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IS THE AIR IN THE CHEST ALWAYS OF PULMONARY ORIGIN? - PNEUMOPERICARDIUM A RARE PATHOLOGY

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CLINICAL IMAGE

Title: IS THE AIR IN THE CHEST ALWAYS OF PULMONARY ORIGIN? -
PNEUMOPERICARDIUM A RARE PATHOLOGY.

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A 70-year-old female was admitted to the hospital for dyspnea and respiratory failure. Two days before she complained of left sided mechanical chest pain, related to exertion with nausea and dyspnea. She had no other symptoms. She was treated initially for anxiety, but the dyspnea progressed. A physical examination revealed significant dyspnea with the use of accessory muscles. The chest X-ray revealed left hemidiaphragm elevation and air in the pericardial sac (Fig. 1A). A chest CT scan revealed pneumopericardium (Fig. 1B) and a large hiatal hernia with anterior wall thickening, opening into the pericardial cavity and causing pneumopericardium of 13 mm (Fig. 1C and 1D). The patient underwent urgent cardiac surgical intervention to reduce pericardial air (Fig. 1E and F) and stomach reconstruction. Pneumopericardium is a pathology with low incidence and fatal outcome. A chest X-ray is often the initial diagnostic tool, although it's not specific.¹ Diagnosis is confirmed by thoracic CT imaging and a barium swallow study in a gastropericardial fistula cases. Gastropericardial fistula is a rare and severe complication of upper gastrointestinal diseases. In this case, high-priority surgical intervention was the optimal management approach.²

Conflict of interests

The authors state that they have no conflict of interests.

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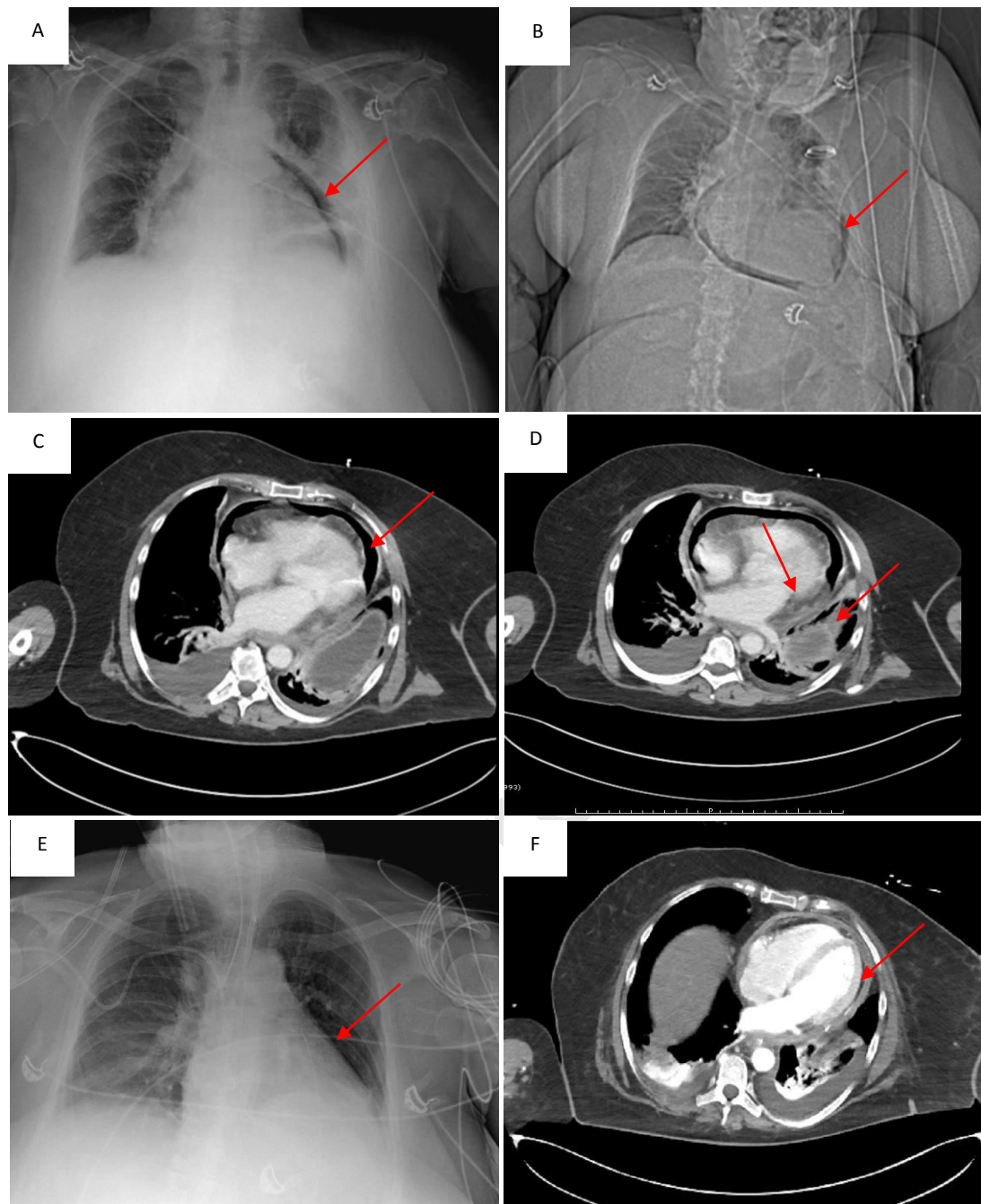


Fig. 1.

Clinical case images: (A) chest X-ray showed air around of pericardial sac (red arrow). (B and C) Chest CT with pneumopericardium (red arrow). (C) Chest CT showed a big hiatal hernia and pneumopericardium secondary to gastropericardial fistula (red arrow). (D and E) Decreased pneumopericardium after surgical intervention (red arrow).