JUNE 1929.

The Antiseptic

A Monthly Medical Journal

EDITED BY

THE HON'BLE U. RAMA RAU

AND

U. KRISHNA RAU M.B., B.S.

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Editorial & Publishing Offices: 323. Thambu Chetty St., G.T., Madras

Subscription Rs. 5, Foreign 10sh. a year. Post paid. Single Copy As. 12. In advance

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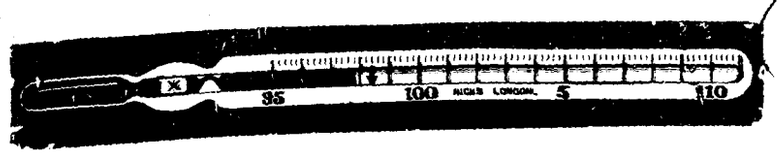

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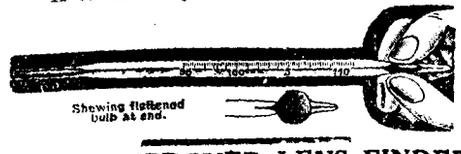

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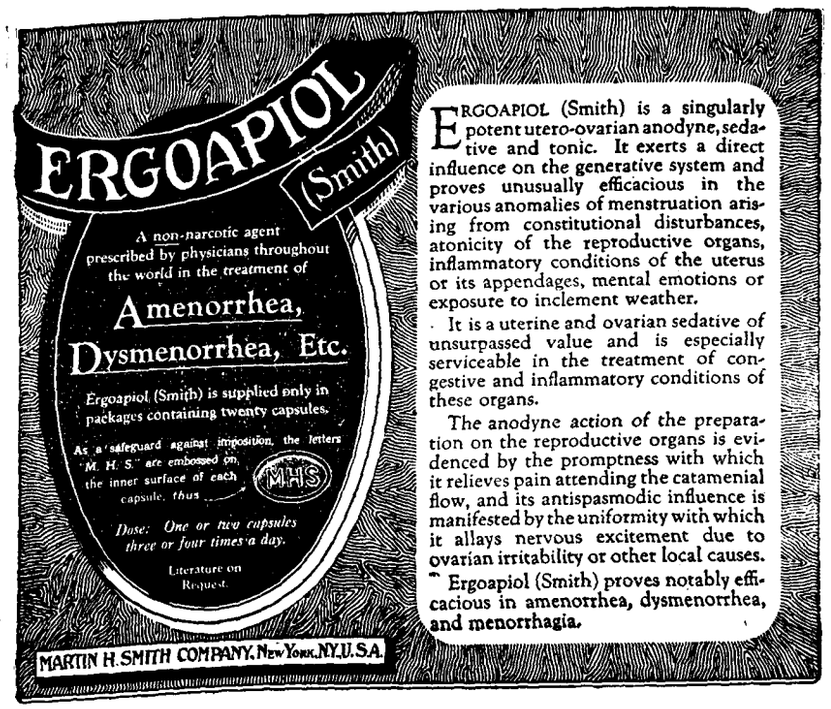

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The Antiseptic

ESTD., 1904.

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Editors: HON'BLE U. RAMA RAU & U. KRISHNA RAU, M.B., B.S.

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

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

Vol. 26] JUNE, 1929 [No. 6

ORIGINAL ARTICLES

GLAUCOMA*

BY

G. ZACHARIAH L.R.C.P., M.R.C.S., D.O.M.S.

Of all the various diseases of the eye which demand the attention of the medical practitioner GLAUCOMA is probably one of the most important. Its great importance lies in the fact that too often the condition is overlooked or its seriousness not sufficiently appreciated. The result is that nearly always energetic measures of treatment are not adopted from the beginning and the condition passes on quickly to partial or complete blindness. Cases are frequently seen in the out-patient department of any Eye Hospital, of people who have been suffering from an attack of glaucoma and had nothing done to their eyes by their attendant physicians and have now become practically blind. Often the only treatment that had been given had been for the relief of the accompanying symptoms of headaches, vomiting etc. Very often these symptoms are not considered as having any relation to the eyes. Under such conditions of a lack of proper diagnosis and of inadequate treatment the patient suffers a serious and irreparable partial or total loss of his vision. One of the important causes of preventable blindness in this country is the unrecognised and improperly treated cases of glaucoma. Think of the case of the person in fair health and in the

* *Specially contributed to the 'Antiseptic' Silver Jubilee Issue*

enjoyment of his visual powers being able to enjoy the beauties of nature and able to receive and give out happiness and joy suddenly thrown into a state of utter darkness and gloom. his eye sight practically gone never to return again because he was not properly attended to. You and I do not desire such a calamity to fall on us or any one belonging to us and yet does this not happen to our neighbours so frequently ? Glaucoma is an easily recognisable condition especially in its acute state. Every case of severe headache with pain in or round the eyes coming on in elderly persons especially if it is associated with marked dimness of vision should be examined carefully for definite signs of glaucoma.

Glaucoma can be divided into two chief groups. Primary and secondary. In both groups the chief factor in the increase of tension seems to be the prevention of the escape of fluid from the anterior chamber to balance the abnormal increase of intraocular pressure. In secondary glaucoma the causes for this are easily ascertainable. It is almost always a mechanical obstruction at the angle of the anterior chamber. Conditions which bring about such obstruction are wounds of the lens, dislocation of the lens, intraocular hæmorrhage, intraocular tumour, annular posterior synechia.

The cause of primary glaucoma is not known. It is a symptom complex and various factors probably enter into its causation. Such as increase of pressure in the capillary circulation of the eye, a veinous congestion, an upset of the endocrine balance or change in the Vitreous etc.

Primary glaucoma is essentially a disease of advanced type. In a good many cases well marked degenerative changes are also seen in the vascular system.

It is not necessary to go into the details of the anatomical and pathological changes seen in eyes affected with glaucoma.

Primary glaucoma may appear in two forms—acute and chronic. Both are essentially the same condition. In the one case an acute attack with congestion of the eye, marked constitutional symptoms and sudden and complete loss of vision is seen and in the other the progress is much slower and more insidious.

An acute attack generally sets in suddenly. The immediate precipitating cause may be constipation, overfeeding, alcohol, worry, fatigue etc. Both eyes may be attacked at the same time, Intense pain over the eye and headache are felt. The pain may be so intense as to cause vomiting. Temperature may be elevated The patient may be prostrated and the vision rapidly lost.

There should be no difficulty in diagnosing such a case. Examination of the eye shows marked congestion of the eye ball, the cornea will be found to be dull and have a ground glass appearance. Anterior chamber will be shallow. The pupil will be semi or fully dilated and inactive to light. The tension will be markedly raised. The eye ball will feel very hard to the touch. These signs are sufficient for recognising a case of glaucoma.

Once recognised treatment should be energetically carried out. Half-treated measure means loss of sight to the patient. Every effort should be made to reduce the tension as quickly as possible. Results will depend on the quickness and thoroughness of the treatment. A purgative should be given at once and leeches applied to the temple of the affected side to relieve the congestion Eserine, 1%. sol. should be instilled every 5 minutes for a few times and thereafter every hour till tension is reduced. Hot fomentations may relieve the pain. Aspirin internally is also useful. Morphia should be given in bad cases. It acts not only by alleviating pain but also by its action on the pupil. If the pupil is contracting up well, the cornea is clear and the tension is being reduced, treatment may be continued till the eye is quiet. But if the Eserine is not having any effect on the pupil operation should be performed quickly and tension reduced. Iridectomy is the operation of choice. A general anæsthetic will nearly always be found necessary to do a proper iridectomy. Otherwise the pain will be too much. In all cases after the eye becomes quiet an iridectomy or one of the filtering scar operations should be performed.

Chronic simple glaucoma should also be treated by an operation as soon as considered feasible.

Different operations have been advocated by different surgeons. At one time iridectomy was the principal operation. Even now some surgeons are returning to iridectomy as being the most reliable on the whole. But many surgeons advocate some type of filtering scar operation. Of these one of the most popular is Elliot's sclero-corneal trephining. Many surgeons in England and some on the Continent rely on this operation. Others have adopted the Lagrange operation of sclerectomy and various other operations.

Trephining seems to have certain drawbacks. In some cases one notices an unsightly raised up scar over the trephine hole. This is so marked as to be visible through the closed lid like a chalazion.—A few cases of infection through the scar have also been reported. One case which came under my notice recently had both eyes operated on some years ago. The site of the hole showed up as large bulging scars. Tension was normal. One

morning the patient came up complaining of pain in one eye. On examination it was found that the scar had become quite flat—It had apparently burst—and an acute iritis had been set up.

I have for a little time past been performing an operation of sclerectomy with a punch under a conjunctival flap. A small piece of sclera about 2 –3 mm. long and 1mm. broad is punched out just above the Limbus by means of a Holth's punch. Iridectomy is performed as usual. The results so far have been very good. There is no tendency for the formation of a raised up scar as the conjectival covering over the hole is thick enough to prevent such an occurrence. At the same time tension is kept low. This operation is easy of performance also. Very good results have been claimed for a similar operation from some clinics in Europe.

PLOMBIER *

BY

D. R. RANJIT SINGH, L.M.S., K.I.H., O.B.E.,
MAJOR (LATE) I.M.S.

I am almost sure that the title under which I am contributing to the Jubilee number of the "Antiseptic," *viz.*, *Plombier* is pretty unfamiliar to most of the readers. As it was to me up till the year 1919 when for the first time it was mentioned to me by my patient Sir Tej Bahadur Sapru, K.C.S.I., ex-Law Member of the Government of India and an advocate of the Allahabad High Court. This patient of mine, who had been subject to stasis accompanied by the usual concomitants, when he returned from his first visit to England, told me that he had been enormously benefited by a course of plombier. Listening to the word I scratched my head and expressed my total ignorance and asked my patient to tell me what he meant by plombier. The patient described to me the technique of plombier, which I will give in the following lines. It was, however, not till five years after this when I made a personal acquaintance of this simple yet so useful a method of combating so many different varieties of human ailments. In June 1925 I was suddenly overtaken by a severe attack of Angina and I actually faced death for a few moments. On making a temporary recovery I went over to Europe and in England consulted several eminent physicians as Sir Thomas Horder, Dr. Hemming Belfrage and Dr. Webb Johnson. I may here mention that I had been subject to occasional glycosuria which more or less had been running in my family for the past few generations. My doctors in England after a very thorough

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examination and consultation amongst themselves came to the conclusion that my alimentary tract was at fault and advised me to a course of plombier. Plombier is the name of a town on the river Plombier in France, famous for its natural waters which they use for giving high colonic lavage. The technique is as follows: The patient first lies on his right side and the Plombier water after its temperature has been raised to 104 is introduced through rectum by means of specially made long India-rubber tubes which have been called plombiering tubes and are supplied as such by the Medical Supply Association, Gray's Inn Road, London. The tube is introduced just a little beyond the rectum and the fluid allowed to enter the sigmoid flexure directly and slowly. The patient is kept on the right side for five minutes when he is turned on the back and while the fluid is still in the bowels he is given a gentle and regulated vibratory massage by hand following the course of the direction of the intestinal tract for two and a half minutes. An electric vibrator is then used which also follows the course of the intestines and is given for two and a half minutes. The patient is then turned on to his left side and lies quietly for another five minutes. They have devised special plombiering clocks which give an alarm at any portion of time for which it is marked and at the end of fifteen minutes after the alarm is given by the plombiering clock, the patient leaves the plombiering table and sits down to relieve himself.

The very first thing noted in the above operation is the extraordinary comfort with which the patient lies for fifteen minutes retaining the fluid without any special inconvenience and the evacuations which follow are naturally accompanied by enormous relief and a sense of lightness and cheerfulness. Having received about two dozens of the above plombiering treatments spread over between three months and having got over my own glycosuria, on my return I began to use this in a variety of cases with an extraordinary success. This treatment alone by itself has brought remarkable relief to patients suffering from chronic stasis, acidity, windiness, sluggish liver, billiary colics, various kinds of abdominal colics, anorexia and various other accompaniments of the Demon of Dyspepsia. I have also used it with marked success in High Blood pressures of obese patients.

Its stimulating effects on the loaded bowels and the improvement of tone that the massage gives to the intestinal muscles help the peristaltic movement. It has also given me marvellous results in some other undefined kinds of pains not only in the abdomen but also in the skeletal muscles.

My most gratifying results have been in bringing down weights and reducing general obesity by combining a course of plombiers with abdominal culture (special exercises for the four abdominal muscles, the two Rectii and the two Transversalis), which will be evident from a perusal of my cases below. The other obstinate disease where I have succeeded is Asthma, wherein I gave a combined course of Plombiers with hypodermic medications of catarrhal vaccine and Soamine.

Plombiering alone has given me wonderful results in relieving patients suffering from pseudo-angina and general præcordial distress.

In short, I do not find anything so efficacious in combating diseases brought on as the results of auto-toxæmia depending on faulty elimination.

" Dhoti-kriya," as practised by some Indian Yogis, I am sure will be familiar to many of the readers and it is a known fact that Yogis practising Dhoti-kriya, which was a recognised method of washing the bowels, always enjoyed longevity and health and personally I base the success attained either by pure plombiering or by combining it with hypodermic medication and abdominal exercises as chiefly and firstly due to the material help it gives to the eliminating process through the Alimentary canal. In this country where the combination of our dietary is recognised as faulty and unscientific, specially in the South and in Bengal, it is a common sight to see majority of people going about with pendulent abdomens who are almost cent per cent subject to various forms of dyspepsia and which in its turn leads on to graver results such as Gravel, Diabetes, Bright's disease and other nervous disorders, it is my firm conviction that Plombiering has a large future before it and should be practised on a wide scale.

The technique is not at all difficult and the hand massage can be learned very easily while the electric vibrator can easily be fixed on to a plug which is always available in towns having electric supply. In places where electric massage is not possible I venture to think that the hand manipulations and massage properly done ought to suffice.

Cases.

F. I. Mohamedan Male—Obstinate constiption, giddiness, heart burn great anorexia—6 plombiers: condition became normal.

H. M. Mohamedan Male—Heart burn many years—continued loss of weight, great anorexia, discomfort after meals—6 plombiers: weight increased and condition returned to normal.

M. N. Bengali Male—B. P. 185 giddiness, obstinate constipation, tense abdomen—plombier abdominal culture—girth reduced 3" round the naval and B. P. reduced by 30.

M. R. Anglo-Indian Female—Persistent short hacking cough, dyspnœa, progressive emaciation, sleeplessness—7 plombiers: cough disappeared.

M. K. Anglo-Indian Male—Mucous with stools—duration few months. A strange feeling round the anus, inability to digest anything, loss of weight. After 11 plombeirs stools became normal and digestion improved and became normal.

D. H. Parsi Female—Had suffered from distressing Asthma for 3 years, attacks coming on every fortnight, anæmic—12 plombiers and injection of Soamine—cured. No return of attacks for the last three years.

A. P. Hindu Male—B. P. 165 Præcordial distress, pain radiating towards arms—distress in going upstairs—6 plombiers B. P. reduced by 25 and præcordial oppression disappeared.

R. N. Bengali Male—History of persistent Asthma, stasis, dyspnœa; 12 Plombiers and soamine and catarrhal vaccine. No more attacks for the last three years.

R. H. Hindu—Persistent Asthma—12 plombiers and 12 injections of catarrhal vaccine and soamine—No more return of attacks.

S. N. Bengali Male—Flatulent dyspepsia, anorexia, sleeplessness, incapacity to work—12 plombiers: appetite returned—the patient said he was feeling ten years younger.

P. S. Kashmiri Male—Ch. stasis, flatulence, præcordial distress. B. P. 185 inability to work. 12 plombiers: B.P. reduced by 30, præcordial distress disappeared, the patient felt fit to work.

N. R. Anglo-Indian—Severe anginal pain shooting towards right arm, emaciation, scanty motions, exhaustion. After 12 plombiers, patient was cured completly.

E. L. B. European Male—Pain in small of back, travelled towards right heel. Great discomfort after meals, heaviness in head. Twitching pain in the small of the back. Tightness and discomfort in chest—6 plombiers relieved him, he became normal.

M. B. European Female—Putting on weight, shortness of breath especially going up-hill. Short hacking throat cough, B. P. 140 combined course of abdominal culture and plombier—lost 11½ lbs and lost 3½" in girth.

R. M. Bengali—Obesity—42 " at the Naval—abdomen very loose and pendulous—Diet full English combined with Indian Meals. 12 plombiers and 7. Ald. cultures Lost 10 lbs and 3" in girth.

B. C. European Female—Wt. 18 stones 2 lbs. B. P. 240—After 8 plombiers B. P.—130—Urine-albumine free, giddiness, shortness of breath. Swelling of lower extremity disappeared.

K. M. Mohamedan Male—Entroptosis, pain in the hypogastrium while bending forward or sitting. After 14 plombiers the pain ceased and abdomen was reduced in size considerably.

M. D. Kashmiri Male—Stasis and acidosis, especially half hour after meals—6 plombiers totally cured.

R. G. Kashmiri Female—Severe abdominal colic and great flatulent, history of gall stone. 11 plombiers: discharged, completely cured.

M. C. Kashmiri Female—Acid eructation, wind troubles accompanied by pain over epigastrium anorexia and loss of weight—12 plombiers considerably decreased her troubles.

R. S. Hindu Male—Suffers from fainting fits—irregular pulse, distress in the præcordium, flatulent B. P. 138. Urine normal. 12 plombiers: pulse became regular, the entroptosis became better, præcordial distress improved.

IMPORTATION OF VEGETABLE GHEE (PRODUCT) INTO INDIA *

BY

S. N. DE, L.M.S. D.P.H. D.T.M., CALCUTTA

The vegetable product is the product of hydrogenation of one or other of the vegetable oils which are said to be used in certain parts of India for culinary purposes, in their natural state by the poorer classes of people who cannot afford to use ghee or butter fat. While ground-nuts as well as certain seeds from which these

* *Specially contributed to the 'Antiseptic' Silver Jubilee Issue*

oils are expressed are largely grown in India (and oils can be cheaply and cleanly expressed in India) these nuts and seeds have other uses as well, nevertheless they are taken to Europe for expression of oil and the oil is imported into India after hydrogenation on the plea that this hydrogenated product is much cleaner and consequently more wholesome than the crude oil expressed in India and the product is therefore considerably safe for consumption by the poorer classes of Indians. The poor people of India appreciate their humane feeling and are grateful to these traders and manufacturers but the point which occasions surprise is that this product is not sold at a cheaper rate than Margarine to the poor unemployed in Europe whose number is astonishingly great. They cannot afford to purchase margarine even. It is in the fitness of things that the traders and manufacturers of these oils should bestow their sympathy on their poor compatriots.

As for cleanliness, the ideal conditions exist in theory only and are never found in practice, and he is a bold optimist who visualises cleanliness in everything European. Ideas as well as standards of cleanliness vary. Hence the assertion that the oil is produced more cleanly and is therefore more wholesome has the complexion of an *ipse dixit* which does not appeal. The plea of cleanliness, however, is a camouflage or the oil would not have been sent back to India " Hydrogenated " to serve as a colorable imitation of ghee. The object of the traders and manufacturers in introducing this product into India is to make the easily gullible people of India believe that it is really a good and wholesome substitute for ghee and may therefore be used with impunity. The term " Ghee " was defined by the Calcutta Corporation and the agents in consequence dropped the term " Ghee " and began to designate the stuff as " Vegetable Product." Major General T. H. Symons, Director General of Indian Medical Service during the discussion in the Council of State the other day rightly pointed out that this product is only solidified oil and the word " Ghee" should not be applied to an oil which has been soldified and the solidified oil does not contain Vitamin A—the growth producing Vitamin in which Ghee is so rich.

Various points have been raised during discussion in the Council of State and the questions have resolved themselves into the following :—

(1) Whether the " vegetable product " is wholesome or injurious to health.

(2) Whether India ought to start an industry of her own and produce the hydrogenated oil here.

(3) Whether she should go on importing this stuff either to be palmed off to poor people as ghee or to be used as a good and cleanly adulterant.

As to whether the "vegetable product" is wholesome or injurious to health: there was a time when physiologists used to teach students and to deal in "Dead" physiology a sterile humbug as Sir Leonard Hill preferred to call it. It used to be taught that the physical body could be maintained and kept fit if only certain quantities of protein, carbohydrates and fat or even better if only requisite molecules of carbon, hydrogen, nitrogeon, and oxygen were supplied to it. Modern pediatricians do not risk their reputation on calories alone; nor merely on the proportion of the three foodstuffs to one another. The advanced physiologists of to-day have found that pure protein, pure carbohydrate and pure oil or fat if supplied to an individual in requisite quantities do not support growth and maintenance of physical structure (muscular, osseous and nervous), nor the mind either. Artificial protein, carbohydrate, fat or oil produced under cleanly conditions are devoid of all vitamins and are in consequence positively harmful and often poisonous. Their deleterious action is insidious and slow but sure, as the experiments of Captain Thomas, and others go to show. The opinions of Dr. Plimmer and Col. Mackie are very pertinent and bear quotation here. "Vegetable Ghee is really a source of danger to the public and especially to the younger and growing section of the population. This is particularly applicable to the poorer classes whose straitened circumstances compel them to consume the cheapest variety." According to Dr. Plimmer the danger of rickets and of stunted growth and bad teeth will increase if the people rely for their fat on vegetable ghee. Sore throat and lung diseases are also due to this.

MACKIE:—"I am dead against the substitution of animal fats by vegetable oils and consider that it should be vetoed at once at any rate until the vitamin content of such substitution has been proved to be as high or nearly as high as ghee. This, as far as I am aware, is not the case in any vegetable oil and most of them contain none at all.

"I am sorry to see these substitution products put on the market at all and think the municipal authorities should prohibit their sale unless they can be proved to contain a fair quantity of fat soluble vitamins. Otherwise the requirements of economy will result in children being brought up on these oils—a procedure which may have a disastrous effect on public health. I say all

this on the presumption that the vegetable oils are dificient in vitamin. As to giving it to hospital patients, I should forbid it altogether."

His Excellency the Commander-in-Chief says—"As a result of exhaustive experiments it has been proved that metabolism is affected by the presence or absence not only of the normal protein, carbohydrate and fat contents of a diet but also by accessory food factors popularly known as vitamins."

As a matter of fact protein, carbohydrate and fat should not only be in requisite quantities, they must necessarily be natural and full of vitamin and unless the proximate principles are natural and unless there is full complement of vitamin no food can be assimilated. For instance gelatin—a protein of good caloric value is not assimilated and does not support life. Faddists used to prescribe the much extolled artificial, cleanly and pure infant foods in preference to the natural foods of infants. The world did not realise the mistake before a large number of babies were sacrificed on the altar of fads. It has been found by experience that even "Doctored" air, *i.e.* air which has travelled through lengthy shafts and special air-channels loses its freshness and is liable to cause lassitude and a feeling of depression amongst those who habitually come under its influence. Chemical and bacterioscopic examination may demonstrate the purity of such air; but none the less there is reason to believe that in such air the vitalising principle of fresh air is diminished.'—*Parkes and Kenwood.*

We are being treated with doctored rice, doctored flour, devitalised town air and on the top of all this we are asked to gulp down doctored oil or fat in preferance to the antirachitic and growth-producing ghee. The idea perhaps is to sap the little vitality the Indians still have by denying them the small modicum of vitamin they may chance to get. The doctored fat—a colourable imitation of ghee—is wholly devoid of vitamin and is not only unfit for human food but unfit for consumption of rats and kittens even". Major General T. H. Symons on the other hand maintains that the oil manufactured in Europe is of purer quality than that manufactured here and being pure it is necessarily wholesome and not injurious. Sir T.H. Symons' high position in service has made him dogmatic and he throws all scientific and experimental findings to wind. He quotes from the English "Sale of Food and Drugs Act, 1899." "No person shall sell to the prejudice of the purchaser etc" "Whether a purchaser is prejudiced or not by such statements as "Wholesome" "Pure" and "Not injurious to

health" is a point to be decided. Sir T.H. Symons has not defined the terms "Wholesome" and "Not injurious to health". He admits that hydrogenated oil does not contain vitamin, yet he would denominate the stuff as "Wholesome" and as "Not injurious to health". He admits that hydrogenated oil does not contain vitamin yet he would call the stuff wholesome and the purchaser will not be prejudiced. The poor purchaser of Vegetable product (Ghee) is made to believe that he would get the requisite amount of nutrition from the stuff called vegetable ghee (Biliati Ghee) when you know full well that it has not the growth-producing principles in it. It is idle to say that the purchaser will not be prejudiced. It is good that Sir T.H. Symons' has condescended to have the stuff permanently coloured by some non-injurious dye-stuff. But he ought to be in a position to tell the purchaser either by word of mouth or by a written declaration in vernacular that it has not the growth-producing principle in it. When however, Sir A. Froom asked the gallant general pointedly, "In mentioning quality does the Hon'ble member mean it is better for health?" the Gallant General parries and avoids a direct answer by saying that it is simply a question of purity of the oil.

We now come to the discussion of the 3 issues raised in the Council by Hon'ble Sir G. Corbett.

Sir Geoffrey Corbett takes his stand on some of the opinions of Capt. Thomas.

(*a*) vegetable ghee fulfils the requirements of India (despite their vitamins deficiency)

(*b*) vegetable ghee is prepared in scrupulously clean factories and ought to be the adulterants par excellence of ghee.....etc.

(*c*) vegetable ghee will force up the price of real ghee if its importation is checked.

We have already dealt with the first point. Not having the necessary vitamins, vegetable products (ghee) will bring about the extinction of Indians easily and quickly. We are told that adulteration of ghee is a *sine qua non* and these veanly products are by far the best adulterant. Adulteration should not be the *sine qua non* and the defects in the sale of Food and Drugs Act ought to be remedied with a view to effectively inhibiting adulteration by not giving the unscrupulous dealers in adulterated articles loopholes for escape. It has been urged that the demand for pure ghee is much greater than supply. That is a matter which ought to be remedied. People should not forget what has forced up the

price of ordinary rice from Rs. 2-and 3-to Rs, 10-and 11-and what has kept the rice-cultivators of Bengal in perpetual bondage to money-lenders. Factors involved are various and must be thoroughly gone into. Adulteration of ghee should not be the *sine qua non*, but production is to be increased and the price should be kept down by increased production of ghee and prohibiting exportation of milch-cows and not by the importation of hydrogenated oil which stimulates ghee in increased quantities from abroad. Increased import of vegetable product will kill ghee resulting in the deprivation of the Indians of valuable vitamins. Importation of the vegetable product must be checked because they are deficient in the growth-producing principles. People will not have these in preference to ghee if only the great nation-builders, the medical men, do honestly tell the people the great danger and risk they run by eating vegetable ghee in lieu of real ghee. To stop importation into this country of this unsound food unfit for human consumption an Act like the Public Health (Regulations as to Food) Act 1907 of England should be passed empowering the municipalities to make regulations "to prevent danger from importation, preparation, storage of this deleterious substance called vegetable product." In England even importation of butter containing more than 16 per cent of water a harmless and pure adulterant is prevented (Amendment of Sale of Food and Drug Act, vide Bale's Food and Drugs Act. pp. 136 and 178) except under certain very stringent restrictions. Public Health Acts do not contemplate legalisation of adulteration. Because certain unscrupulous dealers adulterate ghee with certain noxious substances on account of the very handy safeguards provided for escape, Government instead of bringing these offenders to book ought not to try and encourage adulteration by asking vendors to substitute one noxious thing for another. There is no justification for adding one more adulterant to the list. People very often forget that Public Health interest and trade interest are not identical. Where the health of the whole population is concerned the trade interest must be sacrificed. People of India do not exist for traders. Public Health (Regulations as to food) Act 1907-Regulations under this Act give power to Medical Officers of Health to examine all food imported into England intended for human consumption and to seize and to secure the destruction or in certain cases to deport articles of food unfit for human consumption.

The English Public Health (unsound food Regulation)—Under this regulation Medical Officer of Health may examine any article of food before and after it has landed and if unsound or unwholesome or unfit for human consumption may seize and carry it away.

He may as well forbid the importer to import such articles of food into his district. Regulations like these should be without delay framed by all municipalities or other local bodies authorised to do so and put into operation at once; meanwhile the vegetable ghee must be coloured with some thermo-stabile harmless dye stuff precluding the possibility of its incorporation into ghee. To control importation of this unsound article by prohibitive duty requires invocation of assistance of Government Machinery. Unfortunately government machinery is soulless and moves awfully slow, but the local sanitary authorities should be in a position to prohibit this harmful product altogether in their respective districts.

As for establishing an oil industry in India we would certainly establish factories for the manufacture of these products if there be a market abroad. We would send them abroad as an artificial Stearin from hydrogenated cotton seed oil and coloured with harmless vegetable dye and compete with margarine in open market or sell to margarine factories if only the people abroad can be induced to take these hydrogenated products as a "Good substitute" for butter. We would then have the benefit of the oil cakes for our field and for our cattle but we would certainly not manufacture hydrogenated oil for home consumption in India. A pure (i.e., purefied) oil is not necessarily wholesome and a hydrogenated oil has no food value and is indigestable. It should not be used either alone or as an adulterant of any fat or oil intended for human consumption. A food is taken not to act as a ballast to only fill up vacant spaces but it is taken because of its growth producing, tissue repairing and energy producing properties. Any article (gelatine for example) which has no food value should not form an important factor in the dietary of man nor should it be used as a "Substitute" for any important article or a constituent part of any food taken by man.

The suggestion of the Bengal Chamber of Commerce to use white oil said to be "Cleanly and not dangerous" as an adulterant of edible oil or ghee may be dismissed without a moment's consideration. It is too early to express an opinion as to the nature and extent of mischief the tasteless liquid paraffin or kerosine oil will produce when taken by man internally but men who have closely studied the effect of external application of white oil in the form of scented hair oils and other toilet preparations are now in a position to say authoritatively that the oil is positively harmful as the continued use of this oil inhibits the natural healthy secretion of oil glands in the skin so necessary for the growth and maintenance of hair in a healthy condition.

The evil effects of dietetic deficiences in Indian dietaries have repeatedly been pointed out by Dr. Chas. A. Bentley, the Director of Public Health, Bengal and by Col. McCarrison, I.M.S. and others who have singular opportunities of studying Indian dietaries in all their aspects and whose scientific brains did not allow them Charlatan-like to formulate a theory first and then make facts fit in their theory but closely observed facts in their natural sequence and drew the only irresistible and natural conclusions from them.

It is high time therefore that people were told what to take either internally or externally so as not to come by harm in any way. Nature is inexorable, offend Nature and she takes a revenge from which no asseveration of a charlatan or the skill of a scientist can save.

A true scientist is not an alchemist. Science reveals the truth in Nature and Nature reveals herself in her true effulgence on an earnest and sincere appeal of science but refuses to be bottled in the hands of an alchemist oriental or occidental. An adult woman's body contains some 39 grains of iron. In anæmic conditions when there is a loss of a little of this iron the innumerable inorganic and organic preparations of iron do not avail even if administered in ounces for months. What is the peculiar compound in a bæl fruit which is equally efficacious in diarrhœa and constipation? Again mineral salts are considered an important constituent of the diet. In general it may be said that in an ordinary mixed diet such as is commonly eaten, the mineral salt-mixture contains all the necessary salts in sufficient amount. If salts were of so much importance, the problem of nutrition would be greatly simplified. All that would be needed would be for a Chemist to compound a mixture for general table use instead of the common table salt. Although a mixture of salts, such as is contained in the animal body, is obtainable, it has not been widely used because it has no advantage over the salts of the ordinary mixed diet. The eminent Scientist physician the late Sir William Osler sounded a note of warning to the vain Scientists and Physicians and held out a ray of hope to the hopeless and the bewildered physicians when he asked them to unreservedly accept Nature's method of cure as infinitely superior to the prevailing method of forcing down the gullet of man, woman and child quantities of "bottled" Nature. This will ever remain as a sign post both to the physician, pediatrician and dietetist. The highly milled polished rice grains and the snow white wheat flour are being condemned by scientists not on *sentimental* grounds but because of the discovery of certain stern scientific truths. The

different starches have the same chemical formula and give the same chemical reactions but not only their physical structures are different, their physiological characters differ in a subtle way from one another. Cow butter and cow ghee have both a delicate flavour and colour not posssessed by buffalo butter or buffalo ghee despite their similarity in chemical composition and properties. In India cow ghee is always considered far superior to buffalo ghee and to dismiss this accession of cow ghee over buffalo ghee as merely sentimental evinces an attitude at once arrogant and unscientific. To day we fail to discriminate between the two, tomorrow with better knowledge we may succeed. Chemical analysis of different milks —human, cow, buffalo, goat etc. show that each contains protein, lactose (carbohydrate), milk-fat, salts and water only their proportions vary and by addition of one or other of the constituents to say cow's milk the cow's milk may be made to simulate human milk but this treatment does not humanise cow's milk.

We have talked of hydrogenation and what does this process of hydrogenation do ? The unsaturated fatty acids such as oleic acids are converted into stearic acid and during this conversion the vitamins of natural oils are completely destroyed. During the process of digestion in man the fats are simplified into fatty acids, soap and glycerin. These three substances are absorbed and for some mysterious reason are immediately reunited to form fat, which is then stored in the adipose tissues until the body has need of this source of energy. Which among the structural units in fats in the most essential to maintenance and growth? Is glycerin more important than palmitic acid? or stearic acid more important than palmitic acid or oleic acid? The question then arises which of the three common fatty acids is the most impotant?—Vitamines *Benjamine Harrow*. Dr. McCollum's Synthetic diet consists of Casein 18 p. c., Lactose 20 p. c., Butter fat 5 p. c., salt mixture in quantity and variety as is found in milk, Starch ad 100 p. c. water ad libitum. He modified the diet by omitting lactose and starch and adding polished rice instead. Symptoms of beri-beri were observed. He added lactose to the diet and symptoms disappeared. McCollum next showed that by very careful purification of the milk sugar he obtained a product which could no longer cure beri beri. In other words, the purer the milk sugar the less efficacious the remedy. McCollum used lactose manufactured by Kahlbaum. Chemical analysis failed to show any material difference between the original and the treated milk sugar. Yet something must have been removed, for biologically the two sugars acted so differently.

Dr. Mellanby's experiments confirmed by Japanese doctors proved that rickets is a disease primarily due to deficiency of fat soluble vitamins.

Dr. Hess a prominent American Physician observes that "the great danger arises from diets composed merely of cereal and water or perhaps an insufficient amount of butter-milk or skimmed milk. It is probably true that a catastrophe will result if the incomplete diet is maintained for years or even sooner in a susceptible individual."

K. B. Lehman the Director of the Institute of Hygiene in Wurzburg is said to have regularly used hardened fat in his own family for six months and he observes that no criticism can be found against the fat.

The experiments of the Director of the Institute cited, appear to have been by no means adequately controlled experiments. He might have just substituted a part of the fat daily used in his family by an equal quantity of hardened fat and that for only six months. The severest criticism against the fat is that though found so suitable he chose to discontinue the use of the fat and perhaps gravitated back to the former habit of using butter fat.

