

PART III.

SPECIAL REPORTS.

REPORT ON PRACTICE OF MEDICINE.

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(Continued from page 295.)

VI. ON LEUCOCYTOSIS IN CASES OF PUS-FORMATION ANY-
WHERE IN THE BODY.

VII. CHRONIC SULPHONAL POISONING.

VIII. HÆMORRHAGES IN CIRRHOSIS OF THE LIVER.

IX. ON BABINSKI'S REFLEX.

X. NAPHTHALIN AND OXYURIS VERMICULARIS.

VI. LEUCOCYTOSIS IN CASES OF PUS FORMATION ANYWHERE
IN THE BODY.

Maclean (*Med. News*, N. Y., Dec. 2, 1899, p. 715) has contributed a paper which shows the great value which an examination of the blood possesses from the diagnostic standpoint. He refers first to the physiological leucocytosis which occurs after a meal, and recommends that all blood examinations should be made preferably before breakfast. Pathological leucocytosis is generally in excess of any form of physiological leucocytosis, and the latter can generally be easily eliminated. Leucocytes are present normally in the peripheral circulation in the proportion of 6 to 9,000 per c.m.; and, as the result of a large number of blood counts made in cases of suppuration, he states that "in all cases of inflammatory disturbance, accompanied by pus-formation, leucocytosis is an invariable accompaniment, except in a few instances." The suppurative process may be acute or chronic, deep-seated or superficial, encapsulated or diffuse, but the leucocytosis is present. The leucocytosis begins with the formation of pus and increases with it, but its

degree is not always proportionate to the amount of pus present. The latter is probably to be explained if we look upon the leucocytosis as due not so much to the mere presence of pus, as to the resisting power of the patient. He records a number of cases in which the blood count helped to clear up the diagnosis in a wonderful manner. Some examples may be given. *Appendicitis*.—In the catarrhal form there is little or no increase, but in the purulent and gangrenous forms there is always an increase. The advance of a case from the former to the latter may thus be detected, and shows when surgical interference should be adopted. In one case, that of a male adult, the leucocytes numbered 19,600 at first count. Twenty-four hours later, temperature, pulse, and general condition better; leucocytes 22,000. Next day symptoms still improving; leucocytes 27,000. An immediate operation was urged, as, notwithstanding the improving symptoms, the increasing leucocytosis showed that the abscess was increasing in size. On operating, the appendix was found to be gangrenous in an abscess cavity, containing 9 oz of pus. In other five cases of appendicitis three gave leucocyte counts of 31,200, 34,000 and 16,000, and were found on operation to be purulent; and two gave counts of 9,600 and 7,400 respectively; and in the former an operation disclosed a healthy appendix, surrounded and bound down by many adhesions, and the latter a healthy appendix but impacted gall-stones. The blood count is therefore an important means of differential diagnosis, as it serves to distinguish appendicitis from many conditions which resemble it clinically, such as hepatic or renal colic, intestinal colic, intestinal obstruction (without gangrene), faecal impaction, typhoid fever, nephralgia, floating kidney, ovaralgia, old adhesions, and tubercular peritonitis, which all fail to give any leucocytosis. *Tuberculosis*.—In pure tubercular lesions, whether accompanied by pus-formation or not, there is no leucocytosis. Thus, in a case of peritonitis in a child, tuberculosis was expected. The blood count gave 19,300 leucocytes, and thereby excluded tuberculosis. In another case of enlarged cervical gland, with fluctuation, the leucocytes numbered 6,200, and showed it to be a tubercular abscess. Other instances of its applica-

tion are given. Thus, in a case regarded as muscular rheumatism, the leucocytes numbered 20,600, and led to a suspicion of osteomyelitis, confirmed by operation. In a case with symptoms of obstruction of the gall-bladder they numbered 14,000, and an operation showed an empyema with impacted gall-stones. In another case of suspected abscess of liver they numbered 17,200, and an operation found a large abscess in the right lobe. In another case, thought to be appendicitis, in which an operation was advised by a consultant, they numbered 6,800, and excluded appendicitis, but suggested typhoid, which was confirmed by Widal's test. Salpingitis and perinephric abscess were revealed in the same way, and its wide application is obvious. In that very important class of cases in which obscure and deep-seated formations of pus occur beneath the diaphragm, subphrenic abscesses, the test, if proved to be always reliable, will be of great service. It is of service also in diagnosing internal hæmorrhage. It is often difficult to say whether a case is one of concussion or compression from hæmorrhage; in the former there is no leucocytosis, whereas it is present in the latter. It appears within an hour or so after hæmorrhage has occurred, and persists for days, sometimes weeks. He gives a case of a male who was injured by being thrown from his horse. The question lay between concussion or cerebral hæmorrhage. Leucocytes were 9,100 and red cells 4,700,000, and hence a diagnosis of concussion was made, which proved correct.—*Edinburgh Med. Jour.*, March, 1900.

