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Navigating Diagnostic Dilemmas and Surgical Challenges: The Little Old Lady's Hernia

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Introduction

The obturator hernia is a rare surgical occurrence, with incidence reported to be lesser than 0.1%[1]. The condition is famously known as "**Little Old Lady's hernia**" due to its predisposition in thin, elderly female patients. It carries a high mortality and morbidity rate. Diagnosis and management can be difficult due to its rarity and associated geriatric challenges.

Case Report

An 82-years-old lady, para 3 with no known medical or surgical priors, presented to casualty with intestinal obstruction symptoms of 3 days duration. There were no symptoms suggesting possible bowel malignancy or sepsis. She was not hypotensive nor tachycardic on presentation and had no signs of lung compromise. Her abdomen was distended with visible peristalsis; tender but not guarded on palpation. No rectal mass was palpable. Blood investigations did not show raised white cell counts nor lactic acidosis. Her small bowel was evidently dilated on abdominal x-ray.

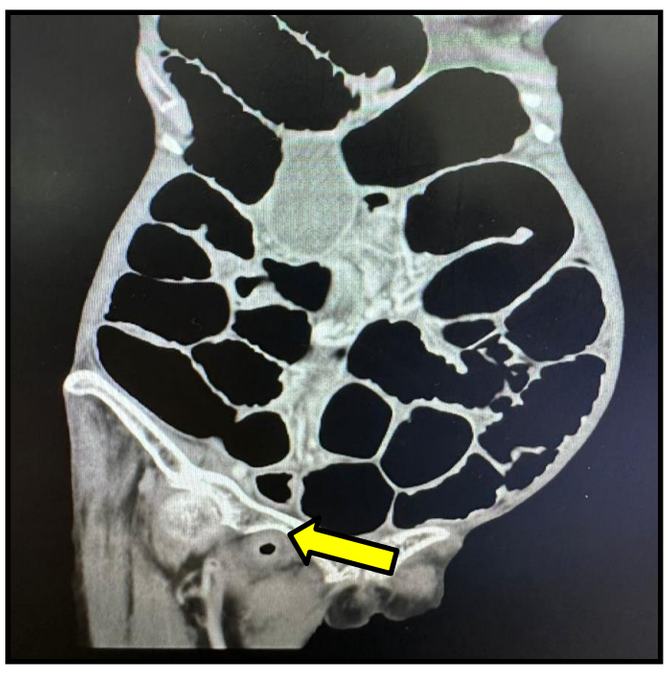

Figure 1: CT abdomen axial view showing grossly dilated bowel, yellow arrow pointing to right obturator bowel hernia

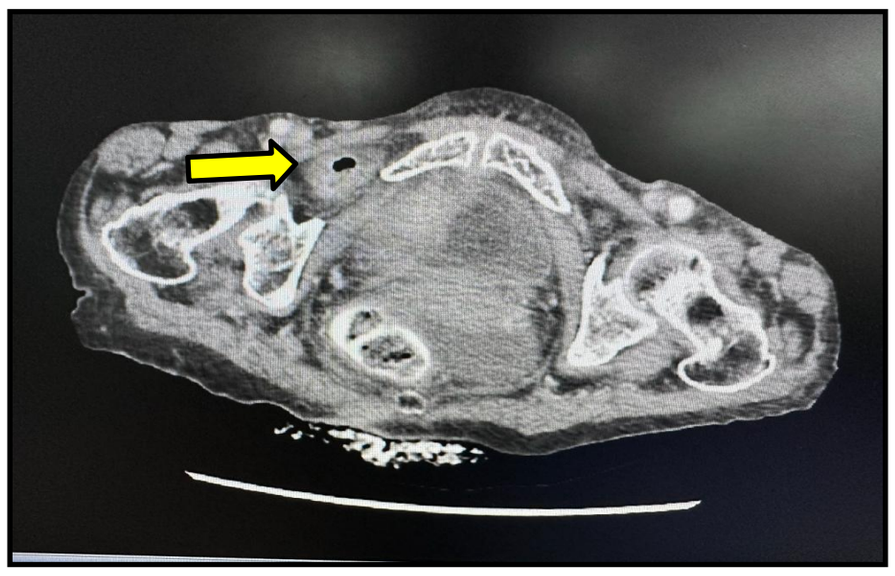

Figure 2: CT abdomen coronal view, yellow arrow pointing to right obturator bowel hernia

A prompt CT scan of the abdomen revealed small bowel obstruction secondary to obstructed right obturator hernia with significant free fluid but no pneumoperitoneum (Figure 1 & 2). She then underwent an emergency laparotomy, with intraoperative findings of a strangulated small bowel 30cm from the ileocecal junction, 2cm in length, in the right obturator foramen (Figure 3). The strangulated small bowel was resected and a primary end-to-end anastomosis with primary repair of the right obturator hernia without mesh placement. Post-operatively, she was monitored in the ICU and was later transferred to the general ward. Enteral feeding was established 5 days after surgery. There were no apparent post-operative complications, namely ileus or anastomotic leak. Unfortunately, she developed hospital acquired pneumonia during her admission to which she succumbed to on day 16 post-surgery.

