

The experiments seemed to prove that the peritoneal cavity does not contain microorganisms, since these were almost uniformly absent from the gauze introduced at the beginning of the operation, even when there was adhesive peritonitis subsequently, which seemed to support Bumm's view that such peritonitis following an aseptic cœliotomy is due not to infection, but to mechanical or chemical irritation.

Examinations of the contents of cysts and adherent tubes, even when these were purulent, showed in the majority of cases an absence of virulent organisms, which explains why such fluids often escape into the peritoneal cavity without usually causing serious consequences, and that irrigation with antiseptics is superfluous under the circumstances. Practically strict asepsis, though it may not render the cavity perfectly aseptic in a bacteriological sense, is still amply sufficient.

PÆDIATRICS.

UNDER THE CHARGE OF

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A CASE OF ACROMEGALY IN AN INFANT OF FOURTEEN MONTHS.

MONCORVO, of Rio de Janeiro (*Revue mensuelle des Maladies de l'Enfance*, December, 1892), reports a well-marked case of acromegaly, observed in conjunction with microcephalus, in a female infant fourteen months old. The case is interesting in several respects, especially as to the age of the subject. The child was born at term, began teething at four months, and had none of the eruptive fevers. The mother was a delicate woman of very nervous temperament, who from the second month of her pregnancy had been subjected to violent emotion, caused by a rupture with her husband and her subsequent abandonment. The child at fourteen months of age exhibited well-marked signs of congenital microcephalus, with the consequences of bilateral cerebral atrophy—idiocy, aphasia, paraplegia, contractures, etc.; but also, besides these, the fundamental symptoms of the acromegaly of Pierre Marie—the retreating forehead, the vertical elongation of the oval of the face, the great enlargement of the nose, the prominence of the superior maxilla, the thickening and advancement of the lower lip. In addition to these facial signs there was cervico-dorsal kyphosis with lumbar lordosis and projection of the anterior plane of the chest, compensated by flattening of the abdominal wall; and finally, the spade-like hands, with prominent thickened palmar surface, short fingers of uniform width and snusage-like appearance.

From a study of all cases reported up to 1890, Souza Leite states that, in the cases where the beginning could be definitely fixed, the manifestations of acromegaly appeared between nineteen and twenty-six years; in only one case, that of Freund, did the trouble commence as early as puberty. Marie stated that the disease was neither congenital nor hereditary. While it is impossible to assert that, in the case under discussion, the disease was congenital, it is certainly evident that its onset must have occurred very close to the time of birth. Among the antecedents was to be noted a nervous temperament in the maternal grandmother and in the mother, with great mental anxiety during the pregnancy, and on the father's part whimsicality and levity of character; but no history of acromegaly in any member of the family. The coexistence of microcephalus, with its well-marked consequences, adds another element of interest to the case, which in this respect, as well as in the age of the subject, is unique.

A CASE OF CHYLOUS ASCITES IN AN INFANT.

NIEWONDT and ROZENZWEIG (*British Medical Journal*, 1892, ii. p. 123) report a case of this character in a child of fifteen months. The abdomen was tapped twelve times within three months, examination after each puncture showing integrity of both abdominal and thoracic viscera. The case was finally cured.

The liquid withdrawn by the aspirator was thick and looked like milk. Its specific gravity was 1022, reaction neutral, and odor nauseous. There was no spontaneous coagulation, but a coagulum formed after heating. By the addition of nitric acid a white deposit was formed, becoming yellow when the liquid was heated. Caustic potash increased the fluidity of the liquid. Under the microscope, in the midst of a finely granular serum, large nucleated cells were observed, the general picture being that of chyle.

Such cases are quite rare. Burey, who has collected thirty-three cases from the literature, attributes chylous ascites either to compression of the thoracic duct, filariasis, tuberculosis, or the puerperal state. In the present case none of these causes could be considered.

A REMARKABLE INSTANCE OF CURATIVE EFFECT OF EXPLORATORY LAPAROTOMY.

