ABSTRACTS FROM CURRENT MEDICAL LITERATURE.

EDITED BY ROY F. YOUNG, M.B., B.C.

MEDICINE.

Practical Application of the Luetin Test. By Hideyo Noguchi, M.D. (New York Medical Journal, 22nd August, 1914).—A little over two years ago it was shown that certain cases of syphilis give a distinct local reaction to an intradermal injection of treponema pallidum (luetin). Among non-syphilitic individuals there was no such reaction. The early experience with luetin showed that the reaction is more uniformly present in chronic cases than in primary or secondary forms of acquired syphilis. In congenital syphilis the reaction is more frequently found to be positive among late cases than among new-born infants. The observation of about fifty investigators in the last two years give the following statistical estimation of the practical value of the luetin reaction:—

In primary syphilis, present in 30 per cent of cases, and usually very mild; in secondary, in 47 per cent, and usually mild; in tertiary, in about 80 per cent, severe, and usually pustular; in general paralysis and tabes, in 60 per cent; in congenital syphilis, in about 70 per cent. The Wassermann reaction is much more constant among primary and secondary cases, but the reverse holds for chronic cases, especially when under treatment.—Adam Patrick.

The Diet in Typhoid Fever. By Lewellys F. Barker, M.D. (The Jour. of the Amer. Med. Assoc., 12th September, 1914).—Barker writes in favour of a liberal diet for enteric fever patients. It was formerly almost a universal practice to limit the diet to fluids, and to a low caloric intake. Emaciation was believed to be inevitable, and losses of weight as great as 30 per cent and 41 per cent have been recorded in extreme instances. As early as 1882 von Hoesslin had shown that foods were absorbed almost as well in typhoid fever as in health, and later observers came to the same conclusion. Shaffer and Coleman (1909) concluded that by the use of diets of high caloric value, especially rich in carbohydrates, it is possible to prevent not only the “febrile loss” of body protein-nitrogen in patients suffering from typhoid fever, but also that due to the so-called toxic destruction of body protein. They are inclined to believe that there is a greater need for carbohydrate in fever than in health, and that if the carbohydrate of the food intake be insufficient, the body protein will be drawn on to supply energy in an available form; if, on the contrary, enough carbohydrate be given, the body protein will be protected. Kocher (1914) points out
that while nitrogen loss may be compensated for by a high caloric intake, there are periods in the disease when nitrogen equilibrium cannot be maintained.

Protein may be taken in sufficient amount as eggs and milk. Schottmuller and other German writers gives as much as 100 gm. of scraped meat per day. If soup is given, it is well to add eggs and cereal. Eggs may be taken raw, or beaten up with milk, or soft boiled. From four to eight eggs may often be given in the twenty-four hours. The carbohydrate may be given partly as milk, partly as bread or toast (with butter), and partly as lactose added to the milk. Coarse cereals with cellulose are to be avoided. Boiled rice or mashed potatoes may be given as variety. Lactose is a very important article in the diet. Fat may be given, but not all patients bear fat well, especially early in the disease. It may be tried in the form of cream, butter, or yolk of egg. Fruit juices, to which lactose has been added, may be given so long as there is no diarrhoea.

It is necessary to begin this liberal diet cautiously. Coleman recommends a pure milk diet for two days in all cases. If the patient is very ill he may be kept on fluid diet—1 litre of milk, 50 cc. cream, 50 gm. lactose, up to 1·5 litres milk, 0·5 litres cream, and 1 lb. lactose, divided into eight feedings. In mild cases the patients may take from the beginning buttered toast, mashed potatoes, and cereals.

The high caloric diet will be objected to by many. The prejudice against it is contributed to by false ideas regarding the character of the intestinal contents in enteric, and their relation to the ulcers. Haemorrhage, perforation, and relapse have been ascribed to dietetic errors, because they sometimes follow them.

—Adam Patrick.

Spasmodic Closing of Cerebral Arteries and its Relation to Apoplexy. By Alfred Gordon, M.D. (Albany Medical Annals, August, 1914).

