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SURGICAL IMAGES

Obturator hernia as a cause of intestinal obstruction in an elderly female patient – A clinical image



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Case presentation

An 82-year-old female with a history of open inguinal hernia repair 50 years ago and bilateral total hip replacement, was admitted to the emergency department for altered general health and persistent vomiting. Clinical exam revealed no abdominal pain, distension, or any other pathological finding. Abdomino-pelvic CT-scanner showed a mechanical ileus with no signs of intestinal perforation or necrosis, due to a right groin hernia with an incarcerated segment of small bowel. Despite significant artefacts caused by the bilateral hip prosthesis, an obturator hernia was diagnosed (Fig. 1). After insertion of a nasogastric tube for decompression, the patient was admitted to the operating theatre for an exploratory laparoscopy and transabdominal preperitoneal (TAPP) inguinal hernia repair.

Intraoperatively, a triple groin hernia (inguinal, femoral and obturator) was confirmed with incarceration of the small bowel in the obturator foramen (Fig. 2a and b). The incarcerated segment was reduced, showing signs of venous ischemia that quickly recovered without need of resection. The peritoneal flap was dissected and a TAPP procedure was performed with application of a semi-resorbable monofilament parietal implant of polypropylene and poly-L-lactic acid compounds, allowing coverage all three groin-hernia foramens (Fig. 3a and b). During dissection, great care was taken to avoid damage to the corona mortis nor the obturator nerve. The peritoneal flap was closed with absorbable 3-0 barbed running sutures and was checked for the absence of tears that could lead to exposure of the mesh to intra-abdominal organs. Overall operative time was 172 minutes with minimal blood loss. Postoperative recovery was uneventful with resolution of preoperative ileus on the 2nd postoperative day. The patient was fit for discharge 2 days later. A follow-up call a year after the intervention showed a patient with good quality of life and no sign of recurrence.

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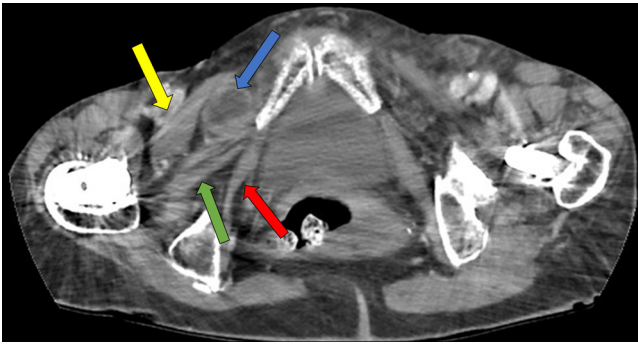


Figure 1. Computerized Tomography (CT) image of the pelvis injected in axial section, with reduction of metallic artifacts (s/p bilateral total hip replacement). Right obturator hernia with ileal content presenting normal enhancement (blue arrow), located between the pectineus (yellow arrow) and externus (green arrow)/internus (red arrow) obturator muscles. Be aware of the corona mortis, a common variant of vascular anastomosis between the inferior epigastric artery and the obturator artery which travels along the vascular lacuna and is in very close proximity.

Contributors

M.W. and S.G.F. collected the data, reviewed the patient's history, and prepared the images. M.W., S.G.F. and S.M. drafted the paper and all authors critically reviewed and approved the final manuscript.

Consent

Written consent for research purposes was obtained from the patient.

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Disclosure of interest

The authors declare that they have no competing interest.

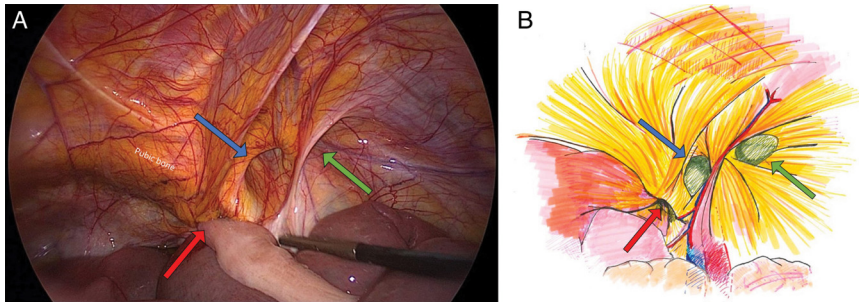


Figure 2. Intraoperative laparoscopic image (a) and schematic representation (b) of a triple groin hernia, with small bowel incarceration in the obturator ring. a: red arrow: incarcerated intestine in obturator ring; blue arrow: femoral foramen; black arrow: epigastric vessels; green arrow: deep inguinal ring; b: red arrow: incarcerated intestine in obturator ring; blue arrow: femoral foramen; black arrow: epigastric vessels; green arrow: deep inguinal ring.

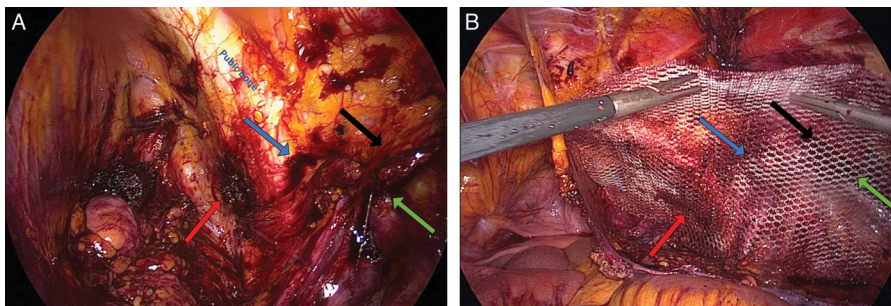


Figure 3. Intraoperative image (a) in the end of dissection and (b) after mesh placement, to cover the groin hernia foramina. a: red arrow: incarcerated intestine in obturator ring; blue arrow: femoral foramen; black arrow: epigastric vessels; green arrow: deep inguinal ring; b: large overlap of the mesh for all potential groin hernia foramina, by a Cousin Right Large 4DMESH®. Red arrow: incarcerated intestine in obturator ring; blue arrow: femoral foramen; black arrow: epigastric vessels; green arrow: deep inguinal ring.