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Incomplete Common Mesentery Revealed by Small Bowel Volvulus in a 53-Year-Old Adult: A Case Report

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***Abstract**: We report the case of a 53-year-old patient admitted for acute intestinal obstruction with absence of stool and gas for 24 hours, accompanied by abdominal pain. Abdominopelvic CT revealed a small bowel volvulus secondary to an incomplete common mesentery. The patient underwent surgery with division of Ladd's band and cecal fixation to the right iliac fossa. Postoperative outcomes were uneventful. This case highlights a rare congenital digestive anomaly revealed in adulthood by an acute presentation.*

Introduction

Incomplete common mesentery is a rare congenital anomaly of intestinal rotation, usually diagnosed during the neonatal or pediatric period. In adults, it is often discovered incidentally or following complications such as volvulus. We report a case of acute intestinal obstruction revealing an incomplete common mesentery in a 53-year-old adult, emphasizing the diagnostic challenges and the importance of prompt surgical management.

Clinical Case

A 53-year-old patient, with no significant medical or surgical history, presented to the emergency department with diffuse abdominal pain and absence of stool and gas for 24 hours. Clinical examination showed abdominal distension and tenderness without guarding or rigidity. Laboratory findings were unremarkable. Emergency abdominopelvic CT scan revealed a small bowel obstruction caused by volvulus, related to an incomplete common mesentery.

The patient was taken to surgery. Exploration revealed intestinal malrotation with incomplete common mesentery. A Ladd’s band causing the volvulus was divided. A cecopexy was performed to fix the cecum in the right iliac fossa. Postoperative course was simple, with return of bowel function on day 3 and discharge on day 5.

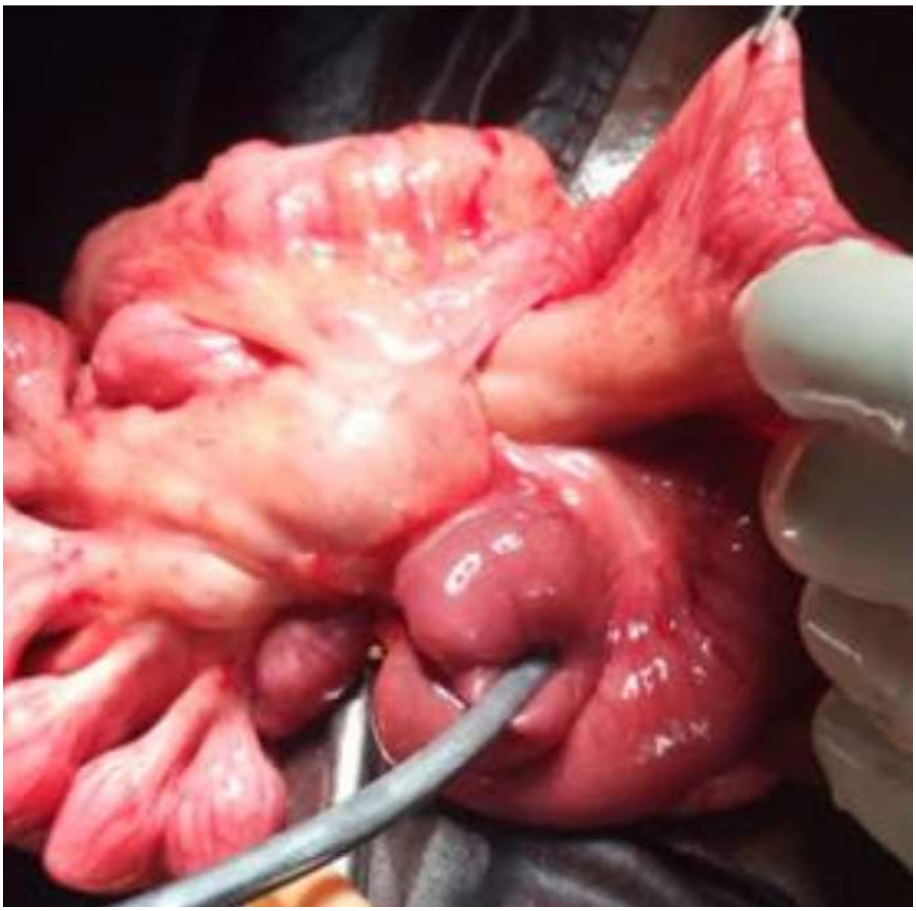

Figure 1: small bowel volvulus

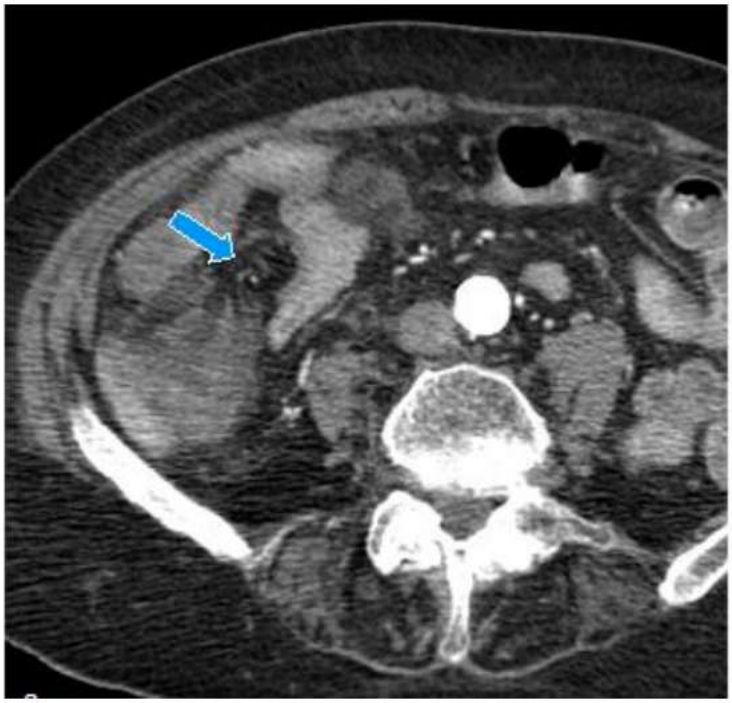

Figure 2: Contrast-enhanced CT scan (portal phase) in axial section showing an obstruction due to volvulus, with radial arrangement of the loops and the whirl sign."

Discussion

Common mesentery results from an anomaly of intestinal rotation during embryogenesis. Two forms exist: complete and incomplete. The incomplete form is characterized by abnormal intestinal positioning with risk of small bowel volvulus. In adults, diagnosis is rarely considered initially due to the rarity of this condition at this age. CT scan is the examination of choice, allowing diagnosis by demonstrating abnormal rotation of mesenteric vessels and pathological intestinal positioning.

Surgical management is based on volvulus treatment and Ladd's procedure, which includes division of bands, widening of mesenteric base, and cecal fixation to prevent recurrence. Prognosis is generally good with early intervention.

Conclusion

Incomplete common mesentery is a rare entity in adults, often revealed by an acute complication such as volvulus. CT imaging plays a key role in diagnosis. Ladd's surgery remains the reference treatment. This case underscores the need to consider intestinal malrotation even in adults presenting with unexplained intestinal obstruction.

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