

## The Skinny Old Lady Hernia: A Rare Cause of Intestinal Obstruction

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**Abstract:** Obturator hernia is a rare form of internal hernia in the world, diagnosed late since it has no specific symptoms and findings and generally occur in thin and old women with comorbidities. For this reason obturator hernia has high morbidity and mortality rates. In this study, we present a case of 75 years old female patient with Right sided obturator hernia which presented with features of intestinal obstruction and was diagnosed on computerized tomography. Laparotomy was performed with lower midline incision. Richter's type of hernia was identified. Sac with the contents was reduced and Prolene mesh was placed preperitoneally over the obturator foramen & fixed to Cooper's ligament. Postoperative period was uneventful. Obturator hernia should be taken into consideration in old and thin female patients with intestinal obstruction. Both Computerized tomography and ultrasound (transvaginal or inner thigh views) are useful for early diagnosis.

**Keywords:** Computerized tomography, Richter's Type of hernia, obturator hernia, small bowel obstruction

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### I. Introduction:

Obturator hernia is a rare hernia which commonly presents with the features of intestinal obstruction. Since there are no specific symptoms and findings of obturator hernia, the diagnosis is often delayed, and presents with complications like strangulation of small bowel and perforation which are associated with high morbidity and mortality<sup>1</sup>. Computerized tomography (CT) became an important diagnostic tool for the rapid diagnosis and early surgical treatment. The most common cause of intestinal obstruction is postoperative adhesions (60%) , followed by malignant obstruction, hernias etc. Here we present an unusual case of an elderly female with recurrent episodes of acute intestinal obstruction whose etiology needs high index of suspicion.

### II. Observations:

A 75 year-old woman presented to the Emergency department with Pain in Lower abdomen for 4 days which was colicky in nature. Vomiting for 4 days, bilious, non-projectile, & multiple episodes. Constipation for 3days, passing flatus. No h/o medical comorbidities. Tubectomised 45 years back. Clinical examination showed a moderately built and ill-nourished patient, generally unwell with a temperature of 38.4 °C, pulse of 92 min<sup>-1</sup>, low volume and blood pressure of 110/60 mm Hg with dry tongue and sunken eyes. She is also having accessory nipple on left side & kyphoscoliosis. Local examination showed distended lower abdomen. ( Fig-1). Visible peristalsis was present. On Palpation - Abdomen was soft with Tenderness in RIF, Hypogastrium, LIF and umbilical regions. There were no palpable masses. Bowel sounds were exaggerated. Other Systems were essentially normal. Per rectal and Per vaginal examinations were normal. Laboratory investigations were within normal limits except for hypoproteinemia. X- ray abdomen showed multiple air fluid levels. A provisional diagnosis of Acute intestinal obstruction was made.

Pt was adequately hydrated, placed on Nil by mouth, Ryle's tube aspiration continuous and 2 hourly aspirate, and Broad spectrum Antibiotics. She got relieved of the symptoms and was started on oral feeds. Later she again developed symptoms of vomiting and pain in abdomen after 5 days. She was again kept Nil by mouth. Patient's general condition haven't improved, when she was advised CECT abdomen, which revealed Right Obturator hernia and decision was made to carry out Exploratory laparotomy.

**Fig -1**



**Figure-2 X- Ray with Multiple Air Fluid levels**



**Fig-3 : CECT Abdomen showing Right Obturator hernia with distal ileal obstruction.**



Exploratory laparotomy was done through lower midline incision. Jejunal & proximal ileal loops were found to be dilated & congested and distal ileal loops were partially collapsed. Ileal loop about 1.5 ft proximal to IC junction was found to be herniating into Right obturator foramen – RICHTER'S type of hernia with serosal tears noted ( Fig-4 & 5). By gentle traction herniated bowel loop was reduced. Bowel was viable. Small serosal tears were sutured with 2- 0 vicryl. Sac was reduced. ( Fig-6 & Fig-7) Prolene mesh was placed preperitoneally over the obturator foramen ( Fig-8) & fixed to Cooper's ligament. Hemostasis secured & abdomen closed in layers.