In a paper presented to the Société Anatomique de Paris, PIERRE DELBET (*Bulletins de la Société Anatomique de Paris*, 1892, October and November, p. 681) records a remarkable instance of the curative effect of an exploratory laparotomy upon a case of syphilis of the liver. The patient was a boy of two years and four months who had always been delicate. Toward the age of a year and a half he had presented a generalized eruption, which had yielded rapidly under alkaline baths prescribed by the family physician. Shortly after this the child had commenced to fail and lost appetite. It was soon noticed that the abdomen was becoming enlarged, and a blister was applied to the right hypochondrium. The health, however, continued to fail until at the age of two years and four months he was seen for the first time by the author. He was then greatly emaciated; the skin presenting a

pale yellowish tint, but not jaundiced. The abdomen was greatly enlarged, the right side, from costal border to the iliac fossa, being filled with a tumor continuous with the liver. Its surface was smooth and firm to the touch. Syphilis was immediately suggested, but, in spite of the eruption previously noted, this was positively rejected by the family attendant. The only possible alternative was to attribute the growth to malignant disease—sarcoma—with very grave prognosis. In view of this, an exploratory operation was made, and showed that the tumor consisted of the enlarged right lobe of the liver, which was pale in tint with violaceous markings. A mass of enlarged glands could be felt in the gastro-hepatic omentum, while along the external border of the rectus abdominis, just outside of the peritoneum, was a chain of nodes, like indurated glands. One of these was removed for study, the impression at the time being that the case was one of diffused sarcoma, and, therefore, unsuitable for further interference. Before closing the wound, several punctures were made in the liver, at the request of the physician, but they revealed nothing. The operation was thus purely exploratory.

The result was surprising. After three days the child regained appetite and cheerfulness, which had been lost for several months. Even before the sutures were removed, he was kept in bed with difficulty, and as soon as permitted began to play with other children. He ate, threw, and complained no more. The liver rapidly decreased in size; and therefore, no longer doubting the syphilitic nature of the disease, the author advised specific treatment, but was still opposed by the physician, who again refused to accept such a diagnosis. Two months and twenty days after the operation the liver had regained its normal dimensions. A few days later, however, three gummata appeared almost simultaneously, one upon the forehead and two in the scalp, and positively proved the nature of the affection, after which anti-syphilitic medication was begun, but at a time when the liver had already returned to its normal size.

Delbet reports this very singular observation, but does not presume to offer an explanation, although he does not accept as satisfactory any of the theories heretofore advanced.

THE ANÆMIA CAUSED BY THE ANCHYLOSTOMUM DUODENALE.

ERVANT ARSLAN (*Revue mensuelle des Mal. de l'Enfance*, December, 1892, p. 555) makes an interesting report of the study of twenty-one cases of this parasite occurring in children under fifteen years of age. The cases all occurred within a limited territory in the provinces of Padua and Venice; they were confined to the poorer classes, and usually appeared in families in which other members were affected. The onset is always characterized by digestive disturbance, especially of the intestine, diarrhoea or constipation, colic, anorexia or abnormal appetite, vomiting after food, sometimes convulsions. This first period usually passes unnoticed, the disturbance being attributed to indigestion or gastro-intestinal catarrh. To these first manifestations are soon joined the symptoms of anæmia, which become rapidly aggravated. After a time, more or less long, the whole series of symptoms becomes rapidly worse, and with loss of flesh fever becomes more marked, and the little patient presents the appearance of advanced phthisis. Happily, in children the course is quite slow before arriving at so extreme a point.

An examination of the blood shows a combination of the characteristics of chlorosis and pernicious anæmia—marked diminution of hæmoglobin (in some cases the proportion falling as low as 13 per cent.); the reduction in the number of red corpuscles, which are pale, easily alterable, and not forming rouleaux; micro-poikilocytosis; sometimes megaloplasts of Hayem and granular protoplasmic masses; slight increase in the number of leukocytes of various sizes, of which the largest contain small black granules.

The urine is pale, of low specific gravity, often neutral in reaction, and generally increased in quantity. Sometimes albumin is present. In the last stage appears a peptonuria.

The examination of the stools is most important. These are sometimes diarrhetic, and often streaked with blood; in other cases they are normal. The eggs of the anchylostomum are quite characteristic, and appear with varied segmentations (mono-, bi-, polycellular). If the stools have stood for more than a day the larvæ may be seen in process of development. The ova of the ascaris lumbricoides often accompany those of anchylostomum; and crystals of Charcot-Leyden with some red globules may be at times observed. If the cause has been recognized in time the prognosis is not bad. Treatment is simple. The ethereal extract of male fern is efficacious, and has been used by the author for children in a dose not exceeding one drachm in aromatic emulsion, to be taken at night in two parts, and followed next morning by a purgative. This dosage may have to be repeated several times at intervals of two or three days. After expulsion of the worms, tonics of iron, quinine, and the like are indicated.

