Enterolithiasis: A Rare Finding in Intestinal Tuberculosis

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ABSTRACT

Though intestinal tuberculosis is relatively a common ailment in India and other developing countries; enterolithiasis is a rarely encountered clinical and radiological entity found in this disease. Enteroliths are formed due to stasis caused by stricture formation in intestinal tuberculosis. We report a case of enterolithiasis secondary to intestinal tuberculosis.

Key words: Intestinal tuberculosis; Chronic Intestinal Obstruction; Enterolithiasis.

INTRODUCTION

Enterolithiasis is formation of calculi in intestine. These can be formed anywhere in gastrointestinal tract. The main underlying cause behind their formation is decelerated motility of gastrointestinal tract and stasis of intestinal content due to obstruction.¹ Some important underlying etiologies of intestinal obstruction are – meckel’s or non-meckel’s diverticulum and congenital or acquired strictures like intestinal tuberculosis, chron’s disease,² post traumatic or post-surgical strictures and malignancy.

CASE REPORT

A 65 years old male patient presented in emergency department of surgery with complaints of pain in abdomen for 7 days, constipation for 5 days, vomiting and distension of abdomen for 2 days. His past medical history included exploratory laparotomy 35 years back but nature of the disease couldn’t be ascertained as there were no medical records. He was never treated for tuberculosis in past. On clinical examination, there was no fever but abdomen was tense, distended, tender and guarding was present. Bowel sounds were absent. Haematological investigations revealed normal leucocyte counts with moderate grade of anaemia. Renal function and liver function tests were within normal limits. Plain radiograph of chest showed no abnormality but abdominal radiograph erect view showed multiple air fluid level and supine film showed dilated gas filled bowel loops and a well-defined radio opaque shadow in right side of pelvis. Ultrasonography of abdomen showed mildly prominent bowel loops with to and fro peristalsis with minimal free fluid in inter bowel spaces. The patient underwent exploratory laparotomy and intra operative finding revealed a pin point perforation about 6 feet distal to duodeno-jejunal junction and two non-passable strictures approximately 1 feet and 2 feet distal to perforation. There were 2 stony palpable masses of size 3*2cm and 1*1cm. Multiple adhesions with membrane formation were present. Resection of about 2 feet of diseased bowel segment (ileum) with end ileostomy and mucous fistula of distal segment was conducted. Histopathological examination of resected specimen confirmed the diagnosis of intestinal tuberculosis. After an uneventful post-operative stay of 12 days the patient was discharged on anti-tubercular medications.

DISCUSSION

Enteroliths are rare finding observed in setting of subacute or chronic intestinal obstruction,¹ but once found requires...
a minimum watchful waiting. Mostly they cause no complication but any complication if occurs are likely to be severe e.g. ileus and perforation. Enteroliths can be primary which develop inside bowel and secondary that comes from outside the bowel like gall stones.

Primary Enteroliths can be true or false. True Enteroliths develop by concretions of normal chylus components and false Enteroliths formed by exogenous substances such as hair (trichobezor), vegetables (phytobezor) or barium sulphate. Depending upon location they may be radioucent or radio opaque. Enteroliths which formed in proximal small bowel (duodenum and jejunum) are radiolucent because they develop in acidic medium and composed of choleic acid while those formed in distal bowel are radio opaque because distal bowel being alkaline is conductive to precipitation of calcium phosphate and carbonate.
The diagnosis\(^{[9]}\) of radio opaque enterolithiasis can be made on plain radiographs with differential diagnosis- radio opaque gall stones calcified lymph nodes, pancreatic calcification and uroliths etc. Out of these only enteroliths can change their location on radiographs due to intestinal motility. CT scan can give a provisional diagnosis. Most enteroliths are asymptomatic but if any complication occurs is likely to be severe such as obstruction (most common) followed by ileus and perforation. Other symptoms are malena and refractory anaemia.

Recommended treatment of Enterolithiasis is exploratory laparotomy and removal of stone by enterotomy and resection of diseased bowel loop then anastomosis or stoma formation depending upon condition of bowel.\(^{[9]}\)

**CONCLUSION**

Enterolithiasis is a very rare condition and it is of significance as they lead us to the diagnosis of the underlying ailment. Due to their rarity they may be misdiagnosed, unless the possibility is kept in mind.

**REFERENCES**