Again—the experiments of Dr. Drummond as well as of Drs. Osbourne and Mendel and of Harrow with rats fed on synthetic diet demonstrated the difficulty of getting diets free from Vitamin A and hence they observed that rats fed on a diet presumably free from Vitamin A grew for a considerable time before decline set in.

We tried feeding experiments not with rats which thrive on almost any food but with kittens and puppies. We had not had much luck. The kittens were 7 or 8 months old but the puppies were much younger and had not had time to grow fastidious. The kittens were of the same litter and so were the puppies and individuals in each set were of the same age and nearly of the same size and weight. The kittens refused to take the synthetic diet of skimmed milk and hardened fat. When they were made to take, they simply brought the mixture out after an hour proving that their stomachs rejected the stuff. The controls were then tried and they too evinced the same fastidiousness. The puppies took the mixture with great reluctance and they too brought out the feed. The experiments could not be carried on for a longer period than 6 weeks in each case as the animals became so weak and so listless that we had to discontinue the experiment and to put them on normal diet of whole milk and boiled rice etc., Both the kittens and puppies recovered quickly. Our inference was

that the hardened fat was rejected by the stomachs of both sets of animals because it was indigestible and unassimilable.

Effect of heat and aeration upon Vitamins A and D— Drs. Osbourne and Mendel confirmed earlier observers that Vitamin A is quite heat resistive i. e. thermo-stabile. Twelve hours' exposure to 120° C. with air or oxygen bubbling up through melted fat seems undoubtedly to involve some destruction of Vitamin A but not of D, and in the absence of air, it (Vit. A) is far from being completely destroyed. Heating drives off the air which may have got included in the mass. Dr. Zilva of the Lister Institute, London, showed that the ultra-violet rays completely inactivate codliver oil i. e. destroy Vitamin A due to production of O_3. The process of refining Cod Liver Oil reduces its Vitamin contents to 1/25th of original.

Prof. and Mrs Plimmer are experts very high-standing on food. They say, "The Vitamins are the elusive things in nutrition. They are chemical substances which can be looked upon as almost alive.....Their isolation and identification is a matter of the greatest difficulty. Rickets, so common among our children, is connected with the insufficient supply of the vitamin A, or a closely allied vitamin in the food."

"Between the entire absence of vitamin and the full supply there are a large number of intermediate stages. Those common ailments, headache, fatigue, indigestion, constipation melancholia are intimately associated with this intermediate condition. Shortage of vitamin is the question that has to be taken into account in our modern diet."

Dr. Cadogen, quoted by Dr. Plimmer, wrote—"The things we feed upon ought all to be in a perishable state or they will never furnish the materials of good blood, and whatsoever is *hardened or seasoned so as to keep long, ought never to be eaten at all.*" This was over 100 years ago. "Consider our food; the conditions," says Dr. Plimmer, "are far worse now. Fewer and fewer *perishable* food stuffs are eaten. The discovery of bacteria as a cause of disease made us nervous of raw food stuffs, and as a counsel of perfection some bacteriologists advised the sterilisation of all food. Luckily for us this was never practicable. We are now learning that our best defence against invasion by disease germs is a healthy body kept healthy by eating the right kind of food."—*Vitamins-what we should eat and why*-By Prof & Mrs Plimmer—published by **The People's League of Health.**

"In the present state of our knowledge of dietitics," says Mr. G. D. Elsdon B. Sc. F.I.C., in his Chemistry and Examination

of Edible Oil and Fats, their substitutes and adulterants, "it is not possible to be at all definite as to the food value of hydrogenated oils. On one point only can any definite opinion be given and that is that under no circumstances should attempts be made to introduce such artificial materials into commerce as articles of diet without due notice being given to the purchaser of the character of the material being sold. The recent work on accessory food factors (no matter what ultimate outcome of such work may be) renders it possible that they may be material, if minute, differences between a synthetic body and the natural product which it is intended to simulate and it is most desirable both on the score of ethics and of public health that purchaser should be fully acquainted with the nature of the product they are buying. Some manufacturers state that deception of the public is not undesirable so long as they suffer no actual harm, since their prejudices may force them to refuse perfectly good articles. The doctrine is dangerous particularly if *the manufacturer* is to be *the sole arbiter as to what is and what is not a wholesome article.*"

Space forbids inclusion of more quotations. Assertions have therefore to stand alone without much of the supporting evidence. I would, however, before concluding quote a few passages from the introduction to Plimmers' pamphlet by Sir Arbuthnot Lane Bart., C. B. M. S., F. R. C. S.

"It cannot be too strongly insisted on that the native living on the coarsest ground wheat and other grain made up with water into thin cakes, which are imperfectly roasted on a heated iron plate, on butter, on plenty of uncooked green food, such as radishes, is a perfectly healthy man. While he lives in his normal conditions he never suffers from any troubles of the stomach and bowels that are so common amongst civilised people, such as appendicitis, colitis, inflammatory diseases and ulcers of the stomach and bowels, and what is perhaps of greatest interest to us all, namely, that terrible scourge, Cancer..... The diet of the natives, which is very simple is exceedingly inexpensive. It is not only sufficient to keep them in perfect health, of magnificent stature, capable of enduring the greatest hardship and of bravery which is unequalled in a state of civilisation. Their women are equally efficient, and perform their natural functions with ease and with a freedom from pain and risk which must be the envy of their White sisters. Place these people in a state of civilisation, let them eat the same food as the White race,

and follow the same habits and they develop the same diseases as the White in a degree proportionate to the civilisation."

Sir William concludes by saying " have mercy on the children if you have none on yourselves. Factory made infant foods, consisting largely or almost entirely of white flour and malt, start the ruin of their constitutions and may make them hopeless invalids for life."

Let the upper and middle aristocracy enjoy their Indian and European pastries (perhaps they can afford) but let the poor of the country, who do not have one square meal any day in the year, be not deprived of just a little ghee on their boiled coarse rice or chappati and the little smashed boiled potato, for, generally these are what comprise their frugal daily meal. It is a counsel of perfection to ask them to take milk. Most of them cannot bring up their infants on milk. They cannot think of going for the luxury of taking milk themselves.

CASES AND COMMENTS

EXTRACT CASSIA BEAREANA LIQUID IN MALARIA AND BLACK-WATER FEVER

BY

DR. NARES CHANDRA BASU, B. Sc., M.B., L.T.M.

Medical Officer, Falakata Hospital, Duars, Bengal.

" Ext. Cassia beareana is a leguminous plant of East Africa. The decoction of its bark is largely used in Black-water fever in Duars, Bengal, especially by the tea-garden doctors who use it in almost all cases of fever in which there is red or yellow coloured urine, though its chemical and physiological action is very little known."

Dr. O' Sullivan Beare strongly recommends the decoction or the fluid extract of the root of cassia beareana liquid (Holmes) The latter can be obtained from Messrs. T. Christy & Sons, Old Swallow Lane, Upper Thames Street, London, and should be administered in one fluid drachm weli diluted with water, every two hours at first, and afterwards, at long intervals. (*Castellani* and *Chalmers*).

Black-water fever is much dreadful in Duars, Bengal, and its death-rate is nearly 50% of cases attacked.

Tea-garden Babus (clerks and garden assistants) local police officers, Khasmohal and Railway employees, merchants, etc., and the middle class Indians are in the habit of examining their urine for dark, red or yellow colour, whenever they are attacked with fever and most of them keep a phial of ext. cassia beareana liquid along with quinine, where Doctor is not easily available. They take it in half to one drachm doses when they begin to pass darker urine. It is believed to be a specific for black-water fever in Duars, Bengal.

Tea garden coolies and local inhabitants are rarely attacked with Black-water fever though they occasionally suffer from malaria fever and about 80% of them have got enlarged spleen.

From an analysis of 55 cases treated by me in the Falakata Hospital, in Duars Bengal, within a period of nearly 5 years the following results have been obtained with regard to the use of ext. cassia beareana liquid.

These cases are all diagnosed by portwine or dark-red colour of the urine.

Out of 55 cases 27 showed malaria parasite B.T. or M.T. individually or mixed in peripheral blood.

All the cases have got enlarged spleen and history of occasional attack of fever.

In no case quinine in any form was administered within the period of passing of dark-red coloured urine.

As long as the urine of the patients was dark-red 5 cases were treated with sufficient doses of Sodi citras, Sodi bicarb, etc alkaline mixtures only.

22 cases were treated with alkaline mixture and ext. cassia beareana liquid.

28 cases were treated with ext. cassia beareana liquid only.

Among those treated with Sodi citras Sodi bicarb etc., alkaline mixture urine cleared from 24 to 72 hours in 2 cases only i.e. 40% but there was no decrease of jaundice or fever, and malaria parasite was detected in 2 of these cases (which were of remittant type of fever) after a week of the attack. 2 cases died—40% death rate.

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Those treated with alkaline mixture and ext. cassia beareana liquid, urine cleared from 10 hours to 72 hours in 6 cases i.e. 72·7% cases.

Fever subsided from 2 to 5 days in 12 cases i.e. 54·5%.

Among these 22 cases 8 showed malaria parasite in the blood. Of these 7 cases were free from Malaria Parasite after repeated examination of thick and thin films after 6 days.

Jaundice disappeared from 2 to 10 days, in 13 days i.e. 59%.

6 cases died within 2 to 3 days, 2 of coma, 3 of Heart failure and 1 anæmia i.e. 27·2% death-rate.

Those treated with Ext-cassia-beareana liquid only i.e., 28 cases, the result was as below :—

Among all these cases there was copious secretion of urine after two or three doses of the drug. Urine cleared within a short time of from 5 to 24 hours in 23 of these cases i.e., 82%.

Fever subsided from 3 to 6 days in 19 cases i.e, 69·2%.

Jaundice in 4 to 6 days in 20 cases i.e. 71·4%. 17 cases showed malaria parasite B.T. and M. T. individually or mixed. 13 of these 17 cases showed no M.P. after 6 to 8 days by repeated examination of thick and thin films for 3 alternate days.

2 cases only died of coma i.e. 7·14%.

Ext. cassia beareana liquid has got very good diuretic effect, makes urine alkaline and superior to alkaline mixture in B.W. fever cases.

In big doses it reduces temperature and kills malaria parasite and to greater degree in an alkaline medium.

It reduces Jaundice and prevents anuria.

It reduces death rate in B.W. fever.

It is very costly and difficult to use in all cases of malaria in which it is perhaps more effective than quinine.

A chart of the experimental result is given below :—

Treatment.	No. of cases treated.	RESULTS																	
		Clearance of Urine.		Dis-appearance of Jaundice.		Remission of Fever.		Death.		Uraemia		Malaria Parasite.				Remarks.	
		Time taken	No. of cases	Time taken in days.	No. of cases	Time taken in days.	No. of cases	Time taken	No. of cases	Time taken	No. of cases	Found in cases.	Cases in which M. P. disappeared after treatment.	Percentage.			
Alkaline mixture Sodi citras m 30. Sodi bicarb m 30. Lig Hydrg. perchl mx Aqua anisi oz. 1	5	24 to 72 hrs.	3	6	...	...	...	2	40	...	20	2	N:il.	N:il.	N:il.	3 cases recovered. Fever and Jaundice subsided with Sodi Sulph quinine etc.	
Alkaline mixture as above + Ext. cassia beareana liquid m 30 to 3 doses.	22	10 to 72 hrs.	16	72·7	2 to 5	12	54·5	5 to 8	16	72·7	2 to 3	6	27·2	3	13·6	7	87·5		
Ext. cassia beareana liquid only.	28	5 to 24 hrs.	23	82	4 to 6	20	71·4	5 to 6	19	69·2	2 to 3	2	7·14	2	7·14	13	75·9		
Total and average	55	13 to 56 hrs.	42	6.4	2 to	32	58·1	5 to 7	35	63·3	2 to 3	10	18	6	10·5	20	38·1	27	49·8 per cent.

THE USE OF HOMEOPATHIC MEDICINES AS AN ADJUNCT TO ALLOPATHIC TREATMENT

BY

PHANIBHUSAN MUKERJEE, L.M.P.

Tajpur, Darbhanga

Homeopathic medicines if exhibited according to symptoms produce nothing short of marvel. The notes on the following few cases will show how rapidly they act on the system and ameliorate the diseased condition speedily.

1. In the year 1920, a case of Ischio-Rectal abscess came under my treatment. The patient was an old man of 50 and a fisherman by profession. I opened his abscess and although I irrigated the cavity daily with antiseptic lotions and dressed the wound with antiseptic dressings I could not stop the discharge which used to come out in gushes. Then the idea of trying homeopathic medicine struck me and I prescribed him one dose 'Silicia' 200. To my utter surprise the next day I found the discharge much diminished and to tell the truth it disappeared altogether in a few days and the cavity completely closed.

2. In the same year I got a case of mastoid abscess. It was in an adult Brahmin priest. As every one is aware in atypical case the pus burrowing through the bony cells of the antrum comes out of the nose, mouth and the ear and in this case also the discharge appeared through the nose, mouth and the ear of the patient when the mastoid region was pressed from outside. The wound was opened in the mastoid region as usual and inspite of my best attempts to diminish the discharge by proper antiseptic dressings, I failed. When the case was shown to the Civil Surgeon, he, as he was going on leave, referred him to the Calcutta Medical College for treatment; but as the patient was unwilling to go out anywhere I thought of trying the effect of homeopathic medicine on him and accordingly I administered only one dose of 'Silicia' 1000 and I was simply astonished with the result. The case was given up for lost and the drug acted like a charm and cured him altogether in a month's time.

3. In the year 1927, I was called on to see a case of scrofula or tubercular adenitis of the cervical glands. It was in a young female and of one year's standing. The patient tried allopathic treatment for sometime but to no effect. I thought of putting her on intravenous *Sod. morrhuate* or E.C.C.O., but as the said remedies failed to cure permanently a similar case, I administered her homeopathic drug and that was 'Silicia' 50 c.m. though some of the glands burst

were discharging pus at the time. The patient is alright now although about a year has elapsed since she left treatment. The glands totally disappeared under the action of the drug which miraculously cured this case also.

4. A child of 2 years of age with lymphadenitis of the submaxillary region of a few months' duration was taken to an allopathic surgeon who advised him operation. The relatives of the child, being afraid of the idea of operative procedure in a child of such a tender age, consulted me. I gave him one dose M. C. Sol. 200. and that set the condition right.

5. My brother was suffering from a Meibomian cyst on the Eyelid which was gradually increasing. I therefore consulted a Surgeon who advised him operation from inside the lid. The idea of the operation made me nervous at the time, my brother being very young and I resorted to homeopathic treatment. A few doses of Calx. chlor cured the condition.

A few doses of Ipecac have cured broncho-pneumonia, pneumonia and double pneumonia in children. Aconite and Bryonia if used in time sometimes avert an attack of Pneumonia. whooping cough, the treatment of which is so very unsatisfactory allopathically is promptly relieved by Belladonna or Ipecac or other indicated remedies. The recurrence of multiple pyæmic abscesses on the body is prevented by a single dose of sulphur. 200. Hepar Sulph if administered after the opening of an abscess hastens its recovery.

My object in publishing these notes is not to deprecate the allopathic system of treatment nor am I proud of having invented any panacea or specific remedies for diseases but to impress on the readers the usefulness of homeopathic medicines along with allopathic treatment, that the well indicated remedies if applied according to symptoms bring about a speedy relief while it takes a much longer time if other systems of treatment are resorted to.

AN INTERESTING CASE OF ACNE

BY

S. A. MAHAJAN, A.M.O., PIMPALGAON KALE

Via Nandura G. I. P. Ry. Berar.

A Hindu lady of 48 years of age: menstruation stopped two years back.

Complaint:—Acne like papules on the face in numbers. Papules and pustules on the head. Burning pain in the eruptions. Pain in the calf. Pyorrhœa with ulcers on cheeks

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tongue and gums with one gum boil. Burning pain in the mouth. Duration about 6 months.

Patient says that the old eruptions improve and new crops of eruptions appear.

She came to me for treatment on 16-1-29. The history for venereal diseases negative.

The hair were cut down. The ointment consisting of Sulphur Icthyol, Hydrargyriamoniata Zinc. Boric acid and vaseline was applied after antiseptic wash.

On 19-1-29 Callosol Iodine 1c.c. was injected hypodermically.

On 21-1-29 Mixed vaccine 1cc. hypodermically.

On 28-1-29 Mixed vaccine 1·5 cc. The pain in the calf was increased.

On 4-2-29 Mixed vaccine 1 cc. Again the pain in the calf very much increased and the eruptions were improving.

On 10-2-29 there was no eruption on the head. There were eruptions on the face but in a mild form.

On 11-2-29 5 cc. of mixed vaccine was injected.

On 13-2-29 a new crop of eruptions appeared on the head. It was tremendously painful. The patient could not sleep.

Throughout this course she was given Peptirron with Arsenic internally Hydrogen per oxide gargle and Euthymol tooth paste.

Juice of 2 fresh lemons after each meal.

On 24-2-29. 1 cc. of Manganese Butyrate of B. D. H. and Co. was injected intramuscularly.

On 1-3-29 1·5 cc. of manganese Butyrate was given intramuscularly.

She was given a powder of calcium sulphide and Pot Iodide T. D. from 24-2-29. There was no improvement.

The lady objected to urine examination. Microscopic examination of the discharge of the eruptions could not be performed as there was no arrangement.

I am in charge of a cheap place dispensary and I have to work without a compounder. This place is a village.

Will any reader suggest any better line of treatment that can be carried out in a village like this ?

SOME SUGGESTIONS AS TO DIAGNOSIS AND TREATMENT OF PULMONARY TUBERCULOSIS

BY

PERCY MOXEY, T.D., M.B.Ch.B., L.S.A., D.P.H.

Clinical Tuberculosis Officer, Southampton

The early diagnosis of pulmonary tuberculosis is of the utmost importance and yet it is one of the most difficult problems the medical man can be faced with. The diagnosis is based upon

(a) The history of the case

(b) Physical examination

(c) X-Ray examination

(d) Examination of the sputum for the T. B.

Now in every early cases none of the above will be of much help, the patient will have little to complain of and the diagnostician will have little to find, and yet the importance of making the diagnosis and instituting treatment cannot be overestimated. X-Ray will often be of no aid, and auscultation and percussion may be almost all you have to guide you, but if the patient has any expectoration there is one test which may be of great service. In these early cases it is rare to find the T. B., but a chemical examination of the sputum will often show the presence of albumen and as this only occurs in pneumonia, pulmonary œdema, and pulmonary tuberculosis, its presence, provided the other diseases can be excluded, will be a strong indication of pulmonary tuberculosis. It is not usually found in bronchitis.

In all my cases the sputum is examined for bacilli and also for albumen and with a large number of cases I have found that on the average the amount of albumen varies directly with the numbers of bacilli found.

To 10 c.c. of the sputum add 30. c.c. of 1% acetic acid and shake until thoroughly mixed. This causes precipitation of the mucus. Filter. Next test the filtrate for albumen and estimate the quantity by Esbach's method as follows——

Fill an Esbach's tube to the mark U with filtered sputum and to mark R with Esbach's reagent (Picric Acid 1 gm, Citric Acid 2 gms, distilled water to 100 c.c.). Cork and allow to stand for 24 hours: then read off height of the precipitate. This gives the amount of albumen in grams per litre and must be divided by 10 to obtain the percentage.

I find that where there are 5 bacilli present in 10 microscopical fields the average amount of albumen present is about '06%, with 20 bacilli it increases to '09%, with 50 to '1%, with 100 to '11% '13% or more. And albumen always is present when bacilli are found. This being the case it seems a reasonable supposition that when albumen is found even in small quantities that there is a strong indication of the presence of a pulmonary lesion probably due to the T.B. My own practice is to keep all such cases under observation and treatment.

The treatment adopted by me in all cases and at whatever stage is the administration of Collosal Antimony (Crookes'). Considerable experience with this preparation has led me to value it highly, and although at one time I gave certain other medicines with it which I thought of value, I have finally decided that the benefit derived was almost entirely due to the Antimony and I have increased the dosage and give it almost entirely intravenously. The initial dose is 2 c.c. given intramuscularly in case the patient has some idiosyncrasy. The second dose is 3 c.c. given intravenously, after which it is increased to 5 c.c. if all is well; and this dose is continued twice weekly and gradually left off after 3 to 6 months treatment as the patient improves; some of my patients have continued with Antimony treatment for over 2 years with no ill effects, in fact quite the reverse. There are no contraindications as far as my experience goes, and there is no need to discontinue the injections even in cases of hæmoptysis. Fresh air, rest, good food, and are of course essential and some simple mixture can be given to allay cough, such as a teaspoonful of a mixture of equal parts of Oxymel Scillæ, Syr. Tolu., and Tinct. Camph. Co. If the cough is troublesome at night some more sedative mixture can be given as rest is essential. Laryngeal tuberculosis which is such an unpleasant complication of pulmonary tuberculosis is always of the gravest significance and for many years I have found no treatment of the slightest use, but recently have tried a spray of a 2% solution of Collosol Mercurochrome (Crookes') and have had excellent results, pain has disappeared, the voice has returned and weight has been gained; it is too early to say what the eventful result will be, but during the last three months every case of this nature has improved; all these cases are of course being treated with intravenous injections of Antimony at the same time.

POISONING DUE TO SPICED TEA

BY

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

Mahuva, Kathiawar

The powder of Star-anisi fruit is commonly used either singly or along with other spices (masala) for vegetables and tea. But care has to be taken to reject the seeds for they yield a volatile oil which is poisonous. Its therapeutic dose is only ½ to 3 Min.

Syn.
Hind—Anaophal.
Bombay—Badyan.
Tel—Anaspurvem.
Tam—Anasuppan.
Pers—Badian-i-Khatai.

The following case illustrates the poisonous effects very well :—

One morning I was called to see four persons in the same family all suffering from poisonous symptoms after taking tea in the preparation of which they had used the powder of star-anisi fruit as masala. They had not rejected the seeds being unaware of their action. They all developed symptoms of an irritant and narcotic poisoning which started in about an hour after taking tea.

The severity of symptoms varied in each person according to the amount of tea each had taken. They were all suffering from vomiting and giddiness and had pinched and anxious faces. Two of them in whom the symptoms were most severe were also feeling drowsy and were absolutely confined to bed. The other two could more or less move about.

The vomiting was the most marked symptom in all and it occured every few seconds. The vomited matter consisted only of a little colourless and frothy fluid occasionally tinged with bile. Everytime they vomited, their faces got red, the eyes watery, veins stood prominent on the face. They felt totally exhausted after each vomit.

After completing my examination I took one of them to my dispensary for medicines as he thought he could do so without any inconvenience. He took the medicine bottles but found it very difficult to walk back alone. A friend of mine had to support him on his way back. Reaching home he administered medicines to the other three and stretched himself on a bench but shortly afterwards fell off the bench in a faint. None of them retained any dose of the mixture. In an hour's time I had to return and give two of them injections of morphia which soon had the desired effect. Towards evening one of them (who had suffered most) thought he was much better, and feeling thirsty got out of bed and walked to the kitchen for a glass of water. But before he got his water he fell down giddy and hurt himself on the forehead.

He was lifted up and put to bed with a strict warning not to get up again. The other three were feeling very much better by evening. After nearly thirty hours the symptoms completely disappeared and all of them were alright again.

The treatment consisted of sedative mixture as in the case of other irritant narcotic poisons. It was followed the next day by a good purge of castor oil. The patients were also advised to take copious amount of butter-milk and it did them a lot of good.

The quantity of powder of star-anisi fruit used was nearly one ounce for about six to seven cups of tea.

Being a rare poison it was very difficult to definitely spot it out. The Indian Materia Medica (By K. M. Nadkarni 1927 Ed.) describes only the therapeutic action of the Star-anisi fruit. That failing to throw any light I refered to Jurisprudence by Lyon (1909 Ed.) and it fortunately contained the following few lines describing the action in very small type.

" Cases have been met with in India (chiefly among children) which tend to show that the kernels of the fully developed seeds of star-anisi, Illicium Anisaeum possess a narcotic action."

A few days after the occurrence, some of my other patients told me of similar cases having occurred in their houses. Over and above the vomiting and giddiness those cases had later on developed diarrhœa with blood and mucus in stools.

I hope the knowledge of the properties and action of the star-anisi fruit will serve a useful purpose to my brother practitioners and that is my only excuse for putting the above lines in print through the medium of " the Antiseptic " which has a wide circulation.

QUERY.

BY

P. GANGULEE M. B.

Medical Officer, The Bengal Iron Co., Ltd., Mauharpur, B. N. Ry.

On 21-2-29, I was called to see an Anglo-Indian lady, who was suffering from high fever coming on with chill and rigor in the evening and leaving with profuse perspiration the following morning. When I went to see her in the morning she had no fever and suspecting malaria, I advised her to take quinine Hydrochloride pills gr. 5 every 4 hours till she has taken three of them. At about 11 a. m. the same morning, I was again called to see her; when I went there, I saw her very anxious and restless. On enquiring she told me that she took one Quinine tablet at 9 a. m. and another at about 10-45 a. m. she passed some urine, which contained blood. I had a look at the urine, it was dark brown in colour, and there was no sediment or anything. On examination I found the spec. gravity to be 1012. Sulpur test negative. Tr. Guaiacum and Hydrogen Peroxide test negative. I prescribed for her urotropine mixture gr. per dose, T. D. S. and an alkaline mixture with the addition of Ammon chloride, Liq. Arsenicalis and Tr. Digitalis every 4 hours.

The urine continued to be the same for the whole of that day and night, but the colour was found to be normal the next morning.

The patient did not have any more attack of fever since that day and keeping all right now.

Will any of your readers, enlighten me as to the cause of that dark colour of the urine shortly after taking 5grs. of Quinine Hydrochlor.

The Antiseptic

ESTD., 1904.

A Monthly Journal of Medicine & Surgery.

Editors: HON'BLE U. RAMA RAU & U. KRISHNA RAU, M.B., B.S.

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

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

Vol. 26] JUNE, 1929 [No. 6

SEA VOYAGE.

Very often patients are advised by their doctors to "take a sea-voyage". It will therefore not be out of place if a brief summary is given as to the beneficial effects such a voyage will have on the general health of the individual and also to consider what cases and individuals should not undertake that journey. The Practitioner has done invaluable service in collecting and publishing in one issue the considered opinion of the medical advisers of such import trans-atlantic steamship companies as the Bibby line, the Blue Star line the Union Castle line, the Atlantic transport Company and the Royal Mail Steam Packet Company.

Excluding sea-sickness which may or may not affect any individual according to weather considerations or personal idiosyncrasy, there is no reason why a healthy individual should dread a sea-voyage. The rejuvenating effects of the bracing sea air, the deck games, music and dancing, the spirit of comaraderie on board, the change of food and a change of life from the busy and worried to the happy care free one, is known to all.

But it is more with regard to the sick that we are concerned. All cases do not respond equally well and the physician in taking the grave rosponsibility of sending his patients on a sea-voyage should first of all thoroughly acquaint himself with the facts

of his case and with the conditions of the route and ship he is asking his patient to go to.

The first type of case that improves is the business man harassed by business and other worries or who has been working under high pressure with probably irregular meals and irregular sleep. These cases usually recover with the removal of the cause and the peacefulness of the routine on board. The next type is the prolonged convalescent from Influenza with or without Broncho-Pneumonia. All post operative cases and those with chronic suppurations improve rapidly. Chronic Bronchitis and other associated chest conditions are very much improved by a long sea-voyage. The saturated warm salt air acts as a soothing inhalation for the inflamed mucous membrane. Cases of chronic nephritis and its sequelæ do particularly well because a warm, moist sea-voyage induces profuse diaphoresis and relieves the kidneys. Rheumatic and allied conditions like gout, lumbago and sciatica do very well if draught is avoided. The profuse sweating induces copious drinking so that the tissues are almost in a state of constant irrigation, warmth, altered metabolism, salt baths, sunshine and moderate exercise are contributary factors to this benefit. Certain eye conditions such as opacities in the vitreous are lessened. Probably the strong and continued action of the ultra violet-rays on the long sea voyage tend to induce absorption of floating organic bodies.

There are also some cases which never benefit by a sea-voyage and should not therefore be sent. Advanced cases of pulmonary tuberculosis should never be sent out to sea, and if sent, the results are disastrous. Hæmoptysis is increased. Totally unfitted for a sea-voyage are cases of delusional insanity especially when associated with melancholia, for there is every opportunity for self-destruction. The noises and bustle of the ship prevent sleep. The crude inquisitiveness of fellow passengers is distasteful and carries suspicion. Those addicted to the use of alcohol and drugs should, for the same reason, not be sent to sea, but if it is absolutely essential for them to travel, a companion should be provided. Diabetics, chronic dyspeptics and persons suffering from gastrits, and of suspected duodenal or gastric ulcers should never be sent to sea to be cured. The dietary provided will be quite unsuitable and special dietaries may not be provided. People suffering from unconquerable sea-sickness, eye cases with a tendency to glaucoma, epileptics, hæmophilics and those with a dilated and weak heart should also not be advised to go on a sea voyage.

CURRENT TOPICS

SURGERY

Some problems in Gastric Surgery.—Moynihan, Sir B., Brit. M. J. 2: Dec. 8, 1928.

The author deals particularly with the operative problems of gastric and duodenal ulcer. In short it may be said that the contribution affords an indication for the operation of gastro-enterostomy properly performed and used in cases which have been properly selected. In order to have a careful examination and preparation of the patient in respect of blood condition, teeth, sinuses, etc., so that it may be performed at the time the patient is most adequately prepared to undergo the ordeal. At the operating table the ulcer should be seen, felt, and shown.

The conclusions arrived at regarding the present status of gastric surgery are as follows: Ulcers of the stomach or duodenum do heal, and remain soundly healed for years. When healed, stenosis in the body of the stomach or in the duodenum may result, and surgical treatment for a mechanical deformity may then be necessary. Medical treatment should always be given a first and a second trial: if it then fails success in later efforts is extremely improbable.

The present methods of medical treatment are proved by experience to be of little value, and are highly dangerous. The majority of patients who die from either of these diseases succumb because medical treatment has failed to relieve them. Medical treatment undoubtedly has a mortality greatly exceeding the highest mortality following any surgical procedure adopted for chronic ulcers of the stomach or duodenum. The failure of medical treatment is largely due to its insufficiency. To be successful such treatment must be rigorous and protracted. The loyal co-operation of the patient is essential. Very few patients now receive any treatment offering a reasonable prospect of healing of the ulcer. When medical treatment has failed surgical treatment must be adopted, and should not be delayed. Experience shows that surgical treatment, adopted when medical treatment has failed, is far less dangerous and far more effective in attaining our object than medical treatment; the immediate and remote mortalities are smaller, the after-effects far more satisfactory. The failures of operative treatment by competent surgeons are due chiefly to the development of fresh ulceration at the new an-

astomosis. The causes of this new ulceration lie partly in the diathesis of the patient, and partly in the details of the operation.

Surgical treatment should consist in the eradication of the ulcer or ulcers; by gastrectomy if the ulcer lies in the stomach; by a short circuiting operation, combined with destruction of the ulcer, when it lies in the duodenum. Balfour's method and Walton's method have proved excellent in the hands of their authors. Other complementary procedures with in the abdomen must be observed. Gastrectomy in the treatment of duodenal ulcer is more dangerous than gastro-enterostomy, and does not appear to give any better late results, if indeed its results are so good. It should, therefore, have no place among surgical methods for the treatment of duodenal ulcer at the present time. The medical treatment of gastric ulcer and of duodenal ulcer is perhaps not so much a medical problem as a problem in social economies. Rest in bed, freedom from anxieties, abstinence from work, complete repose, in fact, are essential if treatment is to have the best chance of success. A counsel of almost unattainable pefection!

The connection between gastric cancer and gastric ulcer is so clear that gastrectomy alone, wherever it is practicable, should be regarded as the apporpriate surgical treatment for chronic incoercible gastric ulcer. On the patient's return home he should be instructed regarding care in diet; abstinence from tobacco, alcohol, and salt; administration of triple carbonates; and the importance of rest and warmth for a few months at least.—*C. M. A. J.*

Extravasation of Urine.—Herman M. Soloway, in the *Journal of Urology*, for November, 1928. concludes as follows:

1. Extravasation of urine is an emergency condition demanding immediate surgical attention.

2. Stricture of the urethra is the cause of the majority of cases and is usually accompained by a periurethral abscess.

3. The anaerobic organisms play a very important role in those cases of extravasation which show no obstruction to urinary outflow.

4. The relationship between the point of rupture of the urethra and the fascial planes of the perineum determines the course of the extravasated urine.

5. The most common site of rupture is the bulbous urethra, next the membranous urethra and rarely the prostatic urethra.

6. The physical state of the urine at time of rupture also bears an important role in the course of this condition.

7. The best results are obtained by radically opening the fo[illegible] of infiltration with wide incisions and by rectifying the stri[illegible]are, when present. Both of these procedures should be done at the same time.

8. Spinal anesthesia has given us very gratifying results and we do not hesitate to recommend it as routine.

9. Streptococcus scrotal and penile gangrene and idiopathic gangrene of the scrotum are conditions which very closely resemble extravasation and from which it must be differentiated.

10. The prognosis depends upon a very early diagnosis, the duration of the extravasated urine, and immediate radical surgery. —*U. C. R.*

Treatment of Fibroids. F. B. Mowbray. *Can. Med, Assn, Jour., March* 1928, XVIII, 285.

While many enthusiastic radiologists regard radiation, either by radium or X-rays, as the only safe and satisfactory method of treatment of uterine fibroids, many surgeons would use radiation in only the cases where surgery is contra-indicated. The correct position is somewhere between these extremes. The author claims that radiation is not absolutely free from fatalities, just as surgery has a certain mortality. As illustration the author quotes a case which received a radiation burn and died from a complicating erysipelas. (To the reviewer this fatality would seem to have resulted, not from the use of radiation, but from its abuse in unskilled hands.)

The author would not use radiation therapy in a patient under forty, unless grave complications rendered surgery unsafe. He regards infections in the cervix or adnexa as contra-indications to radiation. Radiation would be restricted to patients over forty, whose nervous systems are stable, and where hæmorrhage is the prominent feature, and where tumors range in size from small nodules up to freely movable ones as large as a three months' pregnancy, providing these tumors are not sub-mucous, pedunculated, degenerating, or rapidly growing, and that the uterus is otherwise normal.

Whether radium or X-ray should be employed depends on circumstances. X-ray is easier to apply and may cause the patient less inconvenience. Radium usually causes more prompt cessation of bleeding, and produces less effect on neighboring organs.

Radium, well screened, is placed in the uterine cavity, well up to the fundus, and a 600 to 900 milligram-hour dose is delivered. —*Radiolgoy, Feb. 29.*

A New Method of Treating Eczema in Children by Ultra-Violet Rays.—According to Kurt Huldschinsky (*British Journal of Actinotherapy and Physiotherapy*, February, 1929)there are two premises upon which the successful application of the ultra-violet rays must be based, viz.: It must be possible to cause an increase in intensity so that the rays may become efficacious on non-reacting tissue; second, care must be taken to prevent the rays from causing irritation to an already inflamed tissue.

