

CASE REPORT

OBTURATOR HERNIA PRESENTING AS A PARTIAL SMALL BOWEL OBSTRUCTION WITH PARALYTIC ILEUS: A CASE REPORT

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ABSTRACT: Obturator hernias represent a diagnostic challenge and clinical diagnosis is difficult to make due to vague signs and symptoms. However, symptoms of intestinal obstruction are present in majority of cases. Obstruction is usually partial rather than complete and may be acute or intermittent. Delay in diagnosis and surgical intervention causes its high morbidity and mortality. Authors present a case of an obturator hernia presenting as partial small bowel obstruction with paralytic ileus. Early diagnosis and surgical treatment can contribute greatly to reduce the morbidity and mortality in cases of obstructed obturator hernia.

KEYWORDS: Obturator hernia, Intestinal obstruction, rare case, small bowel obstruction.

INTRODUCTION: Obturator hernia was first described by Arnaud de Ronsil. It is considered to be rare and accounts for 0.05%–0.4% off all hernias and 0.2%–1.6% of all cases of mechanical intestinal obstruction.^[1] It is more common in thin, elderly females and has a high mortality rate between 13% and 40%.^[1,2] Rapid evaluation and early surgical intervention can reduce morbidity and mortality. A computed tomography (CT) scan of the pelvis and upper thigh is the best imaging tool in obturator hernia.^[3] This report discusses a case of partial intestinal obstruction associated with paralytic ileus due to an obturator hernia.

CASE REPORT: A 73-year-old hypertensive female was transferred from medicine department to surgical wards of our hospital with colicky abdominal pain and repeated episodes of vomiting since 4 days. Abdominal pain was localized over the periumbical area and radiated along the medial side of the left thigh and knee. She was operated in past for fracture neck of right femur.

On physical examination, the patient's vital signs were stable, her abdomen was distended centrally and abdominal tenderness was present with no evidence of peritonitis or free fluid. There were sluggish bowel sounds. No abnormal findings were found on rectal and vaginal examinations.

Patient initially presented to medicine wards where her serum electrolytes showed hypokalemia (2.58meq/l) and hyponatremia (130meq/l), however even after correction of electrolytes condition of patient does not improved significantly. Surgical opinion was taken. Plain abdominal radiography revealed multiple distended bowel loops. A CT scan and reconstruction of the acquired images in coronal and axial planes was performed to determine the cause of bowel obstruction (Figure 1). The CT scan demonstrated dilated fluid-filled loops of small bowel up to a herniated loop of small bowel, through the obturator canal. Small bowel loop was noted between the pectineus and the left external obturator muscle (Figure 2).

Obturator hernia diagnosis was confirmed intraoperatively using an intraabdominal approach. Reversible sign of ischemia was noted in the circumference of bowel segment which was herniating in obturator canal (Figure 3). A peritoneal flap was developed down to the caudal aspect of

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obturator hernia. The hernial defect was closed by application of 3x5 inch of polypropylene mesh over left obturator, femoral and inguinal areas (Figure 4). Polypropylene mesh was sutured to Cooper ligament.

DISCUSSION: Typically, obturator hernias occur in elderly women or patients with chronically raised intra-abdominal pressure. Obturator hernias occur predominantly in the seventh and eighth decades of life and are nine times more frequent in women than men.^[4] Large, wide pelvic bones and more horizontally oriented obturator canals, which are prevalent in women, are believed to predispose to the development of obturator hernias.^[5,6]

In general, obturator hernias are asymptomatic unless the hernia sac compresses the obturator nerve and produces the pathognomonic Howship–Romberg sign, which includes pain with or without paresthesia localised down the anteromedial thigh to the knee upon movement of the hip or thigh. The Howship–Romberg sign is positive in 15%–50% of cases.^[6,7] The Hannington–Kiff sign, a clinical sign in which there is an absent adductor reflex in the thigh, is more specific but less known.^[6,8] Other symptoms include acute or intermittent small bowel obstruction with high risk of strangulation, weight loss and rarely a palpable mass.^[6] In our case paralytic ileus may be explained by recurrent episodes of vomiting which have caused electrolyte imbalance.

The best imaging tool is CT which has superior sensitivity and accuracy.^[6,7] Bowel herniating through the obturator foramen and lying between the pectineus and obturator muscles is a key finding on CT and determines the diagnosis.^[7] CT also differentiates the obturator hernia from other abdominal masses, such as tumours, haematomas and abscesses. Dilation of small bowel proximal to the hernia is a sign of obstructed hernia.

The intraabdominal approach through a low midline incision is most commonly used as it can establish the diagnosis, avoid the obturator vessels, expose the obturator ring and facilitate bowel resection if necessary.^[9,10] Retroperitoneal, preperitoneal, groin or laparoscopic approaches may be used if the diagnosis is made preoperatively.^[11,12]

CONCLUSION: Obturator hernia remains an important diagnosis to consider in elderly patients with intestinal obstruction. CT scan is valuable to establish preoperative diagnosis. Early diagnosis and surgical treatment contribute greatly to reduce the morbidity and mortality rate.

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Fig. 1: CT scan showing signs of small bowel obstruction

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Fig. 2: CT scan showing bowel loop in between left pectineus and obturator muscle

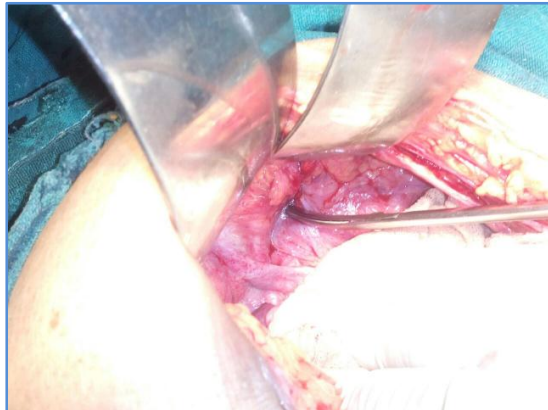


Fig. 3: Intraoperative photograph with instrument pointing towards left obturator canal

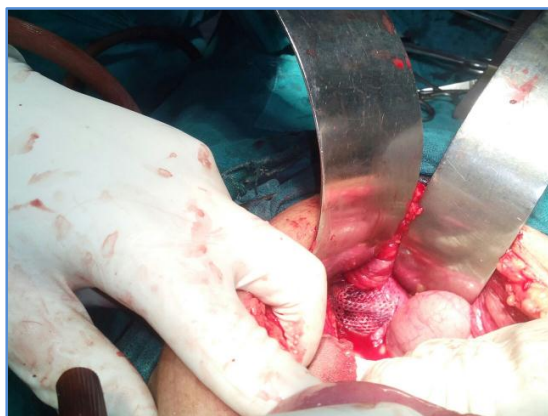


Fig. 4: Intraoperative photograph showing placement of polypropylene mesh

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