A CASE OF ACUTE TORSION OF THE WHOLE MESENTERY OF THE SMALL INTESTINE.

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Acute torsion of the whole mesentery of the small intestine is an abdominal catastrophe which appears to be so rare as to warrant the publication of one case.

Case.—Pte. T. S., aged 20, while in the trenches was seized at 8 a.m., on April 30, 1917, with pain in the abdomen, vomiting and diarrhoea. He passed five stools on April 30, 1917 which, he said, were loose and black. He was admitted as a case of diarrhoea or dysentery to the casualty clearing station at noon on May 1, 1917. One-quarter of a grain of morphia had been given by the mouth two hours before admission. On admission, he complained of very severe pain in the abdomen, with cramps in the thighs. Pulse 140, small and flabby; respirations hurried; skin cold; facies pale and distressed; perspiring profusely; heart and lungs normal. Abdomen soft and easily palpated; no distension. The patient was obviously extremely ill, and the diagnosis suggested by those who saw him were: Dysentery, cholera, ptomaine poisoning, abdominal malaria, "acute abdomen." The last-mentioned diagnosis was withdrawn in favour of dysentery, and he was treated, without benefit, as a case of acute bacillary dysentery. No cholera-like vibrios were found on direct microscopic examination of the stools. The patient's general condition became worse, he vomited watery mucus and bile, and passed a small watery and mucous, colourless motion. At 4 p.m., the abdomen was distended and somewhat resistant, though not hard. Temperature at 4 p.m. was 101° F. The abdominal distension increased rapidly and the general condition became graver till death supervened at 7.30 p.m., that is, about thirty-six hours from the onset of symptoms.

Post-mortem.—When the abdomen was opened an hour after death the condition found was acute torsion of the whole mesentery of the small intestine. The small intestine itself presented a very remarkable appearance. With the exception of the duodenum, together with nine inches at the upper end of the jejunum, and three inches at the lower end of the ileum, the entire length of the small intestine was of a deep plum colour, and was greatly dilated so as to fill the distended abdomen. The lumen was filled with ordinary intestinal contents, plus much blood and gas. The surface was smooth and glistening throughout. There was no peritonitis. Behind this mass of dilated and blood-engorged intestine could be felt a hard, rope-like structure about the thickness of the finger, stretched tightly over the bodies of the lumbar vertebrae in a direction from above downwards and to the right. This was found to be the mesentery of the small intestine twisted on itself from left to right, that
is, in the direction of the hands of the clock. By seizing the whole mass of intestine between the outstretched fingers of both hands and turning it from right to left for three and a half turns, that is, about 1,260°, the torsion of the mesentery was undone, and the parts occupied their normal positions. The mesenteric glands were normal on inspection in situ.

No apparent cause could be found for the condition discovered at the autopsy. The small intestine was not in a state of gangrene, but of intense engorgement with blood, which was due to mechanical interference with the mesenteric circulation; first, the arrest of the venous return from the gut, and, later, as torsion became more marked, and compression greater complete arrest of the flow in both veins and arteries.

Weible, who describes a case which he operated on successfully, was able to obtain from the literature particulars of sixty-six cases of which twenty-three recovered after operation. His communication contains an excellent résumé of these cases. An interesting fact is that the usual amount of torsion was about 180° only, in two of the cases it was as much as 720° (two complete turns). Our case, which showed three complete turns and a half (about 1,260°), would, therefore, appear to be unique so far as the extent of the torsion is concerned.

ADAPTATION OF THE MILLER-JAMES STRETCHER CARRIER FOR TRENCH WORK.

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The following is a description of an adaptation of the Miller-James wheeled stretcher carrier for use in the trenches. The necessity of some such device occurred to me when working a part of the line involving a twenty-five minutes walk along the communication trench which took fully one and a half hours to accomplish by four bearers with a loaded stretcher.

The Miller-James carrier is a collapsible one with pneumatic tyres. When the wheels are approximated you have a capital twin-wheeled support for a stretcher. I therefore had two cross pieces made the width of the open stretcher, and removing the grips, which hold the stretcher, from the springs, fixed them to either end of the cross pieces. The springs were then fixed to the cross pieces by bolts and nuts (using the same holes). This completed the job. We used this carrier all the time.