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## CASE REPORT

# Multiple Jejunal Diverticula – an Incidental Finding

IHTESHAM HUSSAIN MALIK, BAHZAD AKRAM KHAN, AHMAD KAMAL ANSARI, MUHAMMAD ABBAS, ZAMEER ABBAS

### SUMMARY

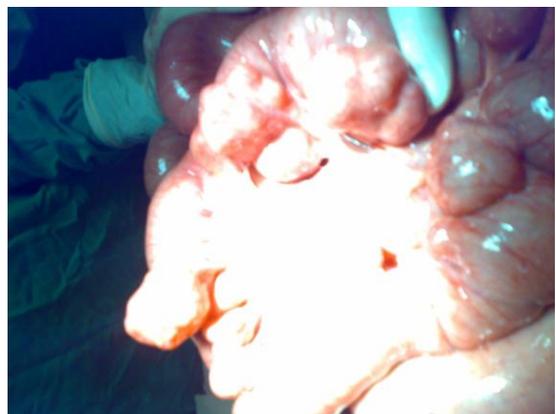
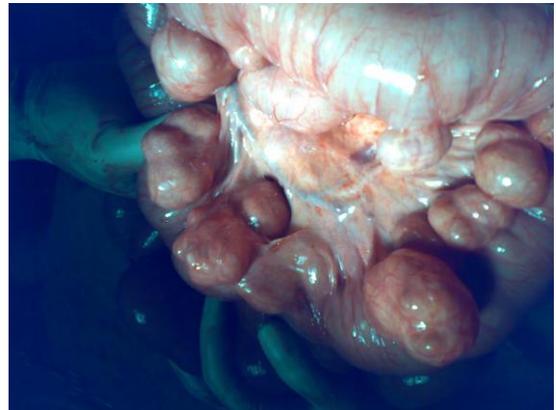
A 50 years old male underwent an emergency laparotomy for small bowel obstruction. Peroperatively there were two bands causing obstruction of terminal ileum with proximal dilatation of small bowel and jejunum was found to have around 15 diverticula all which were symptomless.

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### CASE REPORT

A 50 year old male was admitted in emergency with complaints of central abdominal pain, vomiting and absolute constipation for 2 days. On examination, he had tachycardia, was not pale, afebrile and had a tender abdomen. His Hb was 13.3g/dl and TLC count was  $8.6 \times 10^3/\mu\text{L}$ .

Plain abdomen radiograph done in erect posture revealed multiple air fluid levels giving the classic ladder pattern appearance and some gas shadows. He was diagnosed to have small bowel obstruction and was prepared for exploratory laparotomy which revealed 2 obstructing bands in terminal ileum about 1½ feet proximal to the ileocaecal junction. The small bowel proximal to the site of obstruction was all dilated and jejunum was found to have around 15 diverticula. All these diverticula were of normal colour having wide mouth and none was found to be causing any obstruction or narrowing of the gut lumen. The mesenteric lymph nodes in the region of multiple diverticula were enlarged.



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Department of Surgery, King Edward Medical University & Mayo Hospital, Lahore.

Correspondence to Dr. Ihtesham Hussain Malik, Senior Registrar Surgery. E mail: doctorihtesham@hotmail.com

## DISCUSSION

Diverticula arise from the mesenteric side of the bowel probably as a result of mucosal herniation through the point of entry blood vessel<sup>1</sup>. The mechanism of occurrence include:

1. Pulsion diverticula (commonest) due to motor dysfunction of the smooth muscle or the myenteric plexus in small bowel resulting in jejunoileal dyskinesia.
2. Congenital diverticula
3. Diverticula due to defect in the intestinal muscle coat.

Jejunal diverticula and its complication is a rare surgical disease with an incidence of 1.1-2.3% (together at enteroclysis at laparotomy and at autopsy). Incidence increases with age M:F 2:1<sup>2</sup>.

Acquired diverticula of the jejunum are rare. They are commonly pulsion diverticula due to a pathologic extroflexion of the bowel wall. They are usually multiple and vary in size from millimeters to several centimeters.

Since the first description between the end of 18<sup>th</sup> and bringing of the 19<sup>th</sup> century by Artley Cooper, few cases are reported in literature. They mainly affect males, between 60 and 70 years of age.

In the majority of cases they are asymptomatic and may be discovered incidentally. The reported complications rate is quite low and this influences the current recommendation not to treat asymptomatic, uncomplicated cases<sup>3</sup>.

No specific symptom and signs are pathognomic for small bowel diverticula when not symptomatic the patients history and physical examination are usually negative<sup>4</sup>.

It is found that 10-20% of cases present acutely with diverticulitis ± (abscess), perforation, invasive G.I haemorrhage or intestinal diverticulitis. Chronic symptomatology includes vague, ----- abdominal pain, malabsorption syndrome, functional pseudo-obstruction and chronic low grade GI haemorrhage<sup>5</sup>.

Intestinal obstruction can be pseudo-obstruction or mechanical. Mechanical obstruction can be due to inflammation associated with diverticulitis/stricture/adhesions, pressure on intestinal wall from distended diverticula, intussusceptions, volvulus or enteroliths developed with diverticula (getting impacted locally or distally after getting dislodged from diverticula)<sup>6</sup>.

Majority of symptomatic patients require resection of the affected segment and end to end anastomosis. Exception to this are multiple diverticula

scattered over the bowel wall in which case resection should be limited to the segment with the longest diverticula<sup>7</sup>. Similarly in patients with major malabsorption problem giving rise to anaemia, steatorrhea, hypoproteinaemia or Vitamin B12 deficiency, resection of the affected segment with end to end anastomosis can be effective. However malabsorption syndrome is treated initially with antibiotics which may or may not be followed by surgery<sup>8</sup>.

It is concluded that the incidence of this pathologic condition is difficult to establish. Necroscopic studies report an incidence ranging from 0.4% to 4.6%. the radiologic studies show a percentage between 0.002% and 0.7%<sup>9</sup>.

It is recommended that asymptomatic jejunal diverticula found incidentally should not be treated and a very careful assessment is required prior to the decision of leaving them as such.

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