CASE REPORT OPEN ACCESS

A Rare Presentation of Meckel's Diverticulum

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ABSTRACT

Meckel's diverticulum is one of the the most common congenital malformations of intestinal tract. Inflammation of the diverticulum is a rare clinical presentation in adult population and it often mimick acute appendicitis. A 45-year old male was operated for suspicion of acute appendicitis but found to have Meckel's diverticultis. A large diverticulum with signs of inflammation adherent with greater omentum found. Resection of diverticulum with end to end anastomosis of ileum was performed.

Key words *Meckel's diverticulum, Meckel's diverticultis, Abdominal pain.*

INTRODUCTION:

Meckel's diverticulum is the most common congenital abnormality of gastrointestinal tract due to failure of obliteration of proximal part of omphalomesenteric duct in the 7th week of gestation.[1] It is often described by a rule of 2, found in 2 percent of population, within 2 feet of ileocecal junction, about 2 inches long, 2 types of heterotopic mucosa and presentation before the age of two year. It presents with variety of symptoms like intestinal obstruction, bleeding from gastrointestinal tract, diverticulitis, intussusception, perforation and rarely neoplasm.[4] It is a true diverticulum in which there is outpouching of all the three layers of gut wall and found at antimesenteric border. It is twice as common in males as in females.[2] Herein we present a rare case of Meckel's divertculitis in an adult male which was found at surgery.

CASE REPORT:

A 45-year old male presented to emergency department with three days history of pain abdomen which was colicky in nature. It started around the umbilical area and then shifted to right iliac fossa. It was associated with nausea. Past medical and surgical history was not significant There was no history of anorexia, bleeding per rectum, and fever. On clinical examination there was tenderness and guarding in both right iliac fossa and umbilical regions. Laboratory investigation showed increase in total leukocyte count. Upright plain abdominal x ray was normal. Patient was initially treated with conservative measures (intravenous fluid and nil per oral) and then taken to operation theatre for suspicion of acute appendicitis. Open surgical approach through a gridiron incision was made. A Meckel's diverticulum which was wrapped up by the greater omentum with signs of acute inflammation found (Fig I). It was found at antimesenteric border approximately 2 feet from ileocecal junction (Fig II). Incision was extended and converted to Rutherford Morrison type. Resection of diverticulum and end to end anastomosis of ileum was performed. Appendix was normal and appendicetomy was also done. Histopathology showed Meckel's diverticultis, no ectopic mucosal rest found. Patients was admitted for one week and discharged without any complication. No complication occurred in follow up.

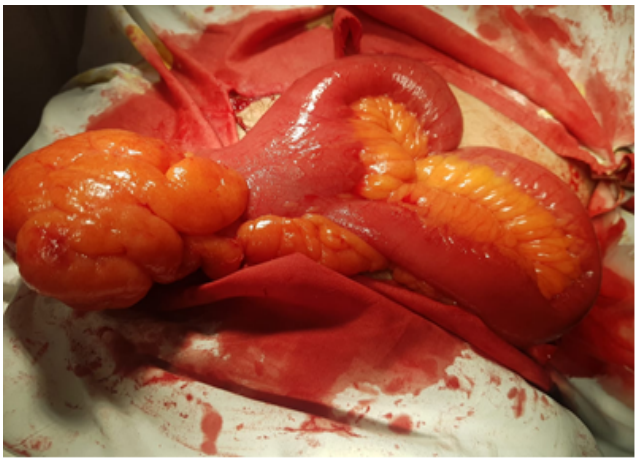

Fig I: Meckel's diverticulum wrapped up by greater omentum.

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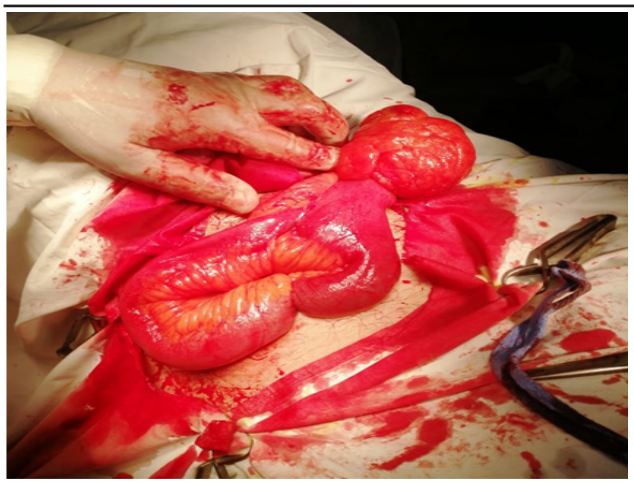

Fig II: Meckel's diverticulum at antimesenteric border

DISCUSSION:

Meckel's diverticulum is found in only 2% of the population with varied presentations. In patients with Meckel's diverticulitis it is difficult to clinically distinguish from acute appendicitis. Usually abdominal pain is more in umbilical region rather than limited to right iliac fossa. If untreated diverticulitis can progress to perforation and peritonitis.[3] Meckel's diverticulum is usually found incidentally during abdominal surgery. Resection of Meckel's diverticulum found incidentally is controversial both in adults and children. The chances of Meckel's becoming symptomatic in adults are only 2% or less. Postoperative morbidity as a result of intestinal obstruction confers no benefit in prevention of disease.[4] Meckel's diverticulum found incidentally may be left as such. Resection should be done if Meckel's diverticulum is long, more than 4cm, with narrow base or containing ectopic mucosa. Symptomatic Meckel's diverticulum should also be removed. Standard procedure is wedge diverticulectomy. In some cases small bowel resection with primary end to end anastomosis is required.[5]

Laparocopic treatment of complicated Meckel's diverticultis is cost effective with few complications compared to conventional surgery.[6] It is worth remembering that Meckel's diverticulitis is clinically indistinguishable from acute appendicitis. In our patient suspicion of acute appendicitis was the reason for exploration but it turned out to be a case of diverticulitis. This may be kept in differential diagnosis of abdominal pain.

CONCLUSIONS:

Complicated Meckel's diverticulitis is difficult to distinguish from other intra abdominal surgical pathologies and is recognized only at surgery. Resection and anastomosis of diverticulum was found safe with uneventful discharge of the patient.

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