

CASE REPORT

De Garengeot hernia: a forgotten rare entity?

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SUMMARY

We report the case of a 79-year-old woman who presented with an increasingly painful lump in her right groin for 24 h. An incidental femoral hernia was detected on her CT scan nearly 8 months ago while investigating her medical conditions. However, its management was deferred on account of ongoing medical illness. Exploration of the lump revealed a gangrenous appendix strangulated within the femoral canal (de Garengeot hernia). The hernia was repaired primarily after appendicectomy. The patient was discharged after making an uneventful recovery.

BACKGROUND

Morbidity associated with femoral hernia such as incarceration or strangulation is well known. We decided to write up this report to reiterate the fact that femoral hernias, once diagnosed, should be considered for repair. The contents of the hernia sac may vary from simple pre-peritoneal fat to bowel. If the sac contains an appendix, the hernia is referred to as de Garengeot hernia named after the French surgeon, who described it in the 18th century.

CASE PRESENTATION

A 79-year-old woman was admitted with a painful lump in the right groin for 24 h. There were no other symptoms other than loss of appetite. The lump was progressively becoming more painful and increasing in size.

Her medical history included hypertension, stroke, Parkinson's disease, diabetes and a recent pulmonary embolism. An incidental asymptomatic femoral hernia was detected while undergoing investigations for her medical conditions.

The vital parameters were normal. Abdomen was soft and non-tender. Bowel sounds were normal. The lump in the groin, however, had become increasingly more painful and erythematous.

INVESTIGATIONS

Routine blood tests only showed minimal leucocytosis and an ultrasound scan of her groin raised the suspicion of a loop of bowel being present in the groin.

DIFFERENTIAL DIAGNOSIS

On the basis of her history and clinical examination, our differential diagnosis included inguinal or femoral hernia with possible bowel incarceration.

TREATMENT

The patient underwent a mini laparotomy 2 days later. A gangrenous appendix was found

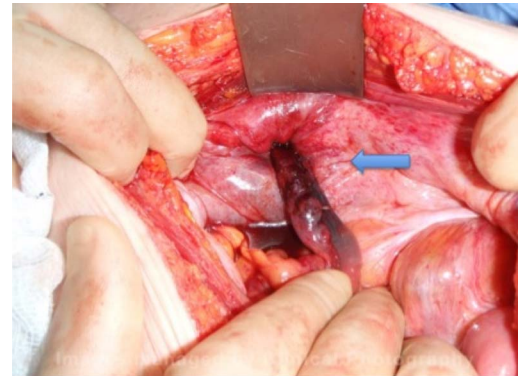


Figure 1 Gangrenous appendix in femoral canal.

incarcerated in the femoral sac (figures 1 and 2) with some haemorrhagic fluid in the peritoneal cavity. The bowel was healthy. An appendicectomy was performed and the femoral defect was closed primarily.

OUTCOME AND FOLLOW-UP

The patient made an uneventful recovery, and was discharged 1 week later. Nine months later, she continues to remain well.

DISCUSSION

Acute or subacute intestinal obstruction secondary to incarcerated femoral hernia is not an uncommon presentation in surgical emergency. What made our case interesting was the presence of an appendix in the femoral hernia, a condition first described in 1731 by a French surgeon Rene Jacques Croissant de Garengeot and hence known by his name.¹ Acute appendicitis occurring within a femoral hernia is even rare and it is difficult to diagnose preoperatively. This phenomenon accounts for less

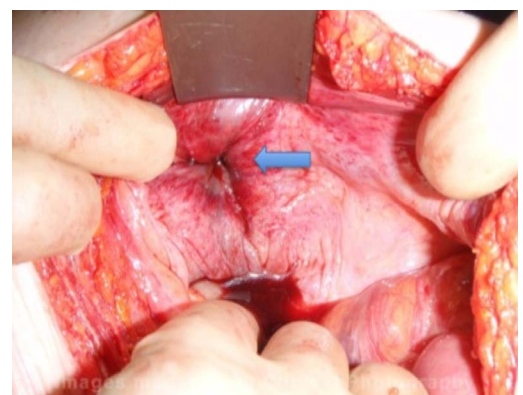


Figure 2 Femoral canal after removal of gangrenous appendix.



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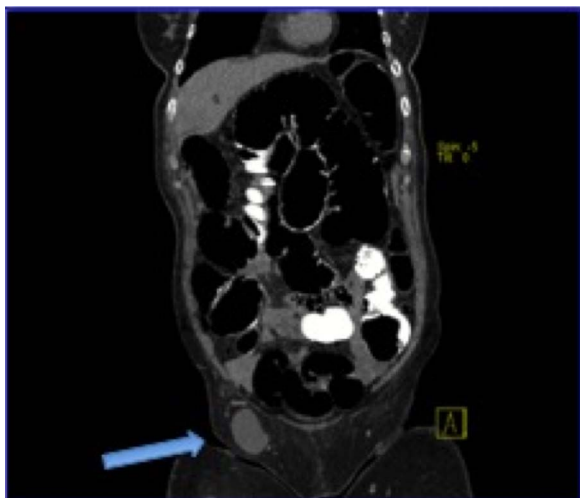


Figure 3 CT scan showing femoral hernia.

than 1% of all femoral hernias.² Less than 100 cases have been reported in the literature in the past two decades.^{3 4} Very few cases are diagnosed preoperatively either as an incidental finding or while getting investigated for other conditions.⁵ The median age for presentation of this condition was 55 years in one retrospective study.⁶ There is no uniform consensus with regard to the operative approach or repairing the hernia. Most authors agree not to use prosthetic material to close the defect if there is suspicion of infection. If the appendix is normal, it may be left after emptying the sac.⁷ The recurrence rate for de Garengeot's hernia is not known.

Although most cases are diagnosed intraoperatively, radiological imaging such as CT or MRI has been shown to be an aid to early diagnosis and may demonstrate the presence of appendix in the femoral canal.^{8 9} In fact the CT scan had picked up this hernia in our patient nearly 8 months prior to acute surgical presentation (figure 3). However, surgical management was

deferred due to recent ischaemic stroke. On hindsight, we feel that the patient should have undergone an early repair of the hernia once deemed fit.

Learning points

- ▶ Femoral hernias, once detected, should be repaired electively in order to avoid potential complication.
- ▶ The operative approach involves standard approach for femoral hernia repair or a mini-laparotomy.

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Competing interests None.

Patient consent Obtained.

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