The use of sensitizers like eosin, etc., would perhaps increase the efficacy of the rays, but would also increase the danger of producing an inflammation by light. The author recalls that there exists an old method of treating eczema, namely by application of silver nitrate. Previously silver nitrate solution was employed in the treatment of minor sores and fissures. We thereby often unintentionally got the tanning effects of the silver molecules which combine with the cellular protein. As the silver ion only acts when completely separated from the solution—and this separation is produced by light action—one was previously dependent upon the chance of daylight falling upon the treated part in order to procure the tanning effect. In order to be independent of chance results and to ensure a maximum of the silver ion, the idea of combining the silver treatment with ultra-violet irradiation occurred to Huldschinsky. In this way he thought that an entirely new result might be obtained, by the free silver ion working *in statu nascendi* upon the treated part and undergoing a quick and complete union with the cell protein. At the same time, by the instantaneous blackening of the epidermic cells, the U-V rays would be prevented from penetrating to the deeper layers of the cutis.

He says that these theoretical suggestions were completely confirmed by clinical experiment.

This treatment produces these effects:

1. An immediate insolation of the silver from the solution and by it a thorough and complete tanning of the treated parts.

2. An increase of the U-V effect by the conducting of the rays to those cells which, bound by the silver, can withstand the strongest rays.

3. Prevention of penetration of the rays to the deeper layers, thereby counteracting the danger of over-irradiation.

He proceeds in the following way: After protecting the non-affected parts by ointments or towels, he wets the whole affected part with a 5 per cent solution of silver nitrate. In infants or on larger excoriated parts he prefers a grater dilution—2 per cent to 3 per cent. Immediately after this, he irradiates that part of the skin with a mercury quartz lamp at a distance of from 20 to 6 inches. The distance only influences the rapidity of the tanning process; it has no relation to the healing process. After a few seconds a blackening or browning of the skin wet with the silver solution will be noticed. The desired reaction is completed in from one to five minutes. Should there be some parts not yet blackened, one should repaint them with the solution and continue the irradiation.

The itching stops almost immediately, generally after the first irradiation. The following day the blackened parts begin to become scaly and to peel off; fresh pink skin appears under them. The excoriated parts are covered by a scab, and new skin grows at the edges.

Between one treatment and the next the writer leaves the part undressed and without any application. The duration of the treatment is very varied; sometimes only one week is required, sometimes several.—*U. & C. R. April, 29.*

Catheterization of the Bladder.—To catheterize, or not to catheterize?—that is the question which has arisen many times when a surgical case is unable to void. Frequently a patient is catheterized once or twice, then left to void the best he can. Soon symptoms of cystitis develop, and the nurse or intern who catheterized the patient is blamed for infecting the bladder by faulty technique. But was this the cause of the infection? Rovsing injected great numbers of virulent bacteria into a normal bladder, and found that they were passed out in two or three hours without causing any change in the bladder mucosa. By experimental evidence Hartung demonstrated that there must be some predisposing cause before bacteria can cause infection of the bladder mucosa.

By clinical observation it has repeatedly been shown that it is retention or overdistention rather than catheterization which causes bladder infection. A bladder may be repeatedly catheterized, and unless there is retention it will not become infected, but if retention is present the most rigid asepsis in catheterization

inward and upward, if a space, or interval, forms between a lower eyelid and the corresponding eyeball in the outer (lateral or external) third of the palpebral aperture, and persists as long as the eyeballs are kept in the upward and inward position, cicatricial ectropion is to be expected. Preventive measures should be instituted at once.—*J. Am. M. Ass.* May 1928.

MEDICINE.

The Symptomatic Value of Fœtor of the Breath.—G. Martinaud *(Gaz. Hebdom des Sciences Med.*, P. 802).—The breath, whether expired by the nose or mouth, is normally inodorous. The toxic and volatile substances present in it are usually not detectable. But fœtor is not a rarity and its cause has to be diagnosed. First make the patient respire with the mouth open and the nostrils closed, then with the mouth shut and the nostrils open. If in the first case there is no odour the nasal cavities must be incriminated. If there is an odour, the cause must be looked for on the bucco-pharyngeal side; it may be of (1) pulmonary or tracheal or (2) gastric or œsophageal origin. The second test is still less affirmative, for the expired air will have traversed not only the regions mentioned but also in part the buccal cavity, the nasal cavities in totality. Fœtor of the breath may be met (1) as an isolated phenomenon; (2) in certain affections of the digestive and respiratory organs; (3) in certain buccal and pharyngeal affections; (4) as an epiphenomenon in the course of a local or general malady.

NASAL FŒTOR.

The odour ozæna is *sui generis* and difficult to compare with any other. It perhaps recalls that of a swamp and resembles that of vegetable rather than animal putrefaction. Nasal fœtor may be due to (1) chronic eczema of the nasal cavities, the coryza of measles, etc; (2) to ulceration of the nasal fossæ, necrosis, sequestra tuberculosis, syphilis, leprosy, rhinoscleroma, tumour, foreign body; and (3) to acute or chronic affections of the sinuses.

BUCCAL FŒTOR.

Let us obstruct now the nasal fossæ and consider the diagnosis of buccal fœtor.

(a) Fœtor as an Isolated Phenomenon.—In a healthy normal person there is an odour of the breath, but it is slight. Sour and bad in the morning, due to changes during the night in the bucco-pharyngeal mucus and fermentation of food residues, the breath becomes almost inodorous after the first meal. The normal

odour of the breath is due to small quantities of ammonium carbonate and suplhuretted and carburetted hydrogen. According to Roger it is the result of vitiation of the metabolism of fats. Age has an influence ; a breath without odour is rare after 45. It must not be forgotten that the salivary glands eliminate toxic substances derived from food and from the tissues. In spite of these influences there is no fœtor which attracts attention ; the breath may be heavy but not nauseous, as characterises a morbid state

(*b*) *Fœtor in Affections of the Digestive Organs.*—Normally, numerous fermentations occur in the digestive tract: acids, aldehydes, indol, skatol, carburetted and sulphuretted hydrogen, are produced for the most part by microbes such as the staphylococcus aureus, B. coli, sarcinæ oidium albicans, leptothrix, and give rise to more or less disagreeable odours. In health the breath may have the odour of ingesta, of normal fermentations, or of drugs taken. But such odours are present only when the cardia is relaxed, at the time of eructation. They are therefore passing. This character enables the intermittent odours of gastric origin to be distinguished from the permanent odours of œsophageal or buccal origin. Intermittent fœtor occurs when there is delay in gastric evacuation, which may be due to pyloric stenosis, gastric ptosis or what Lanceraux called "fœtid dyspepsia," a kind of gastric catarrh.

Œsophageal fœtor is usually permanent. It may be due to diverticula, dilatation, cancer, stricture, or inflammation, acute, or chronic. The fœtor is never present without or symptoms, such as dysphagia, which should indicate exploration.

(*c*) *Fœtor in Affections of the Respiratory Organs.*—More than the stomach, the lung can normally give an odour to the breath. In fact, the pulmonary alveolus is an emunctory. In health many substances are eliminated by the breath, their odours being more or less modified. This holds for resins, turpentine, garlic and other volatile substances. Bromides give the breath an alliaceous odour. In phthisis a putrid odour has been described as of unfavourable omen, even when the other signs are benign, for it indicates disseminated foci of bronchi-pneumonia. It is noticed particularly on coughing, even in the absence of expectoration. Stagnation of pus in pulmonary cavities during the night gives a marshy odour to the breath. Gangrene of the lung produces strong fœtor, which shows remarkable alterations in intensity. This Trousseau considered characteristic. Fœtid pleurisy produces a

heavy repulsive odour which exists apart from any expectoration Gueneau de Mussy has insisted on the alliaceous odour of the breath in pulmonary apoplexy and a special sour odour is frequently premonitory of hæmoptysis. Fœtid bronchitis is due to growth of anærobic germs in the bronchial secretion. The odour is butyric or stercoral, not gangrenous. Bronchiectasis gives the same fœtor but less intense. Tracheal ozæna is now well known. Like nasal ozæna, it may exist without ulceration. The odour recalls that of dental caries. Cancer of the larynx produces a characteristic nauseous fœtor; syphilis and tuberculosis one less putrid. Laryngeal paralysis is accompanied by an alliaceous odour, due to stagnation of secretion.

(d) Bucco-Pharyngeal Fœtor.—Normal saliva has a heavy nauseous odour, which produces the slight smell of the mouth. Caseous concretions of the tonsils produce horrible fœtor when crushed. The odour of diphtheria approaches to that of putrefaction. Noma gives a very fœtid odour. The odour of mercurial ptyalism is characteristic. The cacodylates (arsenic) produce the fœtor of boiled onions. Pyorrhœa give a heavy more or less disagreeable odour. In caries the decomposition of food fragments in cavities gives rise to ammoniacal compounds.

(d) Fœtor as an Epiphenomenon of a Local or General Disease.—At the onset of puerperal fever the breath has a very sour odour. In chronic constipation the breath is almost always putrid. This seems to be due to skatol. The odour of acetone is found in the acetonæmia of children, pneumonia and diabetes (where it foreshadows coma). It is generally due to fermentation of sugar in the saliva. In mental disease fat is said to be badly assimilated. This gives rise to volatile fatty acids which are eliminated by the lungs and render the breath fœtid. In acute mania the breath has an unbearable fœtor; in acute delirium this is absent.—*Med. Rev.* April '29.

The Diazo Test in Nephritis.—Robert A. Kilduffe, M.D., Writes in *J.M.S.N.J.* Feb. 1929. The exact nature of the mechanism concerned in production of the severe and often fatal intoxication which may occur when the urinary output is entirely blocked or quantitatively or qualitatively disturbed over long periods of time is still a matter of investigation and discussion.

Becher has advanced the theory that the symptomatology of uremia might depend upon the toxic action of certain aromatic aminoacids normally formed in the intestinal canal and normally excreted by the functioning kidney but retained by the damaged kidney, and assumed that, if this hypothesis is correct, the blood serum of uremic patients should react with the diazo reagent. The correctness of this assumption he demonstrated experimentally. Previous to Becher's publication, a similar observation had been made independently by Andrewes. Attention having been called to this reaction and its clinical application having been pointed out, the findings thus reported were corroborated by Hewitt and Rabinowitch and, in America, by the work of Blotner and Fitz. The last mentioned observers found the reaction of differential diagnostic value in determining the etiology of comatose states and believe that a positive reaction is ominous of an early fatal termination.

The technic of the test is simple: The application of the familiar diazo reagent of Ehrlich in the proportion of 25 c.c. of solution A to 0·75 c.c. of solution B to the filtrate obtained by adding 2 c.c. of 96% alcohol to 1 c.c. of blood plasma or serum. To 1 c.c. of filtrate is added 0·5 c.c. of alcohol and 0·25 c.c. of freshly prepared diazo reagent, the mixture being then boiled for 30 seconds, when a few drops of 10% sodium hydroxide are added. A positive reaction consists of the rapid development of a pink color, which, it is to be noted, may appear and disappear within a few seconds.

When any new procedure, or a new application of an old procedure is described, it is always of interest to know something of its fallacies, difficulties, and its degree of specificity. With these in mind this reaction was studied in a limited series of cases.

A series of 60 Wassermann sera, a large proportion of which were positive, gave consistently negative results; the same being true of a series taken from the Diabetic Clinic. Among other conditions in which the test was applied with negative results were acute carbon monoxide poisoning, myocarditis, intestinal obstruction, septic arthritis, fractures, salpingitis, tuberculosis, acute cardiac failure, bichloride of mercury poisoning, hydronephrosis, acute appendicitis, and cerebral concussion. Some of these cases were tested numerous times, some several times, and most but once.

The test was applied in nephritis in 19 instances. No correspondence between the degree of nitrogenous retention and the occurrence of a positive diazo reaction was encountered. In one

case of uremic coma the test was completely negative; being made only once. In 3 ultimately fatal cases of nephritis the reaction was positive. It is of interest to note that the positive reaction may be extremely evanescent so that the procedure must be closely watched throughout.

The simplicity and the clinical value of this reaction invite its further and more general use.

Vitamin-Rich Foods.—Vitamin A: Dairy butter, carrots, cheese, cream, cod liver oil, dandelion greens, eggs, egg yolk, ice cream, butter, milk, lettuce, peaches, pineapple, sweet potatoes, spinach, tomatoes.

Vitamin A is the anti-ophthalmia vitamin.

Vitamin B: Whole wheat, whole wheat bread, whole wheat breakfast food, wheat bran, whole barely, whole rice, milk, buttermilk, egg yolk, onions, cabbage, parsnips, turnips, asparagus, cauliflower, celery, spinach, potatoes; tomatoes, lemons, oranges, pineapples, peanuts, yeast.

Vitamin B is the anti-beriberi vitamin.

Vitamin C: All berries in season, raw cabbage, celery, asparagus, lettuce, raw or canned tomatoes, grapefruit, limes, oranges, lemons, fresh pineapples, fresh peaches, apples, bananas.

Vitamin C is the anti-scurvy vitamin.

Vitamin D: Cod-liver oil, egg yolk, whole egg, butter, milk, lettuce.

Vitamin D is the anti-rickets vitamin.

Vitamin E: Whole grained cereals, especially whole wheat. corn, oats, lettuce, cocoanut oil, olive oil, corn oil, peanut oil, liver.

Vitamin E is the anti-sterility vitamin.

Vitamin F: Milk, eggs, fresh meat, lettuce, dandelion greens, spinach, carrots, tomatoes, yeast. Vitamin F is probably found in most foods containing vitamin B.

Vitamin F is the anti-pellagra vitamin. *M.W.J., March, 1929.*

On Percussion.—"We must not explore the chest by percussing our ideas into it. We must rather give our attention to what comes out."

This is the essential piece of advice conveyed in a recent paper on percussion by Prof. Friedrich von Muller. Opening

with a firm insistence that percussion is a fundamental art of medicine never to be superseded, he closes with an exhortation to honesty of purpose in percussion and the maintenance of an open mind. Most of the paper is concerned with experimental work on the analysis and measurement of the note on percussion in various conditions, and ingenious sound-recording instruments are described. On experimental grounds Muller recommends that the fingers alone be used in the examination of the chest, but a small rubber hammer in percussion of the abdomen. He finds that a belt of lung 5 c.m. in thickness will yield a normal note on percussion, no matter what it covers. In other words, a gross organic lesion in the lung is inaccessible to percussion provided it is covered by lung 5 c.m. deep. The normal lung note in man has a frequency of vibration of about 120. It has no characteristic tone or dominant note, but is rather a mixture of various tones, and is therefore correctly spoken of as a "noise." Minor matters in the paper include a demonstration that the damping effect of fluid in the chest is largely due to the impediment to wall vibration and mobility which the fluid causes by its presence. There is also experimental demonstration of the great effect of the thickness and tension of the chest wall on the resonance of the note. Muller thinks that much of the paravertebral dull note usually ascribed to mediastinal glands is really due to the trapezius. In an interesting review of the history of the art of percussion he mentions the work of Auenbrugger, Skoda, Weil, and particularly Felix Hope. He retains the original nomenclature of this last observer and speaks of "pitch" as meaning the frequency of the vibrations per second; "intensity," the loudness; "period," the number of vibrations elicited by a definite impulse; and "timbre," the purity of the tone.—*The Lancet*, 2 Dec. 1928.

Dyspepsia in Childhood.—Jules Tailleus, *Proc. Roy. Society Medical* 1928.

1. A child with dyspepsia rarely, and infant never, complains of indigestion. It is only from the age of 10 years that subjective symptoms exist. It follows, therefore, that dyspepsia in childhood is often hidden and has to be searched for in order to be diagnosed.

2. Dyspepsia in children often takes a misleading form, as it produces a general weakness and wasting, often slight fever, and even coughing. It is therefore frequently confused with tuberculosis.

3. Dyspepsia in children is a functional complaint. Its cure is therefore almost invariably easy and often rapid.

4. The different digestive actions depend on one another. It is usually the first which causes dyspepsia in children. In other words, such dyspepsia originates in the stomach.

5. In more than three fourths of these children, the gastric trouble consists of hyperchloracidity.

6. Treatment is as follows: an approved diet, which chiefly consists of milk and farinaceous foods, a two hours' rest after meals, and the administration of alkalis. A quick progress toward a complete cure is observed; there is a particularly rapid increase in weight. Statistics drawn up from 200 cases show this, and also that such hyperchloracidity can reach high figures even in very young children.—*A. J. D. C. April, 29,*

Some Medical Aspects of Disease of the Gall Bladder and Bile Passages.—Franklin W. White (*New England J. Med.*, 199: 719, Oct. 11, 1928) reviewed the physiology, pathology, diagnosis and treatment, in this symposium, from the physician's point of view. Records show that 5 to 10% of all women coming under postmortem examination show gall stones, and no doubt many more have had lesser degrees of gall-bladder disease. The condition is evidentlymore important in middle life than duodenal ulcer and appendix combined, especially in women, and apparently no important disease in the abdomen has been so often over-looked. Fully half of all cases have no definite local symptoms; only vague abdominal distress, gas, heart-burn or nausea. There are 3 typical groups of cases: (1) those with typical colic; (2) those with moderate local grumbling pain or soreness; (3) those with vague indigestion without local symptoms. The first group includes not more than 20% of the total; the second group about 30% and the third, most difficult of all to diagnose, probably about 50%. Jaundice is a valuable sign when present but it is noted in less than 10% of all cases. The gall-baladder is palpable in only about 2% of cases and then is due to complications. Courvoisier's law that 80% of enlarged gall-bladders are due to pancreatic cancer is usually confirmed at operation or autopsy, but its value diagnostically is limited by the fact that only about ¼ of such bladders are palpable during life.

The standard methods of testing for bile in the blood are the icteric index and the Van den Bergh test. One of the simpler and best of recent tests is Rosenthal's brom-sulph-phthalein method; the dye, which comes in ampoules, is injected into an arm vein and blood is drawn from a vein of the other arm in half an hour, and the dye retention test is read off the colorimeter. Cholecystography has recently made a great step forward and is now the best laboratory test, with a positive diagnostic accuracy of 95% in patients operated on The Graham test and Lyon's biliary drainage are not very enthusiastically endorsed. "There is a wide gap between the ideal and the actual medical treatment, between what we wish to do and what we are actually able to accomplish We wish (1) to combat stasis in the gall-bladder and bile passages (2) to reduce cholesterol and (3) to lessen infection. The actual treatment usually is the use of a bland diet, weight reduction if needed, regular exercise, low cholesterol (restriction of fatty foods), the use of spring waters or mild salines such as Carlsbad salts, sodium phosphate or sodium salicylate, the use of bile salts and the relief of painful attacks." As to the reduction of infection: "We know the affinity of the streptococcus for the gall-bladder and recognize the importance of removing infection in the tonsils, sinuses, teeth and appendix. There seems to be no way known at present to sterilize the contents of the gall-bladder by the use of drugs. Mercurochrome is excreted in the bile but loses its sterilizing power in passing through the liver."

With reference to selection of cases for medical or surgical treatment, White says: "We always advise the stone cases with definite symptoms to see a surgeon, for the results of operation are excellent. * * * The mere presence of stones is not an indication for operation. * * * Surgery should be based on symptoms. * * * In the chronic gall-bladder with mild symptoms and without stones the indications for operation are less definite and the results less good. * * * The medical man has several duties in gall-bladder cases; (1) To make as good a diagnosis as possible; (2) to send to a surgeon those cases that have stones and symptoms; (3) to give medical treatment to mild, early uncomplicated and poor-risk cases; (4) to avoid delaying a necessary operation."—*J. M. S. Feb.* 29.

The Abuse of Castor Oil in Pediatric Practice.—B. A. Melgaard, M.D. (*The Journal-Lancet*, Jaunary, 1929) says: "No other drug is thus so blindly administered by a host of people and san-

ctioned by medical men without definite indication for its use." Castor oil is "given to unload the bowel of fecal material and toxic products." The question as to whether the definite disease existing calls for this treatment or not is discussed. It is pointed out that the active principle of castor oil is the alkaloid risin and that a dose of one-tenth grain by the skin or nine-tenths grain by mouth is toxic; that infants are especially susceptible to toxic drugs and, therefore, untoward results are frequently observed in cases where castor oil has been administered. Cases are cited to show that castor oil is *not* harmless intussusception and acute obstruction are mentioned as following its administration. Castor oil given in the treatment of diarrhea as routine is not advocated and the reasons for such are more or less adequately discussed. The summary of the article is interesting as follows:

1. Giving castor oil to children as a routine procedure is an empirical measure handed down from the past, and is often done without clinical reason. Instead of being a supposedly harmless lubricant, in pediatric pratice it is a violent intestinal irritant, causing excessive peristalsis, edema, pouching and obstruction.

2. In seventeen cases of intussusception the baby had a simple diarrhea, received castor oil, and acute obstruction followed within four hours.

3. Hemorrhagic colitis may be confused with edema of the intestine with oozing of bloody serum caused directly by castor oil. Intussusception may be partial only and castor oil may make it complete.

4. The body fluids are the best detoxifying agents in pediatric practice. Castor oil wastes body fluids, as does no other agency.—*A. M.* March, '29.

Uræmia Simulating Acute Intestinal Obstruction.—Leslie Cole (*Lancet*, p. 128).—An unmarried woman, aged 53, was admitted to hospital in March, 1928. In the previous autumn she had an attack of abdominal pain and vomiting which cleared up after a few days. For several weeks before admission she had become increasingly constipated, and for 5 days her bowels had not been opened at all. On the second day of complete constipation she began to vomit, and this symptom increased in severity until she could keep nothing down. As far as could be ascertained during this 5 days she passed no flatus. Urine was passed regularly in apparently normal amount. There was nothing in her history to suggest renal disease.

On admission she complained of a severe headache and was vomiting every few minutes The abdomen was distended, especially in the left iliac fossa, and there was some tenderness in this region but no rigidity. The bladder was greatly enlarged and on catheterisation after micturition yielded 17 oz. of urine. There was no visible peristalsis, and nothing could be felt on rectal examination. The pulse was 100 and dehydration from excessive vomiting was severe. The urine had a s.g. of 1018 and contained a cloud of albumin but no blood, pus, or casts. During the next 12 hours the pulse-rate rose to 120 and the vomit developed a fæcal odour.

Two enemata failed to give any result, and on the diagnosis of obstruction of the pelvic colon, Mr. V. C. Pennell performed laparatomy. The whole of the colon was found to be distended with hard fæces but there was no organic obstruction. The uterus was retroverted and appeared to be pressing on the neck of the bladder so as to obstruct the outflow of urine. It was therefore replaced in the anteverted position and the abdomen was closed.

The day after operation the blood-urea was found to be 258 mg. per 100 c.cm. After operation catheterisation was done every 6 hours and the bowels were eventually opened by means of repeated enemata combined with injections of pituitrin. The vomiting ceased in 48 hours and the patient's condition improved steadily. The necessity for catheterization gradually became less and after 3 weeks there was no residual urine, so it was discontinued. The constipation also grew less and the bowels opened regularly with the assistance of salts and aloes. The patient felt nearly well, was eating with appetite, and getting up. The urine was of normal s.g. and contained only an occasional trace of albumin. The blood-urea was 28 mg. per 100 c.cm. Six months after discharge from hospital the patient was well.

This case illustrates the profound effects of urinary retention on the kidney. This is well recognized by surgeons who, in cases of enlarged prostate with urinary retention, perform the major operation only after preliminary drainage of the bladder, allowing time for the kidney to excrete toxins and waste products dammed back in the blood. In this instance retention was first caused by the combined effect of fæcal accumulation in the pelvis and the retroverted uterus pressing on the neck of the bladder. The toxæmia from profound constipation probably played its part by lowering the efficiency of the bladder so that it could not overcome the obstruction. Once this occurred secretion by the kidney was seriously interfered with, as shown by the uræmic state and the

high blood-urea. The fact that the urine was normal but for some albumin suggests that this was a pure pressure effect and was not due to an associated nephritis. The rapid improvement during catheterization was striking.—*Med. Rev.*

Treatment of Hæmophila.—P. Emile Weil (*Presse Med.*, p. 266).—A simple wound is less serious than a contused one. The former can be sutured after careful hæmostasis. In the recesses of the latter a clot of poor quality allows continuous oozing of blood, which may prove fatal. This point is important in treatment. Hæmorrhage after tooth extraction can be arrested by plugging with a tampon soaked in blood serum, but only after removing clot by lavage with saline solution. A projecting hæmatoma of the thumb, of the size of a cherry, following suture of a wound, which bled for three months, was removed with a curette. A serum dressing was applied, the hæmorrhage stopped and the wound cicatrized in a few days.

Hæmarthroses occur only in grave hæmophilia. Recovery is the rule after the first attack, but there remains a tendency to recurrence in the affected joint. After a certain time the synovial membrane reacts to the contact of blood and fibrous adhesions form, limiting movement. Partial ankylosis occurs the more readily as the extremities of the bones become decalcified and osteophytes are produced. Reflex muscular debility increases the disability.

Meningeal hæmorrhages are exceptional. The writer has observed only one case. He saw a youth of 20 suffering from spasmodic paraplegia. This followed lumbar puncture by a distinguished neurologist 4 years previously. He had not recognised the existence of hæmophilia. The paraphlegia was due to compression of the cord by hæmorrhage. If the nature of the hæmorrhage had been recognised it could have been arrested by an appropriate treatment.

Hæmatoma of the floor of the mouth.—The writer was called to a hæmophiliac who had received a cocaine injection for extraction of a molar tooth. An interstitial hæmorrhage followed and invaded in 24 hours the whole floor of the mouth. Difficulty in swallowing and respiration followed. The tongue projected from the mouth and it was impossible to shut the mouth. The temperature rose to 103.2°. The writer gave an intravenous injection of 20 c.c. of blood serum and all the symptoms improved in 24 hours. Recovery was complete in a few days.

Hæmatoma of the orbit.—The writer has observed 3 cases, all produced in the same way. The patients were children of ages ranging from 6 to 12 years. In play at school they received blows more or less severe over the eye. An enormous orbital hæmorrhage occurred and produced proptosis. Vision was lost and the unprotected cornea became inflamed. Sight was permanently lost. In none of these cases was the writer called at the onset. This did not hold for the following case. The patient was a youth of 19 whom the writer had treated for many years for hæmarthroses, melæna, hæmaturia, etc. On Dec. 18, 1926, during an attack of influenza he noticed on awaking one morning a swelling of the size of a filbert above the left eyebrow. Next day it invaded the eye and cheek. On the 20th the eye was proptosed between the swollen blackish lids and vision was lost. At the same time there were on the right side a subconjunctival hæmorrhage, an ecehymosis of the upper lid and marked loss of vision. He was transfused with 225 c.c. of blood. At this time the left eye was outside the orbit, the conjunctiva, detached by blood, formed large pad around the cornea, giving the eye the appearance of umbilication. Vision was reduced to perception of light. On the 21st improvement began. The right eye completely recovered; in the left cornea was a paracentral opacity which produced irregular astigmatism reducing vision to $\frac{6}{10}$. If this case is compared with the three untreated ones, it can be seen that adequate treatment, transfusion, would have arrested the hæmorrhage.

Hæmophiliacs should not be allowed to die from hæmorrhage. Its arrest is easy. The wound should be carefully cleansed to remove blood and clots. It is then dressed with gauze soaked in normal blood serum. The hæmorrhage will be arrested at once because it is purely capillary and the poor quality of the clot has been corrected. If there is a bleeding vessel minute hæmostasis will be performed and then the serum dressing applied. If the hæmorrhage cannot be reached because it is internal, the treatment must be general. Transfusion of human blood in greater or less quantity according to the severity of the anæmia and the loss of blood must be performed. This will supply the defective coagulating substances. Human or animal serum, citrated plasma or natural blood may be injected. In cases of relapsing hæmorrhage preventive treatment is indicated. Subcutaneous injections of 10 to 20 c. c. of serum, according to age, are given every month. Hæmatomas and hæmarthroses disappear under this treatment. Only traumatic hæmorrhages continue but these are fewer and slighter. In rare cases the patient is cured and can discontinue treatment. A member of the Swiss family of Tenna, with a

genealogical tree going back to the eighteenth century showing more than 200 hæmophiliacs has been completely cured for 10 years after receiving serum injections for 7 years, and his blood has became perfectly normal. But the majority of practitioners do not know how to treat hæmophilia, because they only treat the hæmorrhages without trying to prevent them. They fear to repeat the serum injections because they have been taught to apprehend anaphylaxis. In true, familial hæmophilia anaphylaxis is not observed or is slight. In watching more than 100 cases of hæmophilia for more than 10 years, of whom some have received from 6 to 12 injections per annum the writer has never observed a symptom due to serum of any importance sometimes little urticaria or rheumatic pains. But hæmogenic hæmophiliacs often bear serum treatment badly. Here the writer uses human serum of parents or relatives, preferably of the same blood group. —*Med. Review.*

OBSTETRICS AND GYNAECOLOGY

Etiology of Accidental Hæmorrhage. F. J. BROWNE and GLADYS DODDS (*Journ. Obstet. and Gynaecol. of the British Empire*, p. 661) 1928, record further work in the experimental induction of accidental hæmorrhage (premature detachment of the placenta) in rabbits. In a previous paper Browne (*British Medical Journal*, 1926, i. p. 683) had shown that in rabbits who had received during three months intravenous injections of 1 per cent. sodium oxalate solution, and had then been mated, further injections of sodium oxalate and of an emulsion of *B. pyocyaneus* about the twentieth day of pregnancy were followed within a few hours by external accidental hæmorrhage, accompanied in some cases by concealed retroplacental hæmorrhage, placental thrombosis and infarction, and extravasation of blood in the myometrium. These experiments were taken to support the view that chronic nephritisis an essential predisposing cause of accidental hæmorrhage. In the present paper the microscopical characters of the kidneys are described in detail: although the oxalate injections had been given for three months only, the cortex, especially in the region of the first convoluted tubes, showed very extensive fibrosis, and in many areas the tubules had all but disappeared and had been replaced by connective tissue, round-cell infiltration being conspicuously absent. In further experiments, here recorded, Browne and Dodds show that (1) the hæmorrhagic phenomena about the twentieth day of pregnancy can be induced (provided that chronic nephritis has been set up by oxalate injections before conception) by injections of *B. pyocyaneus* emulsion

and of uranium acetate, or by injections of emulsion alone, or by injections of uranium acetate alone; (2) when an oxalate nephritis has not been induced the bacillary emulsion does not cause accidental hæmorrhage even if acute nephritis is set up, and uranium acetate injection, accompanied by acute nephritis, is unable to induce accidental hæmorrhage or placental infarction save in exceptional cases. The conclusion drawn is that the existence of an antecedent chronic nephritis is the essential factor in the production of accidental haemorrhage. It is noteworthy that in some of the animals suffering from chronic oxalate nephritis antepartum hæmorrhage occurred spontaneously during the second half of gestation, and that in all these animals the liver function (as shown by the bromsulphthalcin test) seemed normal, and no morbid hepatic conditions were demonstrable after death. In these animals albumin was often absent from the urine between pregnancies and during the early part of pregnancy; it reappeared in the latter half of gestation and before the onest of spontaneous hæmorrhage. The authors believe that there is a close pathological connexion between (1) placental thrombosis followed by infarction; (2) so-called utero-placental apoplexy with retroplacental hæmatoma and hæmorrhage, and thrombosis in the uterus and broad ligaments; and (3) revealed accidental haemorrhage. Although clinically separable, these conditions are probably to be regarded as pathologically similar manifestations of maternal toxaemia, the toxins acting primarily on endothelium; the chronic nephritis operates by interfering with the excretion of such toxins, or possibly by interfering with a physiological metabolic function of the kidneys.—*B. M. J. March 1929.*

Against Artificial Respiration for White Asphyxia Neonatorum.—Aleck Bourne (*Brit Med. Journ.*, p. 1109).—The "white" baby is chiefly produced by difficult forceps delivery or the too rapid moulding of the head in breech delivery. Sometimes it follows pressure due to abnormally strong pains, and occasionally the child is suffering from pure asphyxia after delivery produced by premature placental separation or prolapse of the cord. Of these causes the commonest is pressure on the head by difficult forceps delivery. Is the child ill because it has been and is being deprived of oxygen? Is it actually suffering from asphyxia? The general appearance is that of simple shock: pallid face, slow feeble heart beat, absent reflexes, toneless muscles, low blood pressure, and rapid cooling of the body. Holland and others have shown that tears of the septa of the dura mater (chiefly the

tentorium cerebelli), with a variable quantity of extravasated blood, are almost a constant feature of the necropsy. Even after death following breech delivery, where asphyxia is generally recognized as the danger, Holland found that of 16 fœtuses no fewer than 14 showed intracranial lesions. Tentorial tears and hæmatomata are gross injuries, and sufficient to cause shock apart from any coincident lack of oxygen.

Probably the devitalized baby requires little oxygen for at least 15 minutes after birth. Babies born after "twilight sleep," under the influence of morphine, lie quiet and pale, making little or no effort to breathe, while the pulse beats regularly and strongly though perhaps slowly. But these babies always recover if labour has been normal. The shallow, infrequent, or absent respirations are an incident of the general state of shock. The child will breathe when the shock has lifted, but artificial expansion of the chest cannot be expected to assist shock. Indeed, can we imagine a worse treatment of shock than violent movements, massage or squeezing of chest, abdomen, and loins? During birth the child has just suffered severe mechanical stress, and only too often artificial respiration is but a continuation of the strees. A further point often forgotten is that firm handling of the loins, often done in Byrd's method of respiration, is liable to damage the suprarenal capsules. At necropsy of the stillborn this is one of the commonest of all lesions.

In addition to the danger caused by the mere violence of the movements of artificial respiration when performed unskilfully, it is an actual hindrance to natural spontaneous inspiration, when the child is making its first effort to breathe. The early inspirations are made as spasmodic gasps just at the moment when the chest is being pressed upon by the downward movement of the arms during Sylvester's method. The child tries to expand its chest at the very moment that it is being compressed. But perhaps even worse than Sylvester's or Byrd's methods is that of direct mouth-to-mouth insufflation. Here nothing can happen but inflation of the stomach through the œsophagus. The diaphragm is pushed up and the heart still further embarrassed. The spasmodic inspiratory gasp is of great value to the child, not only by the air intake, but also because of the stimulant action on the pulse. In the cord a great and sudden improvement in the strength of the pulse is felt, coincident with the gasp and lasting for some seconds afterwards. But no such improvement is noticed when the chest movements are imitated artificially.

To sum up, the child is suffering primarily from shock, and not from deprivation of oxygen. Until the shock has passed no treatment is wanted but warmth, the head kept low, brandy dropped into the mouth—not for any reflex stimulation, which is impossible, but because some alchol may be absorbed by the mucous membrane—and possibly some stimulant hypodermic, such as either, coramine, or adrenaline. Prof. McIlroy has shown that good results may follow administration of CO_2, a principle the very reverse of artificial respiration. More harm than good is done by artificial respiration.

Utero-Placental Apoplexy.—J. Heffernan (*New England Journ. of Med.*, p. 286). The sudden, forcible separation of the normally situated placenta, one of the most tragic complications of pregnancy, is fortunately one of the rarest. In over 20,000 confinements at the Chicago Lying-in Hospital, DeLee noted only 14 cases of complete and 35 of partial detachment.

