A RARE CASE OF JEJUNAL DIVERTICULAR PERFORATION

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ABSTRACT

Jejunal diverticulosis is generally seen in elderly patients, and it is relatively rare. Jejunal diverticula are generally asymptomatic, as a result are usually only incidentally detected. Jejunal diverticulosis is associated with small bowel obstruction, bleeding, or perforation. We present a case report of a 58-year-old female who presented with jejunal diverticular perforation.

KEYWORDS

Acute Abdomen, Multiple Jejunal Diverticulae, Perforated Jejunal Diverticulum.

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INTRODUCTION

Jejunal diverticula are rare and are usually asymptomatic. However, they may cause chronic non-specific symptoms or rarely lead to an acute presentation.

CASE REPORT

A 58 year old female patient presented with acute pain abdomen and vomiting since 1 day. On examination, PR of 92/min., BP of 98/70mmHg, distended abdomen, tenderness all over with rigidity and guarding over right hypochondrium, liver dullness obliterated, sluggish bowel sounds. X-ray erect abdomen shows air under the diaphragm s/o hollow viscous perforation (Figure 1). Total WBC count increased (13,000), other blood investigations within normal limits. Emergency laparotomy was done, bilious free fluid in peritoneal cavity with multiple jejunal diverticula noted 20cms away from DJ junction in mesenteric border and solitary diverticular perforation (Figure 2, 3). Free fluid drained through saline washes given, perforated edges trimmed and sent for HPE, primary closure done. Abdomen closed with drain in situ. Postop period uneventful. Drain removed after 5 days. Patient discharged on day 6. Histopathology confirmed jejunal diverticulum with no evidence of malignancy.

DISCUSSION

Jejunal diverticula are rare with an incidence of less than 0.5%.[1] Seventy-five percent of the diverticula in the small intestine are located in the proximal jejunum, 20% in the distal jejunum, and 15% in the ileum.[2] Pathologically, they are pseudodiverticula of the pulsion type, resulting from increased intra-luminal pressure and weakening of the bowel wall.

These outpouchings only contain mucosa and submucosa. Despite most cases of jejunal diverticulosis remaining completely asymptomatic, complications are reported in 10 to 30% of patients.[3,5]

These include chronic abdominal pain, malabsorption, hemorrhage, diverticulitis, obstruction, abscess formation and rarely diverticular perforation. Abdominal plain radiograph may hint at perforation by revealing pneumoperitoneum and sonography by revealing ascites, but both have limited diagnostic utility.

Abdominal Computerized Tomography (CT) appears to be more valuable in identifying the presence, site and cause of GI tract perforation among imaging techniques.[6,7] Barium scan of the small intestine is one of the best radiological contrast study to visualize diverticula. It is contraindicated in case of perforation or acute diverticulitis to suggest a perforation.[8] Endoscopic procedures, such as double-ballon endoscopy and capsule endoscopy may be helpful in the diagnosis of small bowel diverticula, but have limited utility in emergency setting. Diagnostic laparoscopy is a valuable method and may sometimes prevent unnecessary laparotomies.

In our patient considering the age group, multiple diverticulae, generalized peritonitis, risk of short bowel syndrome on resection of long segment of intestine; on table decided to do primary closure of perforation in contrast to resection and anastamosis of the diverticular segment which is considered to be standard.

CONCLUSION

Multiple jejunal diverticulum on mesenteric side presenting with solitary diverticular perforation is a very rare clinical entity and can be revealed only thorough inspection of the bowel at laparotomy. It should be considered in the differential diagnosis of acute abdomen, especially in the elderly patients. Diverticulectomy with or without segmental bowel resection is the treatment of choice.

REFERENCES

1. Zager JS, Garbus JE, Shaw JP, Cohen MG, Garber SM: Jejunal diverticulosis: a rare entity with multiple presentations, a series of cases. Dig Surg 2000;17:643-645.
2. Singal R, Gupta S, Airon A. Giant and multiple jejunal diverticula presenting as peritonitis a significant challenging disorder. J Med Life 2012;5:308-10.
3. Wilcox RD, Shatney CH. Surgical implications of jejunal diverticula. South Med J 1988;81:1386-1391.
4. Sibille A, Willocx R. Jejunal diverticulitis. Am J Gastroenterol 1992;87:655-658.

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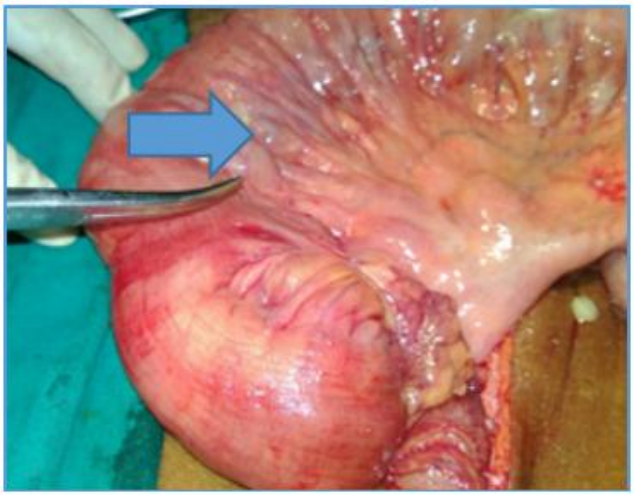
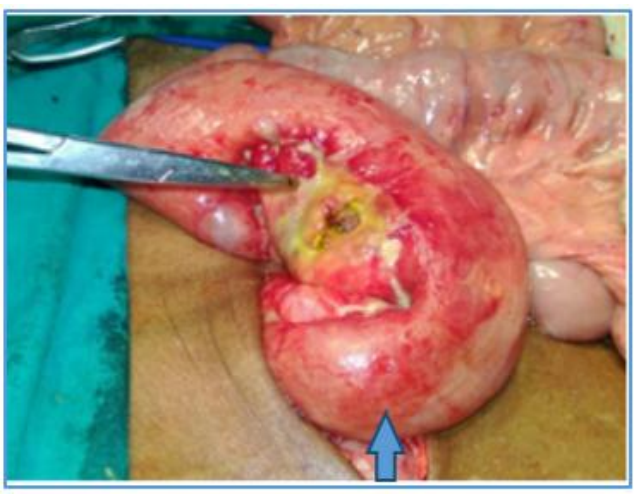
5. Akhrass R, Yaffe MB, Fischer C, Ponsky J, Shuck JM. Small-bowel diverticulosis: perceptions and reality. J Am Coll Surg 1997;184:383-388.
6. Furukawa A, Sakoda M, Yamasaki M, et al. Gastrointestinal tract perforation: CT diagnosis of presence, site, and cause. Abdom Imaging 2005;30:524-34.
7. Fintelmann F, Levine MS, Rubesin SE. Jejunal diverticulosis: Findings on CT in 28 patients. AJR Am J Roentgenol 2008;190:1286-90.
8. Singh O, Gupta SS, Shukla S, Mathur RK, Shukla S. Jejunal diverticulae: Reports of two cases with review of literature. Indian J Surg 2009;71:238-44.



Diverticulum



Diverticular Perforation