had a large shallow ulcer, for 5 months. There was little redness, but some photophobia. Boric irrigation, argyrol, atropine, dark glasses and cod-liver oil were used. After 2 weeks no improvement had occurred so she was admitted to hospital. Treatment was applied every 4 hours by the nurses. The ulcer healed in 2 weeks.

A man, aged 62, had a simple corneal ulcer, moderately septic. He was treated in hospital with boric irrigation, argyrol and atropine for 3 weeks. The ulcer was still present and the eye red. The writer then saw him and immediately cauterized it with pure carbolic acid. Atropine drops were changed to pilocarpine. Zinc ionization was applied every day. Prompt healing occurred in 4 days.

Perforation Complicating Simple Ulcer.

A girl, aged 17, had a foreign body in the cornea for 17 days before admission. Much brown scale was still present; the ulcer was deep. It was curetted thoroughly and boric irrigation, scopolamine drops and foments were ordered. The eye continued pink in colour and 14 days after admission the ulcer suddenly perforated into the anterior chamber. The ulcer was cauterized with the galvano-cautery, pilocarpine was ordered and a pressure bandage was applied to both eyes. Steady healing with fomation of anterior synechiæ occurred. The patient was in hospital for 2 months.

Recurrent Corneal Ulcer.

A woman, aged 35, had three superficial ulcers of the cornea. Little reaction was present. She had a similar attack one month previously and also last year in America. The condition was due to focal infection from the teeth. Boric acid irrigation, pilocarpine and "Stannoxyl" pills were ordered and teeth extraction was carried out. The ulcer healed quickly with vision 6/6.

Acute Septic Progressive Ulcer.

A man, aged 50, had a septic corneal ulcer from an injury in the bush. Great chemosis and hypopyon were present. The galvano-cautery, paracentesis, injections of sterilized milk and antidiphtheritic serum were used. Atropine and foments were ordered. Gradual improvement occurred with dense scar formation. Shrinking of the eyeball ensued, until it became the size of a large pea, but it still retained some movement. It proved an excellent stump for an artificial eye, with no falling in of the socket.

A woman, aged 57, had a large septic corneal ulcer due to trichiasis. Pure carbolic acid was applied to the ulcer, boric irrigation and atropine were used. One week later a small hypopyon was present. The galvano-cautery, pilocarpine and argyrol were used. A few days later perforation of ulcer occurred into the anterior chamber. Treatment was changed to atropine drops and zinc ionization applied every day. Foments and boric irrigation were used every 3 hours. After 6 weeks' treatment, gradual improvement occurred. The final resuls was fairly good, with vision 6/24. Vision previously had been 6/18 on account of the trichiasis.

Septic Progressive Ulcer with Dacryocystitis.

A woman, aged 54, had a small septic ulcer of the cornea, due to pricking from a thorn. She had a chronic purulent dacryocystitis of many years' standing. Œzena was present. The eye was red. Pure carbolic acid was applied to the ulcer; atropine and boric acid irrigation were used. Operation on the tear sac was advised, but refused. Next day hypopyon was present. Operation was again refused. The eye became progressively worse until the ulcer involved the entire cornea. Only then did the patient consent to come into hospital, where the tear sac was removed under an anæsthetic and the cornea thoroughly cauterized with the galvano-cautery. Paracentesis was performed. Injections of sterilized milk were given. After some weeks panophthalmitis developed and the eye had to be excised.

Had the tear sac been removed on the day after she was first seen, the eye would probably have been saved with good vision. This is the first treatment in these cased.

Neuropathic Corneal Ulcer.

A woman, aged 28, had a dentritic ulcer of the cornea. Much pain, moderate redness and definite anæsthesia were present. The ulcer formed suddenly after influenza and exposure in motor-

ing. Boric acid irrigation, atropine, dark glasses and foments were used. Pain subsided, but redness came and went. After 5 weeks the ulcer was still unhealed and some pain was present. She was admitted to hospital and the lids were sewn together in the centre (central tarsorrhaphy). Both eyes were bandaged for 10 days. Healing of the ulcer occurred 3 weeks after operation. Only argyrol drops were used. The lids were kept sewn for 4 months and then separated with a Græfe knife. The eye was normal in every respect. Vision was 6/6.

