# Treatment of a bilateral giant recurrence groin hernia. A case report

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Introduction: Groin hernias, if treat irrelevantly, can present as giant groin hernias. The further surgery is difficult and complicated.

**Presentation of case:** This patient is a 73 year old male patient, with an groin hernia history for more than 34 years. He have performed hernia repair surgery for six times at the last 30 years. Unfortunately, it recurrence again and became a giant groin hernia. Physical examination could not see his penis, so urination is very difficult. Preoperative CT examination confirmed hernia containing the whole of the small bowel along with its mesentery.

**Discussion:** The whole treatment include the pre-operation acclimatization training, the resection of hernia containing, hernia repair, scrotum reconstruction and the prevention of intra-abdominal hypertension.

Conclusion: Integrated and correct surgical plan is important for the successful treatment of this rare surgical case.

### AS5-2

### Simultaneous single incision approach for inguinal and umbilical hernia

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**Back ground:** Laparoscopic single incision approach for inguinal herunia is getting popular. It has not only cosmetic advantage but it will decrease the risk of injury for abdominal cavity and organs ultimately with totally extraperitoneal preperitoneal approach (TEPP). And what is more, single incision approach has advantage that it can adapt to any direction. We present case report of simultaneous laparoscopic single incision approach for inquinal and umbilical hernia.

Case: A 60s-year-old man was admitted with reducible bilateral inguinal and umbilical hernia. His BMI was 28.3. We performed laparoscopic single incision TEPP. With circumumbilical incision, short pitch incision (ca. 2cm) made on the anterior layer of rectus abdominis sheath, and platform was placed. Preperitoneal cavity created with balloon. Inguinal hernia was revealed laparoscopically as direct hernia at both side and repaired with formed mesh bilaterally. Continuously, umbilical hernia repair was performed with suture. He leaved hospital on day1 after operation. Post operatively, the clinical course was good without any complication.

**Conclusion:** This case suggests that laparoscopic single incision approach is feasible not only for bilateral hernia but also other diseases on different site and direction.

# AS5-3

#### A case report of De Garengeot's hernia

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De Garengeot's hernia is a type of femoral hernia that contains appendix. We introduce the rare case of a middle age male patient (male to female ratio of 1: 4) who referred for diagnostic of a groin lump which was operated and found to be a De Garengeot's hernia. De Garengeot's hernia is rare, often an incidental intraoperative finding, difficult to diagnose pre-operatively, however, imaging check is usually required to make a diagnosis. Operation with repairing of the femoral hernia and appendectomy is the effective treatment.

A 45-year-old male patient presented with a 8-day history of a mild painful right groin lump, physical examination revealed 6x3 cm mass in the right groin below the inguinal ligament. The abdomen was soft and no guarding. His laboratory results were within normal limits. Ultrasound check showed a cystic and solid mass. Operation was proceed with epidural anesthesia and found the presence of the appendix in the femoral hernia sac. Appendectomy and repairing of the femoral hernia was performed. Pathology report confirmed an acutely inflamed appendix. The patient recovered well without postoperative complications or signs of recurrence six months after surgery.

# Clinical analysis of Stoppa combined with Lichtenstein repair in the treatment of 30 cases of giant inguinal pantaloon hernia

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**Objective:** To investigate the technique of Stoppa combined with Lichtenstein repair in the treatment of giant inguinal pantaloon hernia and evaluate its efficacy.

**Methods:** 30 patients with giant inguinal pantaloons hernia were performed with combined Stoppa approach and Lichtenstein technique using a 15 cm × 13 cm polypropylene flat mesh (Bard). The operative time, length of stay, postoperative complications and recurrence rate were analyzed retrospectively.

**Results:** 30 cases recovered well after the operation. The mean operation time was  $(62.1 \pm 7.5)$  min, and the postoperative hospital stay was 2-10 d, with an average of  $(3.0 \pm 1.2)$  d. Postoperative complications were improved after conservative treatment, including 2 cases of urinary retention, 2 cases of groin pain, and 4 cases of scrotum edema. The follow-up rate was 96.7% (n=29). Within the follow-up period (range from 8 to 42 months), no recurrence was observed in the patients.

**Conclusion:** Using Stoppa combined with Lichtenstein repair in the treatment of adult giant inguinal pantaloons hernia is safe and reliable, and the curative effect is satisfactory.

