

Title:

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Acute calculous cholecystitis in a patient with suprahepatic gallbladder, hepatic hypoplasia and Chilaiditi's sign

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Dear Editor,

We have read with interest the article by Lucas Ramos J et al. (1), which described a case where the Chilaiditi's sign coexisted with a sigma volvulus. This radiological sign can coexist with several pathologies such as obstruction of the small bowel, appendicitis, volvulus or perforation of the colon (2). In our case, there was acute cholecystitis in a patient with suprahepatic gallbladder and hepatic hypoplasia.

Case report

A 73-year-old male presented to his local Emergency Department due to abdominal pain. His medical history included arterial hypertension and he complained of epigastric abdominal pain for 48 hours, without other symptomatology. A physical examination revealed hemodynamic stability and a fever of 38.1 °C. The abdomen was soft and depressible, painful in the epigastrium and right upper quadrant, with a positive Murphy's sign. Blood tests showed leukocytes levels of 19,200 and a PCR level of 24.6 mg/dl. Computed tomography identified the Chilaiditi's sign, a suprahepatic, hydropic and lithiasic gallbladder, as well as hepatic hypoplasia of the medial left and anterior right segments (Fig. 1). The patient underwent surgery via a laparoscopic approach due to the suspicion of acute cholecystitis. A gangrenous acute cholecystitis was found and a cholecystectomy was performed without any incidents.

Discussion

Chilaiditi's sign is the interposition of the small bowel or colon between the liver and diaphragm (1). This incidental finding is seen in 0.025-0.28% of the chest and abdominal radiographies (2). Predisposing factors include the absence, laxity or elongation of the suspensory ligaments of the transverse colon, redundant colon or elevation of the right hemidiaphragm. Atrophy or hypoplasia of the liver is an uncommon cause of this radiological sign (2,3). On the other hand, suprahepatic gallbladder is the most infrequent location of gallbladder ectopies (0.026-0.7%). It is associated with an abnormal development of the right liver lobe such as agenesis, hypoplasia or atrophy (4).

References

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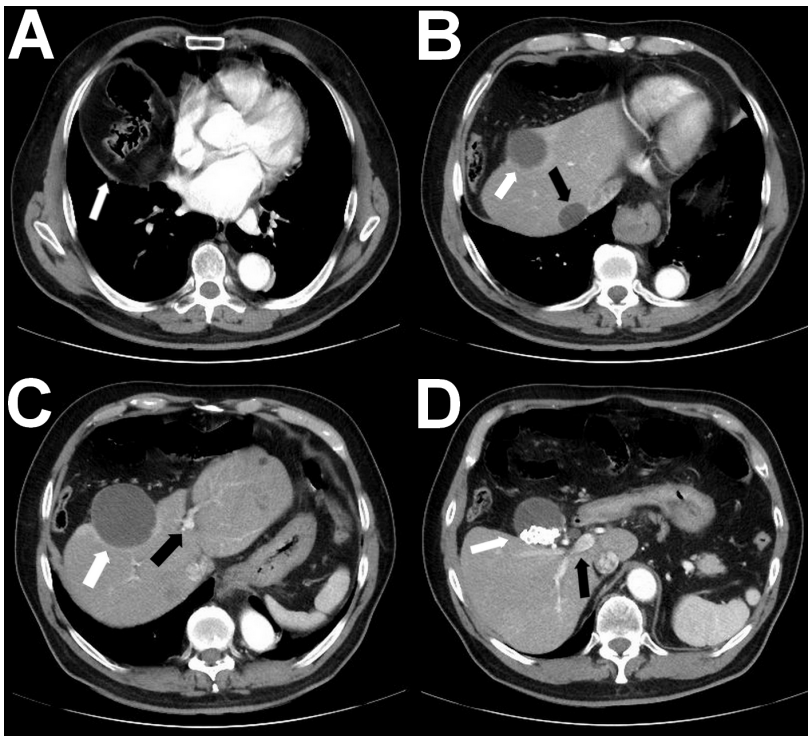


Fig. 1. Abdominal computed tomography. A. Chilaiditi's sign. Interposition of the hepatic flexure of the colon between the liver and the right hemidiaphragm (arrow). B. Chilaiditi's sign. Fundus of gallbladder (white arrow). Simple cyst (black arrow). C. Body of the gallbladder, hydropic and with suprahepatic location (white arrow). Hypoplasia of medial left (IVa and IVb) and anterior right liver segments (V and VIII). Left branch of the portal vein (black arrow). D. Cholelithiasis (white arrow). Hypoplasia of the right anterior liver segments (V and VIII). Right branch of the portal vein (black arrow) that is divided into the anterior branch (segments V y VIII) and posterior branch (segments VI y VII). Choledocho above the right branch of the portal vein. Right hepatic artery above the anterior branch of the right portal vein bifurcation.