The writer calls attention to forms of treatment not to be found in every textbook. Atropine sets the eye at rest and is therefore valuable in most cases. Eserine or pilocarpine, however promotes drainage and stimulates repair. He has found pilocarpine better than atropine in chronic ulcers. Sterilized milk is lauded by many, especially in hypopyon, but its value is overestimated. The writer has seldom seen the temperature rise beyond 100.5° and more often not at all. He usually gives two injections of 10 c.c. each, followed by two injections of 8000 units of antidiphteritic serum. This protein shock therapy is of more value in penetrating wounds or ulcers as a means of preventing sympathetic ophthalmitis.

In regard to tho cautery, Foster Moore states that 90 per cent. of corneal ulcers should be treated with pure carbolic acid and the writer's experience agrees with this. If no improvement follows the carbolizing the galvano-cautery battery should be tried. Zinc ionization is of value in many cases. It may be used instead of or following the cautery. The writer applies it daily in ulcers which are not improving.

Colloidal manganese, in four subcutaneous injections of 1 c c., is good when focal infection seems to be a causative factor. The writter follows up these injections with "Stannoxyl" pills, 6 a day, or may give the pills alone in other case.

Tarsorrhaphy has proved valuable in the writer's hands, not only in neuropathic ulcers, but also in septic ulcers with a bulging cicatrix (staphyloma). It may prevent rupture of the staphyloma with consequent panophthalmitis. One old man had had his lids thus united for the past 4 years and is quite comfortable, seeing well with his other eye. All patients with severe or septic corneal ulcers should be treated in hospital.—*Medical Review.*

Clearing up of corneal opacities:—According to Sabatzky (Klinishe Monatsblätter für Augenheilkunde, 1920, *64* 284), various remedies have been used in an attempt to clear up corneal opacities such as yellow oxide of Hg. ointment dionin, jequiritol tincture opii crocata, iontophoresis, and many others. These preparations sometimes clear up superficial opacities but never deeper ones. Even in such cases it is questionable whether the opacities may clear up just as well without treatment. The result is produced only indirectly by the production of hyperaemia and leucocytosis. Other methods like the removal of scars and leucoma and transplantation of cornea are too drastic a procedure to be employed in every case, although they may be suitable under certain conditions.

In anatomical work it has been known that there are certain reagents which are capable of making tissues, even entire organ, transparent. Spaltaholz in Leipzig has worked out a procedure by which he succeeded in making any animal tissue or even bone transparent. Of course here we are dealing with a dead tissue, but still the fact that opaque tissue which can be pentrated only by X-ray can be made transparent is not only interesting but also opens up a field for further investigation.

Valentin, Lundvall and especially Spaltaholz in their investigations made use of the well known fact that microscopic sections of tissues became clear when they are dehydrated and placed in xylol. The same result is obtained when large organs are treated in the same way. Later Spaltaholz devised a special method by means of which he was able to make every tissue in the body as completely transparent as the glass. He used a mixture of benzol and carbonbisulphide. Subsequently he added oil of wintergreen (methyl salicylate), benzyl-benzoat, and safrol. The tissue was first dehydrated in alcohol and then placed in the above-mentioned fluids. Spaltaholz explained the remarkable process as follows: The fluids he used have all high refractive index. When the fluids with so high refractive index penetrate a tissue which has a similar refractive index then the tissue becomes transparent because the absorption of light is now diminished and there is no more reflection of light at the boundary surfaces of the tissue elements. The whole thing now becomes homogenous. However, Spoltaholz emphasized that his method is not applicable to living tissues, becase in the first place dehydration is fatel to the tissue, and in the second place the fluids he used are poisonous for the protoplasm.

