Regarding the septic ear as a possible channel² for the infecting micro-organism, this was treated with instillations of hydrogen peroxide, followed by irrigations of a mild antiseptic lotion. The alimentary canal and the renal secretion were likewise treated antiseptically; for the former salol and benzonaphthol were administered three-hourly, and for the latter 15 grains of urotropine was given night and morning. To maintain the patient's strength I allowed as much as he could take of an easily assimilative diet. Stimulants were not resorted to, since the patient had never taken any.

In spite of the above treatment, the rigors still persisted, so that my mind turned to vaccines and antitoxins. Two cases were recently brought to my notice where, even after blood cultures were made, and in the one case a suitable emulsion of killed micro-organisms made, and in the other an appropriate serum prepared, yet the result was disappointing.

Although antidiphtherial serum so far is regarded as a specific in neutralizing the toxins of the Klebs-Loeffler bacillus, yet cases are not wanting in which it has been of service in other directions, consequently I decided to inject an initial dose of antidiphtherial serum (Parke, Davis and Co.) of 2,000 units into the abdominal parietes. To my surprise and to the gratification of the patient, only one rigor took place during the next twenty-four hours, and for the following five days the morning temperature was slightly subnormal and the evening temperature just above the normal. On the evening of the fifth day after the first injection I was hurriedly summoned and found the patient in a severe rigor, with a temperature of 104.2°; the rigors continued for the following three days, but in a milder form than formerly, and were not as frequent.

The patient derived so much benefit from the first injection that he begged for another, and I therefore gave him a second injection of 4,000 units in the early morning; the same evening he had a slight rigor, and on the following day the temperature dropped to 101°; after this the temperature kept more or less to the normal, and the patient made an uninterrupted recovery. The patient remained in bed six weeks; three weeks he recruited in a convalescent home, and on examination on November 28th the heart sounds were quite clear, his anaemia much less marked, and his weight had increased 8½ lb.

REFERENCES.

¹ Practitioner, May, 1908. ² Clifford Allbutt, vol. i.

HENOCH'S PURPURA OR ANGIO-NEUROTIC OEDEMA?

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IN connexion with Dr. Leigh Day's case of Henoch's purpura, the following cases, which occurred within a few weeks of one another, may be of interest:

CASE I.

C. M., male, aged 12. First seen on February 9th, 1906; had complained for four days of severe abdominal pain, accompanied by diarrhoea. "The motions looked like blood." On both legs and the backs of both hands there had been white swellings, "the size of a walnut," which developed rapidly, lasted a few hours, and then disappeared.

The boy was pale but not anaemic; the temperature was 100°, the pulse 80 and irregular. The abdomen was slightly retracted, nowhere tender, and nothing abnormal was felt. There were no spots nor any trace of the swellings described. There were no objective signs in the chest.

On February 10th the temperature was 99.6°, the pulse 74, and he looked very ill, with sunken eyes, and much abdominal pain. During the night he had passed six loose motions, containing much bright red blood but no mucus or pus. Nothing abnormal was felt on rectal examination. Several purpuric spots were observed around the elbows.

On February 11th he appeared better, the temperature was normal, the pulse 78, and he had had only one motion, normal in appearance, in the last twenty-four hours, but the urine was scanty and contained a large amount of blood. The skin of the buttocks and sacrum was covered with large purpuric spots, some the size of a shilling.

On February 12th the general condition was better and the pain was neither so frequent nor so severe. He had slight diarrhoea, but the motions contained only a small quantity of blood. The urine had increased and the quantity of blood had diminished.

Up to February 19th his condition remained much the same, when there appeared on the back of the left hand a patch of solid oedema the size of a bantam's egg. The movements of all the joints in the hand were unattended by pain. The patch lasted twelve hours, and then subsided rapidly, leaving no trace.

From February 19th to 28th his general condition steadily improved, pain ceased, and the blood disappeared from motions and urine.

On February 25th he had a fresh crop of purpuric spots on the buttocks which lasted two days only. By March 1st he was quite convalescent.

CASE II.

