

Case Report

Obturator Hernia- A diagnostic challenge

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Abstract- An obturator hernia is an extremely rare type of hernia with a comparatively high mortality and morbidity rate. Early diagnosis of the disease is quite challenging as the signs and symptoms are very unspecific.¹ Despite being a type of hernia, it is still a significant cause of intestinal obstruction, particularly in emaciated elderly women, and a diagnostic challenge for Surgeons.² We report a case of 67 years old female who presented with symptoms of subacute small bowel obstruction and was diagnosed with an obstructed obturator hernia by CECT abdomen. Thus, CECT scan is a valuable asset in establishing a preoperative diagnosis for the same.³ Laparoscopic-assisted reduction and repair was done with resection of incarcerated perforated bowel loop with end-to-end small bowel anastomosis done, by exteriorizing the perforated bowel loop.^{3,7}

Keywords: Obturator hernia, Intestinal obstruction, Computed Tomography scan, Laparoscopy

INTRODUCTION

An obturator hernia is a rare pelvic hernia, with the reported incidence being just 1%, and commonly presents as Acute Intestinal Obstruction with the contents of hernia being small bowel in the majority of the cases.¹ Although some cases also present with the contents as Appendix, Meckels Diverticulum or Omentum in the sac. The hernia passes through the obturator foramen, following the path of the obturator nerves and muscles.^{1,2} This mainly occurs in the elderly (female > male) due to age-related loosening of muscle mass and fatty tissue in the canal.³ The usual presentation is pain in the abdomen radiating to inner/medial side of the thigh, Vomiting. CECT scan is highly sensitive and specific in confirming the diagnosis which is quite challenging otherwise.⁸

PRESENTATION OF THE CASE

A 67year old women came to emergency with Complaints of Pain abdomen and distension for 5 days associated with nausea and vomiting for 1 day. There was pain present in medial aspect of thigh.

On examination, the Patient was underbuilt, poorly nourished, and dehydrated with dry, coated tongue, and sunken eyes. her pulse rate was 97/min and blood pressure 90/60mmHg and was afebrile.

On Local examination, Abdomen was distended with a visible loop of the intestine, no visible peristalsis, and no engorged vein over the abdomen. Generalised tenderness all over the abdomen with guarding and rigidity present. There was no evidence of free fluid in the abdomen, with diminished bowel sound and liver dullness was not obliterated. External hernial site normal (Umbilical, inguinal and femoral). No significant findings on per rectal and per vaginal examination.

Considering to small bowel obstruction (SBO), an X-Ray flat plat abdomen was done immediately for confirmation which showed acute dilatation of small bowel loops.

Patient was kept Nil by mouth with continuous Ryle's tube aspiration, IV fluid was started for correction of dehydration, and Broad-spectrum Antibiotics were initiated along with symptomatic and supportive therapy to stabilize the patient. Then CECT was performed suggestive of a left-sided obstructed obturator hernia (Figure 1&2).

Patient was planned for Diagnostic Laparoscopy in which Left sided Obstructed Obturator Hernia with dilated proximal and mid-ileal loop with collapsed distal ileal loop was found (Figure 3). The obstructed segment was reduced Laparoscopically with gentle traction and caution (Figure 4). After the reduction of content 3cm ileal segment was found to be perforated and gangrenous. Obturator defect closed primarily with prolene 2-0 intracorporeal sutures and the perforated/Gangrenous loop was brought out with a mini 5 cm incision and resection anastomosis of gangrenous perforated segment done (Figure 5,6). Wound closed with drain in-situ. Postoperatively patient recovered well and was discharged on soft diet on the 5th post-op day. No recurrence in the follow-up period.

