

CASE REPORT

Spontaneous Hemoperitoneum: An Unusual Presentation of a Common Disease

¹Raghunath BV, ²Vishwanath Bhat

ABSTRACT

Intraluminal hemorrhage associated with ectopic gastric mucosa in a Meckel's diverticulum is a common presentation. However, intraperitoneal bleeding associated with Meckel's diverticulum, is considerably rare. Herein, we report a case of spontaneous intraperitoneal bleeding caused due to nonruptured, acutely inflamed Meckel's diverticulum causing erosion of one of the branches of ileocolic artery and presenting with peritonism.

Keywords: Meckel's diverticulum, Peritonism, Spontaneous hemoperitoneum.

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INTRODUCTION

Bleeding complications of Meckel's diverticulum are usually due to intraluminal hemorrhage. We hereby report a case of a child aged 7 years with acute abdominal pain secondary to intraperitoneal bleeding from a Meckel's diverticulum.

CASE REPORT

A 6-year-old female child weighing 17 kg, with no previous history of trauma or medical disorder, presented to the emergency department with acute onset of pain abdomen since 1 day and history of self limiting lower gastrointestinal bleeding 2 days back. Pain was generalized in nature and dull aching type, not associated with fever or vomiting. Clinical examination revealed a pale child with tachycardia of 102/minute. There was generalized guarding in the abdomen. Per rectal examination yielded few blood clots.

Investigations revealed hemoglobin: A 6.5 gm% and total leukocyte count of 13,800. A ultrasound of the abdomen suggested mild ascites with few dilated bowel loops. Appendix could not be commented upon.

After initial resuscitation with IV fluids and one unit packed cell transfusion, child was taken up for emergency laparotomy with a provisional diagnosis of a ruptured Meckel's diverticulum. Abdomen was opened by a right supraumbilical transverse incision. Intraoperatively, approximately 150 mg of fresh blood clot was seen, mainly in the right iliac fossa, which was evacuated. An acutely inflamed, nonperforated Meckel's diverticulum was seen adhered to the ileo caecal junction. On gently separating the adhesion, an arterial spurter from one of the branches of the ileocolic artery was seen which was ligated. Resection of the segment of intestine containing the diverticulum with anastomosis was done. Abdomen was closed without a drain.

Postoperative course was uneventful. Child was started on feeds from postoperative day 4 and was discharged on day 6. Histopathology of the diverticulum revealed gastric mucosa with acute inflammation in the diverticulum.

DISCUSSION

Meckel's diverticulum, a remnant of the vitello (Fig. 1) intestinal duct is seen in 2% of the general population. Though it is usually discovered as an incidental finding during laparotomies for other reasons, it can present

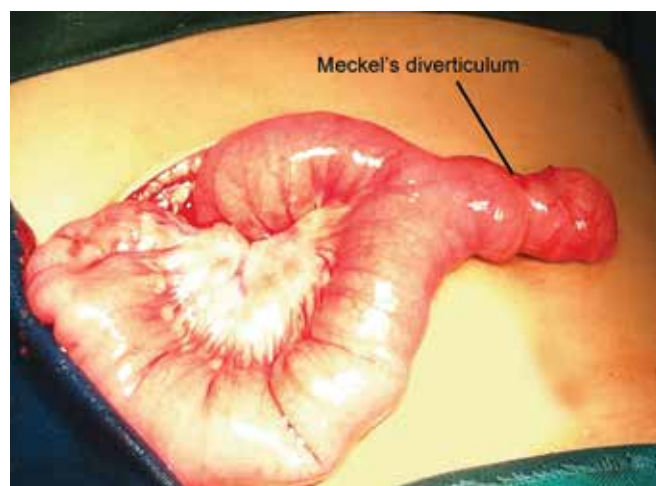


Fig. 1: Meckel's diverticulum showing site of adhesion to the ileocolic mesentery

¹Associate Professor, ²Managing Director

¹Department of Pediatric Surgery, RajaRajeswari Medical College, Bengaluru, Karnataka, India

²Department of Pediatric, Radhakrishna Nursing Home Bengaluru, Karnataka, India

Corresponding Author: Raghunath BV, Associate Professor Department of Pediatric Surgery, RajaRajeswari Medical College, Bengaluru, Karnataka, India, e-mail: bvraghunath9@gmail.com

with complications. The most common complications include diverticulitis, intraluminal bleeding leading to chronic anemia or acute gastrointestinal bleeding, perforation leading to peritonitis, acute intestinal obstruction secondary to bands, may act as the lead point for intussusceptions.

Extraluminal bleeding from a Meckel's diverticulum is relatively rare. Few articles report such an event in children.^{1,2}

The commonest cause for hemoperitoneum in a child with Meckel's diverticulum is peptic ulceration followed by perforation and bleeding. Other described mechanisms include tearing of the mesodiverticular bands which anchor the tip of the diverticulum to the anterior abdominal wall in both traumatic³ and atraumatic⁴ settings. Bleeding from a torn Meckel's mesentery has also been described.⁵ Burt et al⁶ described a case of hemoperitoneum resulting from an inflamed, non-perforated Meckel's diverticulum containing no ectopic tissue. They attributed the bleeding to inflammation disrupting the diverticulum's vascular supply.

In our child, the bleeding resulted from local inflammation and erosion of a branch of ileocolic artery. To the best of our knowledge, this cause for bleeding

has not been reported so far. We wanted to share our experience regarding this rare cause for bleeding and also to highlight that any child with lower GI bleed and clinical signs of peritonism, a bleeding Meckel's diverticulum has to be considered.

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