

ENTEROLITHS SECONDARY TO STENOSIS OF LEFT COLON

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Abstract - A case of an acute intestinal obstruction in a 64-year-old man, due to cicatricial stricture of the left colon with secondary enteroliths in colon, is presented. Enteroliths in colon are rare and it is suggested that stasis is the most important factor in their production as they are most commonly associated with an intestinal stricture.

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INTRODUCTION

Development of calculi within the human gastrointestinal tract represents unusual phenomenon in contrast to the frequent occurrence of gallstones (1). Cicatricial stricture of the left colon is infrequent. The most common cause of stricture of the left colon is scar formation just at the site of anastomosis of the bowel (2). One of the causes of bowel resection and anastomosis is volvulus of sigmoid colon. The incidence of large bowel obstruction from colonic volvulus vary from 20% to 30% (3). Sigmoid volvulus is common in Iran (4). Formation of enterolith or stercoliths in the colon proximal to cicatricial stricture is a rare complication.

CASE REPORT

In 1364, a 64-year-old man presented with two days of progressive crampy abdominal pain and distention. He was noted to have bilious vomiting on the day of admission, as well as anorexia.

Unfortunately no records at that time were available. 20 years back the patient had two abdominal operations consequently. In the first operation sigmoid colon was gangrenous due to volvulus that was resected, and second operation

was reestablishment of bowel continuity. After operation the patient had constipation and diarrhea on and off.

The patient was afebrile and tachycardic with normal blood pressure. Abdominal examination revealed significant distension, tympany, with surgical scar and hyperactive bowel sound with rushes. The abdomen was diffusely tender on palpation, but without peritoneal sign. There was no mass. Abdominal X-rays revealed dilated large and small bowel with multiple air fluid levels. The diagnosis of a large bowel obstruction was made and after rehydration, the patient was taken to the operating room. In sigmoidoscopy, rectum was empty and up to 20 centimeter negative for obstruction.

At celiotomy, colon was thick and so distended that we were unable to find the real site of lesion in the left colon. Appendectomy was carried out and through the base, content of the colon was evacuated. At the bottom of descending colon there was a short narrowed segment just at the closure of colostomy. This segment was resected and end-colostomy with Hartmann's pouch performed.

The patient recovered uneventfully from surgery and was discharged home in his usual state of health. Patient was followed in clinic. One day patient said, "somethings like plant seeds were expelled through colostomy" and he brought two of them with him (Fig. 1).

Previous UGI and barium enema of the patient that obtained from another hospital were reviewed retrospectively. There were multiple round foreign bodies in the right side of abdomen that had been recorded (Fig. 2).

Possible abdominal opacity may be an

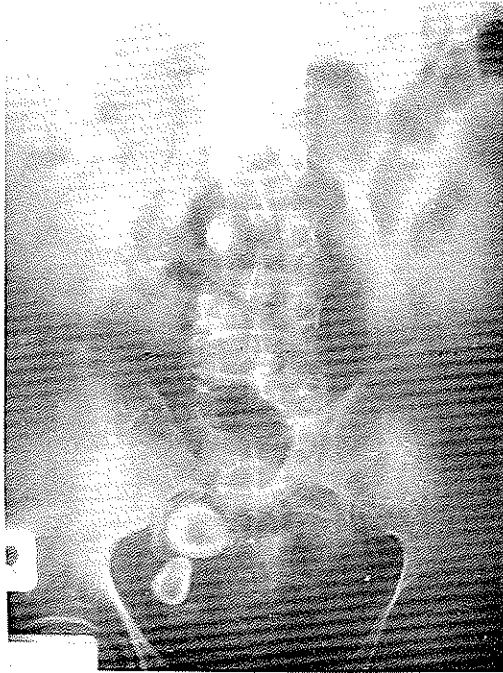


Fig. 1. Plain X-Ray of abdomen shows enterolith

enterolith. Chemical analysis of the enterolith will further confirm the diagnosis (3). In this case enterolith contained calcium 20%, phosphate 25%, oxalate 30% and others 15%, whereas gallstone usually contain cholesterol and bile pigments.

DISCUSSION

The first recorded radiological diagnosis of an enterolith was reported by Pfahler and Stamm in 1915. The generally accepted etiology for the formation of true opaque enterolith is chronic stasis (6). In the large bowel, this combination of mechanical and physicochemical factors occurs in partially obstructed segment of the colon (1). Stenosis occurs in 1.2 to 4% of the cases after colorectal anastomosis (2). Of course, knowledge of a previous history of operation on sigmoid colon, should alert the observer to the possibility that an abdominal opacity may be an enterolith. Chemical analysis of the enterolith will further confirm the diagnosis (3). In this case enterolith contained calcium 20%, phosphate 25%, oxalate 30% and others 15%, whereas gallstone usually contain cholesterol and bile pigments.



Fig. 2. Two enteroliths those expelled through colostomy

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