### AS5-5

### Sliding indirect hernia containing fallopian tube and ovary: a case report

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Even if almost all intraabdominal organs and tissues can be found in the hernia sac, it's rare that ovary and fallopian tube become the content of it, which occurs occasionally in newborn female infants or young patients, an extremely rare occurrence in an adult female. In this report, we introduced a case of a 23-year-old female with a left sliding inguinal hernia. The left ovary and fallopian tube were in the hernial sac. They were reduced to the pelvis successfully and the inguinal hernia was repaired with mesh. Although this situation is very rare, we need to be very careful all the time, without unnecessary injury happened in the surgery.

# AS5-6

#### Large Sliding Inquino-scrotal Hernia of Urinary Bladder: Case Report and Literature Review

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Sliding inguinal hernias of urinary bladder are protrusion of bladder through inguinal canals, most of which are insignificant and diagnosed intra-operatively. While large inguino-scrotal bladder hernias are rare, and commonly present lower urinary tract symptoms, decrease in scrotal size after voiding and 2 stage voiding. We describe and discuss the clinical findings and management of a patient with massive bilateral inguino-scrotal hernias, of which the left side is bladder hernia.

# A rare case of small intestine incarcerated to the tunica vaginalis of testis mimicking inguinal hernia incarceration

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**Background:** Small intestine incarcerated to the tunica vaginalis of testis though the internal ring is very rare. Prior to the operation, the patient's diagnosis was inguinal hernia incarceration. After thorough search of the database, we believe this is the first case reported.

Case Presentation: An 85 years old male presented with chief complaints of irreducible right inguinal mass with pain, abdominal pain, severe vomiting for three days. CT scan revealed right inguinal hernia incarceration and the hernia content was small intestine. Laparoscopic exploration revealed a loop of small intestine was indeed incarcerated "through" the internal ring, but not "by" the internal ring. The incarcerated small intestine was not reducible by laparoscopic approach, therefore open laparotomy was performed. The right testicle was reduced to the abdominal cavity with the incarcerated small intestine and part of the small intestine wall was incarcerated to the tunica vaginalis of the testicle. The circulation of the small intestine was restored after relieving from the tunica vaginalis and TAPP was performed after replacing the testicle back to the scrotum. The patient recovered well and was discharged three days after the operation.

**Conclusion:** Diagnosis of the tunica vaginalis incarceration prior to the surgical procedure is very difficult, as it can have all the same symptoms to mimic inguinal hernia incarceration. And as such, Laparoscopic repair is safe, feasible, and an excellent option to confirm the diagnosis.

### AS5-8

### Laparoscopic Repair of Inguinal Hernia during Placement of Peritoneal Dialysis Catheter (PDC)

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**Background:** Laparoscopic placement of PDC is commonly done in the Medical City of King Saud University from 1995. Inguinal hernia may delay or complicate the dialysis. Hereby we report our experience of repairing of inguinal hernia with placement of laparoscopic of PDC.

Patient & Method: There are 160 patients operated in 10 years, we found 8 patients have inguinal hernia and one patient has bilateral inguinal hernia. The neck of the sac is cut and closure of the deep inguinal hernia using 20 monomax suture.

**Results:** The peritoneal dialysis is done during the surgery and continuous after the surgery.

**Conclusion:** The technique is feasible, allowing immediate usage of the peritoneal dialysis and can be done for the patients who are going for laparoscopic placement of PDC.

### AS5-9

# Large size low-grade retroperitoneal liposarcoma masquerading as scrotal hernia: A rare differential diagnosis

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Spermatic cord lipomas are frequently found in inguinal hernia surgery. They are reduced into the preperitoneal space, resected or left alone when small. Larger lipomatous formations alongside the spermatic cord that are not easily resectable may be part of large retroperitoneal tumors, protruding through the inguinal canal. Despite being a rarity, these masses are often malignant, namely sarcomatous. Complete resection and histological grading define the risk of recurrence, the further course of the condition and clinical outcome. We present a very rare pitfall in a fully documented case of a patient with a large retroperitoneal liposarcoma protruding through the inguinal canal and into the scrotum, thus masquerading as scrotal hernia: It was initially misdiagnosed, discovered during a TAPP procedure and completely resected in a secondary laparotomy followed by Lichtenstein repair of the resulting inguinal defect.

We conclude that poorly defined lipomas along the spermatic cord must give rise to suspicion and that pre-operative imaging must then include the retroperitoneum to avoid incomplete resection by mistake. Clinically suspicious cases should therefore be scheduled for laparoscopic exploration or TAPP-repair rather than for ventral repair techniques.

