



Obturator Hernia in a Male Patient; A Rare Entity: A Case Report

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Authors' contributions

This work was carried out in collaboration among all authors. Author RKA did preoperative evaluation performed the surgery & took pre- & post-operative care. Authors PA and PM gave intensive and medical care to the patient. Author JC gave anaesthesia and did post-operative pain management. Manuscript was written by author PA. All authors managed the literature searches. All authors read and approved the final manuscript.

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Case Report

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ABSTRACT

Introduction: Obturator hernia (OH) is rare accounting for 0.05 – 0.4 % of all abdominal hernias. It is a diagnostic challenge because the signs and symptoms are non-specific. We report a case of OH which was diagnosed during laparoscopic left inguinal hernioplasty and is very rare because it occurred in male, on left side and with associated benign prostatic hypertrophy.

Case Report: Our patient 60 years old male, admitted with history of chronic lower abdominal pain, lump in left groin area which reduced in size after rest and aggravated on coughing and doing heavy

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work. On local examination, left inguinal hernia was present and was reducible. Patient was taken for laparoscopic transabdominal preperitoneal (TAPP) hernioplasty procedure. On laparoscopy after reducing the contents of inguinal hernia associated OH was seen.

Discussion: Loss of body fat and increase in intrabdominal pressure are the major factors that lead to the development of hernia. The commonest content of the sac is ileum with about 50% being of the Richter's type. We suggest that laparoscopic hernia surgeries are superior to open methods. In open surgeries, we can only address direct and indirect inguinal hernia whereas during laparoscopy, we can find and treat direct, indirect, femoral and OH simultaneously. In our case, OH was detected incidentally, had it been open surgery this would have remain undiagnosed and lead to future morbidity.

Conclusion: OH is very rare and difficult to diagnose. Laparoscopic hernia surgeries can detect asymptomatic OH and repair can be easily done either by simple suture closure or mesh placement. TAPP is procedure of choice for strangulated OH.

Keywords: Obturator hernia; inguinal hernia; laparoscopy; intestinal obstruction.

1. INTRODUCTION

Obturator hernia (OH) is rare accounting for 0.05 – 0.4 % of all abdominal hernias [1]. It is a diagnostic challenge because the signs and symptoms are non-specific. It often occurs in elderly, emaciated and chronically ill women. It occurs more frequently in patients with ascites, chronic constipation, chronic obstruction pulmonary disease and any other factors that lead to increased intrabdominal pressure. OH, commonly occurs on the right side due to larger sigmoid colon on the left side protecting the obturator canal [2]. We report a case of OH which was diagnosed during left inguinal hernioplasty and is very rare because it occurred in male, on left side and with associated benign prostatic hypertrophy. OH typically occurs in females, named as the skinny old lady hernia [3-8]. The clinical picture includes intestinal obstruction with abdominal pain, nausea and vomiting. The treatment is only surgical.

2. CASE REPORT

Our patient 60 years old male, weight 55 kg, height 160 cms, BMI- 19.95 was admitted with history of chronic lower abdominal pain, lump in left groin area which reduce in size after rest and aggravated on coughing and doing heavy work. He had type 2 diabetes mellitus and was taking oral hypoglycaemic agents for last 7 years. He belonged to poor socioeconomic status and labour class. He had chronic cough, constipation, difficulty in passing urine for last 3 to 4 years. He had urgency, frequency and burning micturition for last 2 to 3 months. On examination patient was thin built and vitals were stable. On local examination, left inguinal hernia was present and was reducible. On per rectal examination, prostate gland was enlarged.

Routine blood investigations were normal X-ray chest was suggestive of chronic obstructive pulmonary disease. X-ray abdomen was normal. Ultrasonography revealed anterior abdominal wall defect of 22 mm in left inguinal region with bowel herniating through the defect with normal vascularity. The prostate gland was enlarged in size 45 x39 x 37 mm with 34cc volume. Pre-void urinary volume was 484cc with significant postvoid residual urine of 155cc. Patient was given oral medication silodosin for benign prostatic hyperplasia and had significant relief in urinary symptoms. Patient opted for laparoscopic inguinal hernioplasty.

