

Case Report

A rare case of jejunal diverticula with bone causing sub-acute intestinal obstruction

Akshay B. R., Aviral Srivastava*, Hari K. Yadav

Department of General Surgery, Institute of Medical Sciences, Banaras Hindu University, Varanasi, Uttar Pradesh, India

Received: 04 September 2022

Accepted: 03 November 2022

***Correspondence:**

Dr. Aviral Srivastava,

E-mail: aviralsri7@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Jejunal diverticula is a rare condition, usually remains asymptomatic though sometimes presents as vague abdominal pain and in the rare case may present as a life-threatening gastrointestinal (GI) bleed. In this case, the patient presented with features of subacute intestinal obstruction and contrast enhanced computed tomography (CECT) abdomen suggested intraluminal obstruction due to impacted bone in the small bowel. The patient underwent exploratory laparotomy, there were jejunal diverticula with bone as a foreign body, and a was ileal stricture causing an obstruction. Jejunal diverticula with bone as a foreign body is a rare case, requiring high suspicion index and relevant investigations for reaching a diagnosis.

Keywords: Jejunal diverticula, Exploratory laparotomy, Subacute intestinal obstruction

INTRODUCTION

Jejunal diverticula are a rare entity, majorly occurring in the elderly population.¹ Most cases often remain asymptomatic, but jejunal diverticula may present with nonspecific symptoms or features that mimic other conditions viz. appendicitis, colonic diverticulitis, or Crohn's disease.² Rarely reported the complication of upper gastrointestinal (GI) bleed, which could be fatal. On investigation, diverticula reportedly are multiple and mostly located near angle of Treitz. Upper GI contrast study helps visualize disease but contrast enhanced computed tomography (CECT) abdomen is the diagnostic tool for confirmation of disease and extent of involvement.

CASE REPORT

A 65-year-old lady presented with chief complaints of diffuse pain abdomen and abdominal distension for 6 days and non-passage of flatus and stool for 3 days. The pain was insidious in onset, moderate to severe in intensity, colicky in nature, non-radiating, and increased after oral

intake. It was associated with abdominal distension, which was gradually progressive, and associated with non-passage of flatus and stool for 3 days. She was a known asthmatic for 30 years, on inhaler salbutamol puff as required. She underwent a total abdominal hysterectomy 10 years back.

On examination, the general survey was normal and vitals were stable. On per abdominal examination, the abdomen was distended, the umbilicus centrally placed and all quadrants moving equally with respiration, no visible pulsation or peristalsis or any venous engorgement, and approx. 6 cm infraumbilical midline scar mark present. On palpation, the abdomen was tensed with mild diffuse tenderness, no guarding or rigidity, and no organomegaly. There was no evidence of free fluid and bowel sounds were absent. Digital rectal exam (DRE) was normal. On ultrasonography (USG), there were dilated bowel loops with to and fro peristalsis suggestive of intestinal obstruction. On the CECT abdomen, an intraluminal calcified lesion with features of obstruction and proximal dilation is present.

The patient was managed conservatively for 2 days and upon nonimprovement underwent exploratory laparotomy. Two diverticula were found on the mesenteric border of the jejunum about four feet distal to Duodenojejunal Junction. There was bone present inside the lumen of the jejunal diverticula. Also, a stricture was present 3 feet proximal to the ileocecal region. Wedge resection of diverticula and repair with vicryl 2-0 CRB suture was carried out, along with stricturoplasty was done. The patient was allowed orally on postoperative day 6 and the stay period was uneventful.

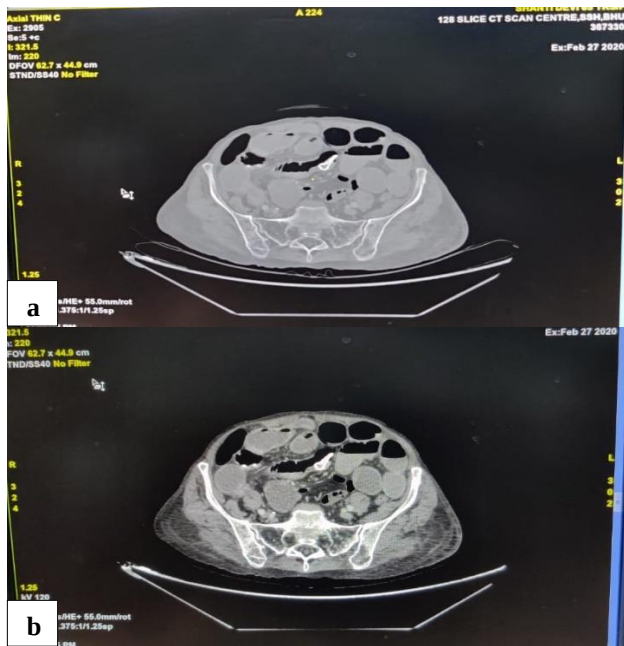


Figure 1 (a and b): CECT image of dilated small bowel with intraluminal bone.