In spite of these warnings the author applied the method in the experiments to clear up corneal opacities. His application of the method was based on the following theoretical considerations, (1) The cornea is transparent, because its surface is perfectly even, its parenchyma is quite homogenous in structure due to the absence of specially differentiated tissue elements, and because its refractive index is low (1376), (2) In corneal scars the surface is no longer even, thus resulting in more reflection of the light than normal. Then in the paranchyma some tissue elements are present, such as blood-vessels and connective tissue, which normal should be absent. This condition again produces more reflection in the deeper parts of the cornea due to the irregular thickness through which light has to travel. Finally the refractive index of the opaque tissue is higher than the normal parts of the cornea (145-155). Now if we can find a fluid which can obliterate or reduce the difference between the opaque and normal parts of the tissue as mentioned above it would be possible to clear up the opacities.

The author applied these theoretical considerations to his experiments in rabits. He found that the most successful result was obtained by using oil of wintergreen (methyl salicylate) especially the artificial kind, which has a refractive index of 1535-1537. He reported in detail the experiments on twelve rabits. He used concentrated hydrochloric acid, mechanical injury, or cauterization to produce the leison in the cornea. Then he waited until a firm scar is produced. Then he used yellow ointment untill the opacities became stationary in an average of 6 weeks. Then anotber 6 weeks were allowed to pass without any treatment. So about 3 months after the formation of the scar he began his experiments.

In the first three experiments it was tried out to see if the animals tolerated the oil. The eyes were cocainized and the epithelium over the opacities scarped off, Then a drop of oil of wintergreen was instilled. In a few minutes the eyes were quite irritated and chemotic, with apparently great pain. This was controlled by cocain ointment. But there was no evidence of any damage to the tissues. On the following day the epithelium had covered over and the irritation was much less. On the third day the experiment was repeated and then it was continued every other day like that for two weeks. At the end of this period the opacities had practically disappeared.

In the remaining nine experiments he used essentially the same method with some mechanical aids to insure thorough penetration of the oil especially where deep opacities were present The results were equally good without any risk.

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He concluded that the treatment of corneal opacities with oil of wintergreen is not dangerous, that corneal opacities can be cleared up in 3–6 months without recurences, and that the clearing up takes place only where the oil penetrates the tissue, which indicates that the process does not depend on the irritation which is associated with it.

On the human beings he tried on two persons with some success. One of them had a scar in both cornea as a result of lime burn nine years previously (Vission: R. 1/20, L. 1/30). The corneal epithelium over the opacities was scrapped off with a foreign body needle, and the oil dropped on then followed by massage. The irrritation and discomfort was controlled by cocain ointment. There was not much discomfort the next day. The procedure was repeated daily for two weeks. Then followed eight days of rest. At the end of this period the vision improved to R. 4/30, L. 4/30, and the opacities were scarcely visible.

—(*N. M. J. of China.*)

THERAPEUTICS.

Recovery from Tetanus Neonatorum—J. M. Johnston (*Glasgow Med. Journ.*, p. 354.)—On Dec. 24, 1926, a 6-para was delivered after an easy labour. The cord was divided between large sterilized artery forceps, tied with iodized catgut, the stump swabbed with spirit, dusted with boric acid, and covered with sterile gauze. Thirteen days later, the child, previously vigorous and healthy refused to suckle, moving its head from side to side when put to the breast, and pursing its lips when coaxed. An attempt to administer castor oil in milk was believed to provoke a subsequent distate for milk, and, incidently, to induce repeated crying in waking moments. The cry became hoarce, and on Jan. 11, 1927, the writer was asked to see the child on account of hoarseness, refusal to take food, and occasional "fits." The bowels were somwhat loose.

