

Rare Presentation of Intestinal Obstruction: Herniation Through Broad Ligament

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Introduction:

- Omental infarction is a surgical rarity with a reported incidence of **0.1%** during laparotomies for acute abdomen (1). It happens **twice in male as compared to female**, frequent in the 40 to 50-year-old age group with only 15% of reported cases in the paediatric population (1,2). Omental infarction may be **primary or secondary**. As compared to secondary cause, primary or spontaneous omental infarction is an extreme surgical enigma. The right-sided omentum is more commonly involved (up to 90% of cases), potentially due to its greater length (3).

Case Description:

- A 57-year-old lady presented with a lower abdominal pain mostly at suprapubic/ right iliac fossa for 3 days, worsening abdomen distension, no bowel opening with multiple vomiting. She has nosuspicious bowel symptoms prior to this. She denied history of tuberculosis and no family history of colon malignancy.
- Upon assessment, abdomen was distended, right iliac fossa was tender with voluntary guarding. **Abdominal xray** showed dilated small bowel with no large bowel gas (**Fig 1**).
- Proceeded with a **CT abdomen** thereafter showed internal herniation of small bowel at the right broad ligament (**Fig2**). She was then subjected for **exploratory laparotomy and proceed**.
- Intraoperatively minimal ascites with **small bowel dilatation** from duodenojejunal junction up to distal ileum. We discovered that **short segment of distal ileum was herniated through one of the three defects on the right broad ligament (Fig 3)**. With extra care, the herniated small bowel was able to release with ease. Bowel decompression and primary repaired the broad ligament defects with absorbable suture was performed. The left broad ligament as well as other visceral organs were normal.
- She took a slow recovery and was discharged uneventfully.

Fig 1: AXR, dilated small bowel



Fig 2: CT AP

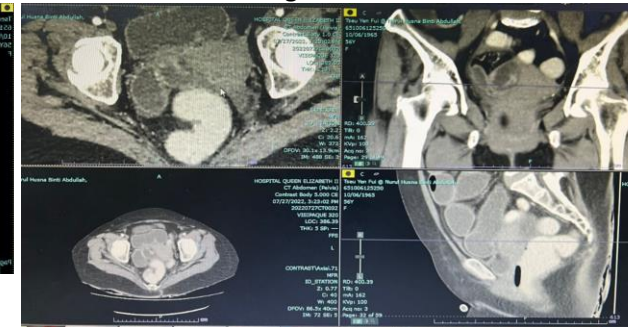
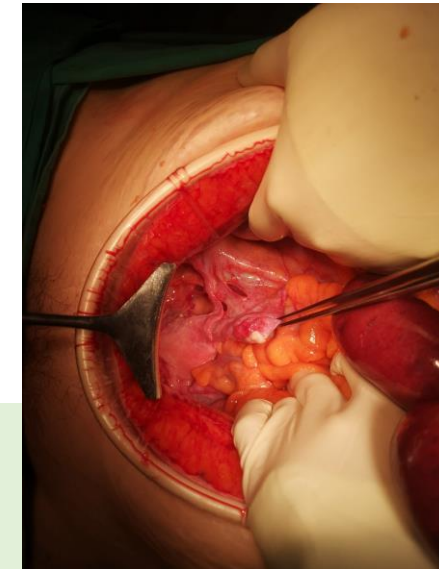


Fig 3: Right Broad ligament Defects



Discussion:

- Primary omental torsion develops when a mobile segment of omentum rotates around a proximal fixed point in the absence of any associated intra-abdominal pathology. It is caused by hyperperistalsis, trauma, and anatomical variations of the omentum such as accessory or bifid omentum, and narrowed omental pedicle (4).
- Its low incidence and non-specific presentation always lead to misdiagnosis of appendicitis, peptic ulcer disease, cholecystitis, and pancreatitis.

Conclusion:

- Omental infarction should be suspected for any patient presented with unexplained acute abdominal pain.
 - Imaging and prompt intervention should be offered. If imaging modality has confirmed the diagnosis, we can observe the patients clinical conditions for 48 hours provided they are stable. Failed conservative management requires a surgical intervention for therapeutic measures.
- Since there are no definite guidelines on management of omental infarction, further prospective study needs to be done to compare the outcome between conservative and surgical management.

References:

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