



Case Report

Perforated Jejunal Diverticulae

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ABSTRACT

Introduction: Jejunal diverticulae are rare, difficult to diagnose clinically and on plain x-ray. It is normally silent and usually comes into picture after some complications like bleeding, obstruction or perforation. Incidence of jejunal diverticulae is reported to be 1.5%. Most are diagnosed on autopsy.

Case report: 77 year male presented with pain in abdomen for 3-4 days with no previous history of similar complains. Plain x-ray showed gas under diaphragm. Other laboratory investigations were within normal limits. Patient underwent emergency laparotomy for hollow viscous perforation. Intraoperative findings were multiple jejuna diverticulae with perforation of proximal diverticuli with other diverticulae were inflamed and showing signs of impending perforation.

Conclusion: If jejunal diverticulae are diagnosed early then the morbidity and mortality can be reduced. Treatment in acute presentation as in our case of perforation is emergency laparotomy/ laparoscopy followed by resection of affected segment and anastomosis with post operative intensive care and supportive antibacterial treatment.

Key words: multiple jejunal diverticulae, perforation, jejunal resection anastomosis

INTRODUCTION

Jejunal diverticulae are rare, difficult to diagnose clinically and on plain x-ray. It is normally silent and usually comes into picture after some complications like bleeding, obstruction or perforation. Incidence of jejunal diverticulae is reported to be 1.5%. Most are diagnosed on autopsy. Jejunal diverticulae are multiple. They present with symptoms like chronic abdominal pain, dyspepsia, regurgitation. Other sites of diverticulae are duodenum and ileum in order of the incidence rate. Barium meal shows out pouching of the intestinal

luminal wall. CT scan helps in diagnosis of the diverticulae and associated abscess and peritonitis. In complicated cases x-ray shows findings like air-fluid level and gas under diaphragm. Treatment of acute cases is to relieve the obstruction and exploratory laparotomy with resection anastomosis to treat complications. Post-operatively intensive care support and antimicrobial treatment helps in early recovery. Asymptomatic or chronic cases are treated conservatively with regular follow up.

CASE REPORT

77 year male presented with pain in abdomen for 3-4 days with no previous history of similar complains. He presented in casualty with acute abdominal pain and discomfort. His vital were stable on presentation but deteriorated rapidly soon after the admission in the hospital. Plain x-ray showed gas under diaphragm. (fig.1) Laboratory investigations were within normal limits. He was managed in intensive care unit for initial resuscitation and stabilization. Subsequently he underwent emergency laparotomy for hollow viscous perforation. Intraoperative findings were multiple jejunal diverticulae with perforation of proximal diverticuli with other diverticulae were inflamed and showing signs of impending perforation. (fig.2)



Fig.1 Preoperative X-ray showing gas under diaphragm.

Proximal jejunal loop of about 10-15 cm was involved with diverticulae. All diverticulae were along the mesenteric border. Involving mesentery was inflamed and oedematous. There were early signs of peritonitis. Rest of the bowel was unremarkable. Involved loop of jejunum was resected and jejunojejunal end-to-end anastomosis was performed in four layers. Thorough peritoneal wash was given. Post-operatively patient was managed in intensive care unit with fluid support and antimicrobial cover. He recovered uneventfully following surgery. Resected segment was sent for histopathology examination. The report was inflamed diverticulae with no malignant changes of involved mucosa.



Fig.2 Intraoperative multiple jejunal diverticulae.

DISCUSSION

Jejunal diverticulae are multiple, as compared to ileal diverticulae which are solitary and are always associated with diverticulae in other parts of the bowel. In our case there were five diverticulae with proximal three were larger as compare to remaining two. Only proximal 10 cm of jejunum was involved, with rest of the bowel was free of disease. Etiopathogenesis of diverticulae is intestinal dyskinesia due to

functional abnormalities of the smooth muscles or of the myenteric plexus. This causes increased intraluminal pressure of the affected segment and diverticuli are formed at the point of entry of vasa recti which is the weakest point of the bowel. [1,2]

Most of the jejunal diverticulae are asymptomatic. Approximately 30% become symptomatic experiencing epigastric pain, abdominal discomfort, post prandial flatulence, epigastric cramping pain and

fever.^[3] Anemia due to chronic occult gastrointestinal bleeding, iron or B12 deficiency have been reported secondary to malabsorption.^[4]

Complications include diverticulitis, bleeding, enterolith formation, intestinal obstruction and perforation.^[5] Some patients respond to the temporary interruption of the enteral nutrition, to a gastrointestinal relief with a nasogastric tube and to the administration of empirical, wide-spectrum antibiotics.^[6]

The treatment of choice for perforated jejunal diverticula is exploratory laparotomy and resection of affected bowel loop with primary anastomosis. If diverticula are extensive, resection may have to be limited to include only the segment containing the perforated diverticulum to avoid short bowel syndrome.^[7]

CONCLUSIONS

It is seen that complicated jejunal diverticula are quite rare and that one of the most common complication is perforation. Though conservative management has been reported, the treatment of choice is elective resection and primary anastomosis. The delay in the treatment may lead to bad prognosis of the disease.

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