

A Contralateral Complication of Extra-peritoneal Laparoscopic Inguinal Hernia Repair

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ABSTRACT:

A 63 year old female underwent an uncomplicated total extraperitoneal repair of a right direct inguinal hernia. One week later she presented with a strangulated left femoral hernia. We believe the dissection of the extraperitoneal space caused bleeding which tracked down through the femoral canal resulting in a femoral hernia. To date there are no reports of such a complication following total extraperitoneal inguinal hernia repair in the literature.

INTRODUCTION:

Total extraperitoneal repair (TEP) of inguinal hernia repair is now a well recognised technique with similar recurrence and complication rates to open and transabdominal pre-peritoneal (TAPP) laparoscopic repair (<u>1-2</u>). Here we present an unusual complication of the presentation of a strangulated femoral hernia following TEP.

CASE REPORT:

A 63-year-old female presented to the outpatient clinic with a one month history of a right groin lump which was asymptomatic. On examination she was found to have a small, easily reducible, right inguinal hernia. The left groin was entirely normal. Her past medical history included well-controlled hypertension and a total vaginal hysterectomy and anterior repair of cystocoele. She was deemed suitable for extraperitoneal laparoscopic repair of inguinal hernia as a day case procedure. We use an open technique to insert a glove balloon in order to open up the extra-peritoneal space before insertion of the laparoscope and further insufflation of carbon dioxide. The patient was found to have a small indirect inguinal hernia which was reduced and a 3-D Prolene Mesh was inserted to cover the defect. The procedure was uncomplicated and the patient was discharged later the same day. One week later she presented to A&E with a one-day history of a painful swelling in the contralateral groin. There were no associated bowel symptoms. On admission the patient was apyrexial and cardiovascularly stable. Examination revealed a 4cm tender, non-reducible swelling in the left groin. This emerged below and lateral to the pubic tubercle. The rest of the abdominal examination was unremarkable. Full blood count, urea and electrolytes and a clotting screen were normal. A diagnosis of strangulated femoral hernia was made and the patient taken to theatre. Initially, a low approach was taken and an incision was made in the groin over the hernia. The contents of the hernia appeared ischaemic and there was a strong suspicion that bowel was present so the decision was made to proceed to a lower mid-line laparotomy.



^C JSCR When performing the laparotomy incision it was noted that the patient had extremely friable blood vessels which bled easily. Once the peritoneal cavity had been explored it was clear that the bowel was not involved in the hernia. There was a small femoral hernial orifice visible as shown in figure 2.



GUSOR The hernia sac was then opened and found to contain

pre-peritoneal fat and a large haematoma. An uneventful repair was performed and the patient made a full recovery.

DISCUSSION:

We believe the previous extraperitoneal laparoscopic inguinal hernia repair caused this new presentation of a strangulated femoral hernia on the contralateral side. It was noted at time of laparotomy that the patients had delicate blood vessels which bled easily. We postulate that insufflation of the extraperitoneal space caused bleeding which tracked down through the femoral canal, opening it up and allowing herniation of pre-peritoneal fat. This would explain why the patient presented one week post-operatively rather than immediately. This was unexpected as dissection of the extra-peritoneal space by insufflation is normally limited to the midline. Common complications of TEP include recurrence, port site hernias, skin numbness, infections (wound and mesh), chronic pain, vascular and visceral injuries and migration of mesh. Less common complications including pneumothorax, pneumomediastinum, subcutaneous emphysema, mesh rejection and small bowel obstruction have also been reported (<u>3-5</u>). To date, there are no reported cases in the published literature of such a complication as reported here following extraperitoneal laparoscopic inguinal hernia

repair.

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