Perforated Jejunal Diverticulum - A Rare Case Report

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INTRODUCTION: - Jejunal diverticulum perforation is an uncommon cause of acute abdominal pain in the elderly. Jejunal diverticulum is very rare with an incidence less than 0.5%. Case: - 85 yr old women come with pain abdomen which was investigated and found to as a case of perforation peritonitis. Intra operatively it was found to be a perforated jejunal diverticulum, resection anastomosis was done and post operative period was uneventful.

Conclusion: - jejunal diverticulum perforation can be suspected in a elderly patient having chronic abdominal pain and where other causes of perforation are ruled out.

Introduction – Jejunal diverticulum perforation is an uncommon cause of acute abdominal pain in the elderly [1]. Jejunal diverticulum is very rare with an incidence less than 0.5% [2]. They are the outpouching contain mucosa and submucosa of the jejunum which are defined pathologically as pseudodiverticula of the pulsion type due to weakening of wall or increased intraluminal pressure. Most of the cases are asymptomatic complications occur in 10-30% of case they are diverticulitis, obstruction, malabsorption, chronic abdominal pain, haemorrhage, abscess formation and rarerly perforation of diveticulum.[3-5]

Case: - An 85 year old female patient presented to emergency department with chief complaint of generalized abdominal pain for 2 days. On physical examination vital signs were temperature was normal heart rate was 84, B.P was 140/90 and respiratory rate was 22 breaths/min

On abdominal examination signs revealed signs of peritonitis and abdominal tenderness. Laboratory investigations were TLC was normal 6200/mm3 and impaired renal profile blood urea was 179mg/dl, and serum creatinine was 2.23 mg/dl.

Abdominal x-ray (figure 1) revealed air under the diaphragm on right side suggestive of perforation.
Patient underwent laprotomy a single jejunal diverticulum with two perforation of pin hole size were present along with pus pockets in the mesentry (figure 2). The part of jejunum containing perforations and diverticulum along with mesentry was excised and anastomosis was done in two layers. Peritoneal lavage was done and good postoperative care was given patient recovered very well.

**Discussion**- Jejunal diverticulum perforation is an uncommon cause of acute abdominal pain in the elderly [1]. Jejunal diverticulum is very rare with an incidence less than 0.5% [2]. Jejunal diverticulum arises on mesenteric border where the mesenteric vessels penetrate the jejunum. The exact cause is not known believed to be developed from high segmental intraluminal pressure, abnormal peristalsis and weakening of wall. In most of the cases it is asymptomatic patient may develop chronic abdominal pain. Common acute complications are diverticulitis, perforation, intestinal obstruction, and bleeding[6]. Angiodysplasia in a jejunal diverticulum is also reported which is an unusual cause of lower g.i.t bleed [7]. There is as such no confirmatory diagnostic test plain x-ray abdomen may show evidence of perforation such as free air under the diaphragm, or evidence of intestinal obstruction such as multiple air fluid levels and bowel dilatation. Localized abcess formation, thickening of jejunum or inflammation of jejunum may be visible on C.T scan[8]. Diagnostic laproscopy may be beneficial it help us in making of accurate diagnosis. Currently the treatement of choice for a perforated jejunal diverticulum causing peritonitis is laparotomy and the resection of part involved and primary anastomosis[9]. If there are many diverticula then resection is done only of the perforated part in order to avoid short bowel syndrome[10].

Jejunal diveticulosis unlike colonic diverticulosis not involved the surrounding tissue as in our case surrounding gut was normal and depending on the age of patient resection and primary anastomosis was done.

**Conclusion**- Jejunal diverticulum are very rare but patient may present as acute complication as in our case. jejunal diverticulum perforation can
be suspected in an elderly patient having chronic abdominal pain and where other causes of perforation are ruled out. Once the diagnosis has been made surgical repair is the treatment of choice.

References


Figure 1 (shows air under the diaphragm)

Figure 2 (Shows jejunal diverticulum, perforation)