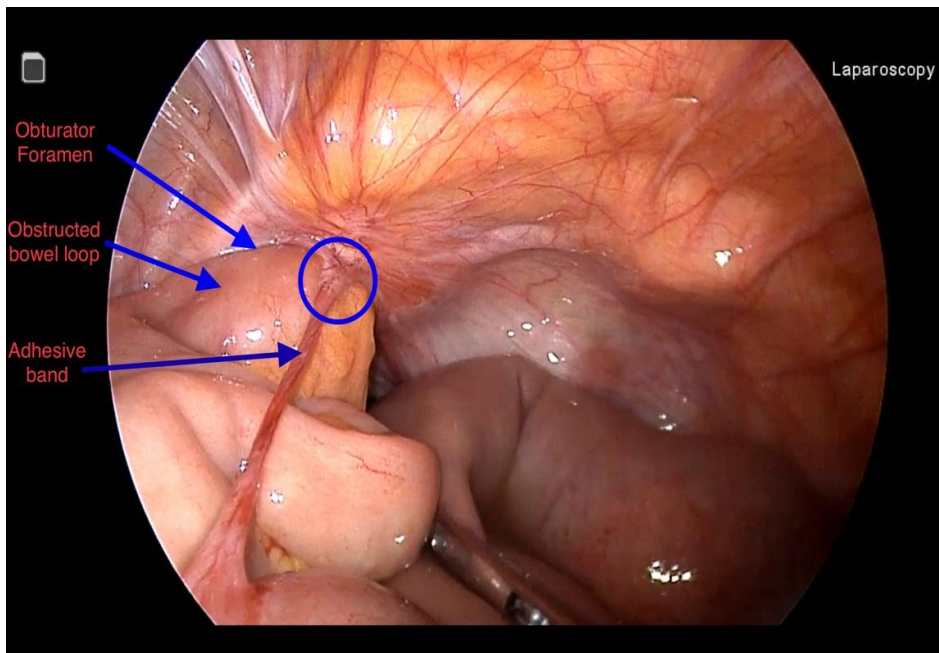
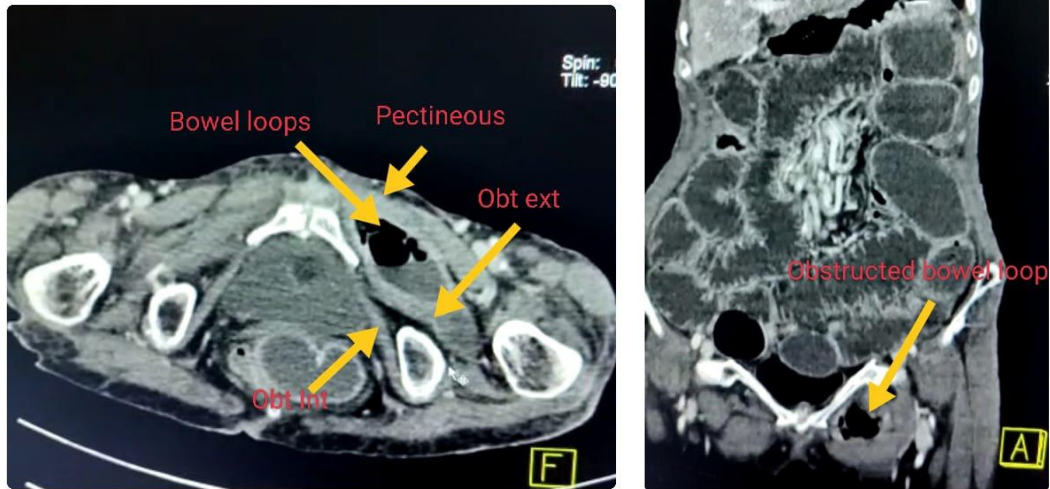


Figure 3

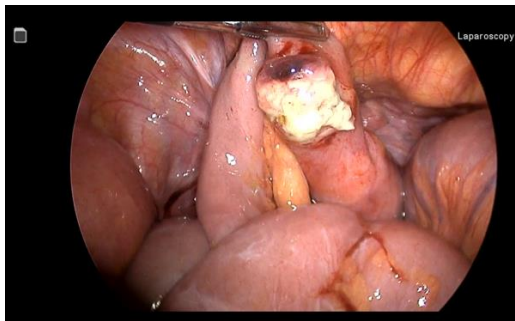


Figure 4: Strangulated bowel loop (content reduced)

