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Clinical Vignette

Inverted Meckel's diverticulum: A rare lead point for intussusception

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CASE PRESENTATION

A 2-year-old boy presented with colicky abdominal pain for the past 12 hours with 2 episodes of non-bilious vomiting. The patient was alright before the onset of symptoms except for episodic abdominal pain that was often relieved with oral analgesics. There was no history of fever or altered bowel habits. On examination, the patient had tachypnea, tachycardia, and irritability. The abdomen was soft, and a sausage-shaped mass was palpable in the right iliac fossa. A digital rectal examination showed an empty rectum and mucus staining. An abdominal ultrasound scan showed a donut sign/pseudokidney sign.

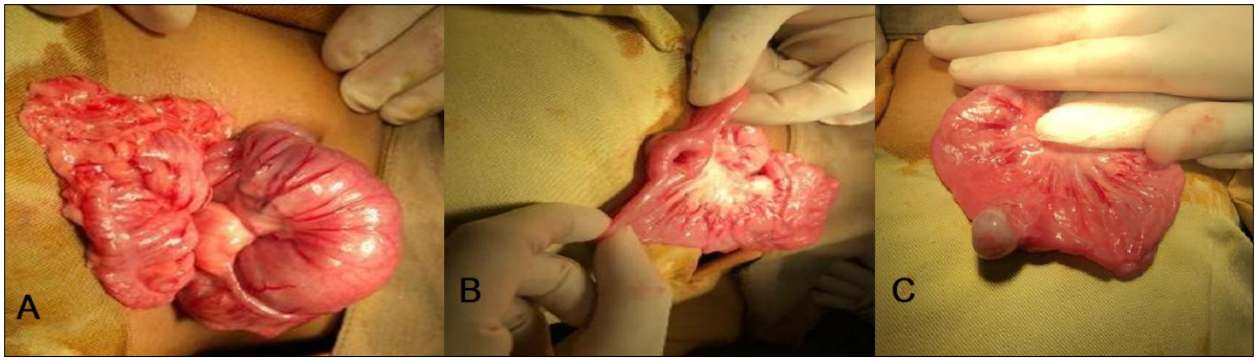

Figure 1: A) Ileocolic intussusception; B) After reduction, a donut-like depression is noted in the distal ileum; C) After eversion of the inverted Meckel's diverticulum.

At surgery, an ileocolic intussusception was found (Fig. 1A). After manual reduction of the intussusception, a donut-like depression was noted on the antimesenteric border of the distal ileum (Fig. 1B). A polypoidal growth was palpable intraluminally at the same level of the distal ileum. Considering it an inverted Meckel's Diverticulum, the growth was everted that ultimately took the shape of Meckel's diverticulum (Fig. 1C). Meckel's wedge resection was done, and primary ileo-ileal anastomosis was made. The postoperative course remained uneventful. The patient was discharged on the 4th postoperative day. The histopathology report showed ectopic gastric tissue in Meckel's diverticulum. The patient is doing fine on follow-up.

DISCUSSION

Intussusception is one of the common causes of intestinal obstruction in infants. Mostly the intussusception is ileocolic in configuration with no obvious pathological lead point (idiopathic). The frequency of pathological lead point (PLP) increases as the age of presentation increases. Several PLPs have been documented including Meckel's diverticulum, polyp, inflamed Peyer's patches, mesenteric lymph nodes, etc.[1] Meckel's diverticulum is one of the most common congenital anomalies of the gastrointestinal tract. It may present with complications in only 2% of the population before the age of 2 years; commonly it causes abdominal pain, lower GI bleeding, or intussusception. [2]

The etiology of inversion of Meckel's diverticulum is speculative. Some authors believe it to be a result of abnormal peristaltic movements around ulceration or ectopic tissue. In contrast, others think that the inversion of Meckel's diverticulum might be a normal phenomenon due to negative intraluminal pressure of the GIT that may advance to form a PLP for intussusception.[3] The reported

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complications of an inverted Meckel diverticulum are GIT bleeding, and intussusception that may lead to gut ischemia or perforation in case of delayed diagnosis and management.[4] Fortunately, in the index case, the patient presented shortly after the onset of symptoms, and a timely exploration decision helped us prevent any complications.

Conflict of Interest: Nil

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