

CLINICAL IMAGE

Mackler's triad: Boerhaave syndrome

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Abstract

A 58-year-old man with a history of alcohol abuse presented after three days of nausea and vomiting with mild (pleuritic) chest pain and diffuse abdominal pain. The patient had no other remarkable symptoms and vital signs and the remainder of the physical examination was normal. The initial workup in the emergency department, at night, included a chest X-ray (*figure 1A*) and an arterial blood gas analysis, which revealed no gross abnormalities except mild hypoxaemia. The differential diagnosis at that moment included pulmonary embolism. The patient received therapeutic anticoagulation and was scheduled for a CT angiography the next morning. However, the next morning, his chest pain deteriorated acutely and he developed progressive severe respiratory distress. A fluctuating, crepitating swelling was noted in his neck. The presence of subcutaneous emphysema and mediastinal widening with increased radiolucency suggestive of a pneumomediastinum was revealed by chest X-ray (*figure 1B*). Although the patient had not vomited since the initial presentation to our hospital several hours earlier, Boerhaave syndrome was suspected. Classically, Boerhaave syndrome presents as Mackler's triad, which consists of ⁽¹⁾ vomiting followed by ⁽²⁾ chest pain and ⁽³⁾ subcutaneous emphysema due to an oesophageal rupture. A CT scan (*figure 1C*) demonstrated air surrounding the aorta (arrow), subcutaneous emphysema (arrow heads) and a pneumothorax (yellow arrow). A small amount of oral contrast was used to confirm the suspected oesophageal rupture, which was located in the right dorsolateral region above the cardia. Based on these findings, Boerhaave syndrome was diagnosed. The patient developed septic shock syndrome with multiple-organ failure and was treated with vasopressive medication and broad-spectrum antibiotics. In addition, he required invasive ventilation, continuous veno-venous haemofiltration and bilateral chest tube drainage. The oesophageal tear was endoscopically stented and later restented due to stent

dislocation. After two months on the ICU, the patient had recovered enough to be transferred to a rehabilitation clinic.

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Disclosures

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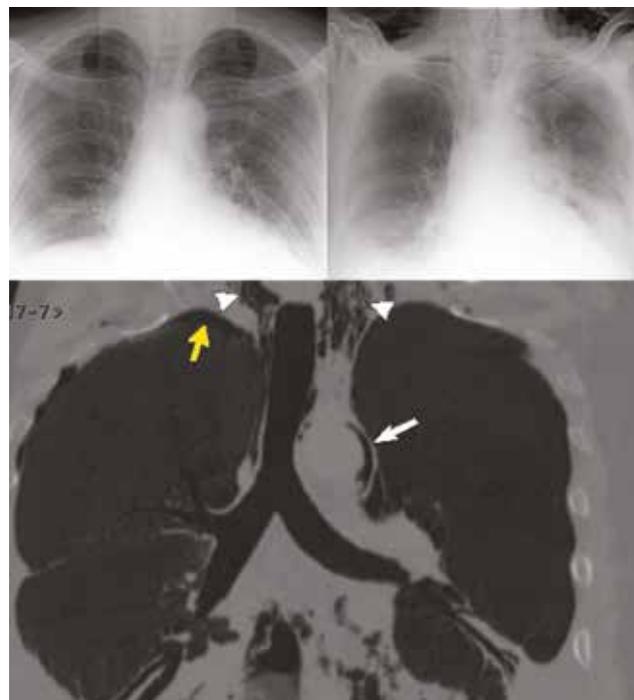


Figure 1.