VII. CHRONIC SULPHONAL POISONING.

Dietrich contributes a review of the reported cases of sulphonal poisoning (*Therap. Monatshfte*, April, 1900). The drug was introduced by Kast in 1888, and since then 30 fatal cases have been described, and about fifty non-fatal severe cases. Considering how much sulphonal is used, Dietrich thinks this a small number, but doubtless many cases have passed unrecorded. They have all been chronic in character, and have occurred during the medicinal administration of the drug, mostly in lunatic asylums. The amount necessary to cause poisoning varies extremely—

1,500 grms. in six years, 224 grms. in 205 days, 893 grms. in 971 days, 128 grms. in 91 days, and similar amounts have frequently been taken without any ill effects. On the other hand, death has occurred after 16 grms. in one month, and 90 grms. in three months, and severe poisoning after 180 grms. in 270 days, 132 grms. in 120 days, and so on. Poisoning, therefore, does not depend directly on the amount taken, but probably to a large extent on the circumstances of the individual. Women are more commonly affected than men, and poor diet, age, and debility all increase the tendency. Constipation specially favours poisoning, as the drug has more chance of being largely absorbed. It is sometimes found unchanged in the urine. None of these points, however, sufficiently explain the predisposition of certain persons as compared with others.

The *post-mortem* changes throw no light on this either. Degenerative processes and hæmorrhages are found in the liver and kidneys and in other organs, and occasionally there is gastro-enteritis. Experiments on animals have given similar results.

The symptoms are first gastro-intestinal—colicky pains, vomiting, constipation—and at the same time a cherry-red colour of the urine. Soon ataxia, paresis, slow speech, and more or less stupor occur. The pupil and tendon reflexes are weakened or absent. The heart may suddenly fail and cause death. A high temperature is often observed. The red colour of the urine is said to be due to hæmatoporphyrin, an iron-free derivative of hæmoglobin, but, according to Quincke, it is a new, hitherto undescribed pigment. Dietrich, however, says, that he isolated a body from such a urine, which was undoubtedly hæmatoporphyrin. The urine is acid, and does not decompose, no matter how long it is kept. Albumin is present in about half the cases. Blood cells, bladder cells, and kidney tube-casts may also be found.

Sulphonal should never be given continuously, and its administration should be interrupted every five to seven days or thereabouts. If chronic poisoning do occur, purgatives and diuretics should be given to clear it out of the body. Alcohol and digitalis and other heart and circulatory

stimulants should be given. Diuretin is specially useful. Large doses of sodium bicarbonate should also be administered to increase the alkalinity of the blood, while magnesium carbonate and potassium acetate are also useful. Vomiting, colic, and other symptoms must be treated by the usual remedies.—*Edin. Med. Jour.*, May, 1900.

VIII. ON FATAL HÆMORRHAGES IN CIRRHOSIS OF THE LIVER.

Dr. R. B. Preble (Chicago) in a careful paper based on 60 autopsies comes to the following conclusions:—

1. Fatal gastro-intestinal hæmorrhage is an infrequent but not rare complication of cirrhosis of the liver.

2. In the great majority of the cases the cirrhosis is atrophic, but it may be hypertrophic.

3. In one-third of the cases the first hæmorrhage is fatal; in the other two-thirds the hæmorrhages continue at intervals over a period varying from a few months to several years, the maximum given being eleven years.

4. In one-third of the cases the diagnosis can be made at or before the time of the first hæmorrhage. In the other cases the diagnosis cannot be made at all or only after months or years, during which time other symptoms of cirrhosis have developed.

5. Œsophageal varices are present in 80 per cent. of the cases, and in more than one-half of this 80 per cent. the varices show macroscopical ruptures, and it is probable that many other ruptures would be found if the varices were tested by injection of air or fluid.

6. Fatal hæmorrhages occur in cases which show no Œsophageal varices, and they are probably due to the simultaneous rupture of many capillaries of the gastro-intestinal mucous membrane.