Discussion

The obturator canal is an opening in the superolateral aspect of the obturator foramen, formed between the obturator membrane and the pelvis. Factors contributing to an obturator hernia are (i) larger obturator foramen in the **female** pelvis; (ii) scanty protective adipose tissue in **underweight** patients; and (iii) weakened pelvic floor muscles due to **multiparity** and **elderly** status – making the little old lady prone for an obturator hernia. The right obturator hernia is more common than the left due to the presence of the sigmoid colon protecting the left obturator canal[2].

Revealing an obturator hernia upon immediate presentation is challenging, given its rarity. Initial clinical findings will suggest bowel obstruction of non-specific nature. This usually leads to delay in recognizing an obturator hernia, and thus causes a significantly high mortality rate due to delayed treatment. The Howship-Romberg sign (inner thigh pain on internal rotation of the hip) is not overly sensitive for detection, with only 56.2% of cases being elicitable[3]. The Hannington-Kiff sign (absent adductor reflex with positive patellar reflex) can also be used to suggest an obturator hernia[4] – however due to the rarity of the diagnosis itself, these two signs are not routinely included in a physical examination.

Preoperative CT scan diagnosis is made possible with systematic review showing 84.2% of patients benefiting from this[3]. Without it, the diagnosis is usually made intraoperatively. An intraperitoneal approach is most often used in emergency cases as it allows better visualization and facilitates maneuvering for possible bowel resection. Laparoscopic techniques include transabdominal preperitoneal approach (TAPP), transinguinal approach and totally extraperitoneal approach (TEP); they are favored in elective settings due to lower morbidity rates, though bowel necrosis needs to be ruled out preoperatively[3,5]. Hernia repair can then be done via a simple closure with interrupted sutures, flap reconstrution or placement of a mesh or plug[3].

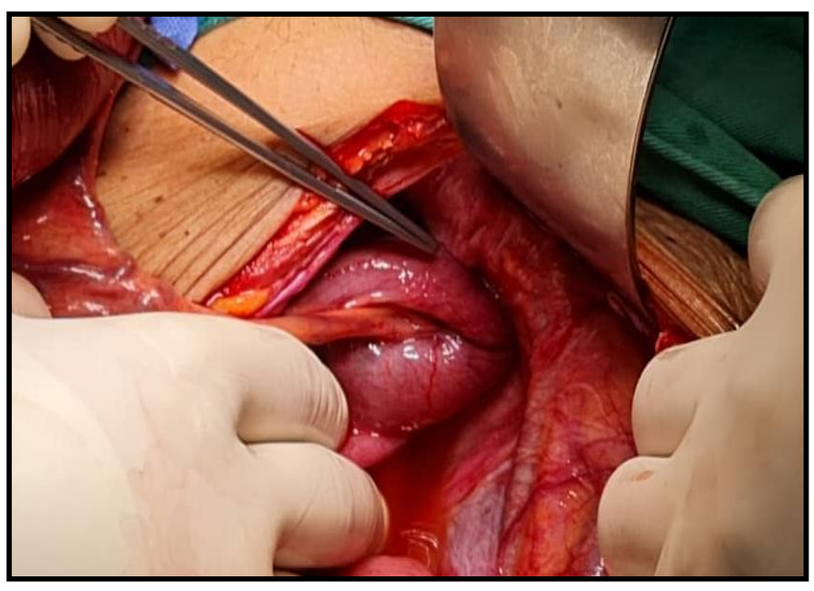

Figure 3: Intraoperative picture showing part of small bowel herniated into the right obturator canal

Conclusion

It is imperative for surgical practitioners to recognize the possibility of an obturator hernia when faced with a frail old lady presenting with intestinal obstruction. CT scan is the gold standard for diagnostic imaging wherever possible, to aid with careful and minimally invasive surgical intervention. This ultimately leads to a lower risk of morbidity and mortality to an already diagnostically challenging case.

References

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