

“Little Old Ladies Hernia”: A Case Report

Rajnish Meena¹, Rahul Kankhedia²

^{1,2}General and Laproscopic Surgeon

Abstract: *Obturator hernia is a very rare variety of pelvic hernia accounting for approximately 0.05-0.4% of all abdominal hernias[1]. It is referred to as the “little old ladies hernia” owing to its prevalence in old frail ladies. The morbidity and mortality rates are high. The most common clinical presentation is intestinal obstruction with or without features of strangulation. We recently managed an 80 year old lady who presented with intestinal obstruction due to an incarcerated left obturator hernia. She was diagnosed preoperatively with a contrast enhanced computed tomography (CECT) abdomen and operated successfully by laparotomy. The radiologist and clinician should be aware of this clinical entity as it most often presents very late and early diagnosis is imperative for successful management and better prognosis.*

Keywords: Little old lady’s hernia, intestinal obstruction, C.T. Scan, obturator hernia, strangulation

1. Introduction

Obturator hernia is a type of pelvic hernia in which a bowel segment protrudes through the obturator foramen adjacent to the obturator vessels and nerve. In 1724, Obturator hernia was initially identified and defined by Arnaud de Ronsil and in 1851 Obre did the first effective reduction of Obturator hernia. Risk factors for obturator hernia are thin, elderly multiparous women, ascites, chronic constipation, and chronic obstructive pulmonary disease [1]. The most common clinical symptom is mechanical intestinal obstruction. Because the symptoms are nonspecific, obturator hernia is difficult to diagnose, and most patients are diagnosed during surgery. Currently, diagnostic imaging, especially computed tomography, is widely used to diagnose obturator hernias before surgery in the early stages of the disease. High degree of suspicion is thus necessary to allow prompt preoperative diagnosis of an obturator hernia, appropriate planning of surgical intervention and optimising the outcome.

2. Case Report

A 80 year-old female patient presented to the ER with a five-day history of abdominal pain, abdominal distension, nausea, vomiting, constipation, and inability to pass gas with past history of open cholecystectomy. Her physical examination revealed abdominal distention with increased bowel sounds. External hernial sites were normal. Her lab tests were normal except TLC - 21000. X ray FPA upright revealed dilated small bowel loops along with multiple gas fluid levels. CT results showed a small intestine loop herniating through the obturator foramen and dilatation in the proximal small bowel (Figure 1). Howship-Romberg sign was absent. A preop diagnosis of obstructed obturator hernia was established. During surgery, a strangulated small intestinal segment extending through the left obturator foramen was detected which was gangrenous (Figure 2). After reduction of herniated gangrenous bowel loop, resection anastomosis with proximal diverting ileostomy was done. Hernial sac identified and removed after identifying obturator nerve & vessels. The obturator foramen was closed with primary sutures and the postoperative period was uneventful.

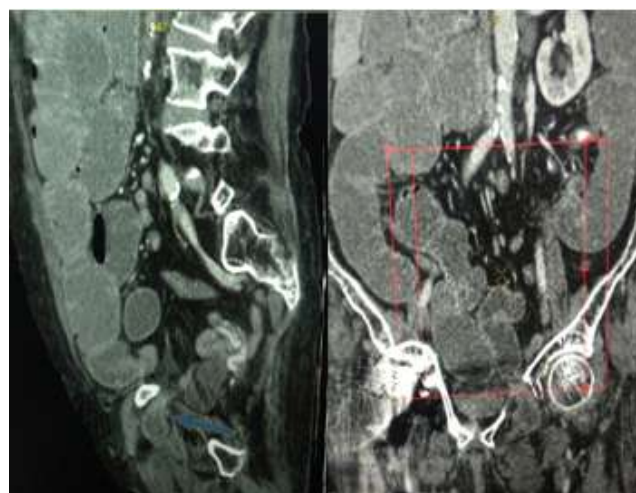


Figure 1: Computed tomography showing herniated bowel loops in left obturator canal with proximal dilated bowel loops