7. The hæmorrhages in this class of cases are usually preceded by other symptoms of cirrhosis, but the first symptom may be a fatal hæmorrhage.

8. In 6 per cent. only of the cases which showed Œsophageal varices was the cirrhosis typical—i.e., showed ascites, enlarged spleen, and subcutaneous abdominal varices.—*Amer. Jour. of Med. Sci.*, March, 1900.

IX. BABINSKI'S REFLEX.

Cestan and Le Sourd (*Gaz. des Hôp.*, Nov. 23, 1899) have made a study of Babinski's reflex. Babinski has shown that if a pin or needle were drawn along the outer part of the sole of the foot of a person in whom the central motor tracts were normal, the toes would be flexed; if, however, the pyramidal tracts were injured the toes would be extended. Cestan and Le Sourd have examined this reflex in 300 persons, many of whom were in good health. They have never obtained extension of the toes in a normal adult. Extension of the toes from irritation of the sole of the foot occurs in normal infants, and the age at which this reflex changes in character has not been determined. In rare cases the pyramidal tract may be injured without the appearance of Babinski's reflex, but Cestan and Le Sourd have never obtained this reflex in adults when the pyramidal tract did not seem to be involved. The sign is of diagnostic value between hysterical and organic hemiplegia. This "phenomenon of the toes," as Babinski called it, may develop very soon after an apoplectic attack. Cestan has found it one hour after an apoplectic "attack," and at a time when the knee-jerk was diminished; he was able from this sign to dispute the diagnosis of hysteria that had been made in the case, and to show that the disease was organic. The sign of Babinski is very frequent in hemiplegia, especially if the cases in which the arm is much affected and the leg only slightly so, and the cases in which *organic* disturbance of sensation on the sole of the foot occurs, are not considered. Cestan and Le Sourd have never seen the extension of the toes in hysterical hemiplegia. The Babinski reflex may occur during an epileptic convulsive seizure and disappear later. Absence of the sign does not prove that the pyramidal tract is intact.—*Internat. Med. Magazine*, Feb., 1900.

X. NAPHTHALIN AND OXYURIS VERMICULARIS.

Dott. Agostino Sorini gives a preliminary dose of calomel and then for a week twenty-two grains of the remedy each day. At the end of the second week no worms were found, and the feces were free from them during about two months.

Care should be taken (1) that the remedy is pure; (2) to forbid fats and alcohol, in which it is soluble; (3) not to use a too large dose and to interrupt from time to time its administration to avoid untoward phenomena from kidneys, bladder, and eyes, such as have been pointed out by various observers.—*Gazzetta degli Ospedali e della Cliniche*, 1900, No. 6, and *Amer. Jour. of Med. Sci.*, May, 1900.

DEAFNESS AS A RESULT OF THE ABUSE OF PHENACETIN.

H. GULEKE (*Zeitschr. für prak. Aertze*) gives a prescription for powders containing 0.7 grm. of phenacetin, one powder to be taken twice daily. Through the stupidity of those in charge, the powders were given every two hours; so that in the course of less than 24 hours the patient took 7.0 grm. of the drug. Aside from other toxic symptoms, the patient was entirely deaf. On the subsidence of the general symptoms the deafness continued and has proved to be permanent. Meningitis could be excluded, and the only explanation is that the function of the ear was entirely destroyed by the phenacetin.—*The Laryngoscope*.

RECURRENCE OF THE TONSIL AFTER OPERATION.

F. E. HOPKINS (*N. Y. Med. Journal*, December 2, 1899) reports an operation which was performed upon a girl thirteen years of age; some adenoids were removed also under ether at the same time, the tonsils were thoroughly removed, pressure being made from the outside. An examination three weeks later justified such an expression. In four months the patient was seen during an attack of acute inflammation of the tonsillar tissue, and the left gland was found considerably enlarged. Two months after the tonsil was again removed, and under the microscope proved to be simple hypertrophy.—*The Laryngoscope*.

POST-PUERPERAL PSOITIS.

WALTER C. WOOD says post-puerperal psotitis is to be thought of after severe labour when fever is associated with marked pain in the iliac fossa, especially on extending the leg, and a tumour is made out. It must not be confounded with renal affection, perinephritic phlegmon, abscess by congestion, and especially appendicitis with abscess. The best possible drainage is the proper treatment.