ENTEROLITHS IN CAECUM

(A Case Report)

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Introduction

Stone formation is seen commonly in urinary tract, biliary tract and less commonly in salivary gland and the appendix. However, calculi are rarely encountered in the rest of the gastro-intestinal tract. Enteroliths in small intestine [1], Meckel's diverticulum [2], vitello-intestinal duct [3], and megacolon [4] have been reported. Enteroliths in caecum is a surgical curiosity and one such case is reported.

Case Report

A 55-year-old woman presented to a zonal hospital with history of abdominal pain and an ill-defined mass in the right iliac fossa. Barium meal follow through study was suggestive of ileocaecal tuberculosis. She was given 12 months course of anti-tubercular treatment (SHRZ). Though the patient improved, she never became asymptomatic and continued to have abdominal pain, dyspepsia and anorexia. One year after anti-tubercular treatment was completed, she was found to have a well defined firm, fixed, non-tender lump, 10 cm x 8 cm, in the right iliac fossa. Ultrasonography was suggestive of multiple solid objects in the lump. Barium meal follow through showed that the caecum was packed with multiple circular objects (Fig 1). Barium enema confirmed the presence of enteroliths in the caecum and also showed a stricture of ascending colon just distal to the caecum.

At laparotomy hundreds of enteroliths in the caecum and the terminal ileum were palpable. Right hemicolectomy followed by end-to-end ileo-transverse colostomy was done. Dissection of the operative specimen showed that the stricture in the ascending colon was fairly advanced with a lumen of only 0.75 cm x 0.75 cm, though, surprisingly, the patient never had any obstructive features. The enteroliths were of uniform size and shape, 1.2 cm in diameter and circular.

Patient had an uneventful post-operative period and was asymptomatic when reviewed three months after the operation. Histopathology of the specimen was unremarkable.

Discussion

The pathogenesis of stone formation in the gut is same as stone formation elsewhere in the body - stasis and infection in a tubular organ. The resulting accumulation of proteinaceous debris acts as an organic nidus around which phosphates and calcium com-

plexes are precipitated [5]. Enteroliths are more commonly found in chronically obstructed bowel proximal to a stricture or in a megacolon, the terminal ileum and pelvic colon being the commonest sites [4].

The composition of enteroliths depends on the site of formation [6]. Bile salts are precipitated by the relative acidity of jejunal contents. Thus enteroliths found high up in the gut are composed of cholic acid. Alkalinity in distal small gut favours precipitation of calcium and these calculi tend to have laminated calcification and are radio-opaque.

Enteroliths usually present with recurrent episodes of acute or chronic intestinal obstruction, haemorrhage, perforation or blind loop syndrome [7]. In our case the hundreds of enteroliths found in the caecum probably resulted from stasis produced by the stricture

Fig. 1 - Barium meal follow-through showing caecum filled with enteroliths.

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in the ascending colon. The absence of obstructive symptoms in the patient can be attributable to the liquid nature of enteric contents in the caecum.

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