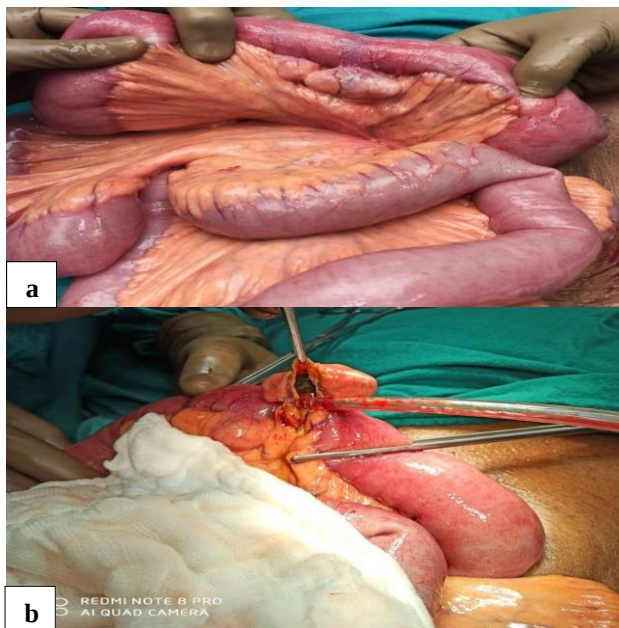


Figure 2 (a and b): Jejunal diverticula with intraluminal bone.



Figure 3 (a and b): Bone as the content of diverticula.

DISCUSSION

Jejunal and ileal diverticula (excluding Meckel's) are relatively uncommon with low prevalence reported at around 0.1-1.3%.³ A jejunal diverticulum is an uncommon condition that usually remains asymptomatic but sometimes may present with massive GI bleed or chronic malabsorption, volvulus, and diverticulitis with or without perforation or abscess, occurring in 10–30% of patients.⁴⁻⁶ Upper GI contrast study may show jejunal diverticulosis but usually, CECT abdomen is the choice. Few reports stated double-balloon endoscopy or capsule endoscopy in selected cases.^{7,8} Emergency laparotomy may be indicated in case of acute diverticulitis, massive GI bleeds as both therapeutic and diagnostic.

CONCLUSION

Since the diagnosis of jejunal diverticula is challenging due to its low incidence and is mostly asymptomatic, high suspicion index with corroborative evidence is required. Incidental finding of jejunal diverticula is rare and the presence of bone as intraluminal content of diverticula is not reported yet.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: Not required

REFERENCES

1. Tilakaratne S, Coomaraswamy W, Ratnapala SD. A rare case of jejunal diverticulitis. Galle Med J. 2009;14(1).
2. Alex M, James H, Huw r, Mark C, Jim V. Jejunal diverticulitis: an unusual cause of an intra-abdominal abscess - coronal Computed Tomography

- reconstruction can aid the diagnosis. *Radiol Case.* 2008;2(5):15-8.
3. Pérez I, De Miguel M, Ortiz H. Complicaciones agudas de los divertículos de yeyuno e ileon. *Cir Esp.* 1989;45:473-6.
 4. Ferreira-Aparicio FE, Gutiérrez-Vega R, Gálvez-Molina Y, Ontiveros-Nevares P, Athie-Gutiérrez C, Montalvo-Javé EE. Diverticular disease of the small bowel. *Case Rep Gastroenterol.* 2012;6:668-76.
 5. Nejmeddine A, Bassem A, Mohamed H, Hazem BA, Ramez B, Issam BM. Complicated jejunal diverticulosis: a case report with literature review. *North Am J Med Sci.* 2009;1:196-9.
 6. Kassahun WT, Fangmann J, Harms J, Bartels M, Hauss J. Complicated small bowel diverticulosis: a case report and review of the literature. *World J Gastroenterol.* 2007;13:2240-2.
 7. Ell C, Remke S, May A, Helou L, Henrich R, Mayer G. The first prospective controlled trial comparing wireless capsule endoscopy with push enteroscopy in chronic gastrointestinal bleeding. *Endoscopy.* 2002;34:685-9.
 8. Yang CW, Chen YY, Yen HH, Soon MS. Successful double-balloon enteroscopy treatment for bleeding jejunal diverticulum: a case report and review of the literature. *J Laparoendosc Adv Surg Tech.* 2009;19:637-40.

Cite this article as: Akshay BR, Srivastava A, Yadav HK. A rare case of jejunal diverticula with bone causing sub-acute intestinal obstruction. *Int Surg J* 2022;9:2086-8.