A small group of the cases reported have followed trauma to the abdomen, but the majority occurred in women with pre-eclamptic toxæmia or chronic nephritis. A blow or similar injury over the placental site can produce a retroplacental hæmorrhage followed by the clinical picture of abruptio placentæ.' But a sudden, severe, hæmorrhagic extravasation, effecting a partial or complete detachment of the placenta and infiltrating the uterine wall and in the most severe cases, the broad ligaments, tubes and ovaries accompanied by degenerative changes in the uterine muscle cells, could be caused only by a powerful toxin acting on the placenta or underlying decidua as in the case reported below.

A woman, aged 39, was seen in consultation on Feb. 13, 1928.

Previous history.—No serious illness since childhood. Four full term deliveries, first forceps, others normal. In 1926 Colpoperineorrhaphy, appendectomy and uterine suspension. Last catamenia 7½ months ago. Pregnancy uneventful until 6 weeks previously, when moderate albuminuria and slight rise of blood pressure noted.

Treatment: rest, restriction of proteins and salt, with saline catharsis. During this period no increase of albumen and blood pressure persisted between 140/90 and 150/100.

About two hours before the writer saw her, she had a sudden, sharp pain in the abdomen, followed by a gush of blood from the vagina. The severe pain was succeeded by a "dull ache and tense feeling" of the abdomen and lower back. Moderate flowing,

with faintness and dizziness continued, but there was no loss of consciousness. She was then transferred to the hospital.

Examination. A well developed and nourished woman. Pallor of skin and mucous membranes. Abdomen distended by pregnant uterus; fundus 4 fingers below ensiform. Extreme tenderness over the entire uterus, with that tense, ligneous quality of the uterine wall observed in many cases of severe accidental hæmorrhage. Fœtal heart heard in the right lower quadrant, faint and irregular, 108 to 134. Moderate but continuous flow of blood.

Vaginal Examination.—Cervix one finger dilated partly effaced; vertex presenting and riding high. By pressure on fundus the head could be forced firmly against the cervix and no placental tissue could be felt. Slight œdema of ankles. Pulse 126. Blood pressure 146/96. Urine 1018. Albumen, trace. Few red cells, no casts.

Conservative care was considered and rejected. The patient would probably not have survived a dilatation of the cervix with a bag or packing. A sanguineous infiltration of the myometrium was suspected. This would prevent postpartum retraction, and result in fatal hæmorrhage after delivery. Moreover the one chance of the baby lay in a quick abdominal delivery.

Low cervical cæsarean section, and supravaginal hysterectomy were performed. Anæsthesia: Nitrous oxide and oxygen with a small amount of ether. About a litre of serosangineous fluid was found in the peritoneal cavity. The uterus was dark purple with many ecchymotic areas mottling its surface. The operative area was walled off, the vesico-uterine fold of peritoneum incised transversely and the bladder stripped off the lower uterine segment. The latter was then incised longitudinally and a small living baby extracted. The placenta was adhering by not more than one-third of its surface. The uterine incision, in spite of its location, was twice as thick as normally and so spongy and friable that sutures would not hold. Frothy blood oozed freely from the cut edges. This condition, with the fact that boggy, hæmorrhagic uterus would not contract or retract, made hysterectomy imperative. The uterus was quickly removed. Almost the entire cervix was exposed before firm tissue, which could be sutured, was reached. The cervical stump was suspended and peritonealized, and the abdomen closed in layers without drainage. Glucose and saline solution were administered intravenously and per rectum.

Good recovery followed. Blood-pressure and urine were normal after the fifth day, and she returned home in good condition 15 days after operation. At birth, the baby weighed 3 lb. 11 oz. and was gaining when discharged. When seen six weeks later the mother was in excellent health. The baby has thrived steadily and has developed into a normal healthy infant.

Pathological Report.—Surface of uterus shows diffuse subperitoneal hæmorrhage. Microscopic examination shows muscle fibres separated, the intervening connective tissue œdematous. Veins dilated, surrounding tissues are filled with blood, notably in subperitoneal regions. Muscle fibres hypertrophied; some swollen, almost hyaline in appearance and show no nuclei.—*Med. Review. April*, 29.

BOOK REVIEWS.

Manson's Tropical Diseases.—Edited by Philip H. Manson—Bahr, D. S. O., M. A., M. D., D. T. M. and H. (Cantab) F. R. C. P. Ninth edition, Revised, with 23 colour plates, 12 half-tone plates, 401 figures in text, 6 maps and 34 charts. 1929. [*Cassell and Company Ltd., La Belle Sauvage, London.* E. C. 4].

Sir Patrick Manson's famous book on tropical diseases is too well known to need any introduction. Recent advances in both diagnosis and treatment of diseases in the tropics have been so striking that a revised edition of this well known manual has come out at a very opportune moment. In this new edition the evidences of progress will be particularly seen in the chapters on such diseases as Malaria, Kala-azar, Sprue and dysentery. The editor has also taken great care to remodel or re-examine previously conceived ideas such as for example in Yellow fever.

As usual the comprehensive appendix is divided into two sections. The first section dealing with medical zoology deals with medical Protozoology, Helminthology, Entomology and Herpetology and includes all the new changes in the classification and nomenclature of parasites and other organisms of infection. The second section devoted to Technique and Laboratory methods have been carefully revised thus considerably increasing their value as a practical guide. A new section on blood transfusion suited to tropical conditions is a valuable addition.

The book is copiously illustrated and instructive. It is one of the best books on tropical medicine and will be very useful to every medical practitioner—from the beginner to the specialist and research worker. We hope and we are sure that this edition will be more popular and useful than its predecessors.—*U. K.*

Manual of Otology.— By Gorham Bacon, M.D., F.A.C.S. and Freeman Laurance Saunders M.D.F.A.C.S. 1928, 8th, Edition. [*Philadelphia Lea and Febiger, 576 pages, 192 illustrations and two plates*] Price $. 4·50 net.

This new and eighth edition of the book has been completely revised and much new matter added, and obsolete remedies and methods of treatment omitted. The present standards of otological practice are set forth and all the newer proven therapeutic methods introduced. The first two chapters deal with the physiology, anatomy and methods of examination of the ear. The succeeding chapters deal with the diseases affecting the ear in order. The chapter on otitis media is very instructive and while the chapter on mastoiditis has been brought up-to-date. The principle and working of the electric audiometre has been briefly mentioned. Insulin in the case of the diabetic ear patients; blood transfusion in suppurative ear diseases, and the new manometer test for sinus thrombosis have received minute attention of the author. The book contains a very useful appendix and the addition of the special method of staining smears for the streptococcus capsulatus to it enhances the usefulness of the book. Some useful prescriptions are also given here and there in the text. On the whole the book is most logically arranged and generouly illustrated. We most heartily recommend this book to all the medical students as a practical guide in otology and a compact reference for the general practitioner.—*V.C.S.*

Varicose veins and their Treatment by "Empty vein" Injection.—By R. Turnhill, M.B.Ch.B. [*London: Bailliere Tindall and Cox*, 1929. *Pp. 63. Price Sh. 5/- Net.*]

The author in this book gives a very good account of the treatment of varicose veins by "empty vein method".

Though the treatment of these conditions by injection of sclerosing solution into the vein dates so far back as 1851, yet, the method did not come into vogue, as the results were not quite promising and were often fraught with disaster. In this present book the author describes a new method which he calls the "empty vein method" and considers this to be much easier for the operator and more comfortable for the patient.

The author uses Quinine Urethrane solution in most of his cases, and advocates other drugs only in cases where quinine is contra indicated.

The author's technique consists in the injection of the solution into the lumen of the vein after emptying the vein of its blood.

A full and complete account of this proceedure is given. It is claimed by the author that 1. c. c. of the solution is enough to produce the required thrombosis. The only complication that may follow this method inspite of the most rigid precautions is the formation of sphacelus in a few percentage of cases.

The book also contains a few points regarding the treatment of varicose ulcers by Humbert's method of Unna's paste.

A brief mention of other methods of injection is also included. About ten illustrative cases of varied interest are also included at the end of the book.

The book is very well written and should prove a useful guide to the general practitioners wishing to take up this method of treatment—*V. C. S.*

The Tonsils and Adenoids and their Diseases.—By Irwin Moore, M.B.C.M. [*London: William Heinemann (Medical Books) Ltd.*, 1928 *Pp. IX—395, 107 illustrations. Price Sh. 21-2 net*]

The book under review is the out-come of much practical private and hospital experience, and embodies a number of papers which the author has contributed to the various medical journals during recent years, dealing with the most important subject of enlarged or diseased tonsils and adenoids—their menace to health, the operative technique for their removal, and control of hæmorrhage, during and after removal.

The various diseases affecting the tonsils and adenoids are fully discussed and the treatments both surgical and medical are exhaustively written. At the end of each chapter, references are arranged in an alphabetical order that greatly increases the usefulness of the book for all those interested in the study of otolaryngology. The various surgical operations on the tonsils and adenoids are fully described and illustrated. A complete chapter is devoted to non-surgical methods of treating diseased or enlarged tonsils.

Perhaps the most important chapter that will be read with interest by every one is that dealing with the Hæmorrhage following the surgical removal of the tonsils. The importance of this complication is well emphasised. The author by his vast experience and extensive search into the available literature describes in full its treatment.

We heartily congratulate the author for having produced such a useful 'monograph, the accumulation and concentration of the

present day knowledge of the tonsils, and the part they play in health and disease.

We have no hesitation in recommending this work as a guide to all the busy practitioners, and a handy reference to the otolaryngologists.—*V. C. S.*

The Essentials of Medical Diagnosis.—By Sir Thomas Horder, Bart, K.C.V.O., M.D., F.R.C.P., and A.E. Gow. M.D., F.R.C.P. 1928 [*Pp. 682 with 8 colour and 11 black and white plates and 22 figures in the text. Price Sh. 16 net. Cassell & Co., Ltd., London.*]

The book under review, written by two such distinguished authors as Sir Thomas Horder and Dr. Gow, is sure to be of extreme value, specially to students who enter the wards after going through a long syllabus of medical studies. The authors have brought the results of their wide knowledge and extensive experience within reach of everybody. They have succeeded in putting a large amount of valuable information into a small volume like this. The presentation of the subject is clear, and illustrates very well how by adopting suitable methods, a proper diagnosis can be arrived at from a minimum of previous knowledge.

The beginning of the book deals with a short description of the method of case-taking, eliciting the history of the disease from the patient, together with some general principles of medical examinations. The book is divided into sections headed by various systems, and a methodical description of examination is described in order. Each section begins with a clear account of the anatomy of the region under consideration such as is necessary for a proper examination of the patient. A brief but clear introduction is followed thereafter of Physiological and Pathological considerations—a most useful inclusion that is bound to increase the usefulness of the book. The authors stress the value of systemic examination and illustrate well, how to work from the patient and his complaints to the disease from which he suffers.

The section on skin diseases contains many useful points regarding the rashes of eruptive fevers.

The section on Pyrexia, which contains all possible causes of the condition and which gives valuable hints for diagnosing the cause in an out of the way case. Of the sections on clinical pathology the one on examination of the urine is very useful.

Besides, the book contains a useful appendix giving various normal data relating to the blood, urine, cerebro-spinal fluids etc. It is copiously illustrated and is full of interest, and sufficiently detailed to be placed among the recognised medical text books of the students and Practitioners. We wish it all success.—*V.C.S.*

Aphorodisiac Remedies.—[*Published By "Practical Medicine" Nal Sarak, Delhi. 4th edition* 1928. *Pp. 211, Price Rs. 4.*]

The fourth edition of this book like the other editions has been specially compiled for the use of medical profession. In this new edition the whole subject matter has been thoroughly rearranged and every new addition to the subject included. The chapter on impotency is up-to-date. The use of endocrine products and certain other organotherapeutical preparations have been discussed. Among the many new and interesting additions the chapter on suggestive and hypnotic treatment of impotency is very instructive.

A short survey of the thyroid transplantation as advocated by Dr. Voronoff adds much to the interest of the book, and needless to say that this new volume would make a useful addition to the book shelves of all the general Practitioners.—*V.C.S.*

Ultra-Violet Radiation and Actino-Therapy. By Eleanor H. Russel, M.D., B.S. and W. Ken Russel, M.D.. B.S. Hon. Director, Sun-Ray Clinic, New Castle on Tyne, Third Edition, 1928. [*E and S. Livingston, Edinburgh. Pp. 648. Price Sh. 21.*]

The third edition of this work has been considerably enlarged, and much new matter added. The present edition contains many new material recently discovered by the authors not only in their own experience but by visits to various places where Physiotherapy is popular. A clear description of the value of Actinotherapy in treating various diseases is given. Many illustrative cases are also included in the text, that enhances the usefulness of the book to all those eager to use this sort of therapy. A chapter is devoted to explain fully the technique of Actinotherapy, and the chapters that follow deal with the usefulness of the ultra-violet ray in various diseases like Tuberculosis Rickets, Anæmia &c. A chapter on the value of Actinotherapy and ultra-violet Radiation in diseases of the special sense organs is

also included. The bibliography at the end of the book appears to be indispensable.

The book contains a vivid description of the various lamps and apparatuses in use and many illustrations and diagrams. It is sure to be of much use and value for anyone specializing actinotherapy.— *V.C.S.*

ANNUAL REPORT

The South Indian Medical Union, Madras.—We are glad to find that there has been steady progress both in the membership and the work of the union during 1928—29. The financial prospects of the Union have not been blasted in any degree, as was anticipated by the mass resignation of the service members and their sympathisers as a result of the resolution passed in 1927 restricting future membership to members of the Independent Medical Profession alone, but, on the other hand, are promising to be stable and sound. Ten meetings were held during the period under review, at which subjects of varied scientific interest were dealt with and discussed. The Union's representations to the Government with regard to the extension of concession of free x-ray and electrical treatment to Government servants under the treatment of Private Practitioners and the debarring of medical officers of Government already debarred from private practice from any or all practice during leave or holidays, have met with successful response, while those made with a view to put the Honorary system in Government Hospitals on a sound and progressive footing still await consideration at their hands.

A permanent habitation for the Union and a permanent organ to voice forth the views of the Union and to record its scientific discussions are the two great desiderata, now engaging their anxious attention. It is a matter for gratification to note that the governing body is recommending to the Union the desirability of issuing a monthly bulletin, and we wish it becomes soon an accomplished fact. We also note with pleasure that efforts are being taken to provide a proper habitation for the Union. It is a happy augury for the future of the Union that the Government and its medical advisers have recently come to recognise the Union as a potent factor and with the active co-operation of the Independent Medical Profession of this Presidency, the South Indian Medical Union, we are sure, bids fair to become a stable and living organization in this part of the country, ere long.

BOOKS RECEIVED

The following books have been received and the courtesy of the Publishers in sending them is acknowledged. Reviews will be published from time to time. **(Ed. Ant.)**.

(1) **Manual of Hygiene and Public Health**: By Jahar Lal Das, Published by Messrs: Butterworth & Co., Ltd., Calcutta. Price Rs. 3-8-0.

(2) **Indian Therapeutics**: By Dr. D. V. Sandu. Published by Messrs: D. K. Sandu Bros., Thana, Bombay. Price Rs. 7.

(3) **The Rockfeller Foundation Annual Report** (1927):— Published by the Rockfeller Foundation, 61, Broadway, New York.

(4) **The Treatment of Ordinary Disease**: By Dr. Beverly, Robinson, M. D. Published by The American Medical Publishing Coy., New York.

(5) **Aids to Psychiatry**: By W. S. Dawson. Published by Messrs: Bailliere, Tindall and Cox, London. Price. 4-6d.

(6) **The Purdah System and its Effect on Motherhood**: By Kathleen Olgavanghan, M. B. (Lond.) Published by W. Heffer & Sons Ltd., Cambridge. Price 2 s. 6 d.

(7) **The conquest of Life**: By Dr. Serge Voronoff, M. D., Translated by G. Gibier Ramband, M. D. Published by Bremtanos Ltd. 31, Gower Street, London, W. 1.

(8) **Tuberculin in Practice**: By E. E. Gunter, Published by Gregg Publishing Company Ltd., Keran House, 36-38 Kingsway, London, W. C. 2. Price 7-6d.

(9) **Tropical Nursing**: By A. L. Gregg, M. A. M. D. M. Ch. D. T. M. and H. (Lond.) Published by Messrs Cassell & Co., Ltd., La Belle Sauvage, London, E. C. 4 Price 6 sh.

(10) **Cholera and its treatment**: By Ramakrishna Guin, L.M.F. Published by Book Co., Ltd., 4/4-A. College Square, Calcutta.

(11) **Manson's Tropical Diseases**: By Philip Manson Bahr. Published by Messrs: Cassell & Co., Ltd., London, E. C. 4 Price Rs. 31-6.

(12) **The Pharmacopœia of the King Edward VII Memorial Hospital:** By Abraham S. Erulkar, M. B. (Lond.) Published by Messrs: Butterworth & Co., Ltd., Calcutta.

(13) **Aids to Medicine**: By J. L. Livingstone, M.D. (Lond.) M. R. C. P. Published by Messrs: Bailliere Tindall & Cox Ltd. London. Price. 5 sh.

(14) **Aids to Psychology:** By John H. Ewan, M. R. C. S. (Eng.) L. R. C. P. (Lond.) Published by Messrs: Bailliere Tindall & Cox Ltd. London. Price 3-6.

The Management and Medical Treatment of children in India—By J. D. P, Mc. Latchie, M.B.C.M. Published by Messrs. William Heinemann Lt., London.

Eyesight and its defects—by B. R. Dewan Published by the author, Price Re 1./—

NOTICE.

Messrs. James J. Hicks, London, manufacturers of Hicks Clinical Thermometers, whose advertisement appears elsewhere in this journal are the Premier Thermometer makers of the world.

Their vast business has been built up on their guarantee of accuracy, each thermometer being tested by an expert before it leaves their factory.

Messrs. Allen & Hanburys Ltd. (A. H. P. Jennings, Special Representative) Block F. 4. Clive Buildings, Calcutta, will at all times be pleased to forward price-lists on application.

Messrs. Havero Trading Co. Ltd., of Calcutta warn the medical Profession of the recent importations of cheap Neo-Salvarsan and Myosalvarsan into the markets in India, which are all old and unused packings left behind after the War and are therefore unfit for medicinal purposes and add: "Our firm are the legal importers of the genuine Neo-Salvarsan and Myosalvarsan" which are specially packed for the Tropics and take full guarantee for every packing bearing the slip, 'specially manufactured for the Tropics and packed for British India, Burma and Ceylon and imported by Havero Trading Co. Ltd'. On the other hand the responsibility for any regret able incident, resulting from the use of the above-mentioned packings *rests entirely with the unscrupulous importers and the customers.*

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(Chiefly intended for the use of the Senior Medico preparing for the qualifying Examination in jurisprudence and Toxicology, the Rising Medical Novitiate, and the growing Legal Practitioner, to serve as a guide on matters of medico-legal interest regarding a variety of crimes of everyday occurrence).

REVIEWS AND OPINIONS :—

The Indian Medical Journal, January 1926 :—It will prove a useful note book to Medical Students and a helping guide to both Medical and Legal Practitioners. The price (Rs. 3) is very low as compared with the thoroughness with which the subject has been dealt with.

The Burma Medical Times, January 1926 :—The success of his first work. (The reference Book for the Young Medical Practitioner) had induced the author to come out with the above book, which we daresay, will meet with the success which it richly deserves. We have no hesitation in strongly recommending the book to all Young Medical Men and Students.

The Antiseptic, February 1926 :—This is a very handy book. It will be of great service to all Junior Medical Jurists. It contains very practical informations gathered by the author during his thirty years experience of service and from various text-books on the subject. It will be of great service to the Rising Medical Novitiate, and the Growing Legal Practitioners.

The Medical Review of Reviews, June 1926 :—We congratulate Dr. Tripathi on his excellent compilation. The price is moderate and we warmly recommend the book to the notice of the members of the Medical and the Legal Professions.

Col. A. Hooton, I.M.S., Surgeon-General with the Government of Bombay :—I have now seen your little book on Medical Jurisprudence, and think it is a very useful summary of the subject. I shall have much pleasure in commending it to the notice of Dispensary Medical Officers.

Col. C.R. Bakhle, I.M.S., Inspector- General of Civil Hospitals, Punjab :—I have brought it to the notice of the Medical Officers in the Punjab, as a useful work for Sub Assistant Surgeons.

The Inspector-General of Civil Hospitals, Central Provinces :—The publication is being circulated among all the Civil Surgeons in this Province.

Lt.-Col. C.I. Brierly, I.M.S., Chief Medical Officer, N. W. F. P.—Is a very useful book on the Jurisprudence and Toxicology and is intended to serve as a guide on matters of medico-legal importance.

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REGD: NO. M. 429.
Vol. XXVI No. 7.

JULY 1929.

The Antiseptic

A Monthly Medical Journal

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

CONTENTS

Editorial & Publishing Offices: 323. Thambu Chetty St., G.T. Madras
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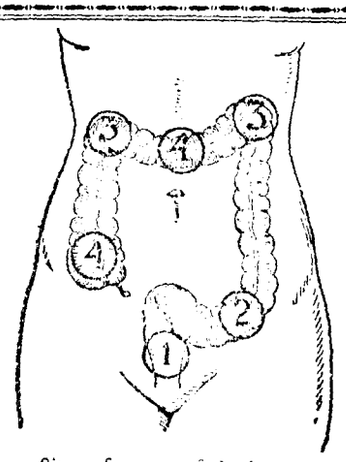
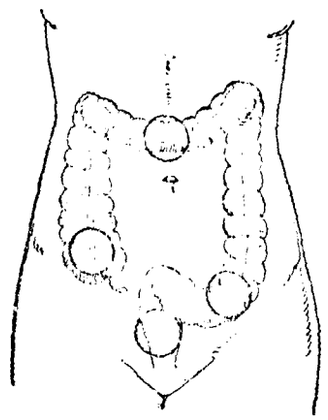


Sites of cancer of the large intestine, numbered in the order of their *frequency*.



Most frequent sites of fæcal impactions which are sometimes mistaken for cancer.

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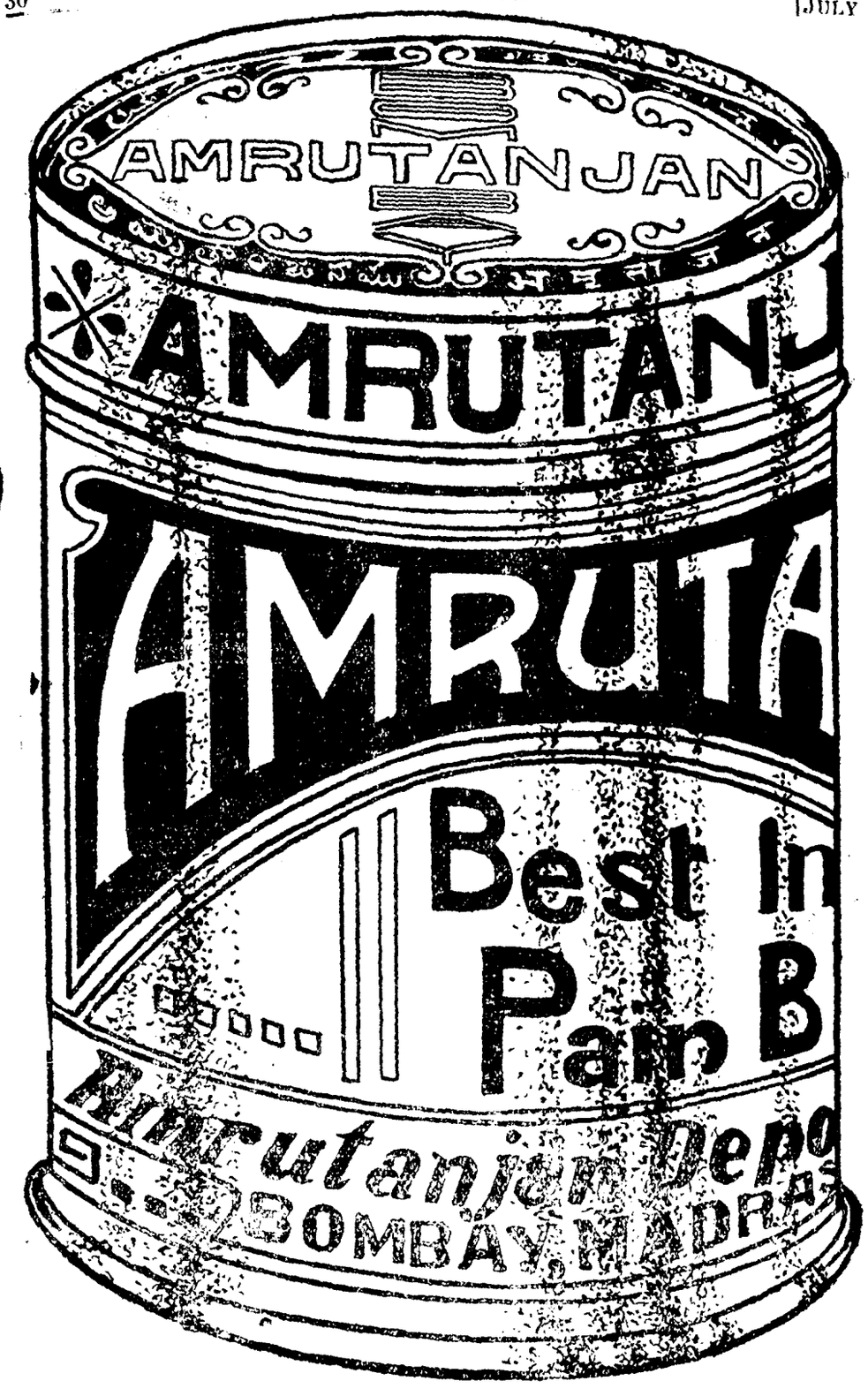

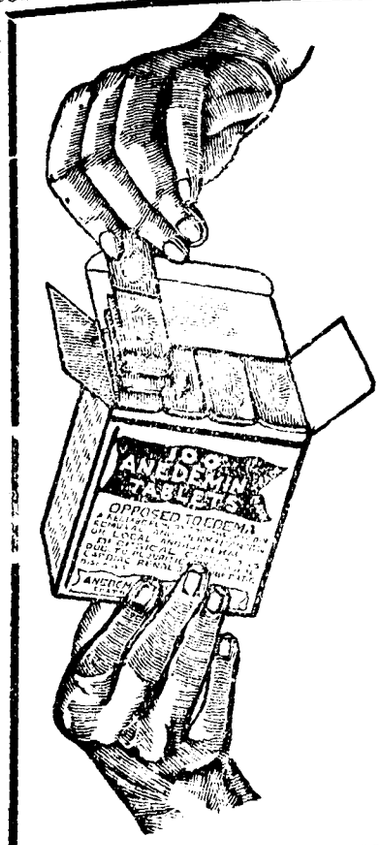

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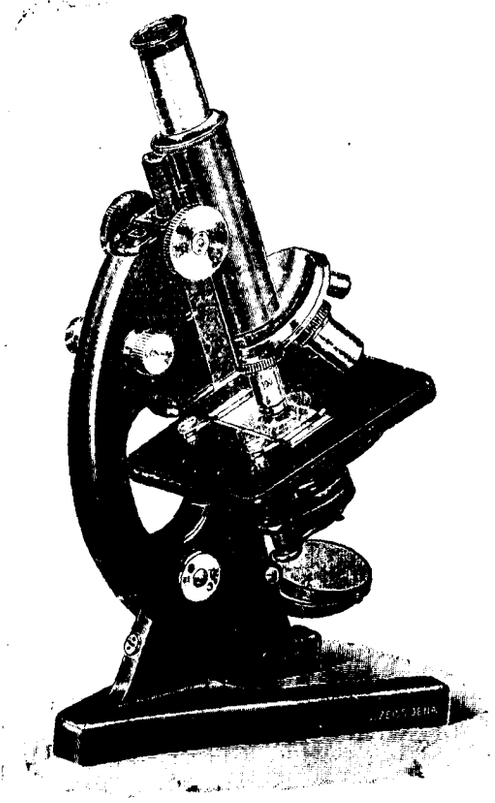

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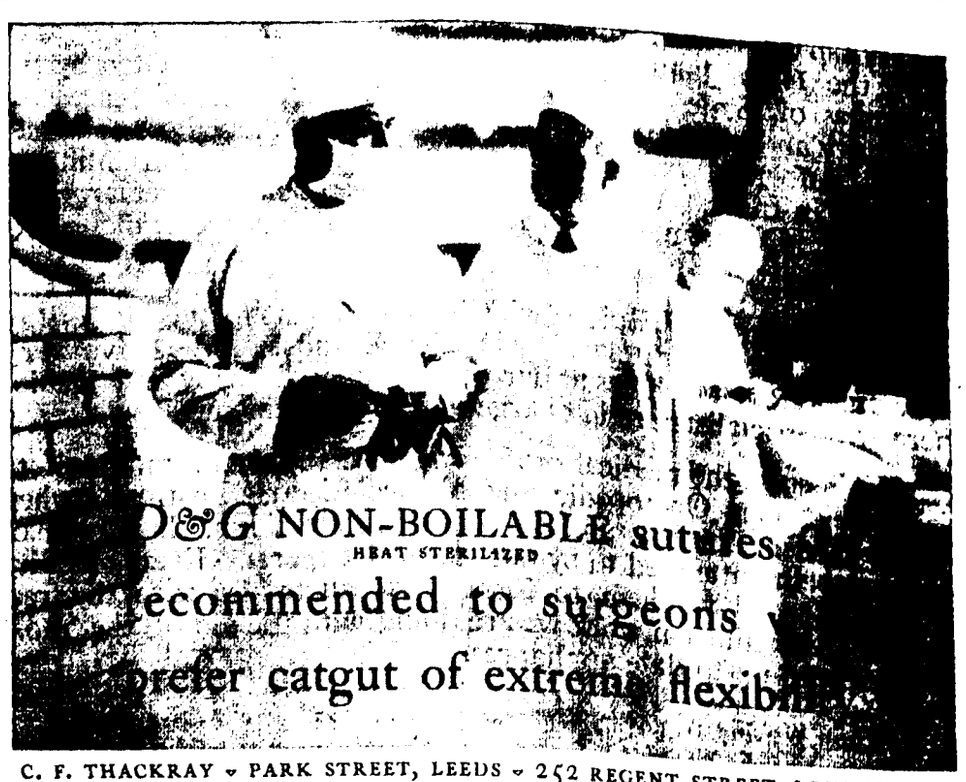


The Antiseptic

ESTD., 1904.

A Monthly Journal of Medicine & Surgery.

Editors: HON'BLE U. RAMA RAU & U. KRISHNA RAU, M.B., B.S.

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

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

Vol. 26] JULY, 1929 [No. 7

ORIGINAL ARTICLES

TOXÆMIA OF PNEUMONIA.*

BY

CAPT. P. V. KARAMCHANDANI, I.M.S.,

In charge of Cantonment General Hospital, Quetta.

1. Pneumonia claims a high toll and any measures which can decrease the mortality materially and hasten the crisis ought to be welcomed by the profession. With this object in view these notes are written.

2. The foremost aim of treatment in Pneumonia should be (A) to lessen toxæmia and (B) to reinforce the patient's power of resistance, and if these be accomplished, the mortality from Pneumonia should be insignificant. In this article I intend discussing only these aspects of Pneumonia.

(A) *Toxæmia.* The means to combat toxæmia at our disposal are those acting :—

i. directly.

ii. indirectly.

I. In group I are included drugs which act like lavage of the system. The use of these measures is limited only to the earliest

*Specially contributed to The Antiseptic.

stage (first 2–3 days) of the disease, when the opportunities of lessening toxæmia involve no risk to the individual and act as preventive treatment, preventing or at least modifying subsequent evils. These are :—

i. Diaphoretics—Hot foot bath in bed and liq. ammonia acetate, are effective and practicable in any place.

ii. Purgatives—Calomel and saline followed by sodi sulph. are unequalled for this purpose.

iii. Diuretics Citrates and large quantities of bland drinks are most suitable, keeping in view the congested condition of kidneys and almost constant albuminuria. It may be mentioned that the care of kidneys is of special importance in pneumonia. It is known that the centre which controls the depth and frequency of respiration is in the medulla and the working of this organ is chemically regulated by a stimulus from the blood which excites the centre. This stimulus is caused by acidity, and the organs which maintain this are the kidneys and the lungs. The kidneys are a sort of coarse adjustment which excrete bulk of acids, while the lungs are a fine adjustment which by varying depth and frequency of respiration regulate the output of Co_2. Thus when the kidneys are handicapped more work falls on the lungs which by increased ventilation maintain the acid base balance. It is thus manifest, what an important role the kidneys play in Pneumonia and why every effort should be made to keep down the ketosis.

iv. Buccal cleansers—These prevent auto infection through the mouth which swarms with bacteria and the swallowing of these helps the disease.

II. In group II are included drugs which

i. Prevent extension of pulmonary lesion.

ii. Increase oxygen tension in the lung alveoli.

The drugs useful for i are :—

(*a*) Applied locally—Poultices of which Antiphlogistine is the best, acts by increasing superficial circulation of the blood and reflexly causing contraction of the deep seated blood vessels.

(*b*) taken internally—Iodide of potassium and alkaline carbonates, both of which tend to promote fluidity of blood. Alkaline carbonates also play an important part in the prevention of acidosis, which is responsible for many of the grave symptoms (Headache, delirium, insomnia, dry tongue etc). In pneumonia as in other grave diseases there is rapid wasting which means consumption of large quantities of fats. These fats, in the course of consumption, produce acids which, unless adequately, oxidised

accumulate in the blood and cause acidosis. But as in every Pneumonia case there is invariably oxygen starvation also, alkaline carbonates (and particularly sodium bicarbonate) are found to be useful in forming a sheet-anchor against acidosis.

Hand in hand with alkaline carbonates goes glucose. It is known that C.H.O. is necessary for complete metabolism of fats, in other words sugar is the fuel which burns up the fat. In Pneumonia, patients do not receive enough C.H.O. to burn up large quantites of fats undergoing metabolism. Hence it is that intensive doses of Sodium Bicarbonate go together with glucose either by mouth or intravenous injection.

ii. Increase of tension in the lung alveoli can be brought about in 2 ways (a) by increasing supply of this gas and (b) by reducing demand for oxygen by the body (c.f. question of supply and demand in economy). In disease when the demand of body for any commodity—in this case oxygen—exceeds the supply, the trouble is bound to increase and it can only be balanced either by increasing the assets or decreasing the liabilities so to say. The medicaments useful for these are :—

(*a*) for increasing the supply of oxygen—Administration of oxygen inhalation, and

(*b*) for reducing the demand of it—Antiphlogistine and hypnotics.

(*a*) Why oxygen inhalation raises pressure of this gas in alveolar air is well known, but unfortunately the technique of oxygen administration is so little understood that unless the following details are borne in mind, this therapy does, if any, little good. It has been demonstrated, that unless the mask is in contact with the face, there is no rise in the oxygen tension in alveolar air and even then the results compare unfavourably with those of catheter or close mask. The volume of oxygen required to flow per minute to be of benefit is 2 litres. The drawbacks of the mask, might with advantage be borne in mind. A patient whose respiration is already embarrassed and who is gasping for air, will not like the idea of anything being put over his mouth; and unless the first breath that he takes through the mask, gives him something better than the ordinary air which he is breathing he will refuse to give further trial to the mask. I have seen nurses forcing oxygen on patients, while the latter are struggling not to receive the same. The harmful results of this are obvious. I therefore consider that any oxygen apparatus which has a bottle

or bag attached. which can be filled beforehand with oxygen so that the first breath draws a very rich mixture of oxygen, is very necessary. Davie's and Gilchrist's modification of Heldanes apparatus is quite suitable.