One of the fundamental principles in the physiology of the vasomotor apparatus is the existence of a central mechanism in the medulla. A continuous flow of impulses from this area maintains the tone of the blood-vessels. Destruction of this bulbar centre is followed by abolition of the vasomotor reflex, and the blood-vessels remain dilated. For a long time there was a belief that cerebral blood-vessels have no independent innervation, and that they passively follow variations in blood pressure. This contention has been proved inaccurate, and it has been shown that in a pronounced fall of blood pressure the cerebral vessels dilate. The existence of a nerve supply to the vessels was shown also by the contraction of the cerebral vessels which follows injection of adrenalin into the carotids, and by anatomical demonstration of the nerve elements in the walls of the vessels.

This bulbar centre is not the only one which influences the vasomotor apparatus. Observations are on record which tend to prove that vasomotor disturbances may be also of cortical origin. In one case the presence of a cyst in the motor area caused vasomotor disturbance in the contralateral hand, and this passed off with the removal of the tumour. Disturbances have also followed the removal of a portion of the cortex.

There is a well-known group of clinical cases apparently due to temporary closure of cerebral arteries—intermittent or transient attacks of hemiplegia or monoplegia. The paralysis may be of any degree, and may or may not be accompanied by aphasia. The author records 14 such cases, in 8 of which he made a post-mortem examination. The main characteristic manifestation was a sudden onset of hemiparesis. The attacks varied greatly in frequency (three
months to two years) and in duration (a few minutes to a few days). In the 8 who died the attacks became more severe, and death occurred with signs of severe apoplexy. In all these cases, post-mortem, softening was found in the internal capsule and portions of the basal ganglia. In 7 of the 8 cases the Wassermann reaction was positive. Administration of nitro-glycerine and anti-syphilitic remedies apparently prolonged life.

A close analysis of the cases shows that there may occur such a disturbance of the vessel wall as to interfere with the circulation in, and therefore with the function of, the nerve tissue supplied by the vessel. In a case of Lindsay Steven's (1907), in which spasmodic contraction of the main vessel occurred, no arterial disease was found post-mortem, but only an area of white necrosis in the vicinity of the blood-vessels. The gradual evolution of the symptoms from mild to severe, together with the post-mortem findings, permits the conclusion that the intermittent spasmodic contraction of the cerebral vessels gradually leads to a destruction of the tissue supplied by them through a process of softening.

—Adam Patrick.

Surgery.

The Operation of Election for the Radical Cure of Inguinal Hernia. By E. A. R. Newman (Indian Medical Gazette, August, 1914).—After a discussion on the nomenclature used to denote the various types of inguinal hernia, the author describes the operation which he has devised and is accustomed to perform; the incision is made 2 to 1 inch above, and parallel to the inner two-thirds of Poupart's ligament. It is from 3½ to 4 inches in length. The canal is laid open throughout its length. When the sac is found it is cleared in the usual way, and, in the tunical variety, the funicular portion is cut off from the scrotal part. The disposal of the sac depends on whether the hernia is funicular or completely tunical; in the former it is twisted into a cord and hoisted up through the canal after it has been transfixed by a long ligature, the latter being brought forward through the external oblique aponeurosis; in the second case a purse-string suture is passed round the neck and tied off.

The transversalis and internal oblique, at the site of the inguinal canal, are pulled down in front of the cord, and sutured to the back of Poupart's ligament with two or three mattress sutures of silkworm gut. The outermost stitch should close the internal abdominal ring, and the innermost lessens the superficial ring round the cord. The concluding steps of the operation are conducted as usual.

—Charles Bennett.

Treatment of Hernia of Muscle by Aponeurotic Grafts. By Dr. Manuclaire (Archives Generales de Chirurgie, 25th July, 1914).—Although observations on muscular hernia are not frequent, yet the author has noted several cases. Three of the cases which he describes refused operation. A fourth was a hemiplegic who sustained fracture of both bones of the left leg about the usual situation. The injury healed well, but the patient returned six months after his dismissal from hospital, showing now a hernia of the tibialis anticus. Doubtless the hemiplegic condition had favoured the aponeurotic distention. The author, having at this time had some experience of aponeurotic grafts in