

is a white cedema, which is intermittent and precedes ascites. The skin is glossy and tense, and retains the impress of the finger. It is present upon the extremities and over the liver. Among other symptoms present are pruritus, hemorrhoids, a tendency to hemorrhage, purpura, and hepatalgia. The symptoms are ascribed to an insufficiency of the hepatic function and the suspension of the antitoxic activity of the liver. From this fact a milk diet is indicated, together with abstinence from alcohol and the administration of antiseptics. Of the last salol may be given in daily doses of one or two grammes, and calomel in daily doses of a centigramme.

IMMUNITY TO DIPHTHERIA.

As the result of an experimental study, KUPRIANOW (*Centralbl. f. Bakteriologie u. Parasit.*, Bd. xvi., No. 10, 11, p. 415) arrives at the conclusion that the blood-serum of rats, which are naturally immune to diphtheria, is not capable of protecting other animals from diphtheria, although the treatment of rabbits with virulent, living cultures of diphtheria bacilli confers immunizing qualities upon the blood-serum. This may be brought about by the use of progressively increasing doses of bouillon-cultures of diphtheria-bacilli, either in small, daily doses (0.1 c. cm.), or weekly, larger doses (1 c. cm.), or doses increased from week to week. By means of the blood-serum of such immunized rats and of injection of bouillon-cultures of diphtheria-bacilli in increased doses three or four weeks after the injections of serum a high degree of immunity may be conferred in a comparatively short time (three months) upon guinea-pigs. By the use of the blood-serum of such highly-immunized guinea-pigs a high degree of immunity may be conferred in a shorter time upon other guinea-pigs. The procedure of immunization forcée to diphtheria is not applicable to guinea-pigs. Active immunity does not develop in animals immunized by means of blood-serum earlier than three or four weeks after the first injection of a bouillon-culture of diphtheria-bacilli for the purpose of testing the existence of passive immunity, and then only in mild degree. In order to attain a high degree of immunity the treatment must be begun with minimal lethal doses of bouillon-cultures of the diphtheria-bacillus, the dose being at first gradually increased, as the animals are at the outset peculiarly susceptible. Subsequently the doses of living cultures may be rapidly increased without danger. The feeding for a protracted time to dogs of guinea-pigs dead of diphtheria has no influence upon the development of immunity, even when conjoined with treatment by means of heated cultures. The maximum degree of immunity attainable seems to vary with the species of animal experimented with. The immunizing power of the serum of immunized rabbits is slighter than that of guinea-pigs, and that of guinea-pigs slighter than that of dogs.

A CASE OF GASTRITIS GRAVIS.

ROSENHEIM (*Berliner klin. Woch.*, 1894, No. 39, p. 887) has reported the case of a woman, fifty-eight years old, previously in good health, who ten weeks before coming under observation complained of headache and anorexia, and subsequently of vomiting. In the course of two weeks exhaustion was so marked that the woman was compelled to take to bed. The headache,

which was principally confined to the forehead and temples, was accompanied with shooting pains in the muscles of the upper and lower extremities. At times there was also enuresis. Speech became slow and difficult, and after four weeks troublesome dyspnœa and palpitation of the heart made their appearance; emaciation had been progressive. On palpation a sense of resistance was perceived in the abdomen in the region corresponding with the pylorus, together with some sensitiveness. The stomach was displaced and dilated. The motor activity was obviously enfeebled. The urine contained no albumin; the eye-grounds were normal. Despite careful dietetic management the vomiting persisted; the gastric contents emitted a disagreeable odor, but contained no sarcinæ and no free hydrochloric acid, although lactic acid was present. There was from time to time slight elevation of temperature, with acceleration of pulse. Examination failed to disclose obstruction of the œsophagus. Later in the history of the case a trace of albumin appeared in the urine, but tube-casts could not be found. There was no œdema. Emaciation progressed and the vital forces failed until death ensued, some four months after the appearance of the first symptom.

A diagnosis of carcinoma of the pylorus was made, which upon post-mortem examination was proved to be fallacious. The stomach was markedly dilated, its mucous membrane pale and gray. The pylorus permitted the passage of a finger, but its walls were unduly thickened. This thickening was found to depend upon an increase in the muscular layer. Macroscopically the mucosa at the pylorus presented no appreciable change, but at the fundus, particularly at the cardia, it appeared smooth and thin. On microscopic examination the muscularis of the pylorus was found to be increased in volume, and here and there the seat of infiltration. The walls of the vessels of the submucosa were thickened, and the muscularis mucosa was in places the seat of infiltration. The mucosa proper presented a condition of marked interstitial hyperplasia, leading to compression of the glandular structure, which had undergone degenerative and atrophic changes. The morbid process was less marked at the fundus. The wall of the cardiac portion of the stomach was thinnest and the mucosa strikingly attenuated. In this situation glandular structure was entirely wanting.

DIPHThERIA AND PSEUDO-DIPHThERIA.

In a report to the Director of the Bacteriological Laboratory of the Health Department of New York City, PARK and BEEBE (*Medical Record*, vol. xlv. No. 1247, p. 1) detail the results of bacteriological examinations made in 5611 cases of suspected diphtheria in the course of twelve months. In 3255 (about 58 per cent.) of these diphtheria-bacilli were found to be present; in 1540 (about 27 per cent) no diphtheria-bacilli were found; while in 816 cases (15 per cent.), although no bacilli were found the cases were for various reasons considered to be of doubtful nature, although they were probably not examples of diphtheria. In a large percentage of the cases of true diphtheria the sex was given, and of these 54 per cent. were in females and 46 per cent. in males. The ages of the persons attacked ranged between three weeks and seventy years. The number of cases increased with each twelve months of life up to the fourth year, and then gradually diminished. The