The infant was asleep. Temperature 100°, pulse 150, respirations 40. Breathing stridulous. Some wasting, napkin soiled with curded green stools streaked with mucus. Umbilicus pouting with fiery edges. The child awoke with a peculiar whining cry, and almost immediately went into a "fit." The lips pouted, the face stiffened, and the forehead contracted as if frowning. The pupils were contracted and fixed. There was a long drawn-out cry, forced as it were between clenched teeth and closed lips, ollowed by cessation of breathing and rapidly increasing lividity By this time the whole body was so rigid that the child could be

les, blood, and humoral equilibrium. Its therapeutic indications are numberous owing to its vaso-dilating property and to its effect on the vago-sympathetic equilibrium. The drug can be used with marked benefit in Raynaud's disease, in gangrene arising from arteritis (whether presenile, senile, or diabetic), and in other troubles of like nature; it favourably influences the arterial pressure in hypertension. The dilating property of acetyl choline has been found of value in ocular conditions due to spasm or thrombosis of the retinal artery, and in hypertonicity of the globe; it has also a remarkably effective action on the profuse sweats of tuberculosis. Owing to the way in which it modifies the calibre of the arteries and arterioles acetyl choline has been tried in angina pectoris, habitual constipation, lead colic, and in cerebral spasms (transitory hemiplegia),—*B. M. J.*

Sodium Hydrosulphite in Treatment of Acute Arsenical Poisoning.—The use of sodium hydrosulphite in mercuric chloride poisoning has led W. R. Bond and E. W. Gray, to conduct a series of experiments to determine whether the compound would exert any favourable influence in cases of acute arsenical poisoning. These experiments have been carried out on apparently healthy dogs following a twenty-four hour period of starvation, so that the presence of food in the stomach would not influence absorption of the arsenic preparation. To prevent vomiting, 10 mg. of morphine sulphate per kilogram was injected subcutaneously, followed in half an hour by the oral administration of the poison. As a source of arsenic they have employed solution of potassium arsenite-U. S. P. (Fowler's solution). which was administered from a burette into a funnel connected with the stomach tube, aud rinsed down with 25 c.c. of tap water. In their first experiment, they employed 1 c,c. of solution of potassium arsenite per kilogram orally, which was immediately followed by the sodium hydrosulphite, 100 mg. per kilogram in the form of a 10 per cent solution, and was rinsed down with 25 c.c. of normal hydrosulphite exerted a most fovourable influence, since both treated animals survived, and the untreated ones died within twenty-four hours. This is of little practical importance from a clinical standpoint, as in most cases of clinical arsenic poisoning there is a considerable lapse of time before the patient comes under observation. The next experiments were conducted with the view of determining the period of effectiveness for the antidote by allowing varying periods of time, ranging from three to thirty minutes, to elapse before the hydrosulphite was administered. The results obtained in this experiment, while somewhat discouraging, plainly show the necessity of immediate treatment, as well as the rapidity with which potassium arsenite is absorbed from the stomach. The mortality of the treated animals was 100 per cent when the lapse of time was greater than five minutes. All animals treated before this time survived, with the exception of one which died on the sixth day without developing the usual symptoms of acute arsenic poisoning. In the next experiment the quantity of arsenic solution was reduced to 0·75 c.c. per kilogram. Less than 10 per cent of the animals treated with solium hydrosulphite within ten minutes after the administration of a fatal dose of arsenic died. The mortality of the control animals and those treated after this time was 100 per cent, the greatest prolongation of life being only forty-eight hours. It should be borne in mind that these experimeuts have been conducted under such conditions as would markedly facilitate the absorption of the arsenic preparation. The presence of food in the stomach, as would ordinariiy be the case clinically, would undoubtedly delay absorption of the poison to such an extent that the period of effective treatment would be much prolonged. Bond and Gray do not wish to recommend the use of sodium byhydrosulphite in the treatment of acute arsenic poisoning as a measure intended to supplant gastric lavage, the importance of which is unquestioned in poisoning from any orally administered drug. As an adjunct to the latter, however, the compound may prove quite effective, particularly in those cases in which the presence of undigested food in the stomach might embarrass the progress of lavage. The immediate administration of approximate amounts of sodium hydrosulphite may serve to fix or render unabsorable the arsenic until thorough lavage can be effected, if not to be solely responsible for the patient's recovery.—*J. Am. M. Ass.* 92 1919, June 8, 1929.—*C. M, A. J.*

OBSTETRICS AND GYNAECOLOGY

Dry Labor.—In *Am, J. Obst. and Gynec.*, Jan., 1929, Dr. Margaret Schutze, of San Francisco, states that dry labor (premature rupture of the membranes) occurred in approximately 10 percent of 6,500 cases.

