Rectosigmoid lithobezoar in a eight-year-old

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ABSTRACT

Bezoars are rare foreign bodies in the gastrointestinal tract. They may be composed of hair (trichobezoars), vegetable matter (phytobezoars), milk curds (lactobezoars) and, very rarely, stones (lithobezoars). Colonic lithobezoars are very rare findings in children. We report an eight-year-old boy with a giant rectosigmoid lithobezoar, who presented with history of recurrent constipation and pica for five years. Four hundred and seventy two (472) pieces of asphalt stones ware manually evacuated via the anus.

Key words: Child, colon, lithobezoar

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INTRODUCTION

Bezoars refer to foreign bodies in the gastrointestinal system. They may be hair (trichobezoars),[1] vegetable matter (phytobezoars), milk curds (lactobezoars) stones (lithobezoars).[2-5] Primary colonic lithobezoars are very rare findings in children. Twelve children with primary colonic bezoars were reported in literature until 2004, out of which only three were colonic lithobezoars.[2-6] This report aims to highlight the diagnostic and management challenges of childhood lithobezoars.

CASE REPORT

An eight-year-old male orphan, under the care of his elderly grand parents, was admitted with a two-year history of pica, recurrent constipation, abdominal pain and failure to thrive, painful defecation, hematochaesia, abdominal distention and bilious vomiting. Abdominal examination revealed moderate distention with multiple palpable intraluminal masses along the rectosigmoid and descending colon up to the splenic flexure, with no features of peritonitis. Anal inspection revealed stone pellets protruding through the anus [Figure 1]. Rectal examination revealed hard prickly masses filling the dilated rectum. It was impossible to negotiate pass around the masses occluding the rectum.

Plain abdominal X-ray showed numerous opaque stones of different sizes scattered within the rectosygmoid and decending colon [Figure 2]. Under a general anesthesia, following anal dilatation, 472 pieces of asphalt stones were completely recovered manually, with a diameter ranging between 4 mm to 2 cm [Figure 3]. He had uneventful recovery. Mental health assessment by the pediatric psychiatrist did not reveal any gross abnormality. He remained healthy one year after treatment. Post evacuation plain X-ray did not reveal any residual stones in the colon.

DISCUSSION

Bezoars are uncommon findings in children and mostly seen in children with mental disorders and with pica.[1] Most lithobezoar cases occur in female children of 6-10 years age bracket, with bizarre appetite and emotional disturbances, although the index patient was a male.

Bezoars may arise from ingestion of some substances such as popcorn, bubble gum, hair, some vegetable or fruit seeds and pebbles for a long period of time or in large quantities may cause intestinal obstruction and severe constipation by occluding the lumen of colon,

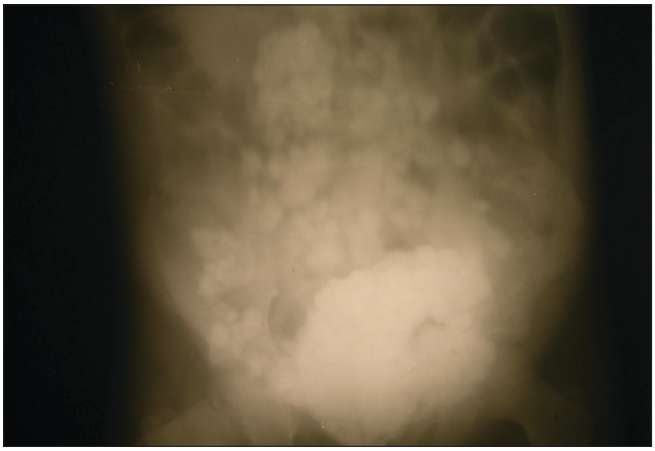


Figure 1: Plain x-ray showing radio opaque stones in the rectum, sigmoid descending and transverse colon

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Figure 2: A stone pellet seen protruding through the anus



Figure 3: Four hundred and seventy two pieces of asphalt stones retrieved after manual evacuation under anesthesia

especially at rectosigmoid level.[3-7] Patient may present with the history of ingestion of sand, constipation and recurrent episodes of abdominal pain, that may end with a significant painful defecation is an important clue in diagnosis of lithobezoars. Abdominal palpation and rectal examination provide important diagnostic evidences for colonic lithobezoars. The palpation of a prickly mass on rectal examination is called as "colonic crunch sign" and could be found in sunflower seed bezoar and lithobezoar. [1, 5] Plain abdominal X-ray is especially important in the diagnosis of this kind of colonic intraluminal mass. The scattered radio opaque nature is typical of lithobezoar. This unique appearance on plain abdominal X-ray was called as "corn on the cob". [1] Anal dilatation under general anaesthesia also help in the dislodgement of the mass of the mass.[1, 5]

In conclusion, lithobezoar should be suspected in any patient who has a history of constipation and pica. Early diagnosis and intervention is necessary in suspected cases of lithobezoars to avoid intestinal obstruction that may ensue.

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