Appendix in Inguinal Hernia—Amyand's Hernia

Aastha Sagar · Jyoti Sureka

Received: 5 January 2013 / Accepted: 17 February 2013 / Published online: 3 March 2013
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Abstract Inguinal hernia containing vermiform appendix as its content is termed as Amyand's hernia. Though an unusual condition, however it is important for the radiologists as well as the surgeons to be aware of this entity especially if the herniated appendix is inflamed so as to avoid delay in treatment and decrease the associated morbidity and mortality.

Keywords Appendix · Inguinal hernia · Amyand's hernia · CT

Discussion

A 63-year-old male presented with right facial palsy and diplopia. On evaluation, he was diagnosed to have acute leukemia with CNS involvement. He underwent two cycles of chemotherapy after which he complained of right upper quadrant abdominal pain for which contrast-enhanced computed tomography (CECT) was done. CECT showed a large liver abscess as the cause of pain. In addition, there was an incidentally detected right-sided indirect inguinal hernia with appendix as its content. This was picked up on axial images (Fig. 1a–j) with better depiction on coronal images (Fig. 2a–h). No evidence of appendicitis was found clinically or on imaging.

An inguinal hernial sac with vermiform appendix is termed as Amyand's hernia (AH). The definition includes normal, inflamed as well as perforated appendix. It is named after Claudius Amyand, a surgeon, who is thought to have been the first person to do a successful appendicectomy of a perforated appendix in an inguinal hernia [1]. AH is uncommon, occurring in 0.28–1 % with appendicitis seen in a mere 0.07–0.13 %. They are usually right-sided as the appendix is a right-sided organ, though left-sided hernias can also occur [2]. Inguinal hernias can be easily picked up on axial CT; however, sagittal and coronal reformats are helpful for the diagnosis of AH, Ultrasound may prove helpful at times. Appendicitis is thought to be caused by compression on the appendix at the base of the hernia rather than intraluminal obstruction [3]. In cases of AH with appendicitis, an inflamed and tender right inguinal mass can be found. However, in many cases, the presentation simulates an incarcerated hernia than appendicitis. Various classifications have been proposed for AH like Losanoff and Basson, Nyhus, and Bendavid [3]. AH with appendicitis is a surgical emergency and radiologists should be familiar with this condition. In our patient, the concomitant comorbidities were treated; but as he was asymptomatic for the AH with no evidence of appendicitis, no surgical measures were immediately undertaken for the same.

A. Sagar (✉) · J. Sureka
Department of Radiology, Christian Medical College and Hospital,
Vellore, Tamilnadu, India
e-mail: aastha_21sagar@yahoo.co.in

Fig. 1 Contiguous axial images (a–j) showing appendix going into the right-sided indirect inguinal hernia. *White star* shows cecum, *black star* shows terminal ileum, *white arrows* show the appendix, and *black arrow* showing right inferior epigastric vessels

Fig. 2 Contiguous coronal images (a–h) better depicting the appendix going into the right-sided indirect inguinal hernia. *White star* shows cecum, *black star* shows terminal ileum, *white arrow* shows the

appendix, and *yellow arrow* shows the junction of appendix to cecum. *Black arrow* is showing the contralateral normal inguinal region

References

1. Malayeri A, Siegelman S (2011) Amyand's hernia. *NEJM* 364:2147
2. Constantine S (2009) CT appearances of Amyand hernia. *J Comput Assist Tomogr* 33:359–362
3. Singal R, Gupta S (2011) Amyand's Hernia—pathophysiology, role of investigations and treatment. *6*:321–327