Patient was taken for laparoscopic transabdominal preperitoneal (TAPP) hernioplasty procedure. On laparoscopy after reducing the contents of left inguinal hernia, (Fig.1) peritoneal flap developed. After dissection sac was reduced with large lipoma. (Fig. 2) On further dissection of space of retzius, we came across left OH containing pre peritoneal fat (Fig. 3,4) which was reduced and 17x12 cm polypropylene heavy weight mesh fixed with tackers (Fig. 5) Tackers were fixed to Cooper's ligament, rectus abdominis and internal oblique muscle and the medial lower end of mesh was tucked beyond the obturator fossa in the space of retzius covering the defects. Flap closed with continuous vicryl sutures. Intraoperative period and postoperative recovery was uneventful.

3. DISCUSSION

OH was first described by Arnaud de Ponsil in 1724 and was successfully treated for the first time by Henry Obre in 1851 [9,10]. OH protrude 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 aspect. Obturator canal is 2-3 cm long and 1cm wide and is usually filled with fat allowing no space [11], for hernia. Loss of body fat and increase in intrabdominal pressure are the major factors that lead to the development of hernia. The commonest content of the sac is ileum with about 50% being of the Richter's type. The hernia sac can also contain appendix, Meckels diverticulum omentum, ovary, fallopian tube and even uterus. The hernia orifice is small, so bowel pinching and strangulation are frequent and mortality remains high, 25% to 47.6 % [12].

Howship rhombery sign is pain radiating down the medial aspect of the thigh to the knee and less often to the hip caused by compression and irritation of the obturator nerve within the canal and is seen in 15-20% patient. Another sign is Hannington –Kiff sign, in which adductor reflex is absent in the thigh. Because symptoms are nonspecific and physical findings are often absent so diagnosis of OH is usually delayed until laparotomy is performed. In our patient this was an incidental finding during laparoscopic inguinal hernioplasty.

Various diagnostic modalities like ultrasonography, and CT scan can aid in pre-operative diagnosis in 10-30% cases. We suggest that laparoscopic hernia surgeries are superior to open methods. In open surgeries, we can only address direct and indirect inguinal hernia whereas during laparoscopy, we can find and treat direct, indirect, femoral and OH simultaneously. In our case, OH was detected incidentally, had it been open surgery this would have remain undiagnosed and lead to future morbidity [13]. The hernia repair can be simple closure of the entrance of the canal with interrupted sutures or repair with mesh [14]. We covered obturator and inguinal defect with a single mesh. Our patient had low morbidity as bowels loops had not entered the obturator canal. Laparoscopic transabdominal approach also allows thorough inspection and identification of ischaemic bowel, and resection- anastomosis of the bowel if required. Other modalities available in laparoscopic surgery are total extraperitoneal hernioplasty (TEP), extended TEP (ETEP). TAPP is superior to other procedures in large, obstructed and strangulated hernias and so it is our procedure of choice for all cases.