Especially interesting attaches to the author's researches into the pathogeny of this anæmia. Up to 1889 all writers attributed it to the direct withdrawal of blood made by the worms fixed to the intestinal mucous membrane. At that time Lussana advanced the view that the anæmia was a result of the absorption of a toxine generated in the intestine by the presence of the anchylostomum. This theory has received confirmation from Arslan's researches, which demonstrate one of the most striking types of auto-intoxication. After extracting the toxins from the urine of two patients by the method of Brieger-Otto, inoculations of rabbits were made, with progressively increasing doses. These animals quickly presented all the characteristic blood-symptoms of the anæmia under consideration. After discontinuing these injections, the animals gradually regained their former condition, with coincident retrogression of the blood-lesions. As control experiments, the same process was carried out with the urine of these patients after expulsion of the worms, or of persons affected with other forms of anæmia, without obtaining the slightest change in the blood of the rabbits inoculated.

The author, in conclusion, suggests that this experiment, which has been applied to the anæmia caused by the anchylostomum, may lead to the explanation of the nervous and general symptoms which so frequently attend the presence of other intestinal parasites in children.

THE TREATMENT OF CHOLERA IN CHILDREN.

BAGINSKY (*Internationale klinische Rundschau*, 1892, No. 45, p. 1830) gives a timely sketch of his treatment of this disease in children. After referring

to prophylaxis, which needs no special mention, he recommends, as all other writers do, the most careful treatment of the slightest manifestation of diarrhœa occurring during the prevalence of cholera. In these cases he deprecates the use of opium. If the tongue is coated, a few drops of hydrochloric acid in decoction of althea may be given; or small doses of calomel, if decided fever, nausea, and coated tongue accompany the diarrhœa and show the participation of the stomach. Other antiseptics, such as naphthalin, iodoform, carbolic acid, benzoate of soda, etc., have not proved of much value, except, perhaps, resorcin as an anti-fermentative in acute intestinal catarrh. This drug may be given in doses of from one-fifth to three-quarters of a grain. Salep and starch enemata are to be avoided, because they simply serve to increase fermentative changes in the bowel. Sherry, port wine, or cognac may be required as a stimulant. The abdomen should be protected with a warm binder, or, if decided fever be present, a wet pack to the belly may be of advantage. If diarrhœa persists after the fever subsides, nitrate of silver or tannic acid may be used, preferably as a clyster. Salol, in doses of one-fifth to two-fifths of a grain to sucklings, and from two-fifths to four-fifths of a grain to children two or three years old, several times a day, may be given. This dose may be increased to 1 or 2 grammes daily for still older children.

If, despite this cautious treatment, vomiting is added to the diarrhœa, with sharpened features and other evidences of a true choleraic attack, a warm mustard bath should be given, followed by brisk rubbing of the skin, and the administration of cognac in black coffee, with continuation of the previous treatment. Ice-cooled Seltzer water with cognac may be given to allay the thirst.

In the algid stage the indication is to maintain the circulation. Cantani, Kroaecker, and Meinert employ for this purpose subcutaneous injections of a 1 per cent. solution of sodium chloride (made, according to Cantani, of four grammes sodium chloride and three grammes carbonate of sodium to the litre of water). Hypodermatic injections, also, of tincture of musk, ether, or spirits of camphor, especially the first two, are valuable in this stage, as are strychnine ($\frac{1}{10}$ gr.) and quinine ($1\frac{1}{2}$ gr.). Generally speaking, the chance of life lies not so much in the hands of the physician as in the attentive devotion of the nurse in keeping up frictions and baths and administering frequent small portions of ice-water, cognac, and coffee.

With the beginning of reaction this assiduity must be redoubled. Failure of the pulse must be met by subcutaneous infusion and injections of tincture of musk and ether. The patient should be covered more warmly, and a gentle perspiration be encouraged, but a warm pack to produce sweating is injurious. The urinary excretion should be watched, and, if retention be noted, the catheter should be employed. In other respects the usual treatment of typhoid fever should be followed. High temperature, delirium, uræmic convulsions, parotitis, pneumonia, and nephritis are to be treated in the usual way. In convalescence extreme care in diet should be enforced, and return to the ordinary mixed diet should be most gradual.