The only thing against catheter is the fact that when a high concentration of oxygen in the alveolar tension becomes necessary, a rapid rate of oxygen flow causes discomfort.

The arrangement of improvising a water valve by passing oxygen through a bottle containining water not only warms oxygen but also indicates the rate of flow.

The last point I wish to stress upon is the misconception regarding the time when oxygen should be administered. In Pneumonia, cyanosis generally considered one clinical indication of want of oxygen in the system. Now cyanosis does not appear until H.G.B. of arterial blood is less than 85 % saturated with oxygen.

Normal saturation of blood is	96 %
Threshold of cyanosis is	85 %

Therefore the degree of anoxæmia, sufficient to damage the more sensitive tissues of the nervous system is probably already present before cyanosis appears, and our object should be to prevent cyanosis appearing, or if it has already appeared then to abolish it as early as possible.

(*b*) How poultices—of which antiphlogistine is perhaps the best, and hypnotics can reduce demand for oxygen requires some explanation.

Antiphlogistine Pleuritic pain in pneumonia restricts thoracic movement, thereby producing shallow respiration i.e. increasing frequency of respiration. This increase is however greater than is apparently imagined.

Air which passes through larynx during quiet respiration is 500 c.c.m.,of which about 150 c.c.m are required to fill the trachea and bronchi, forming the dead space, which never reaches the alveoli. Now, supposing respiration is shallowed to half, the tidal air is also reduced to half i.e. 250 c.c.m. and of this the dead space occupies 150 c.c.m., leaving only 100 c.c.m., for lung alveoli. In other words when the depth of respiration is shallowed to half the normal, the alveolor ventilation is reduced to less than one third. In an advanced case when the depth is reduced to quarter i.e. 125 c.c.m. the tidal air instead of diffusing the lung is ventilating.

merely the dead space. Thus a vicious circle is started. The lesser the ventilation, the greater the effort and the shallower therefore the respiration, still lesser the ventilation. Thus by alleviating pain, and thereby affording opportunity for full expansion of the chest, we increase lung ventilation.

There is a right and a wrong way of applying antiphlogistine and in this respect the instructions which accompany every tin, should be closely followed.

Regarding sedatives, there is an impression in certain quarters that they must never be given in Pneumonia cases. But I am unable to agree in that view, for in the early stages, before toxæmia is very great and the sings of respiratory and cardiac failure not developed, sedatives decrease toxæmia not only by alleviating pain and increasing pulmonary ventilation but also by limiting restlessness and sleeplessness. We know the actual process of muscular contraction is anærobic and depends upon conversion of glycogen into lactic acid with liberation of energy. During relaxation which follows, i.e. the recovery phase, this lactic acid is disposed off by oxidation into Co_2 and by reconversion into glycogen. Thus any movement of body, necessitating muscular contraction, makes a demand for oxygen. In Pneumonia where the body is already in a state of anoxæmia, it should be the concern of the attending physician to reduce restlessness and sleeplessness or in other words a demand for oxygen, as much as possible. Out of all the sedatives, paraldehyde is perhaps the best. ℥iss. in orange water is well tolerated. Bromural comes next, which upto grains 15 per dose is safe and serves its purpose. It should be administered in powder form with a large cup of hot liquid. Same drug on 2 consecutive nights does not show full effects and I use the two drugs as a rule alternately.

I have compounded the following mixture and called it prepneumonia, which I usually give with modifications as necessary in the early stages of Pneumonia.

℞	Liq: Ammonia acetate.	℥ii. ii.
	Pot: Citrate.	gr. xx.
	Pot: Iodide.	gr. v.
	Sod: Sulphate.	gr. xv.
	Sodium Bicarbonate.	℥. z ss—i.
	Vin Ipecac.	mx.
	Aqua Anisi. Ad.	. *i* .
	mft.Sig.	℥i. every 6 hrs.

The above coupled with antiphlogistine, oxygen, glucose and sedatives in the early stages, has given ample proof of the above truths regarding toxæmia in Pneumonia.

(B) The results with treatment on the above lines were however not ideal, for although they diminished toxæmia they let alone the active genesis, the cause of toxæmia i.e. Pneumococcus. A drug therefore which could reinforce the patient's resistance and augment his powers of defence by exercising healthy stimulation of same, would be a crowning succees. In Sodium Neucleinate we have such a drug. Since I have started using sodium Neucleinate injection in conjunction with the above treatment I have not only obtained gratifying cures, but precipitated crisis in this so called self limited disease. In every case of Lobar Pneumonia thus treated by me a crisis occurred within 48-60 hours after the second injection, with corresponding improvement in patient's general condition irrespective of the day of disease. In some cases rusty sputum appeared after the crisis—a point worth noting.

The preparation used was a solution of Sodium Neucleinate put up by Olin Laboratories of Paris in ampules of 2 c.c.m. containing 0.05 grammes per c.c.m. These were obtained through Burgoyne Burbidges & Co., East Ham., London. One ampule was injected hypodermically on the day of diagnosis and one on the next day. White blood count was made as a rule before administration of first injection and after that of the second.

3. How exactly this drug acts is not fully known. The virtue of its causing leucocytosis is held responsible for this success. This of course is true and is clear enough in those cases of Pneumonia where leucocytosis does occur.

4. In 16 cases of Pneumonia which I have so far treated with Sodium Neucleinate injections, there was a rise in the leucocytic element in 14 cases. But 2 cases temperature charts No. 1(Hakim Ali) and No.ii(Santram) showed no rise whatsoever and yet their temperature touched normal within 48 60 hours after administration of sodium Neucleinate.

5. Another aspect worth considering is the fact that Broncho-Pneumonia did not yield to Sodium Neucleinate as Lobar Pneumonia did. Temperature charts No. iii(Hamchandram)and iv (Shankar Sawat) are of such a patient's, whose blood showed a rise in the white cell count from 7000 to 21093 and 16875 per c.c.m. respectively but their temperature fell by lysis.

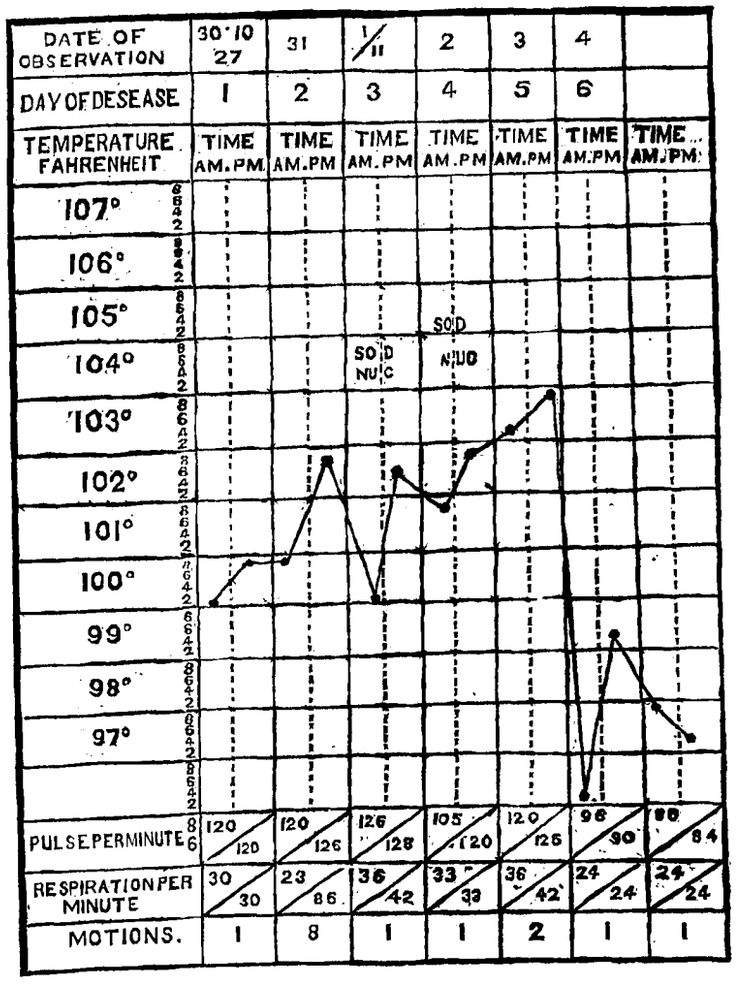
CHART NO. I.

Corps: 121 B.T.C.
No. 1763.

Hospital Station: Pishin.
Rank and Name: Dr. Hakim Ali.
Age: 35 Years.
Service: 13 Years.

Disease: Pneumonia Lobar. (Right).

Date of Admission: 31-10-27.
Date of Discharge: 18-11-27.
Result: Cured.
Two months sick leave.

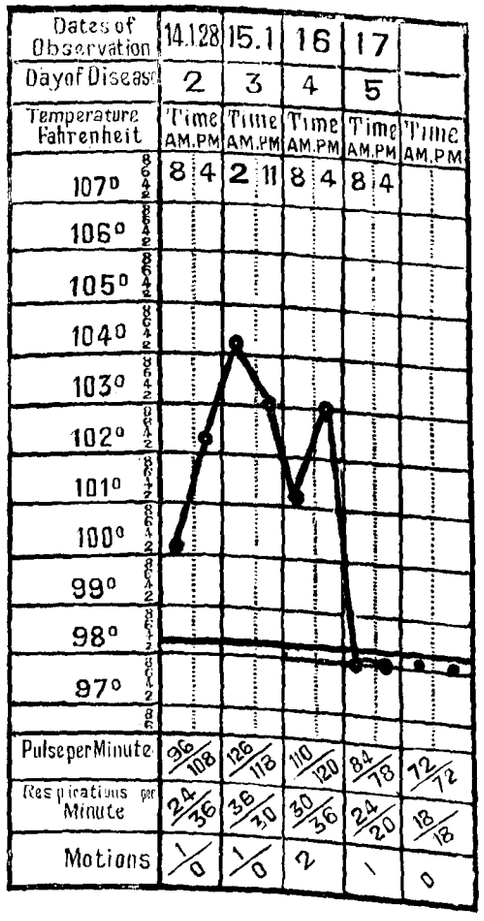


(Sd.) P. V. KARAMCHANDANI. Capt. I.M.S.

CHART NO. II.

Corps: 2/4 B. G.
No. 7111.

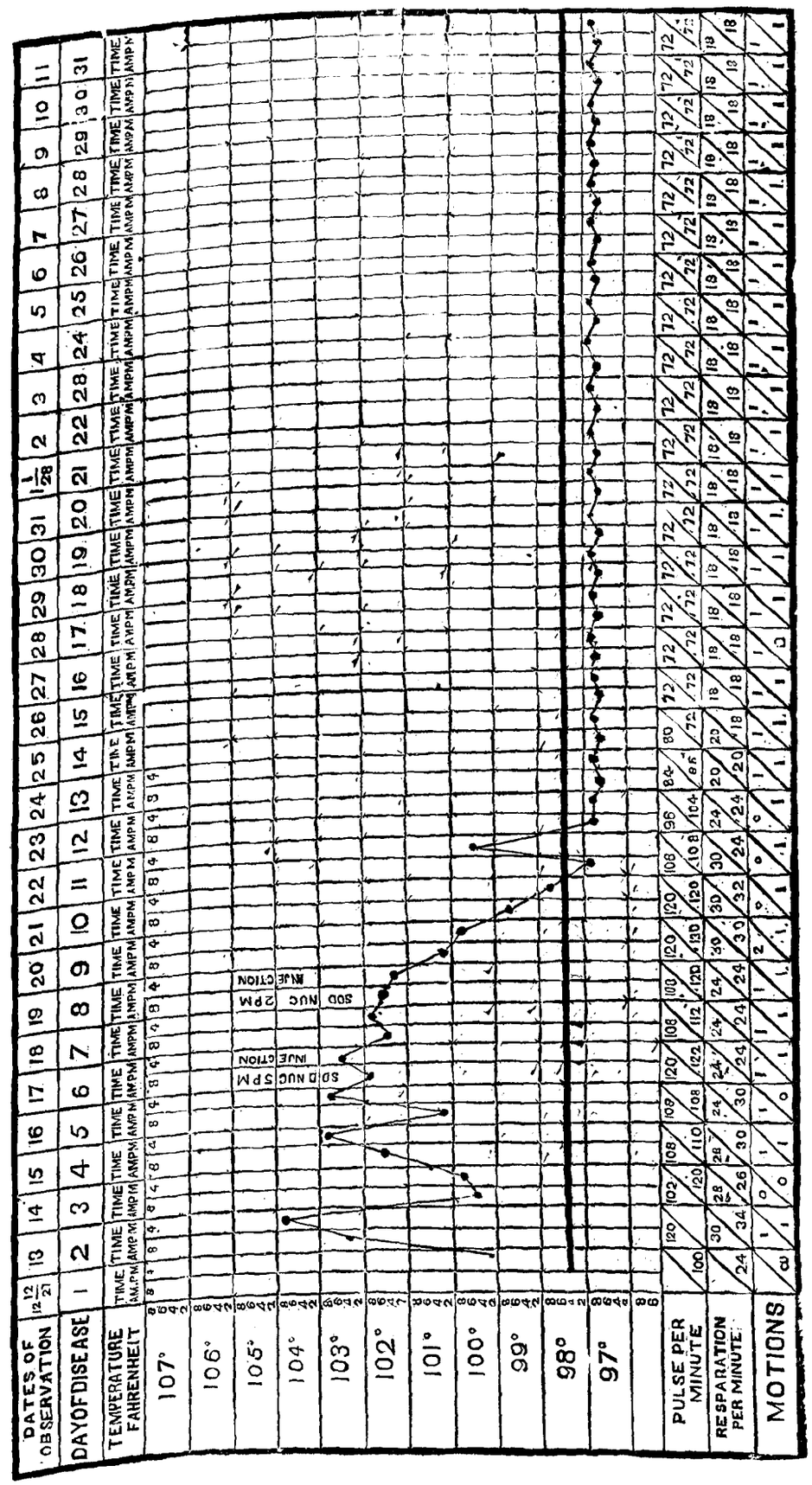
Hospital Station: Pishin.
Rank and Name: Sep. Santaram.
Age: 16; Service: 1 year.
Disease; Pneumonia Lobar.
Date of Admission: 15-1-28.
Date of Discharge: 5-2-28.
Result: cured.
Attend. C—7 days.



(Sd.) P. V. KARAMCHANDANI.
Capt. I.M.S.

CHART NO. III

Corps 2/4 B. G. Disease: Broncho Pneumonia; No. 6794: Rank and Name: Sep, Mamchand; Age: 25 Hospital Station: Pishin
Date of Admission: 13-12-27: Date of Discharge; 14-1-28; Result: Cured; 45 days sick leave.

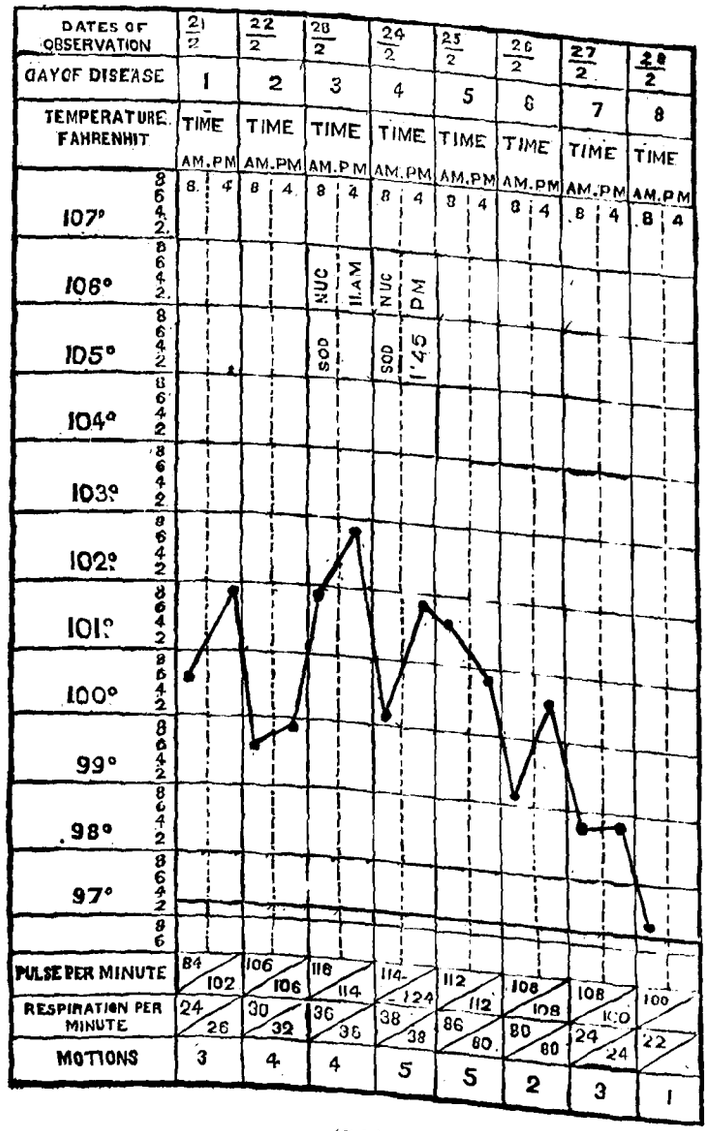


(Sd.) P. V. KARAMCHANDANI, Capt. I.M.S.

CHART NO. IV.

Corps : 2/4 B. G.
No. 6928.

Hospital Station : Pishin.
Rank and Name : Shanka Sawat.
Disease : Broncho Pneumonia.
Age : 20 years.
Service : 1 year.
Date of Admission : 22-2 28.



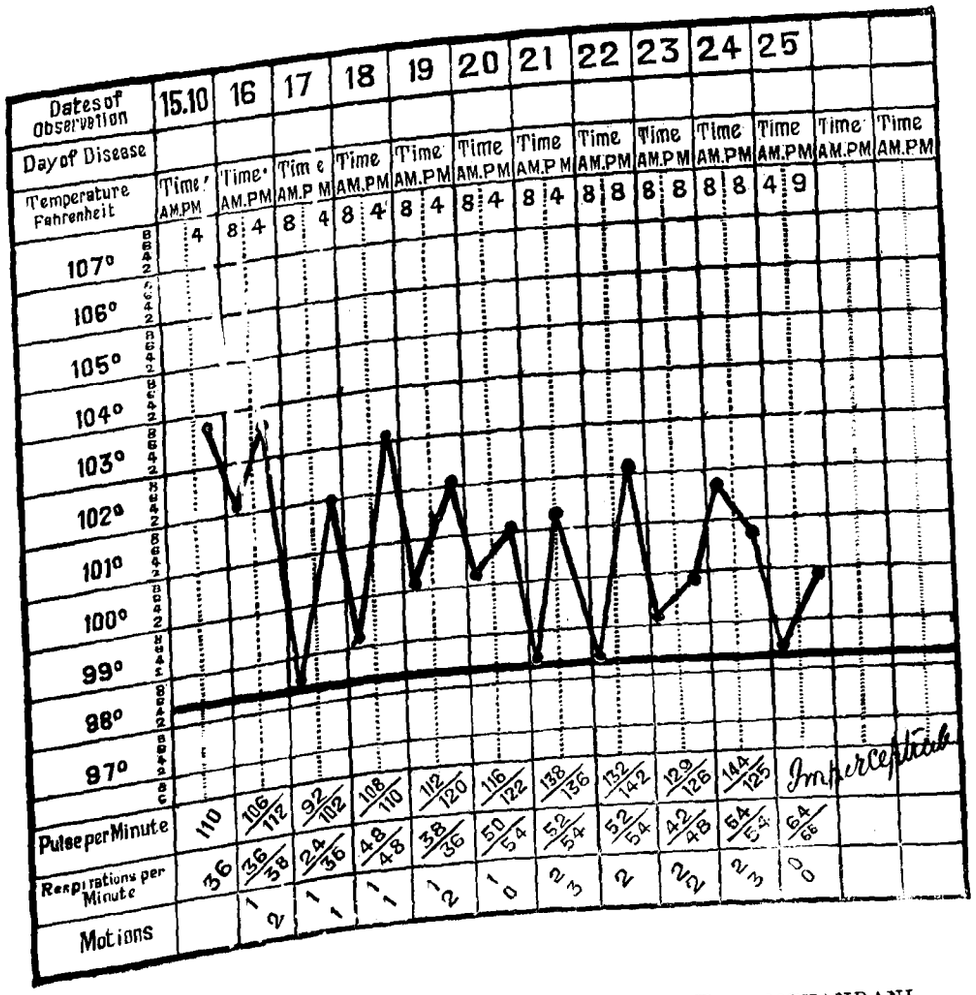
(Sd.) P. V. KARAMCHANDANI.
Capt. I.M.S

CHART NO. V.

Corps 4 : 1 H. C.
No. 4861.
Disease : Pneumonia Lobar (both)

Concurrent Malaria B. T.

Hospital Station : Pishin.
Rank and Name : A. O. Bilawar.
Age : 30.
Service : 2½ years.
Date of Admision : 16-10-27.
Date of Death : 25-10-27.
Result : Died.



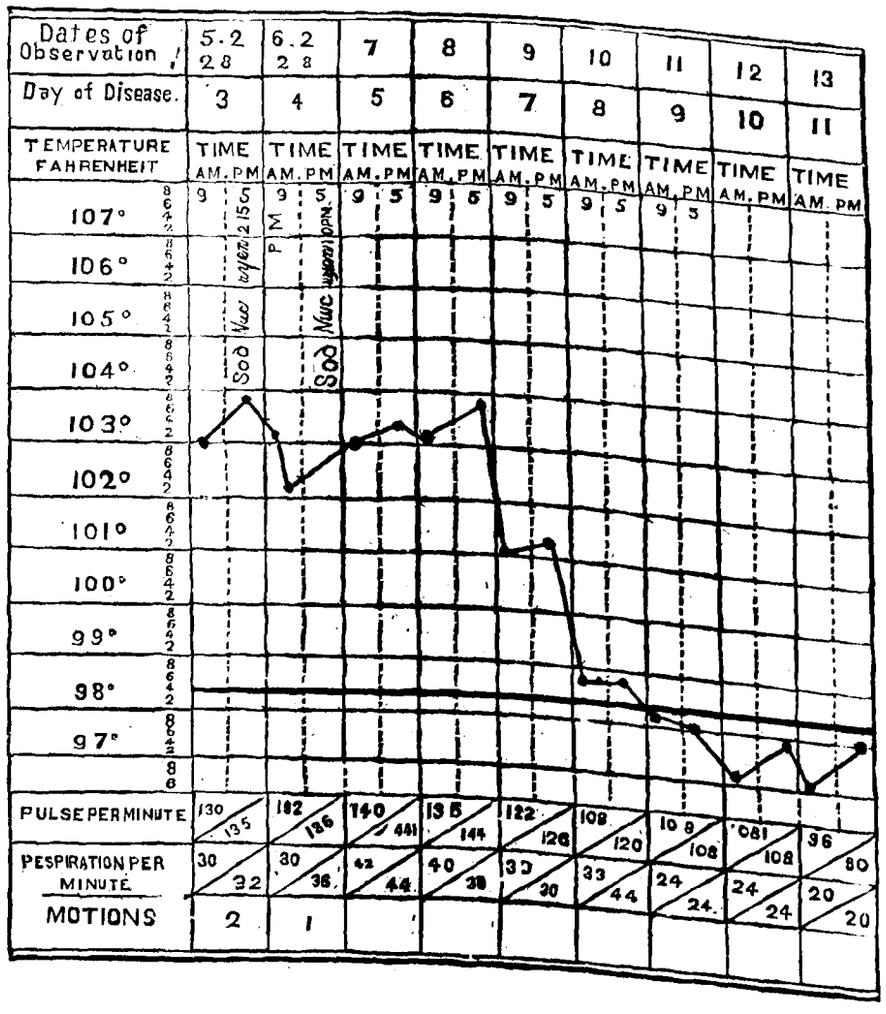
(Sd.) P. V. KARAMCHANDANI.
Capt. I.M.S.

CHART NO. VI.

Corps : 2/4 B. G.

Disease : Lobar Pneumonia Rt.

Hospital Station : Pishin.
Rank and Name : Sub. Maj. Mrs. Chunna Ram.
Date of Admission : 5-2-28.
Date of Discharge : 20-2-28,
Result : Cured.

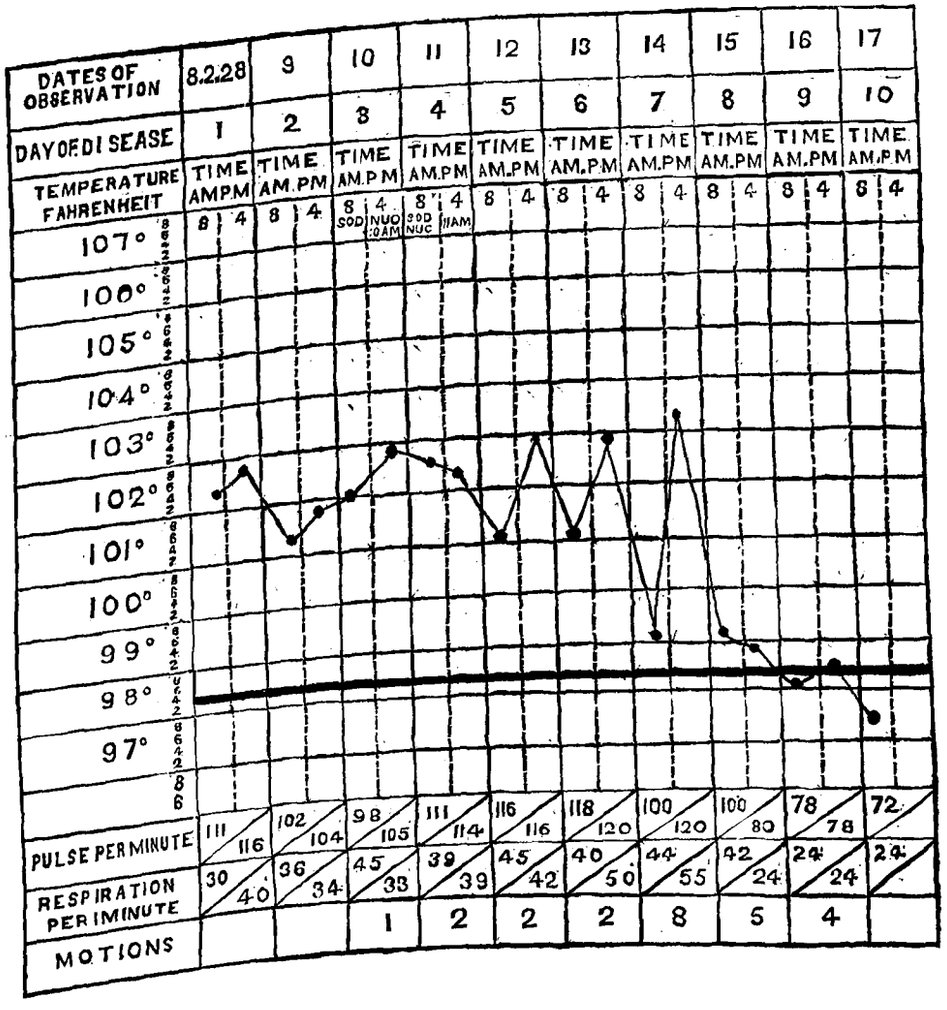


(Sd.) P. V. KARAMCHANDANI.
Capt. I.M.S.

CHART NO. VII.

Corps : 2/4 B. G.
No. 4377.
Disease : Lobar Pneumonia (Left),
Concurrent Malaria : B.T. & M. T.

Hospital Station : Pishin.
Rank and Name : Sepoy Sardara Ram.
Age : 28 years.
Service : 7 years.
Date of Admission : 8-2-28.
Date of Discharge : 8-3-28.
Result : cured 2 months' Sick leave.



(Sd.) P. V. KARAMCHANDANI,
Capt I.M.S.

Out of the above 16 cases of Lobar Pneumonia one died. All these 16 cases were definite, with Lobar consolidation and rusty sputum and all were dangerously ill. The fatal case referred to above, temperature chart No. v (Bilawar) was of Lobar Pneumonia with concurrent Benign tertain malaria. He had been exposed to extreme cold whilst out in camps during the Command manœuvres of 1927. His temperature also touched normal in the specified period but unfortunately his vitality had already been so much sapped that he developed consolidation of the second lung, while oxygen could not be made available. Both the lower lobes were totally consolidated and the congestion had extended to the upper ones upto the very apices. An injection of sodium nuecleinate was unfortunately not administered, when the second lung devoloped consolidation, but I now consider it ought to have been given.

7. Notes of the following 2 abnormal cases (temperature chart: No. vi, Mrs Chinna Ram and temperature chart No. vii, Sardararam) appear to me of sufficient interest to deserve mention here.

Case No. 1 shows a fall of temperature from 103.8°F. within the specified period but only upto 101°F where it remained stationary for nearly 24 hours before touching the normal. Although temperature remained high, still improvement was observed in the patient's general condition.

I attribute this abnormality to the patient having been closed up in a room with ventilators and windows closed. She was a non-hospital case, who having arrived from a very hot country attributed all ills to the cold which was therefore shut out. On one occasion I found her room almost stuffy.

Case No.2 shows fall within the specified period; temperature fell to 99 °F. rising to 103·4°F same evening, but falling to 99°F. again next morning. This case was admitted on 8-2-28 as malaria positive and Pneumonia suspected; P. vivax and Falciparum parasites +++ in blood. He was put on Plasmochin Co., 1 Tablet T.I.D. and other treatment of Pneumonia.

10-2-28. Definite lobar consolidation W.B.C. 16968 per c.c.m.

Sodium Neucleinate injection 10 A.M.
P. Vivax and Falciparum +

11-2-28. Injection Sodium Neucleinate repeated.

13-2-28. W.B.C. 21875 P. Vivax and Falciparum few parasites.

14-2-28. Crisis 9.15 A.M. stop Plasmochin.

15-2-28. W.B.C.18750 P.Vivax and Falciparum+++

16-2-28. Quinine sulph orally gr x x per day.

17-2-28. do

18-2-28. W.B.C.6800 per c.c.m.P.Vivax and Falciparum few parasites.

20-2-28. No Parasites. Temperature normal. Patient. taken off the D.I list.

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*A SYSTEMATISING AND GENERALISING CONCEPTION OF THE DEFENSIVE MECHANISM OF THE BLOOD.

BY

AHIBHUSHAN MUKERJI,

Nutanganj, Burdwan.

Since the existence of bacteria was first demonstrated by Pasteur, various efforts have been made to utilise the defensive mechanism of the blood in various sorts of ways with a view to either kill the micro-organisms or to make them inert by nullifying their toxins. Originally the efforts consisted in injecting the dead microbes into the body with the hope of stimulating the production of antibodies. Though successful to a certain extent this method was not only of no use but positively harmful where the power of response to stimulus was exhausted. It was like whipping a tired horse in those cases. To deal with these cases it was decided to inject the dead microbes into the living animals and then injecting the serum of those animals containing the antibodies into the human patients. In some diseases this method was found successful e.g., Diptheria and Tetanus and to a certain extent in some Streptococcal infections. These serums, it was found later on, in some cases, had beneficial effects on diseases other than those for which they were employed. Sir A. Wright, for example, found that prophylactic Vaccination against Typhoid

*Contributed to the Silver Jubilee issue of the Antiseptic.

had an astonishingly good effect upon many chronic diseases including eczema and arthritis. It was then borne in upon workers in this field that the protein in the horse serum was responsible for at least some of the good effects, which had so far been attributed to its contents of antibodies, and that the beneficial effects of the serum containing antibodies to a particular disease, say Tetanus, to be by no means confined to that disease. They were shown to be useful over a very wide area. The use of serum for its protein content was found to be an important asset in the range of therapeutics. Experiments were made and it was found that other proteins *e.g.* milk, egg albumin, and serum produced their effects by inducing shock and when acute infection *e.g.*, Typhoid, Pneumonia and Septicæmia were subjected to such a shock, were aborted. Thus these foreign substances whether they be proteins or sera or vaccines produce their effects by rousing something in the blood which is capable of ousting the invader and restore the command to the home Government.

Although considerable work has been done in the field of immunity still the whole question is in a state of flux. Besredka has shown that immunity is often a special function of a particular tissue, as could be seen by the practical impossibility of immunisation by the subcutaneous route against dysentery, where as Ch. Nicollas has shown that this could be effected by the alimentary tract. Goldenberg has employed with conspicuous success this principle in the treatment of Pyorrhœa Alveolaris by injecting concentrated stock vaccine into the gums.

The non-specific as against the specification of Sera has already been referred to. Almroth Wright has shown that the same principle holds good in case of vaccines. He found that the addition of culture of organism to blood, outside the body, causes a liberation of anti substances occurring rapidly and immediately, with the result that the blood becomes highly bactericidal. Following these observations it has been found that the same phenomenon takes place in the blood of animals when appropriate dose of vaccine is injected into the blood stream. There was no question of a slow development of agglutins, complement-fixing bodies, or, the like, in response to a specific infection, but a rapid and immediate outpouring of bactericidal substances available for the destruction of a number of bacterial species. Wright holds that these substances are derived from the leucocytes. The striking results claimed from time to time especially during the war for intravenous injection of Eusol and other substances, in desperate

cases of sepsis, is regarded by one that these bodies produced their effects not by direct action on the bacteria but on the leucocytes.

So we find that the action of almost every remedy which has been beneficial in the treatment of infection cannot strictly be interpreted by the application of Ehrlich's distribution hypothesis, and the discrepancies begin to show a congruity among themselves. Repeatedly we find phenomenon which point to the need for the revision of our conception of the action of these bodies. Such a conception has recently been brought forward by J.E. R. Mc Donagh in his book "The Nature of Disease," where he advances a theory which he defends in a convincing manner. The electron theory of McDonagh begins by setting aside the corpuscular element in the blood and concentrating attention on the plasma. In the liquor sanguinis, as studied by the ultra-microscope, he found certain protein particles which he believes the real protector of the organism against toxic invasion. The defensive power of these particles depends on their electronic reactions.

Electricity consists of electric atoms of two kinds the negative atoms called electrons and the positive atoms called protons. Electrons supply the negative and the protons the positive charges. Certain of the protein particles in the plasma are charged with electrons and to maintain the electric balance certain others are charged with protons. In this balance the superiority is normally with the electrons. There is a chronic state of war between the two; the protons try to rob the electrons off their force and vice versa, but the balance of power remains with the electrons.

If now in this condition of more or less equilibrium we introduce another element, a bacterial toxin, which reinforces the protonic power, the electronic power will undergo defeat, which means disease, and if continued, will mean death. The only thing which will counteract disease and prevent death is such a reinforcement of the electrons as will redress the balance and restore normality.

