

An unusual groin swelling

R.C. Minnee*, E.J. Nieveen-van Dijkum, J.R. Ruurda

Department of Surgery, Academic Medical Centre, Amsterdam, the Netherlands, *corresponding author: tel.: +31 (0)20-566 78 32, fax: +31 (0)20-566 94 32, e-mail: rcminnee@hotmail.com

CASE REPORT

A 73-year-old man presented with right inguinal pain. The patient reported a gradual onset of tenderness and swelling in his right inguinal region during the past 11 days. The patient had a history of epilepsy in childhood, circumcision and cataract. He had no other medical problems, was taking no medication, and had an unremarkable social history, family history, and review of systems. The vital signs were normal. Physical examination revealed normal bowel sounds without abdominal tenderness. The right inguinal fossa showed a tender, well-circumscribed bulge of approximately 10 cm in length beginning 5 cm medial to the anterior superior iliac spine, running on a diagonal confluent with the superior aspect of the right scrotum. The right scrotum was swollen and erythematous. Reposition was attempted under the diagnosis of an incarcerated inguinal hernia, but the swelling could not be reduced. Laboratory studies showed (normal adult range): leucocytes $10.1 \times 10^9/l$ (4 to 10), thrombocytes $327 \times 10^9/l$ (150 to 400), and C-reactive protein (CRP) 284 mg/l (<10). The patient had a normal nonspecific urine analysis. Ultrasound showed a non-incarceration inguinal hernia containing a viable omental part. The patient underwent surgery (*figure 1*).

Figure 1.



WHAT IS YOUR DIAGNOSIS?

See page 273 for the answer to this photo quiz.

DIAGNOSIS

The picture shows a large inguinal hernia with multiple adhesions and an acute appendicitis with an appendicular abscess within the hernia (*figure 2*). His appendix was removed and the hernia repaired. One week later he was discharged without any complications. An appendix within an abdominal wall defect is termed Amyand's hernia, first described by Claudius Amyand in 1735.¹

The incidence of herniation of the appendix is approximately 1%.² Inflammation or perforation of such

an appendix occurs less commonly. The incidence varies between 0.07 and 0.13%.² In cases where the clinical picture is suggestive of acute appendicitis complicating an incarcerated hernia, an ultrasound should be used preoperatively to evaluate the sac for the presence of an appendix.³ Losanoff *et al.* suggested a four-part classification scheme for Amyand's hernias.⁴ Type 1 represents a normal appendix within a hernia sac. Type 2 represents an acute appendicitis within a hernia sac. Type 3 hernias represent an acute appendicitis with abdominal sepsis and type 4 hernias are those in which there is some complicating pathology outside the hernia sac. The approach for type 1 and 2 hernias would be by herniotomy and for types 3 and 4 by laparotomy. The mortality of Amyand's hernia is approximately 5.5%.²

Figure 2.



REFERENCES

1. Amyand C. Of an inguinal rupture, with a pin in the appendix coeci, incrusted with stone; and some observations on wounds in the guts. *Philos Trans R Soc.* 1736;39:329-42.
2. D'Alia C, Lo Schiavo MG, Tonante A, et al. Amyand's hernia: case report and review of the literature. *Hernia.* 2003;7(2):89-91.
3. Coulier B, Pacary J, Broze B. Sonographic diagnosis of appendicitis within a right inguinal hernia (Amyand's hernia). *J Clin Ultrasound.* 2006;34(9):454-7.
4. Losanoff JE, Basson MD. Amyand hernia: what lies beneath--a proposed classification scheme to determine management. *Am Surg.* 2007;73(12):1288-90.