A CASE OF INTESTINAL OBSTRUCTION DUE TO MECKEL'S DIVERTICULUM.

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Intestinal obstruction in the following case was due to the free end of a Meckel's diverticulum forming a new attachment to the mesentery of the small intestines.

This caused an acute kinking of the ileum at the new point of attachment, and finally gave rise to complete intestinal obstruction.

The condition appears to be by no means common. Barnard [1] investigated a series of 669 cases of intestinal obstruction occurring in the London Hospital, and found Meckel's diverticulum to be the cause in only thirteen of these cases.

The same writer states that the type of Meckel's diverticulum which is most likely to produce intestinal obstruction, is the diverticulum which has formed a new attachment at its free end.

Cazin [2] collected twenty-three cases of Meckel's diverticulum forming a new detachment. In ten of these cases the free end of the diverticulum had attached itself to the mesentery of the small intestines.

Lieutenant X., aged 22, was admitted to the Military Hospital, Cologne, on November 8, 1924, at 4.15 p.m. He stated that two days previously, whilst playing billiards in the mess, he had a sudden attack of acute abdominal pain which was followed by vomiting. Since that time he had suffered from intermittent attacks of colic, and had vomited everything that he had taken by the mouth. His bowels had not been open since November 6, 1924.

On admission, the patient looked ill and was having attacks of colic—apparently intestinal—at fairly frequent intervals. His temperature was 99°F., pulse 64.

The abdomen moved freely with respiration and there was no rigidity or tenderness on palpation. There was no distension, and no cutaneous hyperesthesia could be elicited.

A turpentine enema was given and some scybala were returned from the colon. A second enema was given two hours later with a similar result.

The patient passed a fairly comfortable night. The abdominal pain was much less severe and there was no vomiting.

In the morning he stated that he felt much better. His temperature was 98.4°F., pulse 80.

No action of the bowels resulted from another turpentine enema and no
flatus was passed. An injection of pituitrin one cubic centimetre was then given subcutaneously.

By the evening, the attacks of colic were becoming more frequent and the abdomen was slightly distended. There was no vomiting, but a persistent hiccup was noticed during examination. Evening temperature was 98° F., pulse 100.

In view of the fact that the bowels had not acted since the morning of November 6, 1924, and the abdomen was becoming distended, it was decided to do a laparotomy before the obstructive symptoms became more acute.

An injection of morphia ¼ grain and atropine 1/60 grain was given. The patient was then anaesthetized with C. E. mixture followed by open ether.

The abdomen was opened through a para-median incision. The cæcum was first examined and found to be collapsed. The hernial orifices and the region of the umbilicus were next explored with the finger, but no cause for the obstruction could be found.

The distended coils of small intestine were then packed off with an abdominal swab and the collapsed gut was followed upwards from the cæcum. About two feet from the ileo-cæcal valve the ileum was found to be drawn inwards towards the spine and sharply kinked by what appeared to be a sudden shortening of the mesentery. Above this point the gut was distended and œdematous.

The thickened mesentery was carefully examined at the point of obstruction, and a Meckel's diverticulum was found embedded in adhesions. The diverticulum was patent for about two inches and was adherent at the tip to the upper surface of the mesentery, near its origin from the posterior abdominal wall.

The diverticulum was dissected away from the mesentery after dividing some adhesions. The process was then removed by crushing and ligaturing the base. The stump was invaginated.

The proximal loop of gut was œdematous and purple in colour but the serous surface was shiny. It was swabbed with hot saline and returned to the abdomen. The abdomen was then closed completely.

After the operation the general condition of the patient was good. Rectal injections of normal saline with glucose five per cent were given every four hours. Subcutaneous injections of pituitrin one cubic centimetre and eserine 1/60 grain were given alternatively at four-hourly intervals with a view to starting peristalsis.

On the following day some flatus was passed after a turpentine enema, and the rectal salines were discontinued.

The second day after the operation the bowels moved twice.

On the third morning an ounce of castor oil was given and the pituitrin and eserine injections—which had been given at increasing intervals—were discontinued. During the day the bowels were open freely.
From this time onwards the patient's condition improved rapidly. The abdominal wound healed by first intention, and the stitches were removed on the tenth day.

Two days later the patient had an attack of abdominal distension accompanied by vomiting. The superficial part of the wound burst open in the lower half. Secondary suture was done under novocaine and the wound eventually healed with a firm scar.

The patient was discharged from hospital to sick leave on January 1, 1925.

The case is of interest, firstly, on account of the comparative rarity of the condition, and secondly on account of the somewhat misleading signs and symptoms which it produced.

As there was no distension of the abdomen until three days after the onset of the illness, it would appear that the obstruction was only partial to begin with, and a certain amount of flatus must have been passed.

I am indebted to Lieutenant-Colonel R. Storrs, R.A.M.C., Commanding Military Hospital, Cologne, and to Colonel J. M. Sloan, C.M.G., D.S.O., D.D.M.S., British Army of the Rhine, for permission to publish the notes on this case.

REFERENCES.

A BONE AND PLATE CLAMP.
BY MAURICE SINCLAIR, C.M.G., F.R.C.S.

This instrument has been devised to assist mainly at bone-plating operations, and with its use such operations are much shortened in duration and are greatly simplified, as the fragments can be securely held in their alignment, while the fracture is bridged by means of a specially modified plate (vide below) which is firmly gripped by the clamp or clamps to the upper and lower fragments of bone.

The bone can now be safely and readily drilled and the plate secured by means of screws, without loss of alignment, without obstruction to vision, and without those encumbrances which so frequently take place during the fixation, especially of the initial screws.