There are two substances in nature, metals, and non-metals which when introduced into the blood immediately reinforce either the electrons or the protons. Those which reinforce the electrons are called conductors and those which reinforce the protons are called condensers.

Mc Donagh says:—

"A conductor is a body which gives up one or more of its atoms of electricity (electrons) to another body. A condenser is a body which deprives another body of one or more electrons.

When a conductor meets the protein particles in the plasma it causes the atoms of the latter to break up. This results in the particles increasing in number, diminishing in size, and acquiring a greater negative change. These changes are covered by the word "Dispersion". When a condenser meets the protein particles it causes some of them to undergo lysis and others to increase in size, and to become agglutinated and to be precipitated. These changes are covered by the term "condensation." Bodies act as conductors and condensors only so long as they are in colloid state".

The protein particles in the liquor sanguinis are in the colloid state. When the electrons in these particles are seriously diminished, the colloid state of the particles undergo a change, the nature of the change depending on the virulence of the toxin. The changes may, for example, take the form either of dehydration or undue hydration. Dehydration causes some of the protein particles to be broken up into very fine division and some to swell up and clump together. The former are thrown into solution; whereby they exchange their colloid for a crystalloid state. Dehydration is the fundamental cause of the clinical manifestations of inflammation. Hydration, on the other hand, causes an increase in size of the protein particles, may be, in certain instances their precipitation. The former, acccording to Mc Donagh, is the morbid process underlying the evolution of cancer; because hydration, leads to isolation, and the metabolic processes are conducted independently of those in the cells around. When the protein particles are precipitated the blood leaves the periphral vessels and the protien particles are collected in the lymphatics and capillaries of the lungs, brain or liver, giving rise to the condition of shock. Senility is the result of long continued dehydration.

The way in which remedies act is called 'dispersion'. Metallic substances are the best conductors when the condition is acute and non-metallic substances when chronic. Both act by conducting electricity to the debilitated protein particles, thus causing them to increase in number and strength, whereby the normal equilibrium is maintained and the invader is annihilated.

Such is gist of the teaching of Mc Donagh, putting in a nutshell and devoid of the many confusing technical terms. Of course this theory requires further clearing up and more experimental works to substantiate the truth. The practical outcome of this teaching comes to this:—Disease is due to the successful attempt on the part of a toxin to rob off the protein particles of its electrons and any measure that will restore the electrons soon

enough and in a sufficient degree will bring about a *status quo ante*. McDonagh not only formulates a clarifying theory but adduces evidence to show that it works out correctly in practice. If his claims are substantiated it will revolutionise our ideas on the microbic infections as well as the metabolic diseases.

STRICTURE OF THE URETHRA AND ITS TREATMENT*

BY

K. SINHA, M. B.

Genito urinary Clinics, Calcutta,

The urethral stricture may be divided according to the etiology as congenital and acquired. The congenital stricture is by most authorities considered extremely rare. When it occurs it is usually at or near the external meatus and except in extreme cases where urinary symptoms appear it requires little or no attention. Of the acquired type of stricture we may subdivide it into

(a) inflammatory.

(b) spasmodic, and

(c) organic.

Inflammatory type of stricture:—This type of stricture ordinarily demands little attention. It is commonly the result of some acute inflammatory process, with infiltration of small round cells and serous exudate, thus producing swelling of the mucosa and narrowing of the urethral lumen. The duration is generally brief and the lesion produces no urinary retention except when accompanied by muscular spasm. In acute gonorrhœa the narrowness of the urinary stream that is observed by the patient is due to this reason. Retention of the urine that is occasionally observed in cases of patient suffering from acute gonorrhœa is due to the posterior urethra and prostate being affected. They set up an irritation and thereby cause spasmodic contraction of the muscular fibres of the urethral wall of the posterior urethra specially at the neck of the bladder,

Treatment of such cases is not to interfere with the lumen of the urethra. Passing of the metallic sound or catheter is contra-indicated in such cases. Introduction of a rubber catheter should be withheld as long as possible. It has been my experience and the urologists agree on this point that the application of hot rectal

* Contributed to the Silver Jubilee Issue of the Antiseptic.

douche, hot hip bath, application of Antiphlogestine to the lower abdomen and the subcutaneous injection of morphine etc., are quite sufficient to relieve the patient. In such cases it is always my practice, and I succeed in vast majority of cases, to apply Diathermy in the prostate per rectum in cases of urinary retention due to inflammatory causes for ten minutes and an injection of 1/4 grain of morphia and the patient is kept under observation in the clinics for half an hour when he makes water by himself. In case this method fails to relieve the patient four percent Novocain solution ten C.C. should be injected into the urethral canal and retained there for 3-4 minutes and afterwards the solution should be forced into the bladder by properly manupulating the urethra. As soon as the solution enters the bladder the patient feels the desire for urination and succeeds in evacuating the bladder. If such measure fails catheterisation with thin rubber catheter should be introduced to relieve the bladder.

Organic Stricture:—Organic stricture of the urethra is the one with which we are most concerned. It is usually the sequel of urethritis, specific and non-specific, traumatism, syphilis, chancroid, tuberculosis etc. Perhaps in most cases of strictures gonorrhœa is the greatest cause. Organic stricture is a deposit of fibbrous connective tissue lying within and beneath the mucous membrane and extending deeply into the tissue of the penis even involving the corpora. The first formation is that of a round cell infiltration, inflammatory stricture, which is gradually replaced by spindle cells and later converted into dense, retractile connective or fibrous tissue, scar tissue narrowing the lumen and interfering with the dilatation of the urethral canal. This scar tissue or stricture varies in extent and form. It may appear as a single thread or bands, the linear stricture, or a much broader band resembling a diaphragm in shape, annular stricture, or it may involve a surface one inch or, more in length changing the urethra into an irregular channel called tortuous stricture.

Though stricture may occur in any portion of the urethra yet it is found in the majority of cases in the bulbo-membranous segments. The next most frequent point of location is the pendulous urethra and the least frequent site is the prostatic segment. Stricture of the prostatic urethra is considered rare by most authorities.

Complications of Stricture:—In neglected or unrelieved obstruction of the urethral canal due to stricture, there often develops complications of more or less severity affecting the entire urinary tract posterior to the stricture. Prostatitis

and seminal vesiculitis are frequent complications. Cabot states that these two complications are so common as to be considered a part of the clinical picture. Next in frequency is perhaps urinary retention. This may occur either in spasmodic or organic stricture or organic stricture may be reinforced by spasmodic contraction. Any patient with a stricture of small caliber is always in more or less danger of urinary retention. Some of the exciting causes which may precipitate or hasten retention are chilling of the feet and legs, alcoholic indulgence, sexual excitement and improper therapeutic instrumentation. Any of these factors may induce a spasmodic or acute inflammtory condition of the urethra resulting in partial or complete retention.

Other pathological changes occurring in stricture are (a) dilatation of the bladder with atrophy of its walls (b) compensatory hypertrophy of the walls with diminution of capacity (c) deverticula of the vesical wall (d) development of more or less severe cystitis (e) retrovesical fistulæ (f) vesical calculi.

Treatment:—Varies according to the degree of stricture present. If the lumen be too small to admit a sound No. 6 (English Catheter number) with difficulty we may call it the stricture of second degree. That which does not admit the sound No. 6 may be termed as stricture of third degree. I will mention here very briefly the treatment of stricture of third degree.

Dilatation of the urethra is the main point for the cure of any stricture. But there are certain practical difficulties in the treatment of stricture of extreme degree. The patient's general conditions remain such that in these extreme cases of stricture sounding the urethra even by means of gum elastic catheter without properly preparing the patient is generally fraught with exacerbation of the symptoms of the stricture, fever, pain etc, or the complete retention of urine. To avoid this we prepare the patient by getting his bladder washed by means of Silver Nitrate solution 1 in 10,000 every alternate day for nearly a month. The patient is taught to take himself the solution into his own bladder from the Irrigator kept 3 ft. 6 inches from the level of his seat.

One should never attempt to pass metallic sound at the beginning as false passage is very apt to be formed even by the expert. One can start dilatation by means of gum elasitic bougie starting from the lowest number and gradually increasing it till the dilatation comes up to No.8 of the English Catheter number and then start metallic sound till the dilatation comes up to No.12 and then one can dilate further by means of Frank's Posterior Dilator

or Kollman's Anterior Dilator as the case may be. (Dilatation is done twice a week).

There are certain extreme cases of stricture in which even the gum elastic bougie cannot be passed due either to the tortuous nature of the fibrous tissue formed inside the urethra or the formation of flap-like fibrous tissue which obstruct the passing of the bougie or sound. In such extreme cases of stricture, fine gum elastic bougie can easily be passed by means of urethroscope under the control of the eye.

Gradual dilatation of the urethra is the ideal method of treatment. Forcible dilatation of the urethra under chloroform in one or two sittings may be met with disastrous results and their end points are not so satisfactory as the gradual dilatation methods.

"PSORIASIS" *

BY

K. DALEPPA, L.M.P., L.T.M.

Demonstrator of Surgery, Medical School, Darbhanga.

Psoriasis is a very common affection of the skin and at the same time one of the worst resistants to treatment.

It is characterised by dry, white, silvery scales, lying on red papuliform elevations. The most important sites of appearance in well established psoriasis are the extensor surfaces of the knees and elbows, the lumber region and the scalp; less common on the front of the trunk and the face while, on the palms and soles, it is distinctly rare. The scales are very variable, usually most marked on the knees, elbows, and scalp where they form thick knobbed projections easily felt through hair.

In some cases the scales become so heaped up that they simulate the crusts seen in rupia (Syphilitic).

The eruption is not accompanied by constitutional symptoms, the general health usually is well maintained, it is only itchy in nervous and alcoholic and seborrheic subjects. When it attacks the joints, folds and other moist regions we no longer get the silvery white scales but a red oozing surface appearing like eczema.

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* Read before the All India Medical Licentiates Association, Darbhanga Branch, and sent for publication in the Silver Jubilee Issue of the Antiseptic.

The first appearance is in the form of a more or less acute outbreak with a tendency to disappear spontaneously with only a few patches leaving at the site of appearance. The eruptions are seen mostly in the cold weather more or less completely disappearing in the summer.

Etiology:—Its etiology is obscure. The modern skin specialists say that it is due to deficiency of Thyroid secretion. Some say it is often heriditary and run in families. It is also noted in Tubercular families, but the reason is unknown.

Diagnosis:—1. Ring worm

2. Seborrheic Eczema.

3. Scaly Syphilides.

Ring worm usually shows some firm vesiculation of the border and has special tendency to attach the Follicles. It is rarely symmetrical.

In the Seborrheic Eczema the skin is always greasy and scales are not usually so coherent as in Psoriasis. A few scales stained with Mythelin Blue at once shows the bottle Bacillus whereas no organisms can be found in Psoriasis.

Scaly Syphilides—They are characterised by patches of hyperæmia and infiltration. It is usually bilateral and unlike simple Psoriasis affects the flexor surfaces rather than the extensor surfaces.

Treatment:—No error of health will be found in this disease, but any deviation should of course be remedied as far as possible. Food sensitiveness must be noted; that is, some foods aggravate the attack and sometimes bring on the attack such as (Green Beans, Brinjals, Cucumber etc). No special diet seems to do any good for the eruptions and some wide spread cases are seen in vegetarians; though meat is held responsible.

Sea side living and Sea baths are considered to be more useful. If the skin is very dry we can prescribe Cocoanut oil with camphor innuction. Internally arsenic still seems to be the only remedy. It is commonly said that arsenic should not be given in acute outbreaks, but some found that it is very beneficial even in acute cases. Fowler's solution in 5 minim doses with infusion Chirretta 3 times a day seems to be very beneficial. Thyroid extract has also been strongly recommended. Potass Iodide is worth trying in obstinate cases. Better to administer in big doses.

Local treatment:—It is very important that of all the drugs Chrysarobin seems to be the most efficacious. Unguntum Chrysarobin of the Pharmocopia should be well rubbed in all over the affected parts with the exception of face and head. The skin must be washed first with washing Soda solution. Another valuable drug is Unguntum Picis Liquidum in full strength or with Pyrogallol 10% strength. Large areas should not be treated at one time with this drug. The Official Liquior Picis Carbonis is a very good remedy for milder cases. Other drugs are Carbolic Acid and Resorcin and the mercurial ointments. Some observers prefer to begin with sedative ointments such as Zinc in acute cases: X'Ray exposure seems to do good in obstinate cases.

CASES AND COMMENTS.

PNEUMECTOMY.

BY

SURESH CHANDRA DAS GUPTA, L.M.S. (Cal.)

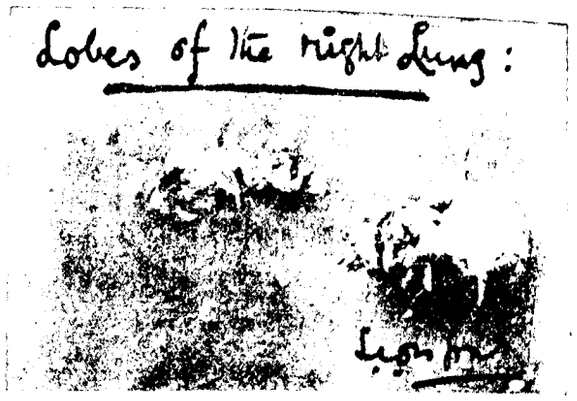
Senior Surgeon, Bir Hospital, Nepal.

In November 1928, G.S.U., a boy aged 8 years was brought to the Bir Hospital with a perforating wound of the chest and difficulty of breathing on account of the injury to the right lung. He had been playing in the field when a buffalo charged him and penetrated its horn into the right side of the chest and threw him to the ground. He lay unconscious there in a pool of blood for some time, and afterwards some of his neighbours carried him to his house. There he was kept for a day and when they came to know of the seriousness of the injury they brought him to our hospital, which was 12 miles off.

On superficial examination, the wound looked like that of a lacerated pectoralis muscle, but on careful survey I found that it was a case of prolapse of the lung caught in between two ribs; the protruded portion was almost gangrenous and foul-smelling. I had the wound dressed antiseptically, gave calcium lactate in 5 grain doses every four hours and ordered for the preparation of an operation on the next day.

Operation:—The area of operation and the surrounding parts were swabbed with Tinct. Iodine freely, and the incision was carried all round the wound and its lacerated margins were removed by a clean sweep. Then the 4th intercostal space was

I give herewith also the photo of the two small lobes of the right lung which were removed; it is curious to note that the



collapsed lung which I mentioned before, became filled with air and the area of resonance greatly increased.

A CASE OF SUPPURATIVE ENCEPHALITIS (BRAIN ABSCESS) AS A RESULT OF CHRONIC OTORRHŒA (?)

BY

A. K. GHOSE,

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

On the 20th. Oct. 1928 I was called in to attend a case at about 11 A. M. The case was reported to be very urgent, so I at once hurried to the place and found the patient in the following condition:

The patient, a shop-keeper, was well-built muscular and aged about 35 years.

He was lying on his back with his head drawn backwards; stiffness of the muscles of the neck, orthotonos present; eyes much red; pupils dilated, saliva coming out of his mouth, great tremor of the muscles of hands and legs; sometimes tonic spasms

of arms and legs; he often tried to vomit but nothing came out except water mixed with saliva; he was in a great stupor but not unconscious, he tried to speak something but could not do so, only made some groaning sound.

His breath and mouth were very offensive; temp. 100·5°F. resp. 32 p.m. pulse 85 p.m. No other abnormality of heart or lungs was detected.

Previous History:—

On the previous night he compiained of extreme headache and vomited again and again. He had some rise of temp. with rigors; he was very restless, felt giddy, became drowsy and towards morning he gradually passed into the condition, described above.

Diagnosis:—

At first I was greatly puzzled as to what this case might be but it suddenly flashed before my mind that this very person, 2 or 3 days back went to me for the treatment of chronic otorrhœa. On examination it was found that the membrane was perforated and there was offensive discharge from the ear. Hence the suspicion of brain abscess arose in my mind.

The characteristic vomiting, extreme headache, gradual onset of drowsiness, and rise of temp. with rigors confirmed my diagnosis. Kerning's sign was not present.

Treatment:—

No operative measures were possible here. I, only injected one ampule of Atropin and morphine to calm down his nervous irritability and sent for some ice.

Arrangements were being made to send the patient to the Sadar Hospital but he expired at 1 P.M. i.e. 2 hrs. after my seeing the case.

Conclusion:—

I shall be much obliged if any reader of this journal can suggest any other probable diagnosis of this case.

A CASE OF ASCARIS INFECTON SIMULATING TYPHOID.

BY

J. N. PAUL, M. B., *Calcutta.*

The following case is a very interesting one in as much as it shows that Helmenthic fever may present a true picture of typical case of Enteric fever and it is not at all possible for the clinician to get at the right diagnosis till pathological reports are obtained or till an abrupt termination occurs as in this case.

A Hindu female child aged 4 was down with very high fever for 4 days when I was called in. Temperature was shooting as high up as 104·5° and never coming down below 102°

The patient was apathetic but rather peevish, gently tossing from side to side, face flushed, complained of headche and pain in abdomen. Abdomen was examined. It was found to be tympanitic, bowels not moved for 4 days. Tongue heavily coated and margin bit clear, lungs clear, puerile breath sounds only, but hacking cough was present.

As a few cases of Enteric fever occurred in the family sometime back, the case was strongly suspected to be of the same nature. The child was ice capped, diaphoretic mixture was ordered and absolute rest enjoined and she was placed on liquid diet.

On 20-2-29 the hacking cough increased in persistency and was very troublesome, could not be controlled with cough linctus. Moist rales appeared in the lungs on both sides.

On 21-2-29. Lungs definitely involved, specially at the base, cough very excessive, useless and hacking, no expectoration. Inhalation of Tr. Benzoin Co. and Eucalyptus vapour, hot linseed poultice to the chest and stimulating liniment were ordered. Pain in abdomen was still present.

Glycerine enema was regularly given on every alternate day.

On the morning of 7th day temperature came down to 99·5° shooting up again within an hour to 103° but this climbing down of the temperature at the period when it should be at the fastigium left sufficient doubt as to the nature of the case. Lungs cleared up. On the evening of 10th day when the bowels were moved with glycerine enema, a large round worm attached to a scybalous mass of stools came out. Temperature dropped to 97° after that and since then it remained normal.

The continued and remittent fever in this case was definitely due to a toxæmia produced by the Ascaris Lumbricoides.

EPIDEMICS OF OPHTHALMIA IN INDIA

BY

DR. KEWALRAM, B. I.

Daharki (Sind)

It has long since been experienced in India that there have been regular epidemics of ophthalmia in hot summer season (June) and Autumn (September).

The commonly received explanation has been that the causative germs are carried in the dust of the gusts of weather. But it has experimentally been found by highly experienced surgeons and bacteriologists, that it is not the only cause, for most of the germs do not live outside human body or live for a few hours and some die away due to hot burning weather of summer. Collins has pointed out that most of the organisms causing ophthalmia are of non-sporing kind which die by drying. The disease is generally being caused by Klebs Loefflers bacillus, Koch weeks bacillus, morax Axenfeld bacillus, Bacillus coli, Pneumococcus, strep to coccus. staphylococcus and gonococci.

The epidemics cannot exactly be attributed to any cause, temperature, fall of water in the rivers or rain, but the main nædus being some abration in the conjunctiva caused by friction and massage with hand.

To summarise two great influences are considered, (1) conditions which prepare the conjunctiva for infection (2) those which stimulate the causative organisms to rapid and pathologic proliferation. Letjus then consider the other subsidiary factors at work.

Summer winds.—The gusts of summer winds, hot and full of dust, earth and particles of fæces, blow burning the whole body and eyes, the hot weather causing congestion of the eyes and the particles of dust causing irritation and thus a nædus for ophthalmia. The fact that blinding dusty weather contains particles of fæces and sewage is clear from the offensive smell after rains as it is a common system in the orient to go out to jungles for answering the calls of nature.

Flies.—They are one of the causes of epidemic ophthalmia as they are very commonly found to be sitting on the eyes of the people and those of children in special. They can carry on their legs and body any kind of dirty materials and some persistent flies go and touch the conjunctiva if the would-be patient is in sleep at day time (a common system of sleeping in India in summer). It has been proved by various authors that they are one of the best carriers and cause of typhoid and summer diarrhœa. If you make an experiment at home to allow a fly to sit on a

cultivation of Bacteria Prodegiosa and then on a freshly prepared plate of gelatin you find streaks of red growth as the fly moves. They carry living bacteria on their feet or on the exterior and interior of body. It has been found that the flies though sluggish in hot summer, yet buzz round the eyes of children and patients of ophthalmia as it is a general system in some Indian ladies not to wash the eyes of the babies till noon or time of bath or till she has became free of her domestic work.

Cosmetic (antimony) pot: Just as a common comb is the main cause of scalp diseases, common towel the transmitter of many internel and external diseases, so the general cosmetic pot. at home is the cause of transmission of ophthalmia from one patient to another.

The ignorance of the people. during an epidemic or otherwise it is a common occurrence in the out-patient room to see an Indian mother wiping away the purulent secretions from a child's eye with her finger or thumb without cleansing her own hands and wipe it off on the nearest fold of the cloth. At another moment she is observed rubbing her own eyes or attending to the eyes of her another baby with the same uncleaned hands with the result that next morning she or the other baby is found to suffer from ophthalmia.

It is a common superstition in India that as the pus is yellow and if the cloth for wiping the discharges of the patient of ophthalmia is yellow there is less harm, or it helps in the treatment of ophthalmia. That is why the saffron coloured cloth is so frequently preferred but as the cloth is coloured by dipping in the watery paste of the spices it adds to ophthalmia than cure it.

Lastly in the wave of epidemic as there is rush of patients the surgeon is not able to wash his hands every time after treating each patient and then touch the next patient.

SURGICAL TREATMENT OF INJURIES OF VISUAL APPARATUS.

BY

DR. RAGHUBIR SARAN AGARWAL

Ram Eye Hospital, Bulandshar.

First adopt measures which will give best results of vision.

Secondly the appearance of globe and its surroundings bearing in mind the dread possibilities of sympathetic disease in the other eye and remembering the operation of enucleation or its substitutes with which to combat this possibility.

A most trivial injury, may through neglect, ignorance or mismanagement, result in total loss of vision in one or both eyes, disfigurement or even death.

General Therapy.

Immediately apply a clean cloth and seek for a doctor: except where large quantities of foreign bodies as sand, dirt, corrosive substances enter the eye when the first application is free douching with clear, clean water.

Asepsis.

Take care of asepsis in each case.

Face of the patient thoroughly cleansed.

Nose irrigated.

Eye—Wash eye lids and eye brows with soap carefully and after rinsing with hot water use a solution of 1: 10,000 bichloride. Wash eye with boric acid solution and instil argyrol 50%, a pad of bichloride 1: 10,000 placed over eye and bandaged all night Repeat it in the morning.

General. Calomel ¼ gr. E.½H, for 4 hours in the night before operation and follow with ½ an ounce of magsulph. in the morning.

Surgical Technique of the wound:—

Five Things.

1. Render the conjunctival sac, lachrynal passages and nose, lids and skin surrounding the eye as free from germs as possible.
2. Replace or cut away prolapsed structures.
3. Sew up the wound or co-apt its edges in other ways.
4. Use after treatment some antiseptic that will prevent the entrance and development of micro-organisms.
5. Keep the wound quiet and occluded by bandaging, the ciliary body at rest and pupil opened by cycoplegics.

Leeches if great pain chemosis.

Atropin to open the pupil and to quiet ciliary muscle.

Use of the Conjunctiva in Ocular injuries

1. Covering gaping wounds of sclera and cornea by means of conjunctival flap is essential in proper healing.

2. One sees its value in the use of a Sclerocorneal conjunctival flap for all operations for cataract or upon the iris.

3. Prevention of infection is also secured by immediate closure of the wound and is, indeed, essential where ch. Conj. or lachrynal suppuration is present even when corneal wound is superficial.

4. In penetrating wounds of sclera. —After careful exploration and removal of impacted and extruded noea and snipping off the protruding vitreous, the sclera should be stitched with one or two sutures. A conjunctival flap is then pulled down over the wound so that cut sclera and cut conjunctiva be not in apposition.

5. In penetrating Corneal wounds.

Special Ointments for Eye diseases

1. *Aristol Ointment*

Artistol	... gr. i.
Olive oil	... m xv.
Lanolin	... dr. i.

Of service after injuries, burns and operations.

2. *Atropin and Dionin Ointment.*

Atropin Sulph	... gr. i.
Dionin	... gr. ii.
White vaseline	... dr. ii.

Of great service in iritis and iridocyclitis and corneal ulcers.

3. *Collargol Ointment.*

Collargol	... gr. v.
White vaseline	... dr. ii.

Of service in marginal blepharitis

4. *Eserin and Cocain Ointment,*

Eserin	... gr. $\frac{1}{5}$
Cocain	... gr. x.
Vaseline	... oz. i.

Usad in marginal ulcers of the cornea. Must not be emplyed if the iris is inflamed.

5. *Holocain Ointment*

Holocain	... gr. ii.
White vaseline	... dr. iii.

Of service after the removel of foreign bodies and abrasions of cornea.

6. *Thiosnamin Ointment.*

Thiosinamin	... gr. iv.
Hyd. O. F.	... gr. iv.
Dionine	... gr. iv.
Lanolin	... dr. iv.
Vaseline	... dr. iv.

Used for the purpose of clearing opacities of cornea.

The Antiseptic

ESTD., 1904.

A Monthly Journal of Medicine & Surgery.

Editors: HON'BLE U. RAMA RAU & U. KRISHNA RAU, M.B., B.S.

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

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

Vol. 26] JULY, 1929 [No. 7

MEDICAL RESEARCH IN INDIA

The recent proposal of the Government of India to found a Central Medical Research Institute at Dehra Dun has met with no little opposition from the medical profession throughout the length and breadth of the land, not because of its undesirability but because of the unsuitability of the place selected for the purpose. This scheme is said to have originated with Sir Harcourt Butler when he was member of the Council of the Governor-General, but the credit for its conception is really due to the distinguished members of the medical profession, in India,—Sir Parde Lukis and Col. Cristophers, to name only two of them. Early in the present century the Government of India realised the need for greater knowledge of the cause of diseases peculiar to India and the best scope which India offers for research into the nature of these tropical diseases and the most promising field for experimenting with the result of research. In 1906, the Government of India established the Bacteriological Department now called the Medical Research Department. In 1911 they established the Indian Research Fund Association to which they have, with a short interruption when the payment was suspended altogether and one year when the amount was reduced to Rupees three lakhs, been making an annual contribution of Rupees five lakhs. In 1920, the Government of India specially invited Prof. Starling to frame concrete proposals for establishing a Central Institute of Medical Research. His proposals were placed before the Standing

Finance Committee of the Legislative Assembly in 1922 and approved by that body. Financial stringency, however, came in the way and the scheme was shelved for the time being. In 1923, the scheme has been revived in a modified form as the result of an *ad hoc* enquiry conducted by a Committee of Medical experts under the chairmanship of Sir Walter Fletcher, K. B. E., F. R. S. Secretary of the National Medical Research Council of Great Britain. The Fletcher Committee's report has not yet seen the light of day but it may safely be presumed that most of their recommendations. if not all, have been embodied in the Government's proposal sanctioned by the Standing Finance Committee on 29th August 1928 and approved of by the Assembly. This scheme is estimated to cost 6·56 lacs of rupees for annual maintenance and rupees 9 lacs for initial expenditure. This, then in brief. is the history of the Central Research Institute to be established at Dehra Dun.

Concurrently with this proposal, another scheme of far reaching importance has been set on foot, that of the establishment of a Public Health Institute at Calcutta. This is the outcome of the munificence of the Rockfeller Foundation of the United States of America. Their representatives Drs. Heiser and Carter have visited India three times in the course of the last two years in order to ascertain how best the Foundation can help India in tackling the Public Health problem. Their offer was to build and equip, according to the latest scientific ideas an Institute of Public Health which will undertake applied research and instruction in the following branches:—

1. Public Health.
2. (a) Vital Statistics and Statistical methods;
   (b) Epidemiology.
3. Sanitary Engineering.
4. Bio-Chemistry and Nutritional diseases;
5. Rural Hygiene, including Veneriology and Tuberculosis.
6. Maternal and Child Welfare including the hygiene of schools and of young persons until they reach adolescence.

The cost to the Foundation of this enterprise is estimated at Rs. 15·61 lacs and the offer is conditional on (a) the Institute being established at Calcutta and (b) the Government of India accepting the responsibility for its maintenance which comes to Rs. 3 lacs

per annum. This scheme has also been since sanctioned by the Assembly.

Now, with regard to the Central Research Institute, the chief objection raised by the generality of the Medical Profession is as to its location at Dehra Dun. The points urged by the Government in favour of Dehra Dun are (1) Climate (2) Facilities for control and supervision by the Government of India (3) Availability of plenty of space either free or at very low cost and (4) Availability of a ready-made Government building called *Chandbagh* and a grant of 6 lakhs by the Indian Research Fund Association to meet the cost of alterations thereto to make it suitable for a Central Research Institute. The location of the school of Tropical medicine at Calcutta, of the Haffkine Institute at Bombay and the King Institute at Guindy near Madras, and their successful working in spite of the trying climate of these three cities, should help us to throw the question of climatic consideration overboard. No scientific atmosphere whatever exists at Dehra Dun and the existing offices there, have no bearing on medical Research. In strange contrast with the Government of India's decision, selecting Dehra Dun as a suitable locality for the Central Research Institute, we find that the Rockfeller Foundation who have endowed for the establishment of the Public Health Institute, have insisted on Calcutta as the suitable place for its location. The reasons are, as stated by the Government themselves (1) that, with its large population and numerous hospitals, Calcutta offers the clinical material adequate in measure and variety and (2) that the school of Tropical medicine —a centre both for instruction and research—which is maintained jointly by private contributions and the aid of the Government of Bengal—will provide complementary facilities, which, were the proposed public Health Institute located elsewhere, would have to be duplicated at extra cost. Col. Graham, the permanent Public Health Commissioner with the Government of India and Lt. Col. Mackie, Director of the Haffkine Institute, Bombay and Acting Public Health Commissioner with the Government of India, both have regarded these reasons as conclusive and the condition itself as unexceptionable. The same argument holds good in respect of the Central Research Institute. The benefits of team work and clinical work, the presence of educated and well-informed medical opinion and the existence of medical colleges and teaching hospitals, and such other facilities as provincial cities afford are entirely absent at Dehra Dun. While so, we find no reason why the Government of India should persist in having the headquarters of the Research Institute at Dehra Dun, and if it is merely

for the sake of its salubrious climate and the small savings in building and equipments it must certainly be the outcome of the penny-wise policy which the Government of India generally pursue and with which they are often credited. Even the views of the Medical experts of America were of little avail in influencing the Government of India and weaning them from their short-sighted course. Public opinion, not to mention medical opinion in India, has never been consulted and it behoves the Government, therefore, to suspend all operations with regard to the location of the Institute at Dehra Dun, if any had been started, and appoint a small Committee of Medical men (officials and non-officials) to confer and pitch upon a suitable locality for the proposed Institute, preferably any one of the three Presidency towns where clinical material can be had in abundance.

Next, with regard to the constitution of the governing body of the Research Fund Association, we consider the time has arrived for a complete overhauling of the same and we agree entirely with the proposals of the Bombay Medical Union in this behalf. As at present constituted, the Governing body consists entirely of Government officials. Neither the Legislature nor the Independent Medical profession are represented on it. As in the case of the Agricultural Research Council, there should be at least two members of the Legislative Assembly and one member of the Council of State as also the representatives of the Independent Medical profession on the governing body of the Research Fund Association which obtains its grant from Government. Representatives of the Independent Medical Profession and Research workers should also be on the Advisory body whose composition should more or less correspond with that recommended for the agricultural Research Institute. The various Indian Universities, the All-India Medical Congress, the Indian Science Congress and the Indian Chemical Society—all these should be adequately represented on the Advisory Board.

Then comes the Selection Board recommended by the Fletcher Committee. This Board is heavily weighted with I. M. S. officers The Bombay Medical Union propose a Board of 13 members consisting of the Director-General. I. M. S., Deputy Director-General, I. M. S., Public Health Commissioner with the Government of India, Director-in-chief, Central Medical Research Institute, Director-in-chief, Public Health Institute, Calcutta (Rockfeller Endowment), one representative of the staff of Medical Colleges under non-Government management, one representative of the

staff of Non-I. M. S. Officers of Medical Colleges under Government management, two representatives of the independent Medical Profession, two representatives of officers in the Medical Research Department, one of whom at least should be a non-I. M. S. Indian officer, two non-medical Scientists, one of whom, should be a representative of the Indian Chemical Society and another of the Indian Science Congress who should be either an Entomologist or a Botanist. This is fairly representative of all interests and is not unwieldy either. There can be no difficulty in re-constituting this Board as above proposed and we are in entire accord with this proposal.

As regards the question of recruitment for the Indian Medical Research Department, for the Central Medical Research Institute and the Public Health Institute, the Government of India do not seem to be guided by any definite policy calculated to advance the interests of the Independent Medical Profession. According to the Fletcher Committee's report, 23 out of 30 appointments in the Medical Research Department are reserved for I. M, S., officers and 7 are open to non-I. M. S. Medical men. We fail to see why such a disparity should exist at all. The policy of reserving a large number of research posts to members of the I. M. S. and of creating a separtate grade of inferior service, members of which can never aspire to take higher appointments, however competent they may be, is largely responsible for retarding the progress of Medical Research in this country. Whatever knowledge and experience the I. M. S. men have gained at the expense of the Indian tax payer is lost to India after their retirement and it is imperative, therefore, that more Indians should be associated with research work and the posts should be thrown open for selection, so that the best brains may not be excluded by reason of their colour or service conditions. With regard to the emoluments of the staff proposed to be appointed to the Central Medical Research Institute and the Public Health Institute, we find there is marked disparity in the proposals made by Government. While the Director or Professor gets 2500 per mensem, the Assistant professors. in the P. H. Institute get only 400 per mensem. There is no chance whatever for the Assistant Professor aspiring for the Professor's place and every time there is a vacancy of the Professor's post, a new recruit will have to be brought in. Thus, once an Assistant Professor, always an Assistant Professor, there can be no inducement for competent men to get into the field. The Bombay Medical Union propose to fix the pay of Director or Professor at Rs. 2000/-100/-2500/- per mensem and Assistant Directors at Rs. 1000/- 50/-1500 per mensem so that, the Assistant

Directors may, in the ordinary course, hope to get the Director's place. There is nothing unreasonable about this proposal and the Government should look to the revision of the scale at an early date.

Lastly, the Bombay Medical Union urge the grant of scholarships to promising young graduates to undertake research work in the existing teaching hospitals and medical colleges in this country. This is indeed a happy idea for a great deal of clinical material is wasted and a good many intellects get rusted for want of such scholarships. There is no doubt that the awarding of a few Research scholarships to every medical college in the country will be a stimulus to Indian Medical graduates and a source of encouragement to pursue research work for which there is a wide field.

We trust the South India Medical Union, Madras and other Medical organizations in this Presidency will follow the example of the Bombay Medical Union and make necessary and timely representations to the Government of India, with regard to the Medical Research work in this country and get the necessary improvements effected, which will be of enduring benefit to the nation.

