Spectrum of Jejunal Injury and Anastomotic Leakage After Bariatric Bypass Procedures

Modes of Injury, Clinical Presentations, and Management Outcomes

Ahmed Hosny, MBBCh, MSc; Ahmed Mossad, MBBCh; Mahmoud Bassiony, MD; Alexandria University

Background

- Bariatric bypass procedures, while highly effective, carry risks of serious complications, including jejunal injury and anastomotic leakage.
- These complications can be life-threatening and often present with a diverse and sometimes subtle array of clinical and radiographic signs.
- We aim to illustrate the spectrum of these injuries through a case series, highlighting varied presentations and the critical need for prompt diagnosis.

Methods

- A retrospective case series of patients who underwent bariatric bypass procedures and subsequently developed jejunal or anastomotic complications.
- Clinical records, operative reports, and radiographic imaging (CT scans) were reviewed to identify modes of injury and management outcomes.

Case Presentations

Case 1: Subtle Presentation *(Figure 1)*

- Symptoms: Mild lower abdominal pain on POD 2 accompanied by isolated tachycardia (HR 100).

Radiology: CT scan shows subtle omental stranding in the lower abdomen with small, localized fluid collections. No contrast extravasation is observed.

- **Case 2: Acute Presentation *(Figure 2)***
- Symptoms: Acute abdomen with high fever and tachycardia on POD 5.

Radiology: CT scan reveals a moderate fluid collection with clear contrast extravasation at the enteroenteric anastomosis.

- **Case 3: Immediate Presentation *(Figure 3)***
- Observation: Mild upper abdominal pain on POD 1, followed by an increase in the output of the surgical drain.

Radiology: CT scan shows contrast extravasation from the gastrojejunostomy.

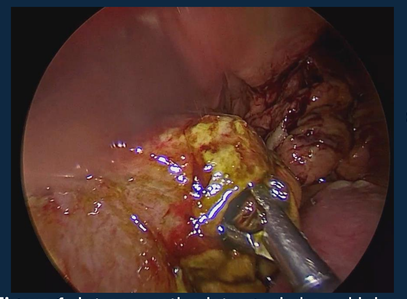

Figure 1: Intraoperative iatrogenic bowel injury.

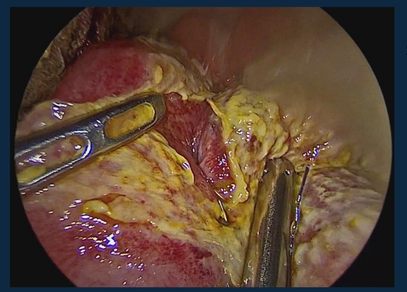

Figure 2: Enteroenterostomy thermal injury.

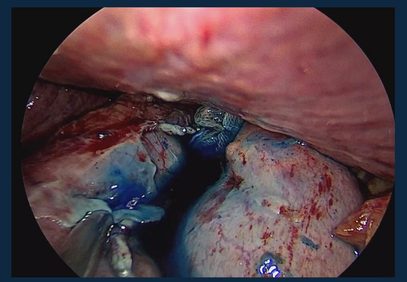

Figure 3: Anastomotic tension at the gastrojejunostomy.

Take-Home Messages

- ***High Index of Suspicion:***

Clinical symptoms like tachycardia and fever in post-bariatric patients must be treated as a potential leak until proven otherwise.

- ***Radiographic Nuance:***

Do not rely solely on "frank" signs of perforation; subtle findings like localized stranding on CT require aggressive investigation.

- ***Vigilance Beyond the Immediate Period:***

Complications can occur at varying postoperative intervals, requiring long-term clinical awareness.

- ***Prompt Management:***

Early recognition is the cornerstone of preventing life-threatening outcomes in this high-risk population.