Case Report

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Multiple Intussusceptions on A Meckel's Diverticulum in an Adult

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ABSTRACT

Adult intestinal intussusception is rare and usually secondary to an organic lesion, with Meckel's diverticulum (MD) being an uncommon but important cause. We report a 44-year-old woman presenting with diffuse abdominal pain and vomiting, found on exploratory laparotomy to have double intussusception (ileo-ileal and ileo-caecal) with an invaginated MD as the lead point. Manual reduction and segmental small-bowel resection including the diverticulum were performed, with an uncomplicated postoperative course. Diagnosis of MD-related intussusception in adults is challenging due to nonspecific symptoms and limited preoperative imaging accuracy, but surgical resection remains the definitive treatment. This case underscores the need for high clinical suspicion and timely intervention to achieve favorable outcomes in adult MD-related intussusception.

Keywords: Meckel's Diverticulum; Adult Intussusception; Ileo-Ileal; Ileo-Caecal; Small Bowel Obstruction

Clinical Image

We report the case of a 44-year-old woman with epilepsy presented with diffuse abdominal pain and vomiting, with examination revealing infra-umbilical guarding and reduced bowel sounds. Laboratory tests showed moderate leukocytosis, and imaging demonstrated small-bowel obstruction with a distal ileal transition zone and a "target-sign" consistent with intussusception. Exploratory laparotomy revealed a double intussusception (ileo-ileal and ileo-caecal) with an invaginated Meckel's diverticulum located 60–70 cm proximal to the ileocecal valve as the lead point. Both intussusceptions were manually reduced, and a 25-cm segmental small-bowel resection including the diverticulum was performed with hand-sewn anastomosis. Histology confirmed a true Meckel's diverticulum with ectopic gastric mucosa and no malignancy. The patient had an uneventful recovery and remained asymptomatic at three-month follow-up (Figures 1 & 2).

Adult intussusception is rare, accounting for 1-5% of bowel obstructions, and is usually caused by an organic lesion, with Meckel's diverticulum (MD) representing an exceptionally uncommon lead point [1]. Symptoms are nonspecific, including intermittent abdominal pain, nausea, vomiting, or subacute obstruction, contributing to diagnostic delays. Contrast-enhanced CT is the diagnostic modality of choice, though preoperative identification of MD, particularly inverted MD, is often difficult [2]. MD can cause intussusception due to ectopic mucosa, ulceration, or abnormal peristalsis, and may rarely harbor neoplasms, supporting the need for surgical resection rather than simple reduction [3]. We report a unique case of double intussusception (ileo-ileal and ileo-caecal) originating from a single MD, highlighting the diagnostic complexity and increased ischemic risk. Segmental resection including the diverticulum is recommended, with laparoscopic approaches feasible in stable patients but open laparotomy often required in emergencies [4]. Early surgical intervention, as in this case, ensures excellent outcomes and prevents complications such as necrosis or perforation, although prospective data on adult MD-related intussusception remain limited.

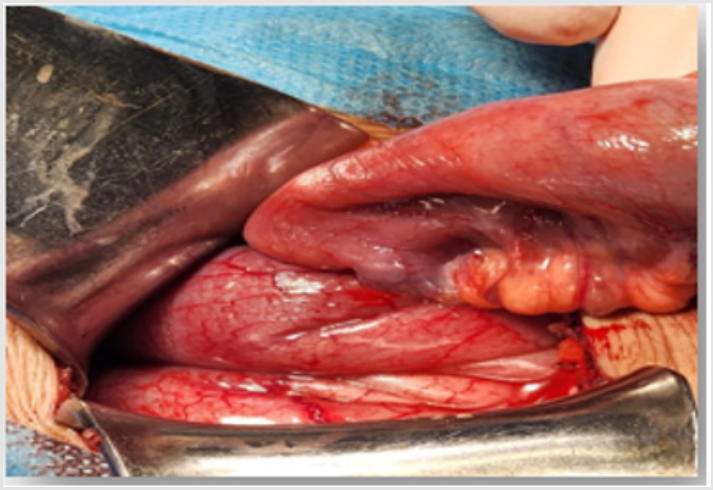

Figure 1: Intraoperative view illustrating ileocecal involvement.

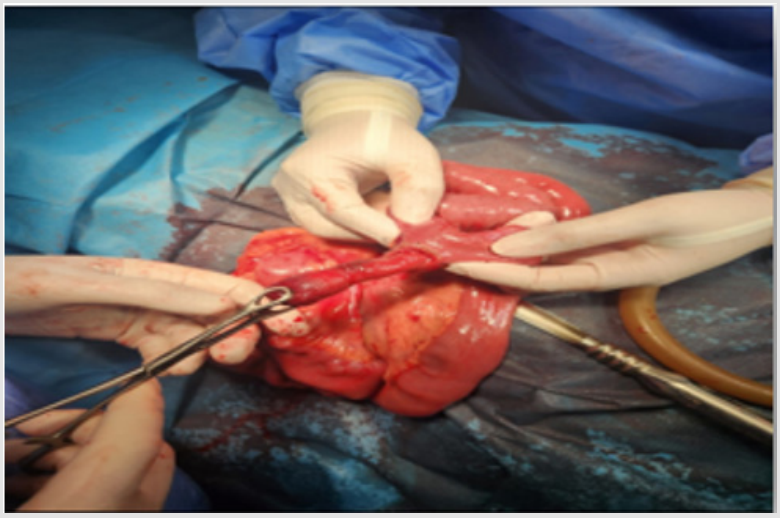

Figure 2: Intraoperative view illustrating an invaginated Meckel's diverticulum leading to.

References

1. Sagar J, Kumar V, Shah DK (2006) Meckel's Diverticulum: a Systematic Review. Journal of the Royal Society of Medicine. 99(10): 501-505.
2. Brill A, Lopez RA (2021) Intussusception in Adults. PubMed.
3. Gayer G, Zissin R, Apter S, Papa M, Hertz M (2002) Adult intussusception-a CT diagnosis. The British Journal of Radiology 75(890): 185-190.
4. Chong EH, Kim DJ, Kim S, Kim G, Kim WR (2018) Inverted Meckel's diverticulum: Two case reports and a review of the literature. World Journal of Gastrointestinal Surgery 10(6): 70-74.

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