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# Primary Omental Fibromatosis Presenting as an Incarcerated Inguinal Hernia Case Series from a Single Institution over 20 years

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**Introduction:** Inguinal omental fibromatosis is a rare disease entity that may mimic incarcerated inguinal hernia clinically. We therefore review the incidence of inquinal omental fibromatosis in our center.

**Method:** From 1.1.1996 to 30.6.2016, all hernia operations performed in all the affiliated Hospitals of the University of Hong Kong were reviewed retrospectively; data were retrieved from patient records inside clinical computer system.

**Results:** A total of 7039 hernia operations were carried out during the period in which 564 were incarcerated or strangulated hernia operations, among which, 2 cases were of diagnosis of omental fibromatosis, which account for incidence of 0.028% of groin exploration.

Case Report: This was second case in our center - A 26-year-old man was admitted with a history of reducible right groin mass since he was born, the mass had become irreducible for two months. Besides, the patient had no symptoms of bowel obstruction. On palpation, a firm mass was found in the right groin extending to the right scrotum, and could not be reduced completely. Bilateral testes in the scrotum were palpable. Computed tomography scan of pelvic cavity showed that there was herniated omentum entered the right scrotum. The omental mass resected completely and free-tension repair was performed. The histopathological examination revealed that the tumor consisted of spindle-shaped cells that consistent with fibromatosis.

**Conclusion:** Inguinal omental fibromatosis is rare and which may be part of presentation of syndromal disease like Garden's syndrome, the recurrence is higher than in sporadic cases.

#### AS5-11

# Treatment of inguinal hernia on the transplant side after kidney transplantation: a case report and literature review

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Case report: The patient was a 51-year-old man who presented with right inguinal swelling and pain for 10 years. He was diagnosed with renal failure secondary to hypertension and undergone living related donor kidney transplantation in 2003. A mesh-plug hernioplasty was performed under a diagnosis of inguinal hernia. The hernia was diagnosed as a sliding indirect inguinal hernia of the bladder. We found that the transplanted ureter was very close to the sac during the operation. Extensive dissection was avoided in order to prevent inadvertent damage to the ureter.

**Discussion:** The case reported here illustrates the importance of protection of the ureter in the treatment of inguinal hernia on the transplant side in a kidney transplant recipient. The approaches which insert an underlay mesh into the anterior peritoneal cavity, such as mesh plug methods, may damage a transplanted ureter present in this lesion. In contrast, the Lichtenstein operation does not dissect the anterior peritoneal cavity and, thus, is a most suitable method to prevent complications involving the transplanted organs.

**Conclusion:** Surgeons performing inguinal herniorrhaphy on the grafted side in a renal transplant patient should thus be warned not to injure the ureter or bladder during the operation. This case shows that a Lichtenstein operation is a suitable procedure for avoidance of damage to the transplanted ureter in treatment of a transplant-side inguinal hernia in a kidney transplant recipient. Intraoperatively the key of preventing inadvertent injury is familiar with pathological anatomy and careful exploration.

# AS5-12

#### Transabdominal laparoscopic hernia repair for inquinal hernia with sigmoid colon herniation

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**Background:** The inguinal hernia repair is the common surgery for well trained general surgeons, and laparoscopic transabdominal preperitoneal (TAPP) hernioplasty is considered to be a popular technique for inguinal hernia repair. However, some unexpected hernia content, such as sigmoid colon, can cause dilemma even for experienced hernia surgeons.

Aim: To present our experience regarding to TAPP hernia repair for inguinal hernia with sigmoid colon herniation.

**Method:** From 2012 to 2016, among elective TAPP hernia repair, 3 cases of inguinal hernia with sigmoid colon herniation without obstruction were encountered unexpectedly. Rather than making effort to reduce the hernia content directly with the risk of injuring the herniated organ, routine incising the peritoneum above the hernia defect to develop peritoneal flap as usual. With the hernia sac mobilized, the hernia content gradually reduced back safely without any injury. Mesh (Ultropro 15\*10cm, Johnsons&Johnson) was fixed with Securestrap (Johnson&Johnson). The peritoneum was closed with 3/0 v-loc suture.

**Result:** TAPP hernia repair was successful without complications or conversion to open in all these 3 cases. On average, the operation time was 85mins. All the procedures were managed as day case. The follow up time was 18months, and there was no recurrence.