ECHOES OF THE SILVER JUBILEE OF THE ANTISEPTIC. SOME MORE CONGRATULATORY MESSAGES AND REVIEWS.

The Burma Medical Times, Rangoon:—We heartily congratulate the Hon'ble Dr. U. Rama Rau and his worthy son Dr. U. Krishna Rau, the editors of the above Journal on the forthcoming Celebration of the Silver Jubilee of that valuable monthly Medical, published in Madras. It may be recalled that the Antiseptic was started 25 years ago by the late Dr. T. M. Nair and the present editor Dr. U. Rama Rau. Dr. T. M. Nair was an unique and influential figure in the political life of South India and during his tenure the Journal attained a high degree of efficiency and this has been steadily and uniformly maintained by Dr. U. Rama Rau. Those who have been perusing the interesting pages of this Journal month after month will certainly see for themselves the high ideal the Journal has established for itself and the review of the work and policy of the Journal during the past 25 years shows an attainment of which any human soul could be proud. Among the great achievements of the Journal might be mentioned its bold fight to eradicate quackery and encourage the Independent Medical Profession. Whether in the matter of reforming and improving the medical

education or in solidifying the medical fraternity in India, the Antiseptic has always taken a keen and abiding interest and in the long years to come we wish the Journal and its learned editors a successful and prosperous career for the benefit of the medical science and profession.

Tubercle, London.—The Antiseptic, a monthly Medical Journal published in Madras, is this year celebrating its Silver Jubilee. The April number is very considerably enlarged to form a special number. In addition to the special articles reviewing the work of the Journal through a quarter of a century, the number contains twenty-eight original articles covering a very large field. Two of these articles deal with tuberculosis, viz., "Recent Advances in our knowledge of the Causation and Prevention of Tuberculosis", by Rao Bahadur Dr. M. Kesava Pai, M.D., and "Abdominal Tuberculosis", by S. Subba Rau. B. A., M. B. M. R. C. S., Eng., D. P. H. Camb.

Dr. E. M. Perdue, Editor.—The Journal of the American Association for Medico-Physical Research, Kansas City.

I enjoy the Antiseptic very much. I wish you great success and a continuance of your beneficent influence.

The Indian Medical Record, Calcutta:—We offer our sincere congratulations to our contemporary on its twenty-fifth birth-day and wish happy returns of the same and a continued career of progress.

In the article on the 'Antiseptic', "Through Quarter of a Century" Dr. Rama Rau gives a history of the activities of the Journal which was founded by late Dr. T. M. Nair and Dr. Rau. Dr. Rau has made the paper what it is to-day and the story of the Antiseptic would have been incomplete without his life. Most of the articles which compose the volume are written by well known specialists. The papers are very interesting and are on varied topics.

There are numerous photos of medical men and of the founders of the Journal.

The volume will well repay the time spent in its reading.

The Indian Medical Journal, Calcutta:—The Silver Jubilee of our contemporary the 'Antiseptic' was celebrated on the 18th and 19th April, 1929. The Medical men of Madras organized a party to honour Hon'ble Dr. U. Rama Rau, the present editor and

to keep up the memory of the late Dr. T. M. Nair. The function was presided over by Dr. S. Rangachary. The Hon'ble Dr. U. Rama Rau entertained about 150 guests the same night and it was preside over by Col. J. W. D. Megaw, I. M. S., Surgeon-General with the Government of Madras, who, while proposing the toast of the Antiseptic, eulogised the services of the Antiseptic during the last twenty-five years. Dr. Rama Rau gave a suitable reply and the function was quite a successful one.

The National Medical Journal, London: We have to acknowledge receipt of an advance copy of a review of "The Antiseptic" through a quarter of a century by the Hon'ble Dr. U Rama Rau together with copies of the Journal itself. The review contains an interesting and often eloquent account of a vast amount of medical, medico-political and philanthropic work, too varied to mention in detail. "The Antiseptic." so named in memory of Lord Lister's epoch-making work was founded by the Hon'ble Dr. U. Rama Rau, with the Late Dr. T. M. Nair as Editor, 25 years ago. The issue for March 1929, contains amongst other articles, an interesting editorial on the late Dr. Emil Von Behring. Although late for inclusion in the Special Jubilee number, we offer our congratulations to 'The Antiseptic' on the attainment of its Silver Jubilee, and our best wishes to its eloquent editor.

The Medical Officer, London :—We have received from the editor of the Antiseptic (323, Thambu Chetty Street, Madras) a copy of the issue completing the 25th year of that Journal's publication. The history of the Antiseptic, as told by one of its founders, the Hon'ble Dr. U. Rama Rau is a record of fine endeavour in the interests of medical practitioners in India. We wish to congratulate our contemporary on reaching this important milestone in its progress and we trust that the editor will receive all the support they deserve from colleagues at home and abroad.

Journal of the Ceylon Branch of British Medical Association :—We acknowledge with thanks the receipt of a copy of the Silver Jubilee Edition of the Antiseptic, edited by the Hon'ble Dr. U. Rama Rau and Dr. U. Krishna Rau, M. B., B. S., of 323, Thambu Chetty Street, Madras E. This special edition contains about 281 pages royal octavo size. The annual subscription is Rs. 5 (Foreign 10 s.) inclusive of postage payable in advance. It contains many leading articles contributed by many medical men, dealing with important subjects. The great popularity of this Journal is evident from the fact that it has gone through the Jubilee number and for the last quarter century the journal has

had the credit of good opinion and recognition from the medical world. We have much pleasure in recommending it to the profession, as a perusal of it will be of great profit to the reader.

Prof. J. Froilano de Mello, Director-General of Medical Services in Portuguese India, Nova Goa:—I have read with much interest the Jubilee number of the "Antiseptic". It is a perfect success and our colleague Rama Rau must be very proud of his work.

Dr. J. L. Das, Patna:—Very many thanks for the complimentary copy of the Silver Jubilee number of your much esteemed paper. It is really a treat as it contains a lot of very useful and instructive articles. I wish your Journal every success.

Dr. Brojendra Chandra Bhattacharyya, L. M. F. Fulkocha:—Glad to receive the Antiseptic Jubilee issue. It is an excellent issue. It contains many important and interesting articles the reading of which will greatly help the practitioners to get up-to-date knowledge of the art of healing. I wish its extensive sale throughout the country.

Dr. R. K. Paul, Indore:—I acknowledge with thanks the receipt of a copy of the Jubilee issue of the Antiseptic. It was with rapt attention mingled with surprise and wonder that I went through the whole of it and I cannot but congratulate you on the brilliant success that you have achieved in bringing out the Jubilee number. The materials that you have collected are surely the best of their kind: the collection of the photographs of many of your contributors and the get-up of the issue surely reflect credit on the part of its worthy editors. I am confident your Jubilee issue is almost unique in India.

Dr. S. A. Banker, M. D., Bombay:—I thank you for a copy of your 'The Antiseptic', Silver Jubilee Number. I send you my hearty congratulations for your Silver Jubilee of the Antiseptic and for such a good production.

Dr. D. C. Menkel, M. D., Simla :—The Silver Jubilee Number of the Antiseptic has reached me and I am pleased indeed with its make-up and the character of articles contained. You are to be complemented on the production.

Dr. Victor Labernadie, Pondicherry :—The Jubilee issue is a very interesting one. Congratulations for your success.

Dr. David Perera, Koslanda, Ceylon:—I beg to thank you gratefully for sending a copy of the Jubilee number. It is a very interesting and valuable number.

CURRENT TOPICS

SURGERY

Cancer of the Stomach:—Sir Berkeley Moyinkan writing in the *Practitioner*, is of opinion that cancer can be removed and recrudescence prevented only by surgical treatment. For this early diagnosis is essential. The following clinical symptoms are, in the writer's opinion, useful in early diagnosis (1) Mimicry of duodenal ulcer. But there is this difference. In cancer the classical symptoms do not improve under treatment, there are no "intervals" of freedom from pain and there is blood in the stools. Radiologist's report is very valuable. (2) Symptoms of "dyspepsia" (3) Symptoms of obstruction appear early. This obstruction may be at the condia, in the body or at the pylorus. Dysphagia is an important symptom. Leather bottle stomach sometimes result. An uction in the body causes dilatation and hypertrophy behind 4) Hæmorrhage is the first symptom. Vomiting of blood may be noticed. Anæmia develops rapidly and is out of proortion to blood lost. Cancer of stomach is often wrongly diagosed as pernicious anæmia.—*U. K. R.*

The Acute abdomen Prevention and early diagnosis of.—Zachary Cope, in discussing this condition, in the British Medical Journal, is of opinion that the fatalistic attitude taken generally regarding the acute abdomen which comes like a 'bolt from the blue' should be replaced by careful study of all antecedents of the more acute conditions. By this method it is occasionally possible to detect serious disease before it is acute. He discusses them under the following heads. (1) Perforated gastric and duodenal ulcer. The question arising is whether it is possible to prevent this perforation. The writer answers, No, in the case of the acute ulcer which develops in a few days and precipitately perforates. But chronic ulcers could be managed so as not to produce perforation. Some ulcers are curable by alkali method and duodenal tribtic; others only by surgery. Anyway the patient should be kept under observation and treatment until the radiological evidence of ulcer has disappeared and symptoms have subsided. (2) Appendicitis is the most common acute condition in abdomen. Referring to Rendle Short's enquiries the writer concludes that

the best method of preventing appendicitis is by preventing constipation, minimising amount of meat eating, increasing the amount of food containing cellulose and lastly to diminish total amount of food taken (3) Diseases of the gall-bladder, gall stones and cholecystitis are discussed separately. Our knowledge of the formation and metabolism of cholesterein is too vague for any definite precautions regarding these diseaces. (6) Gonococal salpingitis and (7) Pneumococcal peritonitis are to be remembered in the female. (8) Intussusception is a disease of healthy babies about weaning time. The best method of prevention is as follows. Too sudden a change should not be made at the age from six to eighteen months. The transition from liquid to solid food must be graduated. Keep the bowels open. Make milk clots in stomach as small as possible to giving sodium citrate by mouth. (9) Intestinal obstruction due chiefly to strangulation of Hernia.

The writer then discusses the most important helps in diagnosis. The first is pain. The next is altered facial appearance which can only be learnt by experience. Vomiting and nausea are also important. This however may be absent in appendicitis and obstruction if there is gangrene, occurs only once in perforated ulcer and is not constant in ruptured ectopic gestation. Distension must never be waited for and should not be present in the early stages except in obstruction of large intestines. Local muscular rigidity should also never be waited for. It is present only when inflammation has pierced the walls of appendix. Constipation and furred tongue are not of much use in early diagnosis. The temperature variation is an important factor. A drop of several degrees accompanied by acute pain indicates a catastrophy. But it is absent in acute obstructions, is moderate and slow in onset in peritoneal inflammations. The alteration of pulse rate is useful if noted. In the acute cohio it is slowed. In perforated ulcers the pulse becomes normal after 2 or 3 hours. In obstruction the pulse is normal or slow until toxæmia begins or until there is shock.

In conclusion the writer says that a definite diangosis should be made within six hours or less as to the seriousness of the condition. If he is doubtful he should get help in diagnosis. Procrastination is the thief of time.—*U. K. R.*

Reduction of Colle's Fracture.—Sir Robert Jones (*British Med. Journ.*, p. 619).—In reducing a Colles's fracture strength is not an important asset, but the method of its application is. The principle underlying the writer's very simple procedure is extension of the radius, pronation of the lower fragment, and supination of the upper. The grip employed involves ***direct*** pr essure

on the lower end of the radius, and disimpaction and reduction are effected by a combined movement. Many surgeons attempt to reduce a Colles's fracture by the "Jones method" in a hopelessly inadequate fashion. They hold the hand, put traction on the wrist-joint, and pronate. The strength of Samson would be helpless to effect reduction in this way.

The method described by Bankart, where the arm is placed upon a wedge block, is very like the Jones Method, as far as the act of reduction is concerned, but apparently no traction is used and preliminary disimpaction is not aimed at. This must involve greater force and crushing of the lower fragment. It is surely hazardous to apply the whole of one's body weight—even occasionally—upon a fractured end with the palmar-aspect of the wrist over a wedge. There must be some risk of injury to tendons and nerves if this method be followed. No, strength is not an important factor. In reducing this fracture Sir Robert Jones little depends on force. Indeed, in many cases he uses no anæsthetic, for the manipulation is rapid, and after the momentary pain of reduction little further complaint is made. Once reduction is complete the type of splint is of no great importance. *Med. Rev.*

The anatomical method of opening Quinsy: H. Mortiner Wherry, F. R. C. S. writes in the B. M. J. April 27, 1929. Not even one has been satisfied with the old method of opening Quinsy by cutting into the soft palate. The œdema present often makes it difficult to find the pus, and more than one cut may be necessary. On the other hand, immediate enucleation is so drastic a form of treatment as to appear unnecessary as well as risky.

He describes a method whereby both these extremes could be avoided.

Quinsy is a collection of pus in the supratonsillar fossa. To effectively empty the pus it is sufficient to break down the adhesions by introducing a pair of sins forceps with closed blades into the supratonsillar fossa. The point of insertion is immediately under the arch formed by the anterior and posterior faucial pillars on the same side. A slight push is all that is needed. As soon as they have penetrated the abscess the blades are widely opened, the adhesions are broken down, and pus pours out.

The following advantages are claimed on this method.

(1) It is simple, certain, easy and only one instrument is required.

(2) Trismus is no obstacle.

(3) There is no pain beyond pressure from the forceps points.

(4) There is hardly any bleeding because nothing is cut.

(5) The abscess is freely drained by its natural outlet.

(6) The tonsils can be enucleated without risk at a later date.

(7) There is no unnecessary mutilation of mobile parts.

(8) No anæsthetic is necessary, either local or general;—*V. C. S.*

The Injection Treatment of Chronic Prostatitis.—Grant in the *Southern Medical Journal* (December, 1928) describes a method of treating chronic prostatitis by injection which he has found very satisfactory in over one hundred cases, all of which were of comparatively long standing with a firm or boggy prostate, never abscess formation. The technic is described as follows:

The bladder is filled with the patient in the lithotomy position. A wheal is made about 3 cm. above the anus and then a deeper injection of 1 per cent. novocaine. The gloved finger of the left hand is introduced into the rectum.

A 4-inch needle of 22 gauge, preferably attached to a Luer Loktite syringe, is introduced at the wheal and guided through the perineal structures until its tip can be felt at one lobe of the base of the prostate lateral to the raphe.

The needle is pushed through the prostatic capsule, at which time a definite sense of resistance presented by this tissue is felt.

Three c.c. of freshly prepared 1 per cent, mercurochrome are injected, moving the needle about in the gland to distribute this as much as possible. The needle is then inserted to the other side of the prostatic raphe and a similar injection made.

On the introduction of the fluid the patient always feels a sensation of fulness in the gland and it requires moderately firm thumb pressure to force the fluid in. The needle is then withdrawn and the prostate massaged gently by the finger in the rectum.

Very little discomfort accompanies the injection and this is relieved immediately when the patient voids. The voided urine or distending fluid is well colored with mercurochrome and a definite trace of this is seen frequently in the urine for three days and in the massaged secretion for as long as two weeks.

The author states that immediate and end results have been particularly gratifying. The method is used in conjunction with massage and diathermy.—*A. M.*

Some Notes on Tryparsamide Therapy in a Venereal Disease Clinic.—Keith and Marquand summarize (*The British Journal of Venereal Diseases*, January, 1929) their findings with the use of tryparsamide as follows:

1. Twenty-four cases of tabes, six cases of G. P. I. and three miscellaneous cases of neurosyphilis have been treated during the last two years with tryparsamide in the Out-patient Venereal Disease Department of the Royal Berkshire Hospital.

2. Tryparsamide has given much better results than the arsenobenzol compounds.

Eleven cases of tabes showed slight and seven marked improvement. Several cases of trophic ulcer improved after resisting every form of treatment.

All the G. P. I. cases were greatly benefited, and five out of the six are at work. They emphasized the value of tryparsamide in early G. P. I.

3. The treatment is simple, suitable for the general practitioner and for the out-patient department, and, if proper precaution are taken, the complications need not be feared,—*Urol, & Cut. Review.*

The Treatment of Erysipelas.—Why is it that the serum treatment of erysipelas has not been as successful as that of scarlet fever? It has been shown by Birkhaug that erysipelas is caused by a specific streptococcus. Why, then, has it not been possible to prepare from this organism a serum which will control the disease? Birkhaug himself claims very encouraging results from such a serum, but he has not received any very general support. McCann,* for example, used this serum in a series of cases of erysipelas and compared the results with a parallel series of cases in which no serum was given. The comparison was not in favour of the serum. Not only was the mortality higher amongst those who received it, but the average duration of their illness was longer.

Another report by Symmers arrives at rather more moderate conclusions. In his experience the serum did have the virtue of controlling the immediate attack in the majority of cases, but it conferred no immunity, and did not diminish the occurrence of complications. In addition, a small but definite number of cases were completely intractable, no matter how much or how often the serum was given.

Still more recently it has been pointed out by T. Francis, Jr, that Birkhaug's serum cannot be expected to have the specific effect which is obtained from antiscarlatinal serum, because, although erysipelas may have a specific causal agent, the course of the disease from a laboratory standpoint is not exactly parallel with that of scarlet fever. There is a difference according to

Francis, between the cutaneous reactions produced by the toxins of the streptococci responsible for these two diseases. In the case of erysipelas the toxin of the specific streptococcus gives rise to its most definite local reaction in the skin only after the disease has passed the acute stage and convalescence has set in; whereas in scarlet fever, as is well known, the cutaneous reaction to the toxin of the *S. scarlatinæ* (as shown by the Dick test), becomes less marked with the progress of the infection, and when convalescence is established disappears altogether. Another difference to which attention is called that the blood during the acute stage in erysipelas seems to contain no toxins comparable with those that can be demonstrated during the corresponding stage in scarlet fever. Erysipelas is not a toxæmia in the sense that scarlet fever is. Again, the serum of patients convalescing from erysipelas, possesses no such protective power as is found in that of scarlet fever. It is true that during the acute stage of erysipelas a substance is produced which neutralizes filtrates of the *S. erysipelatis*, but this does not correspond with the toxin of scarlet fever, since it does not give rise to antibodies.

It is with these differences in view that Francis concludes that attempts to treat erysipelas by means of an antitoxin is unlikely to meet with any marked success. He suggests rather that the streptococci of erysipelas set up by their growth in the erysipelatous lesion an allergy by means of which the final recovery is brought about. This is a theory which requiras further support, but in the meantime his work is a serious criticism of the fundamental points underlying Birkhaug's views.—*C.M.A.J,*

Complications of the cataract operation.—A. KNAPP (*Joury. Amer. Med. Assoc.*, December 8th, 1928, p. 1794) asserts that the most important complications after cataract operation are due primarily to the lens capsule; he describes the pecularities that may be met with in the capsule and the methods of incising it. The opening and closing of the wound are of the greatest importance in determining the absorption of any retained cortex and the development of after-cataract. The varieties of after-cataract are: (1) cortical, in which the small capsulotomy wound closes promptly and the retained cortex remains in a closed bag; (2) capsular, caused by the thickening of the capsule or proliferation of capsular epithelium; and (3) iritic, in which a vascularized membrane lies on the thickened capsule adherent to the pupillary margin. Collins states that the frequency of after-cataract depends on the method of capsulotomy employed and on the cortical matter remaining at the operation. Glaucoma

is the most important post-operative complication--the most dangerous to the eye and the most difficult to treat. Iritis with altered aqueous is a frequent though transient cause of this complication. Collins has shown that glaucoma develops from adhesion to or entanglement of the lens capsule in the extraction scar. Retained cortex causes glaucoma, particularly if it is shut off by adhesions, and operation is then necessary. The most important preventive is a properly placed corneal section; and next, correct technique of the capsule manœuvre. As a further complication following cataract operation E. C. ELLETT (ibid., p. 1797) cites loss of vitreous, which may set up an iridocyclitis or a secondary glaucoma. Predisposing causes of vitreous prolapse are the general health of the patient, the blood pressure, and especially his nervous equilibrium and control. Among the immediate and exciting causes are the fluidity of the vitreous and pressure on the vitreous from within (from an intra-ocular hæmorrhage or pressure on the ball.) Ellett mentions the precautions necessary in operating, emphasizing especially the anæsthesia. Lost vitreous is not regenerated, but is apparently replaced by aqueous. This is the probable explanation of the fact, that such small harm often follows a vitreous loss.

Hæmorrhage in Hæmophilia.—P. EMILE-WEIL (*Presse Med.*, February 27th, 1929, p. 266) describes several types of hæmorrhages in hæmophilic patients and their appropriate treatment. A clean-cut wound is less dangerous than a contused one in that it can be sutured after careful hæmostasis. The great point to remember is that the clot is slow-forming and imperfect; it is advisable to remove it and to place a pad soaked in serum directly on the bleeding points. Interstitial hæmorrhages are generally less severe than the superficial owing to the pressure of surrounding tissues, but trouble is sometimes caused by the absorption of blood followed by hæmorrhages elsewhere—hæmaturia and hæmarthrosis. The gravity of some hæmorrhages turns less on their endangering life than on their sequels. A joint in which a hæmarthrosis occurs usually clears up the first time, but there is always a tendency for recurrence, and ankylosis may be the ultimate result. Prevention of hæmorrhage is therefore of the utmost importance. Meningeal hæmorrhage, though rare, must be recognized as a possibility; the withdrawal of pure blood by lumbar puncture should suggest such an occurrence, and suitable treatment be applied at once if the diagnosis is confirmed. Finally, the gravity of the hæmorrhage may be due to its site, and the author

describes cases of hæmatomata of the floor of the mouth in which deglutition and speech were quite impossible and death by suffocation seemed impending. Four cases of hæmatoma of the orbit came under the author's care. They were accompanied by loss of vision, exophthalmos, and corneal ulceration. Unfortunately only one of these cases was seen early in the hæmorrhage, and transfusion of blood brought about recovery in a remarkable manner. The other three were seen late, and the total loss of vision became permanent. The author insists that hæmophilic patients ought never to be allowed to die from hæmorrhage, the arrest of which is an easy matter. Whenever possible, the wound should be minutely examined and cleaned; all blood and clots are removed, and a gauze dressing soaked in normal serum is applied. In internal hæmorrhages blood transfusion is advisable; human or animal serum, citrated blood, or normal blood all seem equally effective. The author describes a preventive method which he has been using for over twenty-five years with excellent results. This consists of the monthly subcutaneous injection of 10 to 20 c. cm. of blood according to the age of the patients. In many of his cases spontaneous hæmorrhages have entirely ceased and those produced trauma have become much less severe. One patient, after seven years' treatment, now possesses perfectly normal bloood. No serious anaphylactic accidents have been observed, but the best results are obtained by the use of human serum of one of the parents or other member of the family, preferably belonging to the same blood group.

Otitis Media in Infants.—OTITIS media is thought by D. BOTTACIN (*Giornale Medico*, December, 1928, p. 290) to be frequently the cause of disturbances of nutrition in infants, possibly owing to the shortness of the Eustachian tube and the vulnerability of the tympanic mucous membrane, together with the vomiting and regurgitation which often occurs in the first few months of life. The number of nurslings who at necropsy show evidence of otitis media is, according to Feer. 70 per cent., and, according to Marfan, 90 per cent. Bottacin points out that pus may pass into the pharynx from the ear and, after being swallowed, cause diarrhœa and other intestinal disorders; the nutrition of the infant is consequently disturbed. Bottacin cites cases in which no physical signs were present during life, but at the necropsy pus was discovered in the middle ear. In other cases the only cause found for loss of weight, failure to take nourishment, and fever was a bulging of the tympanic membrane: paracentesis released the

pus, after which the infant made a good recovery. The author considers the intestinal mucous membrane of a young infant to be the site of least resistance, and the effects of an otitis media therefore appear there; chronic otitis diminishes the general resistance and thus sets up a vicious circle.—*B. M. J.*

Calot's Solution Otorrhea. Calot's solution should be given a trial in all chronic middle ear suppurations of long duration. Mastoid involvement as well as cholesteatoma should be ruled out before using this treatment.

Calot's solution consists of:

Guaiacol.....0·00025 Gm.
Creosote.....1·5 Gm.
Iodoform.....3· 0 Gm.
Ether.....8·5 cc.
Olive Oil.....up to one ounce

Over 50 cases of discharging ears have been treated by this method and over 50 percent resulted in cures. The other cases showed improvement.—DR. J. C. SCAL, New York, in *Eye, Ear, Nose & Throat Monthly*, Nov., 1928.—*C. M. S.*

The Peritoneum and Peritonitis.—David and Sparks (*American Journal of Obstetrics and Gynecology*) present the results of experimental work on peritonitis in dogs and reach the following conclusions, of which the fourth is worthy of serious consideration in practice:

1. Diphtheria toxin passes promptly in considerable amounts directly into the blood-stream as well as to the peritoneal lymphatic from the normal peritoneum of the dog.

2. Intraperitoneal transudate favors the prompt passage of diphtheria toxin from the peritoneum.

3. A plastic peritonitis markedly if not completely interferes with the passage of diphtheria toxin from the dog's peritoneum.

4. By analogy we may assume as a result of these experiments that when a plastic exudate is formed in the peritoneum, the passage of bacteria and toxin from the peritoneum is markedly interfered with. It would seem, therefore, advisable in the treatment of peritonitis to interfere as little as possible with the plastic exudate that is formed, as it can be regarded as a favorable process. Perhaps it is unwise to press the analogy between dog and human peritoneum further, but one would feel from these

experiments that in the early hours of peritonitis the factors of absorption of toxin and bacteria into the circulation directly and via the lymphatics was the dominant factor of danger, while later absorption from the peritoneum became less important and local conditions, such as paralytic ileus gained the ascendency in the picture.—*A.M.*

Circumcision.—Drs. S. J. Sinkœ and J. B. Arteaga, in *Urol and Cutan. Rev.* Nov., 1928, describe a modified technic for circumcision.

All aseptic precautions are observed. With the prepuce in normal position, a 4 percent solution of novocaine (procaine) is injected about one-half inch behind the corona and including the entire circumference of the penis. The prepuce is then retracted and another circular injection is made in the mucous membrane about one-fourth inch from corona.

About 2 minutes later a hemostat is applied to each side of prepuce and a dorsal incision made with scissors, care being taken not to cut the penis. The incison is made to extend about one-fourth to one-half inch from the corona. The main point is to secure an even edge, which will extend around the circumference and good approximation of the skin. At least one-fourth inch of mucous membrane should be left on the dorsal, ventral and lateral aspects. This is obtained by holding one side of the prepuce between the index finger and the thumb, trying not to include too much skin so that we cut mostly mucous membrane and not skin. Then with a large pair of scissors the side of the prepuce is cut off with one bite. This should extend from the frenum to a point where the dorsal incision ended. The other side is then cut off in the same manner.

The next step is to divide the circumference of the skin into four equal parts, catch each one with a hemostat and pull gently forward, the idea being to bring the skin forward so as to have an equal amount on all sides.

A large straight hemostat is then applied, clamped, and the redundant skin cut off with scissors.

The raw surfaces are cleansed with alcohol and the edges brought together with a continuous suture of black silk, starting at the frenum with a mattress suture.

Care must be taken to keep the dressing protected from urine. It is changed the third day.

This method gives a very successful plastic operation.—*C.M.S.*

Differnentiation Between Doronary Thrombosis and Acute Abdominal Conditions.—A few cases in which a differential diagnosis had to be made between coronary thrombosis and angina and a lesion of the upper part of the abdomen are reviewed by J. P. Anderson with the purpose of emphasizing the following points:

Coronary thrombosis can simulate upper abdominal lesions. This condition should be kept in mind in every case of upper abdominal pain in a patient over 45 years of age, especially in a man. A history of previous heart trouble, anginal attacks or hypertension, a familial history of these diseases, or, on the other hand, a history of recurrent stomach trouble is very significant. On first examination the following signs should be watched for carefully: evidences of heart failure such as enlargement of the heart; basal rales in the chest; an enlarged, tender liver; cardiac irregularity, or gallop rhythm with a split first heart sound at the apex; a pericardial friction rub, or a low blood pressure in a patient known to have had a higher one previously. An electrocardiographic tracing is a necessity in such cases and since portable electrocardiographs are now available, there is no reason why tracings cannot be obtained. This is a condition in which the surgeon and internist should work in close cooperation, but the internist should also be a good cardiologist. A case is cited.—*J. Am. M. Ass.* 91=944, Sept. 29, 1928.—*C. W. M.*

The Causes of Flatulence.—The symptom, flatulence, indicates the presence of excess gas in the bowel, or the passage of gas from the rectum in noticeable quantities. The causes are so numerous that flatulence is in itself of little diagnostic importance, but occasionally, it is the chief or only symptom, or the earliest noticeable symptom, and then its study becomes of value.

In *Annals Clin. Med.*, for Nov., 1928, Dr. Albert S. Welch, Kansas City, states that gas gets into the bowel in three ways. It may be *swallowed*, may be *generated* in the alimentary tract, or may be *excreted* through the bowel wall into the lumen, and gives the following *outline of causes*:

I.—*Swallowed Gas*

A.—in the form of gaseous foods

B.—because of frequent swallowing

a.—on an emotional basis
b.—with lacrimation in eys diseases
c.—with nasal disease
d.—with pharyngeal disease
e.—with oral disease
f.—with esophageal disease
g.—from chemical irritation
h.—from mechanical irritation

C.—because of excessive motility of the alimentary tract

D.—because of decreased absorption in the alimentary tract

II.—*Gas generated in the alimentary tract*

A.—from diseased bowel wall

B.—*from foods*

a.—because of the inherent food qualities
b.—because of faulty digestive juices
c.—because of poor absorptive capacity
d.—because of too rapid passage of food

1.—through the small intestine
2.—through the large intestine

e.—because of delayed passage

1.—through the small intestine
2.—through the large intestine

III.—*Gas excreted from the blood into the bowel lumen*

A.—because of saturation of the blood

a.—from inhalation of gases
b.—from extensive diseased regions in the body
c.—from improperly functioning excretory organs

1.—vicariously, in extensive lung lesions
2.—vicariously, with severe liver lesions
3.—vicariously, in advanced renal lesions.—*C. M. S.*

A Diabetic Creed.—For my own practical guidance, in 1923, I adopted a diabetic creed, but, like the best of the creeds, it has undergone alterations and I am sure will soon require more.

I believe at the beginning of this year, 1928:

1. That diabetes mellitus should be considered so probable, in any person who has 0. 1 percent or more of sugar in the urine, that he should be watched for life.

2. That normal weight or less should be insisted upon in each diabetic, suspected diabetic, or relative of a diabetic, but that therapeutic loss of weight should be extremely gradual.

3. That mildness of the diabetes should be assumed, a long life be expected, and the patient be treated accordingly. Hence, the nearer the proportions of carbohydrate, protein, and fat in the diabetic diet conform to those of the normal diet, always seeking to avoid glycosuria and hperglycemia, the better it will be for the patient, even at the sacrifice of weight, though not of strength. A carbohydrate tolerance, unutilized, retrogrades.

4. That reversal of the diet: namely high-fat and low-carbohydrate, assumes the contrary (severity of the diabetes), is dangerous both in principle and in practice and, unless accompanied by a minimum protein intake, frequently ends in coma.

5. That undernutrition (a) prevents diabetes and (b) is the foundation-stone of diabetic treatment; but if hunger can be avoided, a smaller number of patients will yield to temptation, break treatment, and in consequence die of coma.

6. That extreme inanition with loss of body protein is not worth while simply to render the blood- sugar normal.

7. That diabetes of itself is not fatal, but that death ensues from other diseases or complications; that coma is an accident, usually inexcusable, and is more easily prevented in 99 cases than treated in 1; and, therefore, diabetics when ill *from any cause* should (1) go to bed, (2) keep warm, (3) take a glass of hot water, tea, broth, orange juice, or oatmeal water gruel every hour, (4) empty the bowels with an enema, (5) call a doctor, who, if he finds acidosis the dominant factor, will give insulin and caffeine, may wash out the stomach and inject subcutaneously a solution of salt. A diabetic under treatment with insulin should not omit it unless sugar-free and under medical supervision.

8. That the diabetic should be regarded as unusually sucepti-ble to arterioscleriosis and should be treated with this in view. The carbohydrate in the diet should not long remain under 100 grams, and foods high in cholesterol should be restricted. Gangrene and the complications therefrom can usually be avoided by treatment with posture, by washing the feet daily and by reporting the discovery of any lesion to the physician.

9. That any patient with a tolerance of less than 100 grams of carbohydrate should (a) test own urine for sugar, (b) keep sugar-free, and (c) take home food scales and use them until he can keep sugar-free without them.

10. That the immediate aim of practice should be to simplify treatment and to encourage physicians to develop, in their own communities, homes and clinics to which they may refer their patients for a diabetic education, in case their own time and facilities are inadequate.

11. That firm persistence in a strict diabetic diet (a) finds ample justification in the patients kept alive by it to profit by insulin; and (b) is essential to safety and success in the use of insulin. Insulin utilizes rather than replaces the advances in diabetic treatment hitherto achieved."—*C. M. S.*

A Rare or Hitherto Unrecorded Cavity with Fluid in the Bony Nasal Septum and the Crista Galli. Virgil J. Schwartz. The Laryngoscope, May, 1928, XXXVIII, 347.—The author was unable, after a rather extensive search of literature, to find any previous report of such a case. His patient, who was 20 years of age, had a severe nasal obstruction. The septum was very thick and moderatlely deviated, with a definite spur to the left. During a sub-mucous resection the septum was found to contain a cavity, filled with fluid, which extended about one centimeter above the cribriform plate. This apparently went into the crista galli. He was unable to ascertain whether this cavity connected with the frontal sinus or with any of the ethmoid cells. The cavity was about onehalf inch long (anterior-posterior), and from one-eighth to one-fourth inch wide and contained from 3 to 6 c.c. of fluid.

Dr. Schwartz goes on to explain how such a cavity might be formed in the embryo or by pneumatization from the frontal or ethmoid cells. He then studied a series of 807 films of the accessory nasal sinuses in which he found 518, or 64 per cent, with a solid bony crista galli and septum; 142, or almost 18 per cent, showed a crista with a center of loose cancellous bone; 136. or 17 per cent, showed a pneumatized more or less distended crista galli, while 19, or more than 2 per cent, presented a definite cavity in some part of the bony septum with or without a pneumatized crista. Some of these were pneumatized from the frontal sinuses above or apparently from the sphenoids behind. The author has shown that this subject has a very definite anatomical, clinical, and surgical significance—*Radiology.*

MEDICINE.

The Early Diagnosis of Measles.—P.M. Stimson (*Journ. American Med. Assoc.*, p. 660).—Fever is usually the first symptom and appears about 10 days after infection. Following its onset slight puffiness of the lower eyelids may be noticeable, and there may also be found a fairly definite line of congestion across each lower lid, about at the margin of the tarsal cartilage and perhaps a third of the way from the lid margin to the fornix. This measles line must be marked to be suggestive. Children ill with other catarrhal conditions may show a linear conjunctivitis just inside the blepharal margin of the lower lid. The measles line is best seen on the first or second day of fever. Its duration as a line is brief as a rule, the injection spreading in a day or so to involve the entire peripheral conjunctiva and later the palpebral conjunctiva also.