Labor begins in 24 hours or less, in 90 percent of cases.

Castor oil and quinine were successful in inducing labor in over 80 percent of the cases in which they were used.

The average length of the first stage of labor was considerably shorter than that usually accepted for normal, in both multiparae and primiparae. The second stage was not influenced.

Dry labors which were prolonged, and also the cases of dry lobor developing dystocia requiring serious operative interventions, showed other abnormities, as malpresentations, contracted pelvis, etc.

There was no maternal mortality in 600 cases, but maternal morbidity was slightly higher than in the unselected cases.

Cord inflammations were twice as frequent as in the unselected cases but occurred almost exclusively in prolonged labors.

In abnormal labors, the fetal risk is considerably increased by premature rupture of the membranes.

Results with bag treatment were very poor.—*G. M. J.*

Pregnancy following Amputation of Both Breasts.—Contrary to the view that there is some functional association between the breasts and the female genital organs, Leunckens and Pastiels (*Bruxelles-Med.*, April 28th, 1929, *p.* 739) report a case indicating that the mammary glands apparently exert no influence on the utero-ovarian apparatus. A woman, aged 37, had phlegmonous inflammation of both breasts soon after her confinement: all varieties of local and general treatment were ineffective. The blood culture showed a staphylococcal infection. The breasts continued to inflame and suppurate, and amputation of the right breast was therefore undertaken to save the patient's life. The general condition improved, and the left breast was accordingly removed. Recovery was uncomplicated. The physiological results of the operation were awaited with interest. Menstruation was not affected in rhythm, duration, or regularity; the patient noticed faint prickings in the operation scars at the beginning of the menses. The genital feelings were unaltered. Eight months later the patient became pregnant and went to term without any noteworthy event. The accouchement was uncomplicated and the infant survived The puerperium and the involution of the uterus were quite normal. Two later pregnancies occured, but neither of these went to term. The authors, however do not consider that the operation could have affected

these remote events. They add that in animals a glycosuria has been noted immediately after amputation of the breasts; no glycosuria was reported in this patient.—*B.M.J.*

The Early Diagnosis of Ectopic Gestation.—M. Sabel, (*Med. Journ. and Record*, May 1st 1929, p. 512) remarks that ectopic gestation is so varied in nature that at times other acute abdominal conditions, such as renal colic, acute peritonitis, may be closely simulated; this is particularly true when a double pregnancy—both intra and extra-uterine—is present. The early and accurate diagnosis of the ectopic condition is of great importance, and the diagnostic aids most to be noted are: the history, with special reference to alterations in the menstrual cycle: pain in the lower abdomen as well as pain elicited after the sudden release of pressure on the abdomen; vaginal bleeding; intense sensitiveness on one side upon moving the uterus from side to side; and, in later cases, rapid increase in size of mass, associated with tenderness. Ectopic gestation is not common among coloured women and it occurs most frequently at advanced ages. Sabel believes that previous abortions have an etiological significance, and the advanced age incidence support this belief, since there is thus time for tubal changes favouring ectopic gestation to develop. The menstrual history is a highly important point in diagnosis, and any alteration of the periodicity in conjunction with other signs is very indicative of an ectopic gestation. The most constant symptom is pain-in the lower abdomen, which varies in degree; vaginal bleeding is the next most common symptom, but amount is usually slight. The extreme sensitiveness of the unruptured tube is a very valuable sign. High temperature is usually in evidence against extrauterine pregnancy, unless there is infection of the tubal sac: the pulse rate is in proportion to the temperature. Leucocytosis is generally present, but the red cell count and hæmoglobin percentage are normal. A rapid sedimentation reaction is said to be more suggestive of pelvic inflammation than of ectopic gestation. Urinalysis is of no assistance as regards making the diagnosis, but the urine test for pregnancy is of definite value. Two cases are reported by the author: in one, owing to a criminal abortion having been induced, an erroneous diagnosis of acute peritonitis had been made; in the other a double pregnancy existed.—*B.M.J.*

CORRESPONDENCE.

