
CASE REPORT**Obstructed Obturator Hernia: A Diagnostic Dilemma***Manish Swarnkar^{1*}, Raghav Jindal¹**¹Department of Surgery, Jawaharlal Nehru Medical College, Sawangi, Wardha- 442005 (Maharashtra)
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Abstract:

Obturator hernia is a rare type of pelvic hernia which accounts for less than 1% of all abdominal hernias. It generally occurs in elderly emaciated patients with accompanying diseases. Because it is difficult to diagnose before surgery, the morbidity and mortality rates for obturator hernia are high. The most common clinical symptom is strangulation combined with mechanical intestinal obstruction. Abdominal CT scan can precisely confirm the diagnosis and early surgical intervention is essential for better outcome.

Keywords: Obturator Hernia, Strangulation, Howship-Romberg Sign, Intestinal Obstruction

Introduction:

An obturator hernia is a rare type of hernia of the pelvic floor in which pelvic or abdominal contents protrudes through the obturator foramen. Because of differences in anatomy, it is much more common in women, especially multiparous and emaciated older female [1].

Obturator hernia poses a diagnostic challenge as the signs and symptoms are often nonspecific, which makes a preoperative diagnosis difficult. The mortality rate for patients with an obturator hernia is the highest among all abdominal wall hernias (range 13–40%); this is related to the difficult diagnosis and delayed specific treatment [2]. The most common clinical presentation is intestinal obstruction of an unknown cause and the diagnosis is carried out with the aid of imaging methods such as Computed Tomography (CT) or during exploratory surgery [3]. Most of the case reports and case series published in literature

consist of classical female cases. We are presenting a case of elderly male patient admitted with classical presentation of Obturator Hernia, Intestinal Obstruction with pain radiating to thigh and knee and positive Howship-Romberg sign.

Case Report:

A 70-year-old male patient weighing 46 kg presented to the ER with a three-day history of abdominal pain, nausea, foul smell, vomiting, constipation, inability to pass gas and pain radiating to right thigh and knee. His physical examination revealed abdominal distention and tenderness and he had hyperactive bowel sounds. Howship-Romberg sign was positive but failed to elicit Hannington-Kiff sign. All the hernial orifices were normal and there was no history of previous abdominal operation. His laboratory tests were normal; scout abdominal X-ray images obtained in a standing position revealed dilated loops in the small intestines and air fluid levels. His computed tomography results showed a small intestine loop herniated through the right obturator foramen and dilatation in the proximal small bowel (Fig. 1a, b). The patient was diagnosed with obturator hernia and underwent surgery. During surgery, after reduction of bowel, structured segment of small intestine with perforation at tip of loop was detected (Fig. 2a,b,c) primary closure of hernia defect with 2-0 prolene suture with resection anastomosis of non-viable segment done. The patient's postoperative course was uneventful and was discharged on the 10th day.

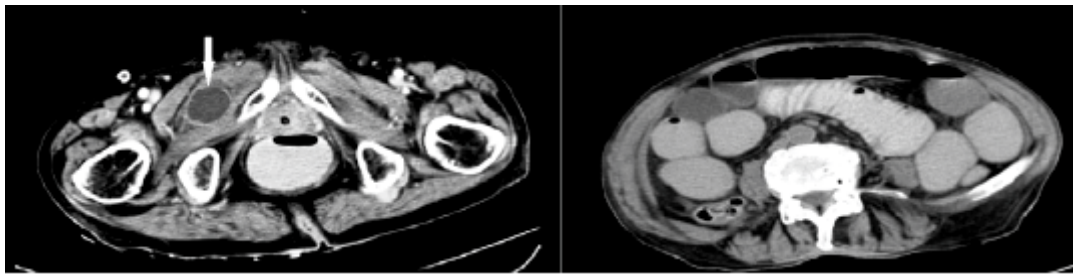


Fig. 1: Axial CT Scan of Abdomen (A-B) showing RT Sided Obturator Hernia (White Arrow) and Dilated Bowel Loops suggesting Intestinal Obstruction



Fig. 2: Operative Images (A-C), A-showing Ileal Loop (White Arrow) Herniating through RT Obturator Foramen, B- Strictureous Ileal Loop after Reduction of Hernia, C- Right Obturator Foramen (White Arrow)

Discussion:

Obturator hernia is a rare abdominal hernia first described by Arnaud de Ronsil in 1724 and is a significant cause of morbidity and mortality [4]. Obturator hernia occurs most commonly in debilitated elderly people, because of loss of the protective fat in the obturator canal and typically affects women as they have a broader pelvis with a larger triangular obturator canal opening, with a greater diameter [5]. Therefore, this disease is also nicknamed as the “little old lady's hernia” [2].

Accurate pre-operative diagnosis is difficult and usually made in only 20-30% of cases of obturator hernia [6]. Most patients have nonspecific symptoms and specific signs are often obscure. Howship-Romberg sign (described as pain

exacerbated by extension, abduction and internal rotation of the hip due to compression of the obturator nerve) is considered pathognomonic, although it is reported to be present in only 15–50% of cases [3]. Palpation from the rectum or vagina can confirm the presence of an obturator hernia, if the suspicion is already in the examiner's mind [7]. Generally, the diagnosis rests on a high suspicion and quick imaging. Abdominal and pelvic CT scans are considered to be most accurate imaging instrument for diagnosis with high sensitivity and specificity [2].

Nishina *et al.* [8] established that prompt identification with a CT scan and successive surgery produced good results. Tsai *et al* [2]

reported that ultrasonography of the inguinal and inner thigh region is a fast and widely available imaging modality that can, in experienced hands, accurately diagnose potential bowel obstructions caused by an obturator hernia and can be performed at bedside in emergency room. Delayed identification and management contribute to the need of resection of bowel in 25-50% of the cases [9].

The type of surgical approach depends upon confirmation of diagnosis pre-operatively. Retro pubic and inguinal approaches both give good results otherwise lower midline approach is favored in doubtful cases [7]. Small defects can be managed effectively by direct suturing with non-absorbable sutures while larger defects are covered by marlex or teflon mesh. Laparoscopic

repair has the advantage of having lower post-operative complication and shorter hospital stay and can only be done in patient without any previous abdominal surgery and significant abdominal distension [3].

As the occurrence of obturator hernia in the general population is so low that even experienced surgeons encounter only one or two cases. So, it must be considered in differential diagnosis in elderly patients with signs and symptoms of intestinal obstruction. CT is the most precise imaging modality for pre-operative diagnosis and urgent surgical intervention is must to reduce morbidity and mortality associated with the condition.

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