

## Case Report

# Left Side Obturator Hernia With Multiple Ileal Diverticula : A Rare Case Report In A 72 Year Old Female

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## Abstract

Obturator hernia is an extremely rare type of hernia that presents with signs and symptoms of intestinal obstruction. Its early diagnosis is difficult because the signs and symptoms are non-specific. A 72-year-old woman was admitted to our hospital in the emergency ward with complaints of intermittent abdominal colicky pain, abdominal distension, and bilious vomiting from last six days. The abdomen skiagram showed an obstructed loop of the bowel in the pelvis. After initial resuscitation, an exploration of the abdomen was planned. The patient also had multiple ileal diverticula in the terminal ileum. The only treatment for the obturator hernia is surgery.

**Keywords:** Hernia; Ileal diverticula; Obturator.

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## Introduction

Although obturator hernia accounts for less than 1% of all abdominal wall hernias (incidence between 0.05 to 1% of all hernias), it has relatively higher morbidity and mortality (15–25%), mainly due to delayed diagnosis and gangrene of bowel (60–75%).<sup>1,2</sup> Pierre Roland Arnaud de Ronsil first described it in 1724 as a rare type of pelvic hernia.<sup>3</sup>

The hernia sac passes through the obturator foramen, following the path of the obturator nerves and muscles. Patients can present with radiating pain on the medial aspect of the thigh (Howship Romberg sign)<sup>4</sup>, recurrent episodes of intestinal obstruction, or palpable mass on the medial aspect of the thigh. Contrast CT scan has superior sensitivity and accuracy for the diagnosis of obturator hernia.<sup>5</sup>

Multiple terminal ileum diverticula is a rare disease that

may present as an acute abdomen, mimicking appendicitis. This condition is unrelated to Meckel's diverticulum or other true diverticula. These diverticula are usually multiple and occur at the mesenteric border, sometimes hidden in the leaves of the mesentery and overlooked during surgery. Most patients are asymptomatic and diagnosis is made on routine imaging studies or during surgery. However, acute complications of ileal diverticula including obstruction and inflammation are very rare.<sup>6</sup>

The management of ileal diverticula is similar to that of colonic diverticula, i.e. treated conservatively with bowel rest and antibiotic treatment if recognized on imaging before laparotomy. Surgical intervention is required for patients who present with complications such as obstruction, bleeding, or perforation. The most reported complication of terminal ileal diverticula is diverticulitis. Radiographic findings of diverticulitis may include pressure defects from



**Figure 1. Plain abdominal X-ray showing small bowel obstruction, arrow showing loop of intestine in the sac of Obturator hernia**

an inflammatory mass, thickening of mucosal folds, or perforation.

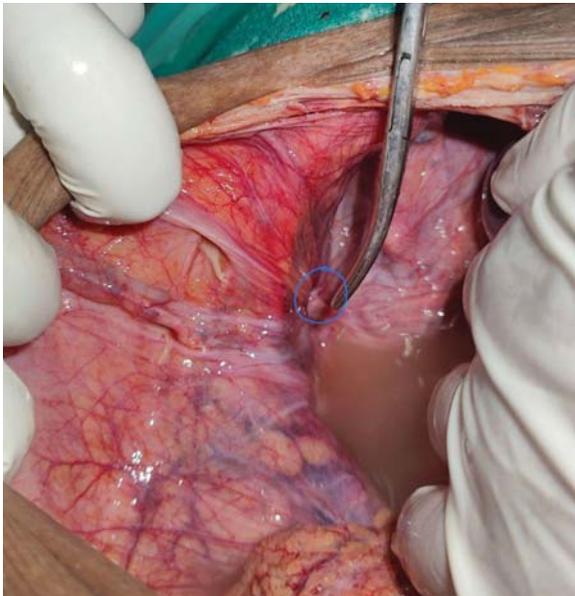
The clinical presentation of ileal diverticulitis usually mimics acute appendicitis and Crohn's disease.<sup>7</sup> For differential diagnosis, Ileocolonoscopy can be helpful. Surgical therapy is reserved for patients with perforation or acute complications.<sup>8</sup>

This case warrants reporting as there is no similar case reported previously.

