Case report

Incarcerated multiple recurrent inguinal hernia with incidental finding of textiloma in the abdominal wall from previous hernia repair

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Abstract

Multiple recurrent inguinal hernia is a diagnostic and surgical challenge. In terms of additional incarceration of the recurrent hernia, few options for the surgeon are available. We present a case of multiple recurrent left sided inguinal hernia in female patient presented with clinical signs of mechanical bowel obstruction. Preoperative computed tomography of the abdomen presented the hernia defect and also revealed the presence of textiloma in the abdominal wall from previous hernia repair. Intraoperatively there were no signs of bowel ischemia. Hernia defect was closed with resorbable mesh (bridging “in – lay” repair). Postoperative surgical site infection of the wound occurred. Patient was discharged from hospital on day 17.

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Introduction

The recurrence rate after groin hernia repair in the pre-mesh era is reported to be as high as 30% and the rate for recurrent hernia repairs was 35% \cite{1}. New data on recurrence rate for inguinal hernia repair, regardless of the used technique, in large national registers is reported to be between 4.3% and 11.7 \% \cite{2,3-4}. Proposed etiology factors for inguinal hernia recurrence are: experience of the surgeon, infection, tension, suturing material and technique and the patients’ general condition \cite{5}.

Case presentation

A 79 years old female patient was admitted in our hospital with large left sided multiple recurrent incarcerated inguinal hernia, accompanied with diffuse abdominal pain, vomiting

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and absence of flatulence. Previous anamnestic history (no medical data available) related to surgical interventions included surgery for uterine suspension, open cholecystectomy, 2 orthopedic interventions on the left hip and 3 operations for left sided hernia repair with mesh. Complete laboratory blood test and computed tomography (CT) were performed. The laboratory results showed leucocyte levels of 13.0 (3.5-10.0 x 10⁹/L), thrombocyte levels of 456 (150.0-390.0 x 10⁹/L), neutrophil levels of 10.2 (2.0-8.0 x 10⁹/L), serum glucose levels of 6.0 (3.9-5.8 mmol/L), C reactive protein (CRP) of 19.20 (0.0-5.0 mg/L), serum creatinine level of 108.10 (50.0-98.0 mmol/L), chlorides 107.6 (98-107 mmol/L).

The hernia on inspection presented as left lumbar hernia (Fig. 1). Computed tomography (native series) revealed hernia sac on the left side of the anterior-lateral abdominal wall with present incarcerated intestinal loops with signs of small bowel obstruction and a small amount of free intra-abdominal fluid. The hernia neck with present inguinal eventration was measured to be with dimensions of 72 mm. The hernia sac itself was measured to be: anterior-posterior diameter of 196 mm, lateral-lateral diameter of 170 mm and cranial-caudal diameter of 230 mm. Incidental finding of a present foreign body (possible textiloma) in the abdominal wall was noted (Figs 2 and 3).

Indication for emergency surgery was set. Intraoperatively, the incarcerated small intestine was without signs of bowel ischemia. Hernia defect was closed with the use of polyglactin 910 mesh. No attempt for removal of the previously implanted mesh was performed (Fig. 4). The presence of foreign body (textiloma) in the abdominal wall was proved and it was removed (Fig. 5).

In the postoperative period the intestinal function was established and oral feeding was started. Superficial surgical site infection (SSI) of the operative wound occurred and was treated with local wound care on routine daily basis. The patient was discharged from hospital on postoperative day 17.

**Discussion**

Different hernia classification systems include recurrent inguinal hernias (EHS, Aachen) [6,7]. The only published classification and approach proposed for inguinal hernia recurrence is the one of Campanelli [8]. According to his classification, our case presented as R3 type of inguinal hernia recurrence (multi recurrent non-reducible hernia, with big defect >2 cm and inguinal eversion).

Although, rarely needed for inguinal hernia diagnosis [9], the CT of the abdomen proves its diagnostic value in the detection of the hernia defect and its dimensions. In our case,
be fit to the patient- and hernia-related factors, the surgical skills, the available type of mesh and surgical equipment [14].

In our case, laparoscopy was not reliable option due to the surgeons’ experience level in this type of surgical entity and priority was given to the anterior approach. The anatomic landmarks of the inguinal canal in case of multiple previous hernia repairs are often unrecognizable, therefore the “gold standard” Lichtenstein procedure was unfeasible. The hernia defect was closed with bridging mesh implantation (“in lay” repair). Contact between the mesh and the intestines was inevitable and the use of resorbable mesh was forced.

### Declaration of Competing Interest

The authors have declared that no competing interests exist.

### Patient consent

An informed consent was obtained from the patient.

### Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.radcr.2022.01.001.

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