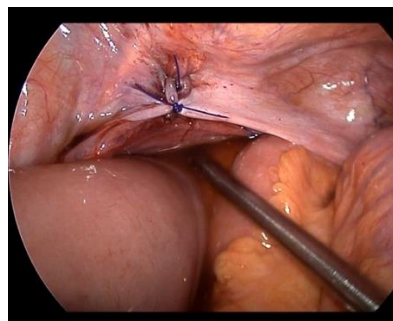


Figure 5: Defect closer with prolene 2-0

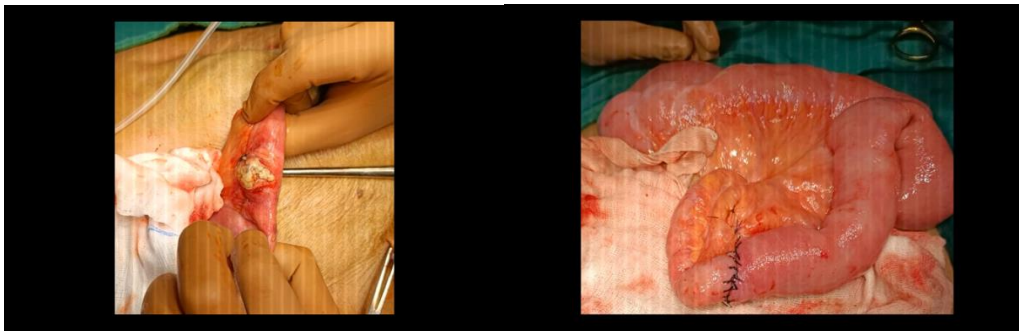


Figure 6: 5cm incision (mini laparotomy) followed by Resection anastomosis

DISCUSSION

An obturator hernia is a rare type of pelvic hernia. Since it usually occurs in multiparous and elderly emaciated women.¹ It is also known as “LITTLE OLD LADY’S HERNIA” It is 9 times more common in females due to its anatomically wider pelvis, and more triangular obturator canal opening with greater transverse diameter.^{1,2} Other risk factors include chronic obstructive pulmonary disease, chronic constipation, and ascites. Making an early diagnosis of the same is diagnostically challenging as the clinical symptoms are quite nonspecific.⁴ The cardinal clinical picture is Acute Intestinal Obstruction. The clinical course of the disease is commonly manifested with the presentation of acute small bowel obstruction (Pain abdomen, distention, Vomiting). Pain may also radiate on the medial aspect of the thigh due to compression of the obturator nerve- this is known as Howship Romberg’s sign.^{2,5} Multiple imaging modalities have been used to establish the diagnosis which includes Ultrasonography, and CECT scan, amongst them CECT scan has the highest level of sensitivity and specificity.⁸

The treatment for obturator hernia is surgery.³ There are various operative approaches including the Inguinal, Retropubic, and Transperitoneal approach broadly classified as transabdominal and extraperitoneal. In an emergency setting, the abdominal approach via a low midline incision is commonly favored, as allows adequate exposure of the obturator ring as well as the identification and resection of any ischemic area of the bowel.⁵

The Laparoscopic Total Extraperitoneal (TEP) approach is more feasible once the diagnosis has been confirmed in a uncomplicated case. Often the incidental obturator hernia is detected during TEP repair for inguinal hernias.⁶ But in our case, there was obstructed obturator hernia with dilated bowel loop presented, so we went intra-peritoneally for reduction of content and closing the defect. This further emphasizes the importance of thoroughly inspecting all myopectineal orifices during the laparoscopic approach.

Techniques of repair include simple sutures, closure of the obturator defect with adjacent tissue, and mesh repair during laparotomy.⁷ In the current case we preferred Lap assisted reduction of content with suture repair of defect and mini-laparotomy for resection anastomosis of perforated and gangrenous bowel loop.⁸

Other advantages of laparoscopic include less post-operative pain, shorter hospital stay, and lower complications. However, it is usually reserved for a non-strangulated hernia because of more challenging techniques and a longer learning curve.⁶

CONCLUSION

An obturator hernia is a rare but clinically significant cause of intestinal obstruction, particularly in emaciated elderly women. It is further more challenging for doctors to diagnose due to its non-specific symptoms.^{1,8} CECT scan has proven to be valuable in establishing the pre-operative diagnosis. Hence, it cannot be stressed enough to raise awareness to try and establish early diagnosis and an accurate approach with an emphasis on immediate surgical management. Laparoscopic/lap-assisted management can be done in case of the acute abdomen or incarcerated obturator hernia as done in our case. Lap-assisted repair has an advantage in terms of short hospital stay less pain and less wound infection.

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