## Case report

A 72-year-old woman was admitted to our hospital in the emergency ward with complaints of intermittent abdominal colicky pain, abdominal distension, and bilious vomiting for the last six days. The pain initially localized over the periumbilical area with radiation along the medial side of the thigh (positive Howship Romberg sign), pain increased with food intake and was not relieved by medication. Then she developed abdominal distension that was abrupt in onset and gradually increasing. She also stopped passing flatus and motion. Abdominal distension was aggravated by food intake and not relieved by medication and home remedies. It was associated with multiple episodes of vomiting initially bilious later turned to faecal. It was also associated with generalized weakness and fever. No history of similar complaints was noted in the past. On admission, the patient was conscious, oriented to time place, and person, alert and cooperative. Pulse on admission was 120/min feeble, blood pressure was 90/60 mm of Hg, and the patient was afebrile on touch. On palpation, tenderness was present in the lower abdomen, hernial orifices were found to be normal. There was an absent adductor reflex in the thigh in the presence of a positive patellar reflex (Positive Hannington Kiff sign).

Initially, on admission, a plain skiagram of the abdomen with the pelvis was done to see the site of obstruction. It showed an isolated radiolucent shadow on the left side of the pelvic cavity near the obturator foramen. In this scenario, the X-ray shown in **Figure 1** is highly suggestive of obstruction in the pelvis. Considering other factors such as age, sex, weight and the history of the patient this was most likely an obturator hernia (also called a little old lady's hernia).



**Figure 2. Gross photograph of Left Sided Obturator Hernia orifice.**



**Figure 3. Gross photograph of multiple Terminal ileum diverticula (arrows)**

After initial resuscitation, under aseptic precautions, an emergency exploratory laparotomy was done and the bowel was explored thoroughly. Pyoperitoneum was present with approximately 500 ml of purulent fluid in the peritoneal cavity. Approximately 150 cm proximal to the ileocecal junction, small bowel loops were entering into the left obturator hernia sac with dilated proximal bowel loop and collapsed distal bowel loops. Multiple ileal diverticula were also embedded in the mesenteric leaves of the terminal 100 cms of ileum. The hernial sac was very oedematous and stuck within the obturator canal. To minimize injury to the bowel, gentle traction was applied to the bowel and the hernia was successfully reduced. The bowel wall showed signs of ischemia and perforation was present in the loop of the intestine embedded in the obturator canal and therefore resection of the gangrenous loop of intestines was done. Because of the poor general condition of the patient, double barrel ileostomy was done to reduce the duration of surgery. The rest of the bowel was examined which revealed no abnormality proximal to the obstruction. Distal to the obstruction, multiple ileal diverticula were present. The hernial sac was then inverted and excised after ligating its neck with a 3-0 braided polyglactin suture. The patient had an uneventful postoperative period and was discharged on request on postoperative day 7.

## Discussion

The only treatment for obturator hernia is surgery. There are a variety of operative approaches including inguinal, retroperic, transperitoneal, and laparoscopic

approaches.<sup>9</sup> In the emergency setting, the low midline abdominal approach is the most commonly favored, as it allows adequate exposure of the obturator ring as well as identification and resection of the ischaemic bowel.<sup>10</sup> Exploratory Laparotomy via a low midline incision was done in this case.

It is more common in women than men due to their greater transverse diameter and broader, triangular pelvis. It affects women of around 70–90 years of age, the reason is atrophy of the preperitoneal fat around the obturator vessels in the canal thereby predisposing hernia formation and hence the name ‘little old lady’s hernia’.<sup>3</sup>

Diagnosing an obturator hernia at the earliest is very difficult for surgeons as it usually presents with non-specific signs and symptoms. Although it is a rare abdominal hernia, the mortality rate is as high as 70%. Major clinical symptoms are due to intestinal obstruction like abdominal pain and distension, nausea, vomiting, and constipation.

## Conclusion

An Obturator hernia is the protrusion of abdominal viscera through the obturator canal in which the obturator nerve and vessels pass. This hernia is about six to nine times more common in women and more common on the right side. The major risk factors for the obturator hernia are chronic constipation, chronic obstructive pulmonary disease, and ascites.

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