To

THE EDITORS, "*The Antiseptic*", *Madras.*

Sirs,

With reference to "A case for diagnosis" by Dr. K. D. Bhale Rao, Raipur, C. P., in the March issue of the Antiseptic, the case is probably one of cerebral compression ending in death, caused by Intracranial collection of pus resulting from an abscess or infection and suppuration of an already existing innocent tumour.

The idea of compression suggests itself because of the association of symptoms reported by the doctor, viz., persistent paroxysmal headache associated with giddiness, later onset of fever, the temperature taking a remittent or hectic type-suggestive of a collection of pus in the system leading on to gradual unconsciousness ending in increasing coma, rapid and weak pulse, loss of control over the sphincters and finally death.

The respiratory and digestive systems have nothing abnormal to cause these symptoms, nor does the report show that there was any other visible or palpable cause for the lectic temperature and coma.

The blood picture as well as the absence of any effect after an intramuscular administration of 10 grs. of Quinine, negative malaria.

There is no mention of the actual condition of the pupils themselves though the eyes are said to be congested and the pupils react to light. Moreover, the case report could have been made more complete, if the previous history of the case as to whether the patient had had at any time of his life any head injuries or middle ear troubles (acute or chronic) and that together with the condition of the pupils may go a great way in assisting one to arrive at a definite diagnosis of the case.

Yours faithfully,

Pudukottah,
12—9—29.

V. S. BALACHANDRAN,
Sub-Assistant Surgeon.

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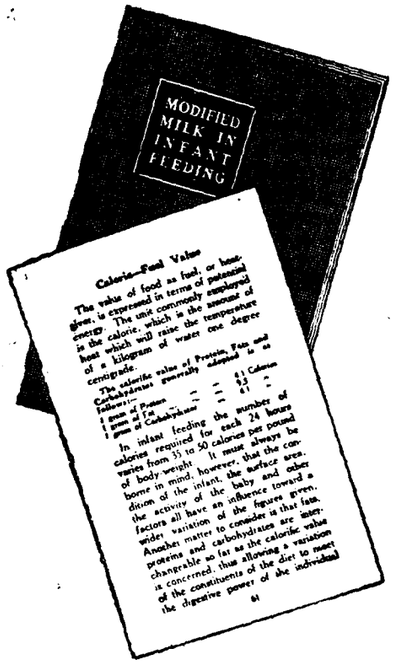

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BOOK REVIEWS

Mirror writing.—By Dr. Macdonald Critchley M. D., M. R. C. P. Published by Messrs. Kegan Paul Trench Trubner & Co. Ltd., London. Price 2/6 net.

By mirror writing is understood that variety of script which runs in an opposite direction to normal, the individual letters being also reversed. The writing is therefore illegible until held before a mirror. A familiar example of mirror writing is seen in the imprints upon a blotting pad.

The occurrence of mirror-writing is associated with mental defect, mental disorder or cerebral disease. In the brochure before us, a concise and interesting description of the phenomenon is given, the clinical aspect and pathogenesis being discussed at length. But no definite explanation is put forward to account for it. Associated phenomena like inverted and downward writing are also dealt with. A large collection of cases in which the above peculiarities have been noticed, have been described. Should any one encounter a case of such peculiarity of script, this book will furnish him with supplementary information on the subject. From a perusal of the book, one would think that this peculiarity of writing is far from being rare but it is not much noticed, as being of not any scientific value. *F. N.*

The New born infant.—By Emerson L. Stone. M. D. Pp, 180 $ 2.00 net, Philadelphia: Lea and Febiger,

This manual of obstetrical pediatrics is an amplification of a course of lectures given in the electvic work in obstetrics for senior students of Johns Hopkins medical school.

Almost all the chief troubles of the newborn infant are dealt with in a thorough manner. The immediate care of the new born is well described in the 1st chapter. The treatment of asphyxia neanatorum, the care of the cord, eyes &c. are highly practical.