When this line has been obscured by the more general conjunctivitis, puffiness of the lids becomes marked and there is usually seropurulent exudation with considerable photophobia. The caruncle at the inner corner of the eye becomes swollen, and occasionally there can be found thereon two or three tiny elevated bluish white spots, possibly similar in nature to the buccal spots of Koplik.

Occasionally there may be found, particularly on the chest and neck, a prodromal eruption occurring during the first day or two of the fever. This rash may consist of fine macules somewhat resembling the rose spots of typhoid, or it may be a blotchy erythema, or it may resemble closely the diffuse erythema of scarlet fever. The eruption usually is short lived, disappearing before the onset of the typical exanthem of measles.

Usually about the second day of fever, the enanthem appears on the soft palate, uvula, tonsils or posterior pharyngeal wall. It begins as a slight injection, with a number of scattered reddish brown spots possibly the size of a pinhead. The congestion becomes more marked and the spots become more numerous and possibly confluent, so that by the fourth or fifth day the pharynx may be congested and irregularly brownish red. Numerous tiny opalescent miliary vesicles may be seen when there is considerable involvement of the pharynx. This enanthem usually lasts until the skin eruption is well marked, and it fades as the fever in uncomplicated cases returns to normal. Profuse involvement of the pharynx may be accompanied by pain, especially on swallowing.

There next appear the coryza and cough. These manifestations of catarrh, coryza, cough and conjunctivits usually reach maximum severity about the end of the period of invasion when the fever is at its height and the exanthem is beginning to appear. They then usually clear up even more rapidly than they appear, excepting the cough, which is apt to persist into convalescence.

Koplik's spots comprise the first pathognomonic sign of measles. When marked, they resemble grains of white pepper loosely sprinkled on a red background. They first appear, usually on the second or third day, as small red patches in the centre of which is a tiny opalescent whitish speck, much smaller than a pinhead. They are usually first found in the mucous membrane on the inside of the cheek about opposite the first molar teeth, but as they become more numerous they may be found all over the inside of cheeks and in marked cases on the mucous membranes of the gums and lips. They have also been reported in nasal and vaginal mucous membranes as well as on the inner caruncle of the eye. When marked, they are usually seen in any light, and the patient may speak of the mucous membrane of the cheek as feeling rough to the tongue. When few or fading or just appearing they are best seen in strong daylight, and occasionally cannot be seen at all by artificial light. They usually disappear as the exanthem appears.

Koplik's spots are important because when found a definite diagnosis of measles can be made and the child isolated possibly 2 or 3 days before the appearance of the rash. Unfortunately, however, they do not usually appear before the catarrh, when the case is markedly contagious. It has been shown that children with measles are about equally dangerous to their school-mates, on the 3 days before the rash appears. The day of the appearance of the exanthem should therefore be considered at least the fourth day of the case of measles, and exposure to others should be dated from the third day prior thereto.

Throughout the period of invasion, the patient is apt to suffer also from a good deal of diffuse headache and general malaise, and perhaps drowsiness. The spleen may be palpably enlarged until the rash is well out.

In making an early diagnosis of measles, one has to differentiate it from a common cold or the slightly more severe condition

usually known as grip. Search for suggestive features, such as fever, involvement of the eyes, particularly this so-called measles line inside the lower lid, the macular eruption on the mucous membranes of the pharynx, and Koplik's spots. One should habitually, in a patient with a cold, examine inside the lower eyelids and inside the cheeks, even before examining the pharynx.

When there is a history of exposure to the disease, as in a hospital ward, or in a family, the patient's temperature should be taken every 4 hours, beginning with the seventh day, and with the first indication of fever the patient should be put to bed and isolated, and kept thus until the temperature has remained normal at least 2 days. Remember that occasionally, after the first little flare up, the temperature in measles may return to normal for a day or even two, but it rises again and rapidly as the other features of the disease become more marked. —*Med. Rev.*

A Form of Senile Seizure. Hugh Barber (*British Med. Journ.*, p. 492).—Without any warning, an apparently healthy elderly person falls down unconscious. There may be some clonic spasm of the face or limbs, perhaps more pronounced on one side. In a few minutes follow loud shouting and violent behaviour, necessitating restraint, but possibly aggravated by it. After a variable time the patient regains consciousness and reason, although perhaps a little dazed and inconsequent. On full recovery of his faculties he will say that the whole incident is a blank. The duration of the attack may be three-quarters of an hour or considerably longer. This type of emergency is seen after the event usually in hospital practice, or only in the casualty department. It does not appear to be described in medical textbooks. Of 6 attacks witnessed by the writer the following is a typical example.

A railway storekeeper, aged 66, was found unconscious at 8-30 a.m. He was put into an ambulance, in which he became very violent, with struggling and shouting, sweating profusely. At 9 o'clock in the casualty department of the Derbyshire Royal Infirmary he was very violent, and continued so until 9-45, when he vomited twice and became conscious, but was somewhat dazed. He was taken to the ward, where he went to bed quietly, saying everything was a blank since his last duty performed that morning.

Examination showed a stout plethoric man; tongue furred, teeth decayed, and pyorrhœa present. Lungs emphysematous; heart normal, but sounds distant. Temperature normal, pulse 92; artery thick; blood pressure 130/90 (two days later 170/110). There were no abnormal signs in the nervous system. The urine contained a trace of albumin occasionally; but the blood urea was only 48 mg. per cent., and the urea test gave a reading of 2·4 per cent. His mind was quite clear, but his head felt heavy. The day after admission lumbar puncture revealed normal cerebro-spinal fluid. Five days later he could walk about quite well.

In 6 cases the patients (5 men and 1 woman) were between the ages of 60 and 75. There was some evidence of cardio-vascular degeneration; but they were robust, stout, somewhat full-blooded people, engaged in their duties. There had been some degree of hyperpiesis, but no serious renal disease. In one case anger precipitated the attack, but otherwise there had been no history of effort, nor were their duties arduous. In 5 cases the patient had come to himself in about an hour. The sixth patient came round about 3 hours after the seizure, without any knowledge of what had been taking place. The attacks have not recurred nor have vertigo or other symptoms developed. The expectation of life does not appear to have been changed by the accidental occurrence of the seizure; nor have the activities been restricted.

The attack seems to be due to slight hæmorrhage on the surface of the brain, perhaps below the piamater, producing coma and cerebral irritation, analogous to what may be seen occasionally after concussion. The bleeding must be quite distinct from a free subarachnoid hæmorrhage; the one lumbar puncture observation revealed normal fluid. That it is a vascular lesion seems probable, because of the sudden onset, and there is the analogy of epistaxis and retinal hæmorrhage occurring in this type of patient. Uræmia does not seem probable the recovery is too complete, and the urea in the blood was not unduly high in the one case tested. The type of patient is not suggestive of epilepsy, although the analogy of a convulsion from loss of cerebral function probably holds good.—*Med. Rev.*

Vitamin B Extracts in Diabetes.—As the result of four years' clinical experience of its action, C. A. MILLS (*Amer. Journ. Med. Sci.*, March, 1928, p. 376) believes that vitamin B stimulates the utilization of glucose in the body. He has found it very effective in increasing the appetite and rate of growth both in children and adults, and, since increased food utilization, growth, and resistance, to infection are attained in diabetes by the use of insulin he assumed that the vitamin might be exerting a similar action. Mills, therefore, tried the addition of vitamin B to the treatment of diabetics, and reports seven cases in which a definite effect seems to have been obtained. In five of these there was indisputable evidence of vitamin effect on sugar excretion; in another the clinical improvement was very marked; and the remaining patient left hospital when definite results were commencing to appear. Funk, Corbitt, and Collip, among others, have previously performed animal experiments in this connexion. Mills gives an acid-alcohol extract of plants rich in vitamin B, such as alfalfa, onions, and spinach. In diabetics the alcoholic extract was administered, but in the case of children the alcohol was evaporated and glycerin to 40 per cent. added as a preservative. The results in these cases indicate that vitamin B does possess the power of lowering sugar excretion, and 30 c.cm. of the extract were found to be roughly equivalent to 30 units of insulin. Without indicating diabetes as a deficiency disease, Mills believes that this therapy affords the injured pancreas an opportunity for functional recovery, and might in combination with insulin give better results than either would alone. It has the added advantage that oral administration is effective, and the treatment may therefore be carried no safely in the homes of patients to whom insulin could not be entrusted. In further experiments on dogs and rabbits as to the physiologic properties of this extract, Mills (ibid., p. 384) found that it did not produce hypoglycaemia, and had no effect on the normal fasting blood sugar. It increases glycogen storage in the liver, but it has no insulin-like action on depancreatized dogs, nor does it enhance insulin action in such dogs. The author concludes that its effect is exerted directly on the pancreas, and that its action in inducing glycogen storage is secondary to its pancreatic effect.

X-ray Treatment of Asthma and Spasmodic Coryza.—P. VALLERY-RADOT, P. GIBERT, P BLAMOUTIER, and F. CLAUDE (*Ann. de Med.*, March, 1928, p. 214) believe that radical treatments, acting on the body generally, give more lasting results in asthma

and state that they have obtained excellent results from the employment of *x* rays. They recall that Schilling in 1906 was the first to use this method of treating asthma. Irradiations can be applied over the pulmonary hila, the spleen, or over both sites, either on the same occasion or alternately in successive treatments. The authors employ an induction-coil apparatus with a standard Coolidge ampoule a focal distance of 30 cm., and an aluminium filter of 5 to 10 mm., and a dosage of 500 R. For both the lung and the spleen two ports of entry are used, anterior and posterior, in order to save the skin. Ten to twelve successive irradiations are given at the rate of two weekly. If no success follows, a second and even a third similar series may be tried. A summarized table showing the diagnosis, treatment, and results of sixty-four cases treated by this method is given. After a single prolonged irradiation nausea, vomiting, and sometimes a recrudescence of the affection have occurred, but these symptoms last only a few hours and are usually followed by marked amelioration. No other untoward symptoms were noted, and eosinophilia, a fall in the leucocytic percentage, and a lowering of arterial tension were never seen. Beneficial results have been reported following irradiation of several pulmonary areas and of other organs such as the thyroid the cervico-thoracic ganglia and the long bones. Many hypotheses as to the mode of action of the rays in these affections have been suggested. As Widal and others have proved that an asthmatic is a colloidoclasic, the authors believe that the rays cause a change in the humoral state which prevents the production of colloidoclasic shock.

P. GIBERT (*Paris Mid.*, February 4th, 1928, p. 126) notes that the statistics of other workers show 30 per cent. of very good results, 35 per cent. of improvements, and 35 per cent. of failures in the treatment of asthma with *x* rays. In his own series of 64 cases of asthma and of spasmodic coryza either separately or in combination 19 patients seemed to recover completely, 16 were much improved, while the treatment failed in 29 cases. He advocates a dosage of 500 R twice a week, over a field of 12 by 12 cm. at a focal distance of 30 cm. with moderately penetrant rays. When there is spasmodic coryza alone he irradiates the spleen; in cases of asthma, with or without coryza, he irradiates the spleen and the hilar region. He does not conclude that the treatment has failed until he has given twelve irradiations. No untoward results have followed.

Arsenic in Chorea.—IN a series of carefully controlled cases S. GRAHAM (*Arch. Dis. in Childhood*, August, 1928, p. 206) found that the course of chorea did not appear to be influenced by treatment with arsenic. He thinks that any improvement shown should be attributed to the tonic effect of the arsenic, since it is not in proportion to the amount of arsenic given. The intravenous administration of arsenic has no advantages over other methods of treatment. Simple rest in bed and freedom from emotional disturbances will, he adds, usually cause a disappearance of chorea in four or five weeks, but the administration of sodium salicylate is recommended in the hope that it may favourably affect the rheumatism. None of the children so treated displayed any intolerance; the salt was given in 10-to 20-grain doses three times a day, with twice the amount of sodium bicarbonate five times daily. In patients treated with arsenic, neokharsivan was given at four-day intervals, the total average amount injected being 2·15 grams. In four cases toxic symptoms appeared, apparently due to idiosyncrasy. In patients treated with arsenic by the mouth the average total amount given was 11·5 drachms of liquor arsenicalis: two children showed signs of intolerance, which disappeared when the drug was stopped.

The Cerebro-spinal Fluid in Acute Poliomyelitis.—G. M. LYON (*Amer. Journ. Dis. Child.*, July, 1928. p. 40) has investigated the cytology of the cerebro-spinal fluid in the pre-paralytic stage of acute poliomyelitis. His results suggest the presence of some cytolytic factor, not described previously, particularly active towards the multilobed cells. The origin of these cells has not been fully determined; they may be identical with the polymorphonuclear leucocytes of the blood stream, or they may be wandering clasmatocytes not necessarily of hæmatogenous origin. The author inclines to the latter view. Proof is given of the advisability of making spinal fluid cell counts immediately after lumbar puncture in all cases in which there may be a possibility of poliomyelitis. A pleocytosis of 50 per cent. or more of multilobed cells occurring in a clear fluid is suggestive of acute poliomyelitic infection. Lyon asserts that when, in the course of from twenty-four to thirty-six hours, the lumbar puncture is repeated, and there is a fall in the total cell count with a shifting of the differential count to a mononucleosis of 90 per cent. or more, it is certain that the condition is one of poliomyelitic infection. This cellular response is pathognomonic, as it has not been observed in the spinal fluid in other conditions. It is not easy to determine the exact mechanism of the cytolysis. If there is a cytolysin

characteristic of poliomyelitic fluids, it is probable that it does not appear until the time of, or shortly after, the shower of virus into the cerebro-spinal fluid.

Remedial Measures for Cardiac Neurosis.—W. SCHOLZ (*Wien. klin. Woch.*, July 5th, 1928, p. 951) emphasizes the importance of regarding the vague condition of cardiac neurosis as part of a general neurasthenic state which leads the patient to take undue interest in heart sensations which are of little or no pathological significance. After determining by careful examination that there is no evidence of commencing heart disease, and winning the confidence of the patient, Scholz advises residence at or above the sea coast and the encouragement of physical activity. In severe cases such as those of "heart cramp," small doses of codeine may be effective, or a mixture of the tinctures of aconite and valerian; rubbing the chest with alcohol, ether, or venegar is also commended. In less acute cases the most useful remedies are the bromides, valerian, iron, arsenic, and quinine; arsenic in the form of injections has a suggestion value, and involves a closer medical supervision which may be advantageous. Cocaine and morphine preparations are contraindicated. Lukewarm baths each morning have been found useful, and to them may be added salt, thyme, and pine extract. Massage, air baths, faradic stimulation, and "four-cell" baths may also be tried. Heliotherapy under careful medical control is sometimes beneficial. Symptomatic treatment of such conditions as sleeplessness and loss of appetite should not be omitted. For relief of the unpleasant sensations caused by extrasystoles becoming perceptible, the administration of quinine three-times a day has been found useful.

Contraindications to the Use of Salvarsan.—J. GATE and P. BARRAL (*Journ. de Med. de Lyon*, May 20th, 1928, p. 283) state that in the course of secondary syphilis, in addition to coincidental jaundice such as cholelithiasis or ordinary infective jaundice, other forms of jaundice may develop, such as the so-called preroseolar jaundice, simple jaundice, and even icterus gravis. Hæmolytic jaundice is rare. Moreover, since the introduction of arsenical preparations the number of cases of jaundice occurring in syphilis has shown a considerable increase. Most of them may be regarded as toxic, but some are due to syphilis and constitute an herpetic Herxheimer reaction. The practical conclusions are as follows: (1) Salvarsan is contraindicated in the presence of any jaundice occurring in a syphilitic patient even when no treatment has been applied. (2) As it is impossible to say whether jaundice occurring in the course of salvarsan treatment is toxic or syphilitic,

it is best to continue with antisyphilitic treatment, but to replace salvarsan by intravenous injections of mercury cyanide, which is the least likely drug to injure the hepatic cells. Bismuth, owing to its possible toxicity, is contraindicated. (3) The significance of jaundice occurring after salvarsan treatment varies in different cases. If the treatment has been very energetic and sufficiently prolonged, and there has been no other sign of active syphilis as well as a negative Wassermann reaction, the symptomatic treatment of jaundice is all that is necessary. If, on the other hand, there is reason to suppose that syphilis is responsible, treatment by mercury cyanide exclusively should be adopted.

HICCUPS IN INFANTS.

W. R. Pendleton (*American Journal of Diseases of Children*) states that many practitioners think that little can be done for an attack of hiccups occurring in an infant after nursing. It has been demonstrated experimentally that irritation of the human œsophagus will cause hiccups, and the author has observed that infants may start to hiccup shortly after regurgitation following nursing. It seemed probable that the irritation from gastric fluids lying in a sensitive œsophagus might cause the hiccups, and it seemed reasonable that an attack might be stopped by washing any material in the œsophagus back into the stomach. When an average of 6·7 c.cm. (*between* 1½ *to* 2 *drachms*) of water was used, and an average of 30 seconds taken for consumption of the same, 57·5 per cent. of 40 infants stopped hiccuping immediately, and 15 per cent stopped fairly readily. In none of these was the attack resumed. Warm water was given by bottle, nipples with large holes proving most satisfactory, as they allowed a better flow of water.

Intracranial Hæmorrhage in the Newly Born. A STUDY OF ITS INCIDENCE, CAUSES, RELATION TO BREECH EXTRACTIONS, AND DIAGNOSIS. THEODORE C. GREENE, Boston M. & S. J. **197**: 1302 (Jan 12) 1928.

The author's summary is: 1. Intracranial hæmorrhage is the most frequent cause of death in the newly born and was found in 55 out of 177 consecutive autopsies performed at the Boston Lying-

in-Hospital. 2. The most important cause of intracranial hæmorrhage is injury to the child's head during delivery, especially if force is applied suddenly. 3. Hæmorrhagic disease is also an important factor in producing intracranial hæmorrhage. 4. Intracranial hæmorrhage occurs most often in primiparous and operative deliveries, and especially in connection with breech extractions. 5. In this clinic, however, only 6 instances of intracranial hæmorrhage occurred in 258 consecutive breech extractions (not preceded by version). 6. Intracranial hæmorrhage occurs in a number of simple, uncomplicated breech deliveries which are not considered difficult at the time. This ever present possibility emphasizes the folly of the routine use of version and breech extraction for all deliveries. 7. The diagnosis of intracranial hæmorrhage in the newly born is usually definite, and the outcome is not always fatal.

Transient Hemiplegia.—O. K. WILLIAMSON (*Journ. Med. Assoc. of S. Africa*, May 26th, 1928, p. 269) describes three cases of transient hemiplegia in elderly patients; he ascribes this to arterial spasm which did not persist long enough to produce softening in the cerebral area involved. After a fall a man, aged 62, became comatose and deeply cyanosed. The respiration was stertorous, of the Cheyne-Stokes type, the pupils were tightly contracted, the pulse was small and weak, the tongue was deviated to the right, knee-jerks were absent, and there was flaccid paralysis of the right arm and leg. When seen he was still cyanosed, but conscious and fairly rational. The pupils later became equal and rather large. The deviation of tongue, the facial paralysis, and the weakness of the right arm soon passed off, but the paralysis of the right leg persisted. The knee-jerks returned and there was no ankle-clonus. The plantar reflex was extensor on the right side and flexor on the left. The heart sounds were normal; the radial pulse was rather small, regular, and soft, and the arteries were not perceptibly thickened. Amyl nitrite was given immediately, erythrol tetranitrate in ½ grain doses was ordered every four hours, and 8 grain doses of potassium iodide thrice daily. A few days later all signs of paralysis had disappeared. Before the attack his systolic blood pressure had been 140 mm. Hg. and the diastolic pressure 90 mm. Williamson believes that spasmodic contraction of the middle coat of the middle cerebral artery produced temporary ischæmia. His second patient, a man aged 55, had had attacks of paresis in the left arm and leg for two months, associated with vertigo and headache, with complete paralysis of arm, and paresis of the leg

numbness in both limbs; they were followed by unconsciousness lasting about thirty minutes, when he occasionally passed urine. He had had six similar attacks. There was no paralysis and the knee-jerks were normal. The brachial arteries were thickened and tortuous. The systolic blood pressure was 185 mm. His third patient, a woman aged 64, suffered from occasional sudden weakness of the left hand, with numbness and tingling in the left thumb and index finger. The mouth was drawn to the left, and there was numbness and coldness of its left side. These symptoms persisted for about a week. The patient was florid and well nourished; there was no paresis, and the knee-jerks were normal. There was no obvious thickening of the arteries, and the systolic blood pressure was 210 mm. Hg. The heart was dilated; there was no bruits, but the aortic second was accentuated. At the time of an attack the pulse was small and weak, but later recovered its volume. Williamson remarks that it has been noted previously that sclerosed vessels are especially prone to conditions of spasm, and adds that it is obviously most important to recognize and treat these cases as early as possible. Elimintory measures and vaso-dilator treatment are indicated.

Adult Apical Pneumonia.—R. LEPAGE (*Bruxelles-Medical*, August 12th, 1928, p. 1337) remarks that adults are not immune to apical pneumonia, a disease common among infants: pneumonia accounts for 25 per cent. of the mortality of old age, and two-thirds of these pneumopathies occur in the upper lobe. He adds that young adults, though less frequently than the aged, are also attacked. Its diagnosis is not always easy owing to its relative rarity, its unusual localization, and its symptomatology. The onset is generally sudden with chills, pain at the base of the thorax, and elevated temperature; it somewhat resembles that of frank lobar pneumonia, but is less severe and dramatic, the typical sputum and distinct localizing signs being absent. Symptoms of general infection, among which nervous reactions (vomiting, restlessness, delirium, prostration, and torpor) predominate, are very persistent, but respiratory signs are very slight, a sharp dyspnœa, ordinary cough with no or scanty sputum, and some bronchial rales only being present. A sign of great diagnostic value is a heavy furring of the tongue. These symptoms last for four or five days or even longer, and then the signs of apical involvement appear. At times a subclavicular skodism, a souffle, or some isolated rales are present; sometimes there is dullness over the supraspinous fossa with adventitious bruits, and sometimes rales are heard over the apex of the axilla. The dullness and sputum are not early signs;

the latter is not typical and does not appear till defervescence, which is as sudden as the onset. Six cases illustrating these points are reported, the ages of the patients ranging from 19 to 32. Death occurred in only one of these. The thoracic pain, an early symptom, occurs on the same side as the lesion and always at the base of the thorax. When this pain is very severe and on the right side, and especially if icterus is also present, an erroneous diagnosis of hepatic colic might be made. More or less marked congestion of the bases, and even effusion, were found in five of the cases. Conditions usually considered as predisposing to this type of pneumonia are debilitating and cachetic diseases, such as alcoholism, diabetes, and cancer, but Lepage adds that none of his cases showed these classic predispositions, and that the only death occurred in a robust female patient, aged 19, in whom, without any apparent cause, a double bronchopneumonia developed. The treatment of apical pneumonia is purely symptomatic, though vaccine therapy may be tried.

Treatment of Early Cerebro-spinal Syphilis.—A POSITIVE Wassermann or gold-sol reaction in the cerebrospinal fluid is considered by F. BERING (*Wien. klin. Woch.*, July 12th, 1928, p. 977) an indication for malaria treatment. He adds that no thorough antisyphilitic treatment is possible without an examination of the cerebro-spinal fluid. Not much significance can be attached to a positive or negative reaction in the fluid in the secondary stage; therefore the examination should be made at the end of the treatment or during the stage of late latency, when a positive reaction is of primary importance, implying that the central nervous system is threatened by the syphilitic virus. Bering remarks that it is not certain that commencing involvement of the central nervous system can always be detected in the cerebro-spinal fluid. The examination of the blood only is certainly insufficient, since very pronounced changes may be present in the cerebro-spinal fluid, while the reaction of the blood remains negative. In the presence of a positive reaction in the cerebro-spinal fluid the routine antisyphilitic treatment is insufficient, and malaria treatment is indicated. Eight attacks of malaria are usually sufficient, but the malaria treatment should in all cases be followed by an intensive salvarsan or bismuth treatment. The malaria treatment has proved useful also in cases where, in spite of intense antisyphilitic treatment, the reaction of the blood remained positive. Bering considers that the results of malaria treatment in tabes have been variable; they were occasionally good, but sometimes there was no response. No permanent harm has been caused to

any patient by the malaria inoculation. No case of syphilis treated prophylactically with malaria developed general paralysis or syphilis of the central nervous system.

CORRESPONDENCE.

AN ANSWER TO QUERY.

TO

THE EDITORS, "*The Antiseptic*" MADRAS.

DEAR SIRS,

On going through the articles "A case for diagnosis" by Dr. D. G. Chourikar in the Jan. 1929 issue of your journal, I am led to think that the case is one of PERNICIOUS MALARIA of the cerebral or comatose type. The patient belongs to a family in which there are other cases of malaria. First there has been a sudden rise of temperature to 104°. F. and the patient becomes unconscious. A few hours later, symptoms of cerebral involvement set in. viz., convulsions associated with retraction of the head, spasms of the muscles of the trunk, cyanosis, rapid pulse, burried, respiration and dilated pupils and the patient succumbs to the attack in the short space of about 14 hours in all. This sequence of symptoms and the history point out strongly towards the case being cerebral malaria.

As the doctor himself has suggested, the proofs for the case being one of tetanus are few and those against it are many, namely absence of lockjaw, sudden onset with coma and high temperature, later on bordering upon hyperpyrexia (107°. F.). later onset of convulsions and clonic contractions of the hand -a fact strongly against tetanus, where the contractions are of tonic rather than of clonic variety. The presence of scratches in the foot and pain in the groin are probably only incidental and might have had very little to do with the attack.

The condition closely simulates spinal meningitis but the absence of the shooting pains and hyperæsthetic areas of the latter condition is significant: moreover the bowels in spinal meningitis are constipated.

The absence of chill which is made mention of in the case report does not carry much weight with it, since chill is not necessarily present in all cases of cerebral malaria.

Blood examination and history as to whether the patient has had any previous malarial attacks may greatly aid in clinching the diagnosis of the case but they both have had no place in the case report.

The case might have been treated on lines similar to those accorded to cerebral malaria as by straightaway starting with intravenous quinine, with perhaps better results.

Town Hospital
Pudukottai

Yours faithfully,
V. BALACHANDRAN, L. M. P.,
Sub-Assistant Surgeon.

"PYREXIA AND CIRRHOSIS OF LIVER IN AN OLD CASE OF SYPHILIS"

The probable cause of death in this case, (Vide Antiseptic Vol. XXVI. No. 2) was Neosalvarson.

I know very much of similar cases. A male patient of about 29 was laid up with enlarged cirrhotic liver. His blood Wasserman was double positive.

Thereupon, he was injected intravenously a dose of Neosalvarson. This resulted in severe hæmatemesis; collapse preceded a long coma, in which the patient expired, within about twenty four hours after the fatal injection.

"A word should be said regarding the treatment of Syphilis of the Liver. Arsenic compounds should not be given on account of the danger of fatality, due to influence of arsenic on the liver cells. Mercury and Iodide are thoroughly satisfactory" so says Osler.

Treatment of Early Rodent Ulcer. Vide p. 174, Vol. XXVI, No. 3 of the "Antiseptic."

For the cure of rodent ulcer by external agents, the application of Co_2 pencil under pressure may be given a trial. Better results are recorded when that is used after scraping the growth under novocain See *Ind. Med. Gazette.* Jan, 1929 pg. 35.

F. G. P. DIAS, L.M.P.

BOOK-REVIEWS

Hand book of Surgical Diagnosis.—By. Clement E. Shattock, M.D., M.S. (LOND), F.R.C.S. *Edinburgh. E. & S. Livingstone, 16-17 Teviot Place. 1st Edition, pp. 678, Ill. 78,* Price 15/.

In this hand book, the author presents in a practical manner the differential diagnosis of the commoner surgical affections, and the subject is dealt with concisely, giving all the salient points of pathology and important complications, avoiding all elaborate detail. The book introduces the subject with non-specific infections, then goes on to specific infections, ulceration, gangrene, tumours and cysts, shock, and lastly, deals with injuries and affections of each part of the body. The text is illustrated throughout with x-ray illustrations. This is a useful and practical book for medical students and practitioners.

Physical Diagnosis.—By. Charles Phillips Emerson, A.B., M.D., *London. J. B. Lippincott Coy., 16, John Street, Adelphi, pp. 553. Ill. 324. 2nd Edition Revised.* 35/-net.

The popularity of this book is demonstrated by the appearance of second edition in such a short time as less than a year from the time of the appearance of the first edition. This edition is revised and important materials of recent research, as in undulent fever and diseases of circulation, are added. The rapid multiplication of laboratory and instrumental aids to diagnosis in the recent years have deceived the students of medicine to depend more on these than to train themselves in clinical medicine and physical diagnosis; but x-ray reports and laboratory findings should be looked upon as a confirmatory evidence to physical diagnosis, and each of these has to be interpreted and evaluated in terms of the individual patient. Physical diagnosis is, and doubtless will remain the primary and fundamental method of diagnosis. This is the main principle followed by the author in this useful and instructive book.

The author begins with a discription of relatively permanent general physical characteristics, and variations of these in various nutritional and deficiency diseases, and goes on to the subject of diagnosis of different conditions affecting general body surface, including dermatitis, the descriptions of diagnostic methods and the diseases affecting the different parts of the body are dealt

with in great detail, in a clear style, with profuse illustrations and diagrams to aid the proper understanding of the subject. We have no fear in recommending it to all medical students and practitioners as a useful and instructive book for their studies and guidance.

Serum Diagnosis by Complement Fixation.—JOHN A. KOLMER, M. S., M. D., *Philadelphia. Lea and Febiger. 583 pp. 65 engravings, 1928 Price $ 700. Net.*

This work is the result of investigations which Dr. Kolman has initiated and directed during the past nine years in serum diagnosis by complement fixation.

The book is divided into four parts. In the first part a clear but brief discussion of the important principles of serum hemolysis and complement fixation is given, while the second part deals exclusively about the principles of technique.

All factors which are involved are discussed sufficiently well.

In the third part the technique of the author's method is very well described.

The last part is devoted to the practical applications of methods of serum diagnosis, and treatment of various diseases, as well as for the medicolegal identification of blood and seminal stains, the detection of meat and milk adulteration.

In our opinion the present volume is indispensable for the pathologist, while the practising physician will find it a useful addition to his library.

We recommend it as a standard in the diagnostic field of medicine. It is beautifully published.—*V. C. S.*

Acute Infectious Diseases—By. Jay Frank Schamberg, A. B. M.D., and John. A. Kolmer M.Sc., M.D., Dr. R. P. H. D. Sc., U. D. *Philadelphia. Lea and Febiger 2nd Edition 1928. 161 engravings and 27 full page plates 888 pp. $ 10. Net.*

The present second edition has been enlarged and thoroughly revised by introducing the important factor as to the value and usefulness of vaccination and production of immunity by other methods. The whole subject of vaccination has been thoroughly discussed, and the value of vaccination has been well emphasised. New chapters have been added on the prevention of diphtheria, Vincent's angina, serum anaphylaxis, erysipelas, mumps, whooping cough, cerebro-spinal meningitis, the "fourth disease," and erythema infectiosum.

The clinical details of the various diseases have been very well illustrated giving a good conception of infectious diseases.

The advances in our knowledge and methods of handling acute infectious diseases in recent years are comprehensively set forth by the authors.

The whole work is copiously illustrated and are very effective.

This is a valuable and instructive volume and we have no doubt that all physician, and medical students will find this work a useful guide in the treatment of infectious diseases.—*V. C. S.*

Morpheus the Future of Sleep.—By. D. F. Fraser-Harris, M D., D.Sc., F.R.S.E. *London: Kegan Paul, Trench, Trubuer & Co., Ltd., 1928. Pp. 94.*

In this little book the author gives a very good idea of what sleep consists in as regards the body, the brain and the mind.

It is written in a simple style, and all technical terms are avoided, so that it could be understood by all.

The chapter on Hygeine of Sleep is very interesting and many useful suggestions are given, which may be followed by all with benefit.

A very descriptive chapter is devoted on Sleep and Sleeplessness.

The last chapter on the future of Sleep contains an interesting forecast of the direction in which research into the biology and psychology of sleeping and dreaming should take in future:

This is a brilliantly written book of absorbving interest that ought to be read by everyone:—*V. C. S.*

NOTICE.

THE ALL-INDIA OPHTHALMOLOGICAL SOCIETY.

The above Society was recently organised to bring together medical men who are interested in ophthalmology and to facilitate exchange of ideas amongst them.

The membership of this Society is open to all Medical Practitioners who practise Ophthalmology as a speciality or are interested in Ophthalmology and whose qualifications are satisfactory to the Committee.

Applications for membership should be made in writing to one of the Secretaries and recommended by a member of the Committee. This rule holds good for this year. Thereafter all applications should be supported by two members and the election will be made by the Committee.

The management of the society is in the hands of a Committee consisting of a President, two Vice-Presidents, two Secretaries, two Treasurers and ten other members, one of whom at least will be from each of the following Provinces: Madras, Bombay, Bengal, Punjab, Central Provinces, United Provinces and Mysore.

The present Committee consists of the following gentlemen:—

President:	Lt. Col. W. V. Coppinger, I.M.S., C.P.
Vice-Presidents:	Dr. F. Kugelberg. Tirupattur, Ramnad. Dr. B. P. Banaji, F.R.C.S.I., Bombay.
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Committee:	Dr. J. N. Duggon, D.O., Bombay. Dr. Sardesai. L.R.C.P. & S., Bombay. Major E. C. J. Kirwan, I.M.S., Calcutta.

Dr. S. K. Mukerjee, D.O., D.O.M.S. Calcutta.
Lt. Col. P. Gidney, I.M.S. (Rtd.) Calcutta.
Dr. B. K. Narayana Rao, D.O., Bangalore.
Dr. E. V. Srinivasan, M.B., Madras.
Major Dick, I.M.S., Punjab.
Dr. B. G. S. Acharya, D.O., Lucknow,
Dr. S. P. Shroff, F.R.C.S., Delhi.

The subscription for membership is Rs 15/-per year payable in advance.

The Society will meet once a year at a time and place decided on by the Committee. At this Annual Meeting papers will be read and discussed and patients and pathological specimens will be exhibited.

Any member wishing to read a paper should intimate the Secretaries at least a month previously and forward a copy of the paper with a short abstract to be published in the papers.

All communications made to the Society by and through members and considered by the Committee suitable for publication will be published in the form of "Proceedings" of the Society as soon as possible after the Annual Meeting. A copy of the proceedings will be sent to every member whose subscription has been duly paid up.

The first meeting of the Society will be held in Bombay during the third week of December. The proceedings are expected to occupy 2 or 3 days.

All medical men who are eligible for membership are earnestly requested to enrol themselves and to send in their subscriptions to Dr. G. Zachariah. Jt, Secretary, "Flitcham", Marshall's Road Egmore, Madras as soon as possible.

ERRATUM.

In the Jubilee (April, 1929) Issue, page 330, line 25 from top under the heading "Lupus Erythematosus" please read "The application must be *light and not more than* ten seconds etc., instead of "must be *light and more than* ten seconds etc."

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