appendicectomy were carried out, and on August 30 the patient was finally discharged from hospital in excellent physical condition and with a strong abdominal wound.

I wish to thank the Director of Medical Services, Trinidad, for permission to publish this case.

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Haustro-caecal Invagination as a Cause of Intussusception

The condition of haustro-caecal invagination appears to be a rare one; I have been unable to find any case recorded in the British and American literature, although there are some in the German and Italian literature (Erkes, 1937; Sovena, 1940; Grasso, 1940; Scendrate, 1946).

CASE REPORT

A man aged 44 was admitted on December 27, 1948, as a case of "acute appendicitis." He stated that on Christmas Day he had indulged in considerable dietary and alcoholic excesses, to which he attributed his present complaint. Since 10 a.m. on December 26 he had suffered from colicky pain, at first in the epigastrium and later moving to the right iliac fossa. The pain recurred every 10-15 minutes, and "doubled him up." There was nausea but no vomiting, and he had taken only fluids since the onset of his pain. His bowels were not opened on December 26 but were opened before admission, when he had also passed a quantity of dark-red blood per rectum.

He had been in hospital in Cairo in 1921 with (probably) dysentery, but had had no dysenteric symptoms since. There was no other relevant past history.

On examination he was seen to be a well-built man who at intervals of 10-20 minutes "doubled up" as a result of obvious colicky pain. His temperature was 98° F. (36.7° C.), pulse 80, and respirations 18. Local tenderness and guarding were present in the right iliac fossa, and a doubtful mass the size of a hen's egg was present, the rest of the abdomen being slack; there was no abdominal distension; vigorous tinkling peristaltic sounds were heard on auscultation; the liver was not enlarged; the kidneys were impalpable, with no renal tenderness.

Examination per rectum revealed a ballooned ampulla; no neoplasm was felt; and a small amount of dark-red blood was present on the examining finger. The urine contained no abnormal constituents.

An enema produced a coloured fluid with no solid faeces, but with recent blood clots; flatus was passed with the enema.

The abdomen was re-examined one hour later, when an obvious mass the size of a tennis ball could be felt in the right hypochondrium. A provisional diagnosis of intussusception was made.

A laparotomy was performed under thiopentone, curare, and gas-and-oxygen anaesthesia. The abdomen was opened through a right paramedian incision centred at the umbilicus. The caecum was found to be intussuscepted into the colon as far as the first 6 in. (15 cm.) of transverse colon; the ileo-caecal valve did not form the apex of the intussusception, but lay in its medial side. There was no distension of the small intestine. The intussusception was reduced easily; the caecum was very oedematous and three "dimples" were seen on the antero-lateral wall. The caecum and lower half of the ascending colon were extremely mobile. The caecum was palpated and three rounded masses were felt. Since idiopathic intussusception in the ileo-caecal region is said to be of extreme rarity in the adult it was decided to explore the lumen of the caecum.

Occlusion clamps were placed on the terminal ileum and on the colon above the caecum, which was opened longitudinally through the anterior taenia. Three purple swellings of the mucosa were found lying one above the other on the antero-lateral wall of the caecum, each corresponding with one of the "dimples" mentioned above. The possibility of a "haustral invagination of the caecum" came to mind, but it was decided to confirm this by taking a biopsy; the affected portion of the

caecum was therefore excised and the opening sutured transversely. Appendicectomy was performed and the caecum was sutured to the lateral parietal peritoneum to prevent recurrence of the intussusception. The abdomen was then closed in layers.

Post-operative recovery was uneventful and the patient was discharged on January 7, 1949.

Pathological Report.—The specimen submitted is a portion of caecal wall measuring 6 by 3 cm. The wall is very oedematous; the serous surface has lost its sheen but is not discoloured. In the mucosa are three polypoid masses, each about 1.5 cm. in diameter and 0.5 cm. thick, black in colour. One of these has been sectioned. The microscopical appearance is consistent with that of any portion of the bowel which has undergone strangulation (see illustration).

Section of invaginated haustration showing oedema in submucosa and muscle layers, with haemorrhage into the mucosa and submucosa. (× 6.)

COMMENT

This case conforms in many details with those described in the Italian and German literature. As was found in the majority of cases recorded, the caecal wall was very oedematous and the caecum itself quite mobile. It is suggested that the condition occurred in this patient as a result of undue irritability of the colon following his "Christmas excesses," which, in the presence of a very mobile caecum, produced invagination of the antero-lateral haustration, so initiating a caeco-colic intussusception.

Apart from the usual conditions associated with a tumour in the right iliac fossa, there is the condition known as "chronic non-specific ulceration of the caecum." A case of this has recently been reported by Sangster (1949), and the clinical history was similar to that of a haustral invagination; hemicolectomy was performed and a shallow ulcer found in the most dependent part of the caecum, almost opposite the ileo-caecal valve. The microscopical characteristics were consistent with those of recent ulceration, and it is tempting to consider whether this may not be a late result of haustral invagination.

I wish to thank Dr. A. Wilson Russell, medical superintendent of St. Chad's Hospital, for permission to publish this case; Dr. C. D. Cruikshank for the pathological report; and Mr. P. G. Konstam for advice in the preparation of this report.

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