

Short Report

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Pseudo cholecystitis as a first impression of pericardial effusion

Carla Pereira Fontes*; Mário Gil Fontoura; Mónica Teixeira

Internal Medicine Department, Centro Hospitalar de Entre o Douro e Vouga (CHEDV), Portugal.

***Corresponding Author: Carla Pereira Fontes**

Internal Medicine Department, Centro Hospital de Entre o Douro e Vouga (CHEDV), Santa Maria da Feira, Portugal.
Email: carla.pfts@gmail.com

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Case description

A 70-year-old man, with no past medical history, was admitted to the emergency department (ED) with right upper quadrant (RUQ) abdominal pain, nausea and vomiting for a week. He denied fever, altered bowel movements, or urinary tract symptoms. On observation, he was afebrile, normotensive, tachycardic and eupneic with oxygen saturation of 99% on room air; cardiopulmonary auscultation was normal and abdomen was depressible, but painful on palpation in right quadrants, without any mass, swelling, or signs of peritoneal irritation; the remaining examination was unremarkable. Electrocardiography revealed atrial fibrillation with rapid ventricular response (140 beats per minute). Arterial blood gas test excluded significant acid-base or ionic disturbances; lactate 4.1 mmol/L. Laboratory studies showed elevation of inflammatory parameters and a cytocholestatic pattern with elevated glutamic-oxaloacetic transaminase (1540 U/L), glutamic-pyruvic transaminase (1194 U/L),

alkaline phosphatase (190 U/L), and gamma-glutamyl transferase (192 U/L); serum lactate dehydrogenase was also raised (1217 U/L), but with bilirubin at normal range. An abdominal computed tomography (CT) scan revealed hepatomegaly associated with marked parietal thickening of the gallbladder, without dilatation of the bile ducts (Figure 1a). Though, on CT lung sections, a large volume (26 mm) pericardial effusion was visible (Figure 2a) and later confirmed by echocardiography. The patient had successful pericardiocentesis, which yielded about 500 cc of straw-colored pericardial fluid, and whose etiological study was inconclusive. He evolved with clinical, analytical and radiological improvement (Figures 1b and 2b), with resolution of the gallbladder edema, without antibiotic or anti-inflammatory therapy. At follow-up, no recurrence was documented.

Although acute cholecystitis is the most common cause of acute RUQ pain in patients presenting to the ED, in over one-third it is attributable to extra-abdominal causes [1,2]. Similarly,

gallbladder wall thickening is a radiological feature that often distinguishes acute cholecystitis, but can be seen in several other medical conditions [2,3]. This case describes an alternative diagnosis of cholecystopathy, secondary to increased intrahepatic venous pressure caused by pericardial effusion and totally reversible after proper treatment of the primary cause. An appropriate interpretation of the findings is of great importance, as the correct diagnosis has a direct impact on treatment.

References

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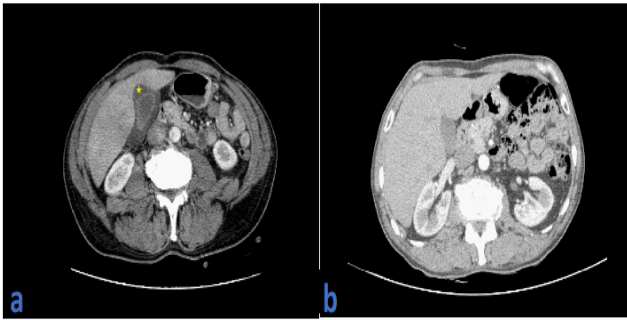


Figure 1: Axial contrast-enhanced computed tomography scans showing abnormal gallbladder wall thickening and edema (yellow star, a) and its improvement after pericardial drainage (b).

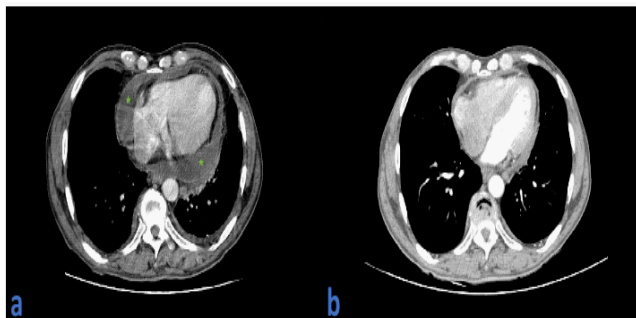


Figure 2: Axial section of contrast-enhanced computed tomography revealing a large pericardial effusion (green stars, a) and its improvement after pericardial drainage (b).

Declarations

Competing interests: None declared.

Authors' contribution: CPF was involved in drafting the article. MGF and MT were involved in revising the article critically for important intellectual content. All authors read and approved the final manuscript.

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