

True ileal mesenteric diverticula- a rare cause of intestinal obstruction

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Abstract:

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Jejunal and ileal diverticula (Excluding Meckel's diverticulum) are an extremely rare entity. Autopsy shows incidence of 0.5- 2.3%. Ileal diverticula consist of about 23.8% of the total cases. Although these diverticula are usually asymptomatic, serious complications such as infection, bowel obstruction, bleeding or perforation can occur. Diagnosis is often delayed due to rarity of the disease. It is often diagnosed incidentally on abdominal exploration. We present a rare case of true ileal diverticula emerging on the mesenteric border, as a cause of intestinal obstruction, in a 50 yrs old male. The patient underwent laparotomy with segmental resection of the ileum. This study is important from the perspective that though ileal diverticulum is a rare disease, it should be considered in the differential diagnosis of acute abdomen, particularly in elderly patients.

Key Words: True ileal diverticula, Mesenteric border, Small bowel obstruction.

Introduction:

Ileal diverticulosis is as such a very rare entity and its incidence has been reported to be 0.06-2.3% based on radiological and autopsy studies (1). Most cases of ileal diverticulosis show multiple diverticulae, and occur predominantly in males over 60 yrs. Diagnosis is often delayed due to rarity of the disease (2). The cause is thought to be a motor dysfunction of the smooth muscle or the myenteric plexus, resulting in disordered contraction of the small bowel, generating increased intraluminal pressure, and resulting in herniation of the mucosa and submucosa through the weakest portion of the bowel (i.e, the mesenteric side) (3).

Case Report:

A 50yrs old male presented as an emergency with a three days history of sudden, severe generalized abdominal pain associated with non bilious vomiting. There was no significant past history. On examination he appeared dehydrated, having tachycardia and tachypnea. Abdomen was distended, tender. Erect x-ray abdomen showed few air fluid levels and no gas under diaphragm. Sonography suggested few dilated small bowel loops with to and fro type peristalsis, suggestive of subacute intestinal obstruction.

The patient was posted for exploratory laparotomy after explaining the risk to the patients kin. Laparotomy was done with a midline incision and revealed dilated jejunal and proximal ileal loops. There was evidence of a solitary diverticulum of the

terminal ileum on the mesenteric border just 15cms proximal to ileocaecal junction which was inflamed and adherent to sigmoid colon and adjacent ileal loops causing obstruction (Figure 1 and 2). Resection of the bowel segment containing the diverticula was done and end to end anastomosis done.

Histopathology study of the section from the blind pouch showed all layers of intestine with mucosal thinning and erosion. Mucosal myositis are lost in one half of the intestinal segment. In the area of loss of mucosal myositis there is complete denudation of the mucosa with underlying muscularis and serosa. A diagnosis of true diverticulum with transmural enteritis was made (Figure 3 and 4).

Post operatively patient was managed with intravenous fluids, antibiotics, analgesics and Ryles tube aspiration. Patient was fine post operatively, was allowed orally on post op day 3. Sutures were removed on post op day 11 and discharged. Patient's condition at the time of discharge was satisfactory.

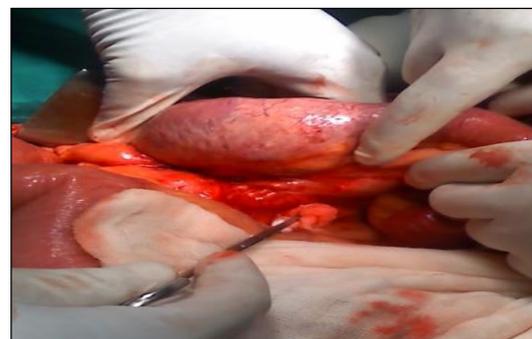


Fig. 1

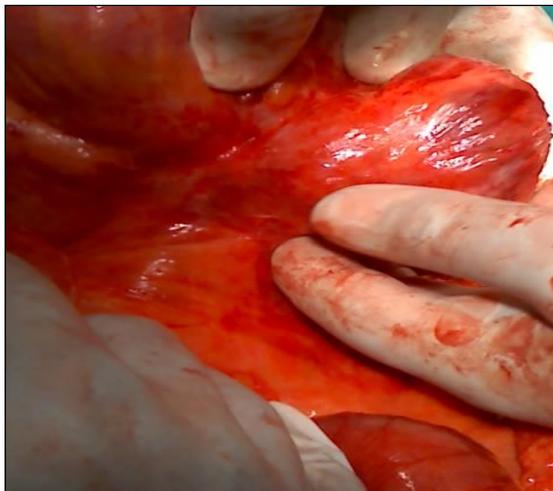


Fig. 2

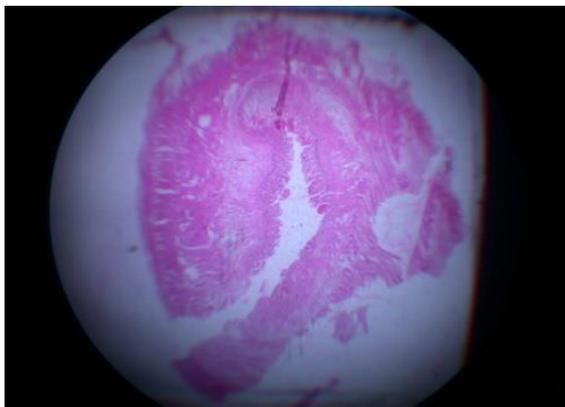


Fig 3

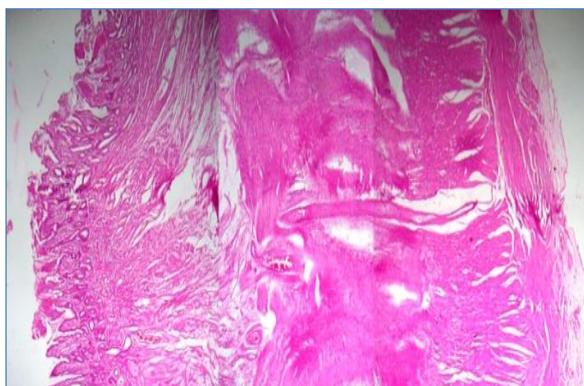


Fig 4

obstruction, hemorrhage and sepsis. The most common complication is diverticulitis(5). Occult perforation of ileal diverticulum is known to occur in rare cases(6).

Surgical intervention is indicated only if complications arise. Resection and primary anastomosis is the preferred treatment for non-meckelian diverticula(7). It should therefore remain as one of the differential diagnosis for any patient with an acute abdomen or gastrointestinal bleeding of unknown origin, particularly in elderly patients (8). This case is being presented because it is a rare solitary ileal diverticula.

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Discussion:

The true diverticula of the small bowel are a very rare observation in clinical practice; they have a mal formative origin and, occasionally are acquired, contrary to what is observed in the colon, where they are frequently an acquired pathology (4). The majority of small bowel diverticula are asymptomatic, with only 10% associated with acute complications including diverticulitis, perforation, volvulus,