G. L., male, aged 4½. Was seen on March 12th, 1906. For a week he had complained of severe abdominal pain, coming on specially at night; otherwise he did not appear to be ill. The boy was well nourished and not anaemic; he did not complain of pain at the time of examination, and the temperature was normal. Careful examination of abdomen revealed nothing abnormal. There were no objective signs of disease.

For the next few days the attacks of pain were frequent and severe, but I failed to detect anything to throw light on the condition.

On March 20th I examined him during an attack of pain. The pulse was 100, regularly intermittent, and there was most noticeable rigidity and retraction of the abdominal muscles, but nowhere did pressure reveal any tender spot. Around the wrists and on the extensor aspects of the legs were a large number of circular spots, resembling urticaria, but the hyperaemic border was a darker and more dusky red than in ordinary urticaria. There was no irritation. These spots lasted four days, and left a stain like a bruise.

On March 21st his condition was about the same. On the backs of both hands were patches of solid oedema of an area of about 2 sq. in. There was no pain on movement of any of the joints of the hands. These swellings lasted forty-eight hours and then rapidly disappeared, leaving no stain. He complained of pain in the dorso-lumbar region.

On March 22nd a patch of solid oedema appeared on the back, over the spine of the last dorsal vertebra. It lasted less than twenty-four hours, leaving a well-marked bruise, which covered an area of 4 sq. in.

On March 23rd the eyelids were oedematous and the site of urticarial spots becoming purpuric. The child was very ill; the pulse was 120 and intermittent, the temperature normal; he was taking very little nourishment.

On March 24th he vomited during an attack of pain; urticarial wheals appeared on the cheeks, replaced two days later by purpuric spots.

On March 25th the child was exceedingly ill and vomited frequently; on the next day he was much collapsed, the face livid, the eyes sunken, and the pulse 120, small and very soft. He had vomited incessantly all night, but had had no attacks of pain.

On March 27th the condition was greatly improved; he had only one attack of pain, and there had been no vomiting. On March 29th large purpuric spots appeared on the elbow and backs of forearms; and from March 30th to April 3rd several fresh crops of spots appeared. On the arms many of the spots coalesced, causing large areas of discoloration. On April 3rd a few spots were noticed on the hard palate. He complained of pains in both knees; there was solid oedema above the left patella, and the knee-joint was hot, swollen, tender, and contained excess of fluid. The pulse for the last few days had been about 70.

From April 4th to 30th he improved steadily, although he had several fresh crops of spots and patches of oedema. The attacks of pain occurred at longer intervals, and were less severe. By the middle of May he was convalescent.

Perhaps the most interesting feature common to both cases was the occurrence of solid oedema which appeared and disappeared very rapidly. This is not a condition generally met with in Henoch's purpura, but angio-neurotic oedema is characterized by severe gastro-intestinal crises, and Osler has pointed out that Henoch's purpura has an interesting connexion with angio-neurotic oedema. In neither case was the spleen felt. The temperature in the first case was slightly raised at the onset, but in the second it was normal throughout; in both at times the pulse was unduly slow, and for some time in the younger boy it was regularly intermittent. There was no involvement of the joints in the first case, and a very slight and transient swelling of one joint in the second. The changes in the younger boy's general condition were very rapid. One morning he would appear to be in extremis, and the next his illness seemed to be slight. Conty regards the disease as of nervous origin, affecting the vasomotor nerves, and certainly in these two cases the symptoms might be explained by the presence of a toxin acting mainly on the sympathetic nervous system.

THE Metropolitan Asylums Board has arranged for further lectures and demonstrations in hospital administration for the benefit of candidates for the diploma in Public Health. There will be two simultaneous courses covering the same ground, the one being conducted at the North-Western Hospital by Dr. J. MacCombie, and the other by Dr. F. M. Turner at the South-Eastern Hospital. Each course lasts three months, that at the North-Western Hospital commencing at 11 a.m. on Monday, January 10th, and continuing on each consecutive Monday thereafter. The South-Eastern Hospital course begins at 2 p.m. on Wednesday, January 12th, continuing at the same hour on the following Wednesdays. The fee is £3 3s.