Figure 2: Strangulated small bowel segment extending in to left obturator foramen



Figure 3: Showing obturator foramen after reduction of hernial content

3. Discussion

Obturator hernia was first described by Arnaud de Ronsil in 1724 and was successfully treated for the first time by Henry Obere in 1851 [4, 5]. Obturator hernia protrudes through the circle surrounded by the superior ramus of the pelvic bone in the front, the obturator membrane and the internal and external obturator muscles on the inferior side, and the obturator vessels and the nerves on the posterolateral aspects. Obturator hernias account for 0.05–0.4% of all abdominal hernias [6]. It is often referred to as “little old lady’s hernia” [5]. Due to its nonspecific symptoms, obturator hernia is difficult to diagnose. The preoperative diagnosis rate is reported as only 10–30% [2] female :male ratio 6: 1 due to broader pelvis and wide obturator canal. Anatomically development of an obturator hernia divided into three stages. The first phase starts with ‘pilot tags’ of preperitoneal connective tissue and fat entering the pelvic or internal opening of the obturator canal. In second phase peritoneal dimple appears on the peritoneum progressing to the formation of the empty peritoneal sac. In third and final phase symptoms appear due to the entry of viscera into the peritoneal sac. [6] Diagnosis during the first two phases is uncommon. More than 90% of patients with obturator hernia are admitted to the hospital with acute intestinal obstruction, presenting with abdominal pain, nausea, and vomiting [7]. The Howship-Romberg sign ie pain along the medial aspect of the thigh radiating to the knee due to compression of the anterior branch of the obturator nerve by the contents of the hernia is present in 50% of patients [8, 9]. However, the sign is commonly mistaken for neuromuscular pain, as joint pain is common in elderly patients and is overlooked. Another clinical sign of obturator hernia is the Hannington-Kiff sign, in which the adductor reflex is absent in the thigh. Clinically diagnosing obturator hernia is difficult because the symptoms are nonspecific. A reliable preoperative diagnosis can be made by preop computed tomography which has high sensitivity and specificity [3].

4. Conclusion

Obturator hernia is a rare but significant cause of intestinal obstruction .Obturator hernia must be kept in mind specially in thin, elderly females and CT scan should be advised as early as possible to reach to the diagnosis so that timely intervention can be done before development of gangrene. Rapid clinical and appropriate radiological assessment, followed by early surgery is critical to successful treatment.

References

- [1] D. W. Ziegler and J. E. Rhoads Jr., “Obturator hernia needs a laparotomy, not a diagnosis,” *American Journal of Surgery*, vol. 170, no. 1, pp. 67–68, 1995.
- [2] S. W. Gray, J. E. Skandalakis, R. E. Soria, and J. S. Rowe Jr., Strangulated obturator hernia, *Surgery*, vol. 75, no. 1, pp. 20– 27, (1974).
- [3] R. Ijiri, H. Kanamaru, H. Yokoyama, M. Shirakawa, H. Hashimoto, and G. Yoshino, Obturator hernia: the usefulness of computed tomography in diagnosis, *Surgery*, vol. 119, no. 2, pp. 137–140 (1996)
- [4] C. H. Hsu, C. C. Wang, L. B. Jeng, and M. F. Chen, Obturator hernia, *Surgery, Gynecology&Obstetrics*, vol. 167, no. 3, pp. 217– 222 (1988)
- [5] S. K. Dundamadappa, I. Y. Y. Tsou, and J. S. K. Goh, *Clinics* s no. 1, pp. 89–94 (2006)
- [6] S. S. Chang, Y. S. Shan, Y. J. Lin, Y. S. Tai, and P. W. Lin, “A review of obturator hernia and a proposed algorithm for its diagnosis and treatment,” *World Journal of Surgery*, vol. 29, no. 4, pp. 450– 454, 2005.
- [7] C. Y. Lo, T. G. Lorentz, and P. W. K. Lau, “Obturator hernia presenting as small bowel obstruction,” *American Journal of Surgery*, vol. 167, no. 4, pp. 396–398, 1994.