**Fig- 4**



**Fig- 5**



**Fig-6**



**Fig-7**



**Fig-8**



Postoperatively she was treated with Broad spectrum antibiotics, rational nutritional support and careful monitoring of vital organs was done. Her post-operative period was uneventful. She was discharged after 10 days. Pt remained well during subsequent outpatient follow up.

### **III. Discussion:**

Obturator hernia was first described in 1724 by Arnaud de Ronsil at the Royal Academy of Sciences in Paris<sup>1</sup>. It's a rare type of hernia with incidence of about 0.073% of all hernias<sup>1</sup>.

The obturator canal is an opening in the superolateral part of the obturator foramen. It contains the obturator nerve and vessels. The canal is 2–3 cm long and 1 cm wide, and it is usually filled with fat, allowing no space for herniation. In emaciated elderly people, loss of fatty tissue coupled with increased intra-abdominal pressure facilitates the formation of a hernia<sup>2-6</sup>.

It usually occurs in multiparous and elderly emaciated women and so called as “little old lady’s hernia”. It is 9 times more common in females due to their wider pelvis, more triangular obturator canal opening, and greater transverse diameter. Incidence increases with age and more common after 70 years<sup>7</sup>. The other risk factors include chronic obstructive pulmonary disease, chronic constipation and ascites. Obturator hernia of the right side is three times more common than the left<sup>2,7</sup>. Bilateral obturator hernia occurs in approximately 6–15% of the patients<sup>8</sup>.

Obturator hernia is a diagnostic challenge because the signs and symptoms are usually non-specific. Most commonly presents with recurrent bouts of intestinal obstruction with cramping abdominal pain, nausea, and vomiting<sup>2-6</sup>. Obturator hernia has been reported to account for 0.4–1.6% of mechanical small bowel obstruction<sup>2,4,6</sup>. Other features are a) Pain radiating down the medial aspect of the thigh to the knee and less often to the hip called as Howship Romberg sign which results from compression of the anterior division of the obturator nerve, b) Absence of the obturator reflex in the thigh, caused by compression on the obturator nerve called as Hannington-Kiff Sign or c) As a palpable mass in the proximal medial aspect of the thigh at the origin of the adductor muscles, the mass is best palpated with the thigh flexed, abducted, and rotated outward or laterally.

Various imaging modalities have been applied to establish the diagnosis, including abdominal X-ray, transvaginal ultrasonography, CT scan. Among them, CT scan has superior sensitivity and accuracy.<sup>6</sup> MRI is as good as but not superior to CT. Abdominal X-Ray may show air in the obturator region. Laparoscopy may be used as a diagnostic tool, as well as a treatment modality

The only treatment for obturator hernia is surgery. There are a variety of operative approaches including transperitoneal, inguinal, and retropubic approach.<sup>5,6</sup> In the emergency setting, the abdominal approach via a low midline incision is most commonly favoured, as it allows adequate exposure of the obturator ring as well as the identification and resection of any ischaemic bowel. Transperitoneal approach via low midline incision was done in this case. Recently, Laparoscopic surgery for obturator hernia became another alternative approach<sup>8</sup>. The advantages of laparoscopic surgery include less postoperative pain, shorter hospital stay and lower complications. However, it is usually reserved for the non-strangulated hernia because of more challenging techniques and longer learning curve. Methods of repair include simple suture closure, closure of the obturator with adjacent tissue, and mesh placement during laparotomy.<sup>8</sup> Many authors preferred a simple closure of the hernial defect with one or more interrupted sutures, in case of bowel resection.<sup>5,8</sup> In this case we closed the defect by placing a preperitoneal prolene mesh and outcome was satisfying.

### **IV. Conclusion:**

Obturator hernia is a rare but significant cause of intestinal obstruction especially in emaciated elderly woman and a diagnostic challenge. CT scan is valuable to establish preoperative diagnosis. The emergency physicians should be alert for this exceedingly rare condition, because a delay in diagnosis will increase the mortality rate.

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