Physiology and development of the newborn, nursing care of the normal infant, breastfeeding, pathological aspects of lactation, modified feeding form the subjects for the following five chapters.

Chapter VII deals with the common dietic disorders with their proper treatment.

Chapter VIII is very interesting and exhaustively written, and gives all about the birth injuries including the recent work of

Ford and Carthers, on intracranial, and spinal cord injuries. Acute and chronic infections are described in the next two chapters.

Remaining portions of the book treat about the disorders of special systems (viz) Respiratory, Circulatory, Nervous etc. The last chapter gives full instructions regarding the treatment of premature infant.

The book is highly practical and gives an interesting reading. It is an uptodate production and medical students, and medical practitioners will find it useful;—*V, C. S.*

Incompatibility in Prescription:—By Thomas Stephenson, DSc., F. R. S. (Edin) F. C. S. 1929. Pp. 61. Edinburgh: The Prescriber offices. Price 4 sh. 6 d.

The difficulty with which every newly qualified medical man is confronted in writing compatible prescription cannot be over estimated. To him, this little book will be found invaluable while it may be consulted now and then by the practising physician.

The subject is dealt with under three broad headings viz. chemical incompatibility, physical incompatibility, therapeutic incompatibility. Each section is exhaustive, and examples are given, to illustrate the particular reactions. Some of the common explosive reactions due to incompatability in prescription are well stressed. The book also contains full notes on some of the oft used modern preparations as merchuro chrome 220 &c, The 2nd part of the book contains an alphabetically arranged dictionary of incompatibilities giving dosage, degree of solubility, incompatibilities, &c. Besides the practitioner and medical postgraduates, the pharmacist will find this more useful as a ready-referencer.—*V. C. S.*

Herman's Difficult Labour:—Revised by Carlton Oldfield M. D. Lond., F. R. C. S. Eng., F. R. C. P. Lond. 1929; 7th edition Page 560. with 8 X-Ray plates and 197 illustrations Price Sh. 6/- Cassell & Co. Ltd., La Belle Sauvage, London, E. C. 4.

In the new edition of this medical classic, while little that Dr. Herman wrote has had to be omitted, a good deal has of necessity been added, and important alterations have been called for in revising the work to meet the demands of the day.

Dr. Carlton Oldfield has brought the book thoroughly up-to-date. New features include chapters dealing respectively with Puerperal Sepsis and the Mitigation of Pain in Labour. The chapter on Albuminuria and Puerperal Eclampsia has been almost

entirely re-written and now includes full accounts of the treatment adopted in maternity hospitals.

Changes in method and treatment as dictated by new knowledge and experience have been introduced in nearly every chapter.

A valuable feature, in view of the increasing tendency to invoke the aid of X-ray photography in the diagnosis of obstetric conditions, is the introduction of eight X-ray plates.

The book is sure to be of considerable help to students and practitioners as well.

The Story of Vitamins.—By Dr. H. Valentine Knaggs L. R. C. P. &c. London: The C. W. Daniel Company 46, Bernard St. W. C. I. Price 2/6 net.

This tiny edition gives us a clear and succint idea about Vitamins and the important part played by them in the evolution of the Universe. The author visualizes the possibilities of the Vitamin principle in life and says that, when the true knowledge of the Vitamins comes to be realized, through photographs and films taken of them, which is a matter of time and patient research, disease can be banned entirely from earth and 'humanity will walk the earth with radiant happy faces and healthy bodies'. The book will prove a valuable guide to all research workers and scholars interested in the subject of Vitaminology.—*S. T.*

What every one should know about Eyes.—By F. Park Lewis M. D. p. 70. Newyork. Funk and Wagnalls Co.

