

CASE IMAGE

An unusual coexistence: Spontaneous pneumopericardium and pneumothorax*Nadir bir birliktelik: Spontan pnömoperikardiyum ve pnömotoraks*

ID Ahmet Güner

ID İsmail Balaban

ID Anıl Avcı

ID Muzaffer Kahyaoğlu

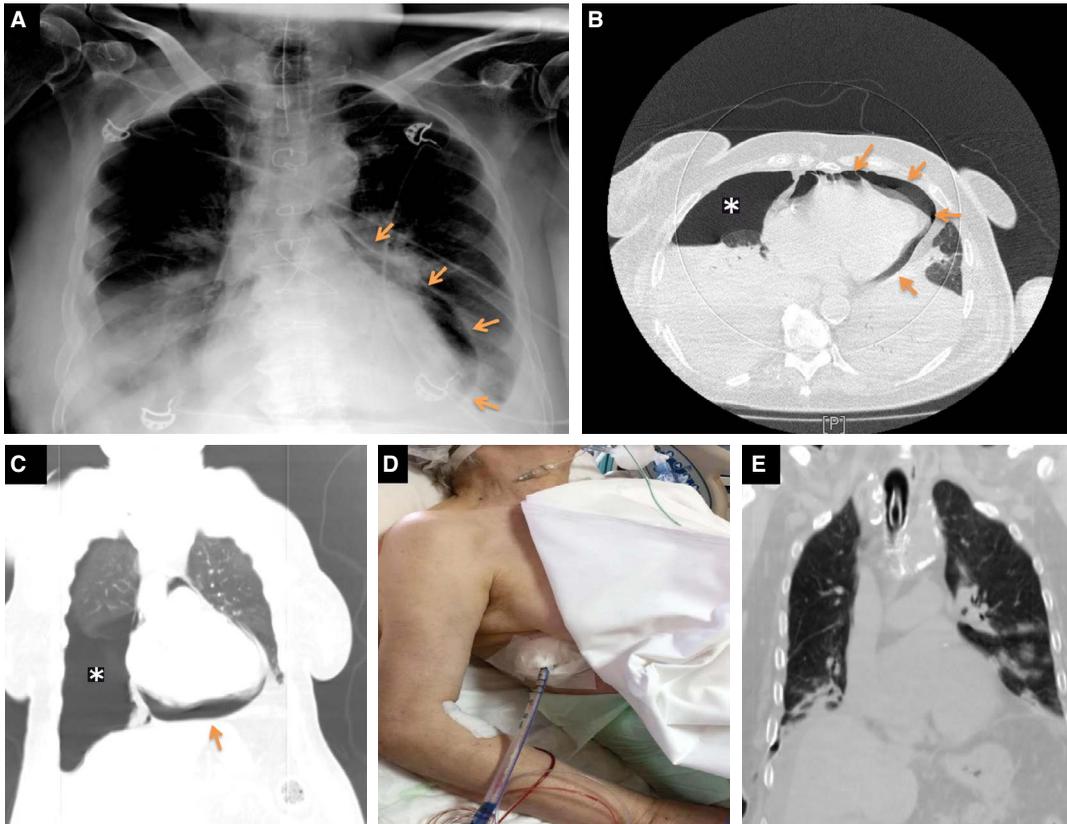
ID Mehmet Özkan

Department of Cardiology,
Kartal Koşuyolu High
Speciality Training and
Research Hospital, İstanbul,
Turkey

A 74-year-old female presented at the emergency department with dyspnea that had gradually progressed over the course of 10 hours. The patient's past medical history included coronary artery bypass surgery, ischemic heart failure, diabetes mellitus, and no history of trauma. On examination, she had a pulse rate of 121/

minute, blood pressure of 65/40 mm Hg, and a peripheral oxygen saturation of 78% with diminished heart and breathing sounds. Due to hemodynamic instability, endotracheal intubation was performed and the patient was taken to the intensive care unit. A chest X-ray revealed the presence of air separating the pericardium

from the heart inside the pericardial cavity (Figure A). A bedside echocardiogram did not indicate the presence of air surrounding the heart with features of cardiac tamponade. A contrast-enhanced computed tomography (CT) scan of the thorax confirmed the presence of both pneumopericardium and pneumothorax (Figure B and C). A tube thoracostomy was performed by a thoracic surgeon (Figure D). The patient's vital signs recovered to normal levels. A repeat CT scan of the thorax indicated resolution of both the pneumopericardium and pneumothorax (Figure E). The patient was discharged after 9 days of follow-up and she has been doing well for 2 weeks at the time of writing. Pneumopericardium is a clinical condition that occurs when air enters the pericardial space. This usually occurs as a result of chest injuries, barotrauma, obstruction, or iatrogenic causes (esophageal and coronary bypass surgery). The coexistence of spontaneous pneumopericardium and pneumothorax is a very rare chest pathology.



Figures– (A) Chest X-ray indicates the presence of air separating the pericardium from the heart inside the pericardial cavity (yellow arrows). (B, C) Contrast-enhanced computed tomography (CT) scans in horizontal and coronal planes reveal the presence of both pneumopericardium (yellow arrows) and pneumothorax (asterisk). (D) Image of tube thoracostomy. (E) A repeat CT scan of the thorax indicated resolution of both pneumopericardium and pneumothorax.