

Atypical acute appendicitis and its complications : A rare location of the appendix in the periduodenum

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To the Editor,

Acute appendicitis is a common and easily diagnosed disease. However, variation in the location of the appendix may make it difficult to diagnose acute appendicitis (1). Left-sided or subhepatic acute appendicitis has been reported due to adhesion or developmental anomalies (2,3). Periduodenal acute appendicitis, as seen in our case, is rare and may lead to delay in diagnosis.

A 35-year-old man presented with sudden acute right upper quadrant pain. He had no nausea, vomiting, or anorexia. Physical examination revealed local tenderness in the right upper quadrant without rebounding pain. White blood cell count was elevated (19,000 cells/ μ L). Liver function tests and serum lipase were normal. Computed tomography (CT) scans of the abdomen showed swelling of the appendix with a calcified fecalith protruding from the cecal base into the peri-duodenal space, with surrounding fluid collection and fatty stranding (Fig. 1A & B, arrow). The patient underwent laparoscopic appendectomy. Operative findings included

suppurative inflammation of appendix with upward extension into the duodenum and turbid fluid accumulation around the duodenum. He was discharged on post-operative day 3. However, he developed fever and abdominal pain 7 days after discharge. Abdominal CT revealed a periduodenal abscess (Fig. 1C, arrow). The CT-guided drainage of abscess was performed, and the patient recovered without surgical intervention. Thus, early application of abdominal CT may help in prompt diagnosis. Furthermore, adequate placement of drainage tube for atypical appendicitis is important to avoid post-operative intra-abdominal abscess.

References

- SCHUMPELICK V., DREUW B., OPHOFF K., PRESCHER A. Appendix and cecum. Embryology, anatomy, and surgical applications. *Surg. Clin. North Am.*, 2000, **80** : 295-318.
- NELSON M., PESOLA G. Left lower quadrant pain of unusual cause. *J. Emerg. Med.*, 2001, **20** : 241-245.
- TING J.Y., FARLEY R. Subhepatically located appendicitis due to adhesions : a case report. *J. Med. Case Reports*, 2008, **2** : 339.



Fig. 1. — CT scan of the abdomen showing a swollen appendix (arrow) with calcified fecalith protruding from the cecal base upward into the peri-duodenum space, with surrounding fluid collection and fatty stranding (A : axial view ; B : coronal view) ; Abdominal CT scan showing a periduodenal abscess (C, arrow).

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