Acute perforated appendicitis in femoral hernia sac: CT imaging findings

Salih Hamcan,¹ Veysel Akgun,² Bilal Battal,² Bulent Karaman²

¹Department of Radiology, Balıkesir Military Hospital, Balıkesir, Turkey

²Department of Radiology, Gulhane Military Medical Academy, Ankara, Turkey

Correspondence to

Dr Veysel Akgun,
akgunveysel@yahoo.com

DESCRIPTION

A 66-year-old woman with a sudden onset of right lower quadrant and right groin pain was admitted to our emergency department. Physical examination and laboratory tests were suspicious for acute abdomen. Ultrasonographic examination revealed a femoral hernia sac medial to the femoral vascular structures, fat tissue oedema and a dense cystic

structure within the sac. An intravenous contrast-enhanced abdominal CT was performed for further evaluation. The whole appendix was depicted within the normal limits except for the distal segment (figure 1). The distal segment was located in the femoral hernia sac showing cystic dilation surrounded by a small amount of free fluid (figure 2). Those findings were consistent with acute perforated appendicitis in femoral hernia sac. The diagnosis was also confirmed surgically.

De Garengot's hernia is a rare entity that is defined as the presence of an appendix in the femoral hernia sac.¹ Different degrees of intestinal rotation or large caecum may lead to a pelvic appendix, which has a higher risk of entering a hernia sac of the pelvic peritoneum.² The diagnosis of appendicitis in a femoral hernia was used to be extremely challenging and was almost never made preoperatively before CT.³ CT examination is an important radiological method that can clearly reveal appropriate diagnosis.

In conclusion, perforated appendicitis in a femoral hernia remains a challenging diagnosis for the radiologists due to its extremely rare occurrence. The diagnosis should be considered in elderly women presenting with signs of a strangulated hernia.

Figure 1 Oral and intravenous contrast-enhanced axial CT; normal appendix coursing in the pelvis adjacent to lateral wall of the urinary bladder (arrow).

Figure 2 Oral and intravenous contrast-enhanced axial CT; appendix coursing medial to the femoral vessels (straight arrow) into the femoral hernia sac (curved arrow). Loculated fluid and cystic degeneration of the distal appendix can be seen within hernia sac.

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Learning points

- ▶ De Garengeot's hernia is a rare entity that is defined as the presence of an appendix in the femoral hernia sac.
- ▶ The diagnosis of perforated appendicitis in a femoral hernia remains a challenging diagnosis and should be considered in elderly women presenting with signs of a strangulated hernia.
- ▶ CT examination is an important radiological method that can clearly reveal appropriate diagnosis.

Competing interests None.

Patient consent Obtained.

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