

Meckel S Diverticular Perforation - Rare Complication. Mimicking Acute Appendicitis

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I. Introduction

Meckel's diverticulum first described in 1808, develops due to the failure of obliteration of vitelline duct. It commonly occurs in 2 per cent of the population 2 inches in length, 2 feet from the ileocecal valve and two times more common in men than women. It is true diverticulum with all layers of Ileum present on the antimesenteric border. About 60% of Meckel's diverticulum contain heterotopic mucosa of which more than 60% found to be gastric mucosa, other tissues are pancreatic, colonic etc. Majority of Meckel's diverticula are asymptomatic, often diagnosed incidentally on imaging and laparotomy or laparoscopy for other conditions. The total lifetime complication is 4%.

The known complications are inflammation, perforation, haemorrhage, intussusception, volvulus, intestinal obstruction and malignant transformation.

II. Case Report

A 16-year-old male presented to the emergency room with a history of pain abdomen since three days associated with vomitings and fever.

The pain was initially around the umbilicus and migrated to right iliac fossa for one day.

On General physical examination: the patient was toxic with a temperature of 101 F, and a pulse rate of 100 beats per minute. blood pressure was normal

Per abdomen examination: revealed distended abdomen, with guarding and rigidity all over the abdomen.

Xray chest and Xray erect abdomen were normal ultrasound abdomen showed some free fluid in the abdomen.

Total counts were elevated to 12000. Other blood parameters were normal.

INTRA-OPERATIVE FINDINGS:

A fluid-filled with flakes of about 700 ml was drained, Meckel's diverticulum with phlegmon was identified on Ileum on the antimesenteric border.



Perforation was seen at the base with pus covering over it.



Resection of Meckel's diverticulum and an end to end ileo -ileal anastomosis was done Postoperative period was uneventful, and the patient was discharged on 12th post-op day and follow-up after one month was normal.

Histo-pathological examination of Meckel's diverticulum specimen showed gastric mucosa.

III. Discussion

Meckel's diverticulum is common congenital anomaly found in approximately 2 % of the general population. Complications of Meckel's diverticulum include bowel obstruction, inflammation, perforation, haemorrhage, intussusception, volvulus and malignant transformation.

The preoperative diagnosis was challenging. We reported a complicated and unusual case of a patient with spontaneous perforation of Meckel's diverticulum, who presented as acute abdomen and this patient required open laparotomy for diagnosis and management.

Most of Meckel's diverticulum are asymptomatic.

Meckel's diverticulum, in this case, presented as acute appendicitis clinically.

The perforation of Meckel's diverticulum can be caused by due to irritation by the foreign body and pressure necrosis of wall or spontaneous perforation following inflammation as in our case.

IV. Conclusion

Meckel's diverticulum complications are uncommon and a challenge to diagnose. Early diagnosis and intervention needed.

Meckel's diverticular perforation can present as acute abdomen mimicking acute appendicitis.

Hence the history of blood in stools and chronic abdominal pain, perforated Meckel's diverticulum should be kept in mind as a differential diagnosis.

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