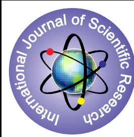
Volume : 3 | Issue : 6 | June 2014 • ISSN No 2277 - 8179

Perforation of Jejunal Diverticulum



Medical Science

KEYWORDS : diverticulum, jejunum,perforation

Thulasivasudevaiah.N	Assistant professor in the Dept of Surgery at JSS Medical College ,Mysore. India.
Manjunath Shenoy	professor in the Dept of Surgery at JSS Medical College ,Mysore. India.
P.B.Thrishuli	Associate Professor in the Dept of Surgery at JSS Medical College ,Mysore. India.
Shivanand Reddy K V	postgraduate in the Dept of Surgery at JSS Medical College ,Mysore. India.

ABSTRACT

Jejunal Diverticulum is an uncommon disease & Usually asymptomatic. The incidence of acquired Jejunal diverticulum is 0.06 to 1.3%.They typically Located on the mesenteric aspect of the jejunum. Complications such as intestinal obstruction, Diverticulitis, haemorrhage, perforation & Malabsorption can occur in 6-10% of patients. Generalised peritonitis caused by Jejunal diverticulum Perforation can be a rare clinical entity in an elderly Patient who is diagnosed clinically as a case of perforated Duodenal ulcer.

Pathophysiology:

The prevalence of jejuno ileal diverticulum has been estimated to range from 1-5%.Commonly seen in the 6th or 7th decade of life. Acquired abnormality of intestinal smooth muscle or dysregulated motility leading to herniation of mucosa & submucosa through weakness areas of muscularis leads to diverticulum. Acquired diverticulum can be associated with bacterial overgrowth,leading to vitamin B12 deficiency, megaloblastic anaemia, malabsorption & steatorrhea. Intraluminal debris causes distension can lead to perforation.

Fig :1- showing enteric contents coming out of Perforation in jejuna diverticulum.

.

Clinical presentation:

Acqiured diverticula are asymptomatic unless associated with complications. Symptoms such as intermittent abdominal pain,flatulence,diarrhea,& constipation are reported to be present in 10-30% of Patients with jejuno ileal diverticulum. perforation of the jejunum occurs into the peritoneal cavity and causes abdominal pain, tenderness, distension Accompanied by fever& tachycardia.

Diagnosis:

Most acquired diverticula are discovered incidentally on X-ray imaging, during endoscopy or at the time of surgery. The lesions can be missed on endoscopy. Enteroclysis is the most sensitive test for detecting jejunal diverticulum. If perforation is suspected but not clinically obvious, CT scanning should be performed.

Treatment:

Asymptomatic diverticulum should be left alone. Jejunal & ileal perforations Require surgical repair or segmental resection.

Case report:

A 65 years old male patient was admitted on26th Feb 2014 to ER Dept of JSS Hospital with complaints of severe abdominal pain and vomiting of 3 days duration.He was treated conservatively for the similar pain 1 year ago at district hospital for 4 days.

On admission his pulse rate was 120/min, BP was 130/90 mmHg, he was anaemic & dehydrated.

Per abdominal examination revealed generalised tenderness, guarding & rigidity. BS were sluggish. Liver dullness was obliterated (due to emphysematous chest)

His blood investigations showed TC-10100 cells/cmm DC-Neutrophils-86%, L-10%. M-4%
Plain X-Ray abdomen was showing multiple air fluid levels,but there was no Pneumoperitoneum.

Our initial clinical diagnosis was perforated DU & Emergency laparotomy revealed purulent peritonitis with flakes of pus around proximal jejunum coils(Fig-1) with a perforated sloughed out Jejunal diverticulum filled with white debris in the lumen obstructing the neck of diverticulum.There were multiple diverticulum at mesenteric border of jejunum.(Fig-2)

Thorough peritoneal toilet was done with resection of perforated part of jejunum and end to end anastomosi carriedout. Post operatively patient received IV antibiotic and analgesics. he was discharged on 6th Post operative D

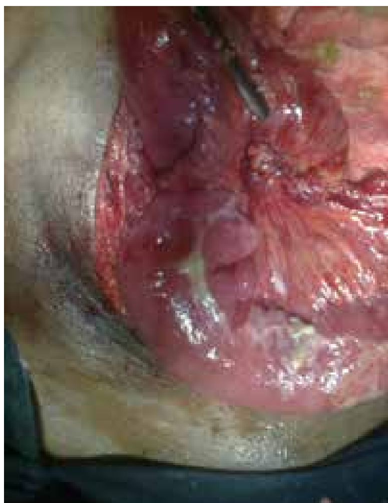


Fig 2 - *showing multiple diverticula in the mesenteric border of jejunum.*

Jejunal diverticular perforation is rare condition , found on incidentally on emergency laparotomy for peritonitis If perforation is clinically not obvious CT scanning should be performed. segmental intestinal resection is required for bleeding , diverticulitis & perforation.

Perforation of jejunum can also be managed with wide drainage.

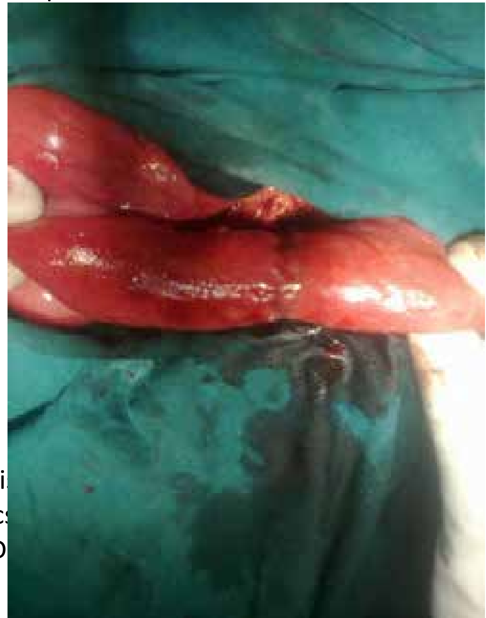


Fig-3- Jejuno-jejunostomy.

REFERENCE

1.Schwartz's principles of surgery 9th edn, page-1005,chapter 28. 2.Journal of minimal access surgery 2009,Oct-Dec 5(4),115-117 3.American surg-1996,Jan: 62(1) 26-9,KogerKE,ShatneyCH. 4.case report gastroenterology 2011 May 5 (2),445-51 Nonose.R Valenciano, de souza.