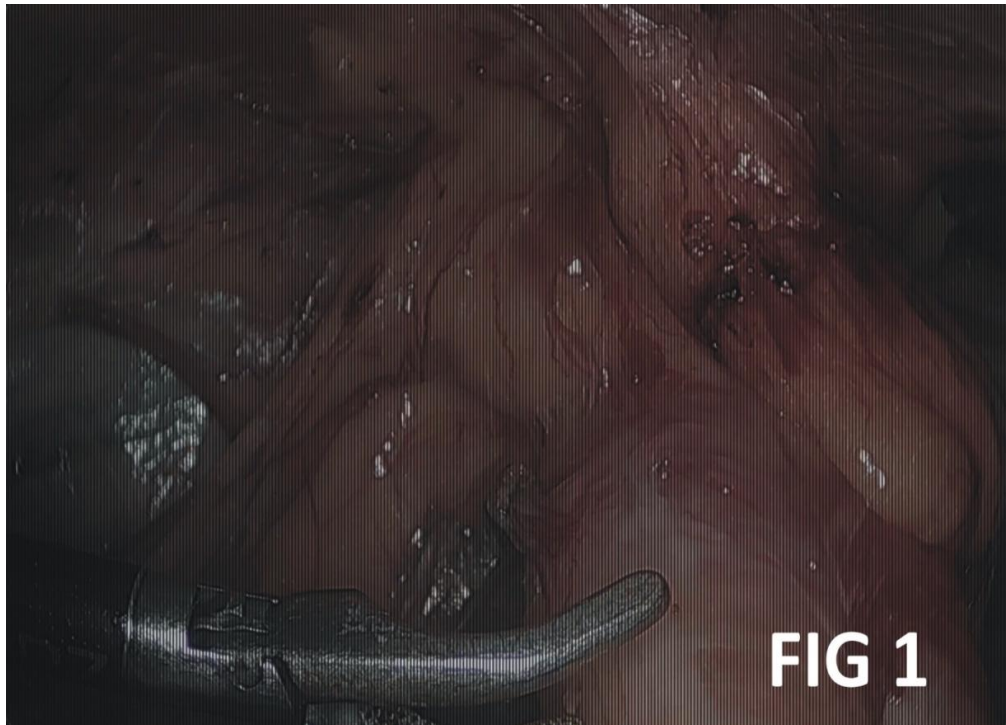


Fig. 1. Laparoscopy showing left inguinal hernia

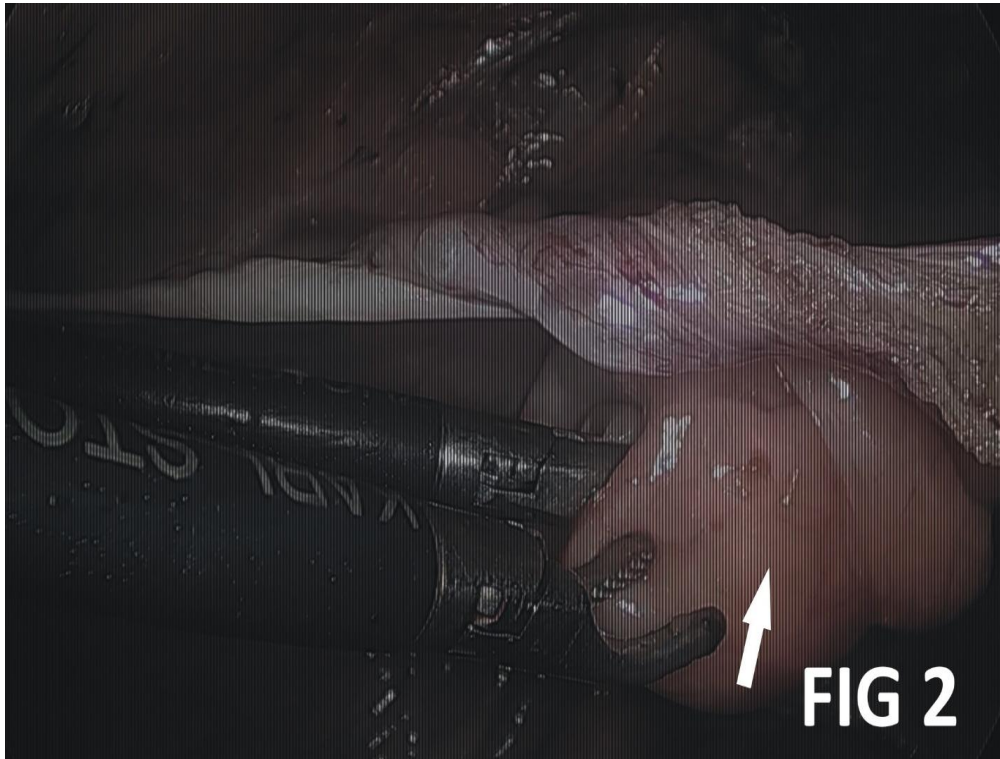


Fig. 2. Hernial sac with lipoma



Fig. 3. Obturator canal plugged with pre-peritoneal fat

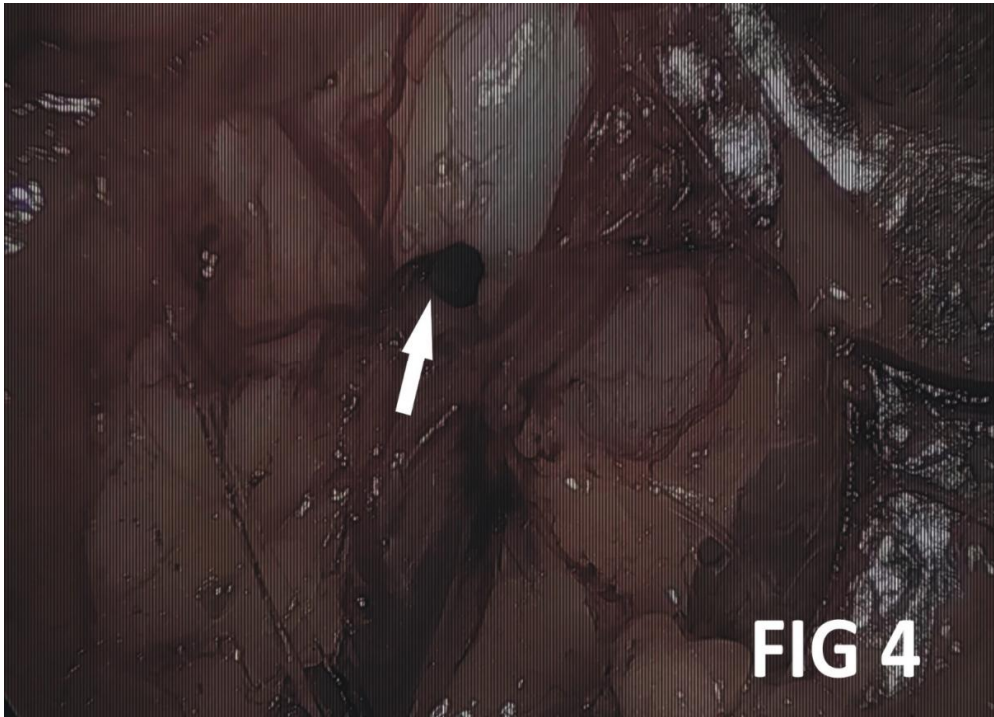


Fig. 4. Obturator hernia

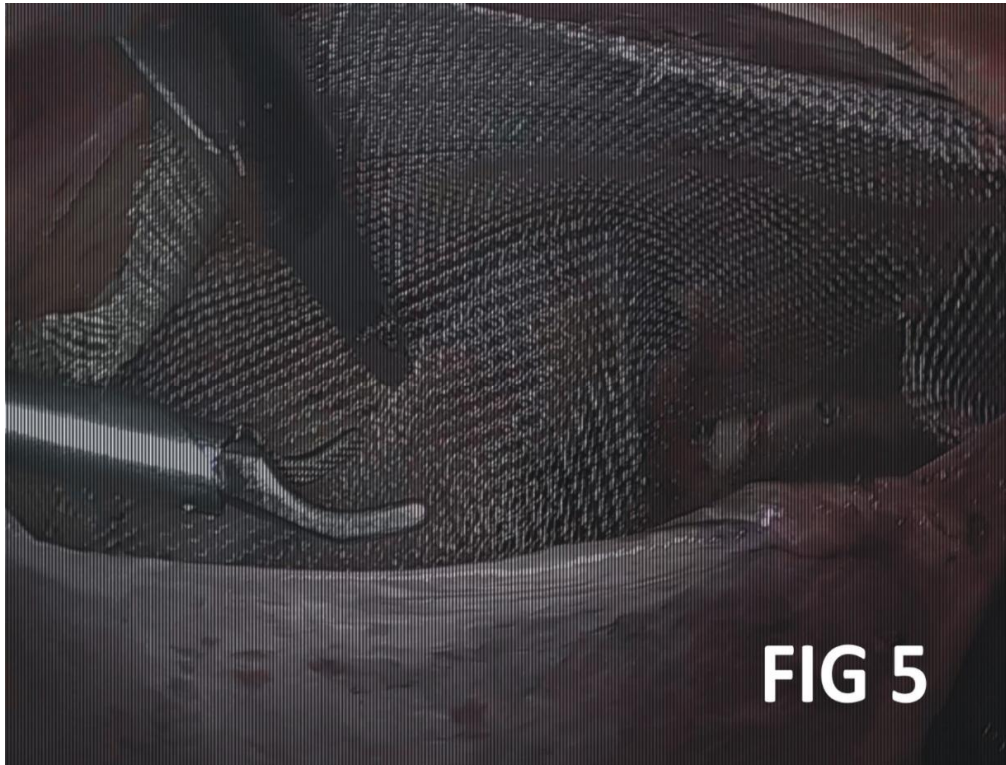


Fig. 5. Defect closure with Mesh

4. CONCLUSION

OH is very rare and difficult to diagnose. Though common amongst elderly, chronically ill females but may occur in males also. Laparoscopic hernia surgeries can detect asymptomatic OH and repair can be easily done either by simple suture closure or mesh placement. TAPP is procedure of choice for strangulated OH.

CONSENT

Informed consent was taken by the patient to participate in the study.

ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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