This book as the title itself indicates is intended for every one, whether layman or medical man, to know all about eyes and consequently has been written in a clear and lucid style, devoid of all technicalities. The Eye is an important organ of the human body and incalculable mischief is wrought through ignorance of its mechanism, functions and uses. A cursory knowledge therefore, of the subject will prevent bad sight or loss of sight, and in affording such a knowledge this book will serve admirably. We heartily recommend this book to all students, teachers, Medical Inspectors of schools, Medical Practitioners and others desirous of having healthy eyes.—*S. T.*

Modern Public cleansing Practice; Its Principles and Problems.—By A. L. Thomson M Inst M & C. E, M. R. S. I. Published by the Sanitary Publishing Co. Ltd, 8 Breams Buildings Chancery Lane, London,

Cleansing of a large city or town is a difficult problem to deal with and if not attended to, promptly and efficiently, is fraught with grave danger to the health of the inhabitants. Years ago, the mortality amongst the people of both towns and villages was very high, living, as they did, mostly amidst squalor and dust, but now, owing to improved methods of treatment of sewage, dry refuse and other waste products, the death-rate has decreased considerably. This book deals exhaustively with the modern methods of removal of dry refuse and should certainly interest every sanitary and conservancy official in our own country. We heartily commend it to all Local and Municipal authorities who are directly concerned with the cleansing of the vast areas under their charge.—*S. T.*

Water Treatments, Plain and Medicated.—By Eric F. W. Powell, Phys. B., M. N. C. A. (Eng.) N. D. D. O. (U. S. A.). The C. W. Daniel Co. Forty six Bernard Street, London. W. C. 1. Price 3/6.—This is a practical work by a Nature Cure Specialist based on several years of investigation of the efficacy of water treatments both plain and medicated. The book contains simple directions for the home application of various baths and an index to ailments and their appropriate treatment. The book will be found useful to Professional healers and also to laymen.—*S. T.*

Teaching Health in Fargo.—By Maud A. Brown 1929 Pp. 142. Illustated 50 photographs showing class room activities, children's drawings, devices for health education, etc. Newyork: The Common Wealth Fund division of Publications 578 Madison Avenue, Price $. 1·50. From 1923 to 1927 the Commonwealth Fund, a Newyork philanthropic foundation particularly interested itself in child welfare, conducted in Fargo, N. D. a five year demonstration of public health activities with particular reference to child health. The purpose was to determine the effect upon community health and welfare of reasonably complete and adequately supported programs of official and voluntary health activities.

The writer was the director of health education on the demonstration staff from 1923-1926, serving under official appointment by the Board of Education as a superviser in the Fargo Schools.

The book under review gives a detailed account of her methods of health teaching which were developed during the first four years of the demonstration. The book is divided into five chapters. Chapter I deals with the problem of Health Education: Chapters II to IV are very interesting, and the authoress has well explained the practical aspect of teaching health subjects

to school children which if followed is sure to give good results under any staff. The book is sure to be of immense use to all health propogandists, and kindergarteners.—*V. C. S.*

Introduction to Anatomy.—By Dr. N. S. Sahasrabudhi; M. S. Lecturer in Anatomy R. M. School Nagpur 1929 Pp. IX + 236.

This handbook gives very clearly all the fundamental principles of Human anatomy in a concise form.

The author has dealt with the subject in an interesting and novel way by adopting what he calls the 'Method of inductive reasoning' i.e. from "known to unknown." This method is sure to interest the students and make them grasp the fundamentals of anatomy with little effort.

Though one would think, by adopting this method, the whole subject may not be finished in the prescribed period yet this sort of teaching anatomy will certainly drive home the essentials of the subject in a clearer and better way.

The book is cheaply brought out with the hope that it may be within reach of even the poor student.

After all is said, we would have liked to see more evidence of a proof corrector's skill, for printer's errors are overfull specially with regard to type faults. But this does not mar in any way the intrinsic value of the text and we recommed this book to all the Medical students as a very suitable introduction to the study of advanced anatomy.—*V. C. S.*

Arthritis and Rheumatoid conditions, their Nature and Treatment.—By Ralph Pemberton, M.S., M.D., 1929 Pp. 354 and 42 illustrations Philadelphia: Lea and Febiger:

The author has given in this book in a very descriptive and concise form the result of a series of observations and work which he has been engaged in the past fifteen years. The book also contains a brief review ot the work of other investigators in this field, thus giving an opportunity for the general practitioners to have a wide view of the subject.

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