

Clinical Image

Late Unexpected Pneumopericardium Due to Pleuro-pericardial Atrial Perforation by Pacemaker Lead

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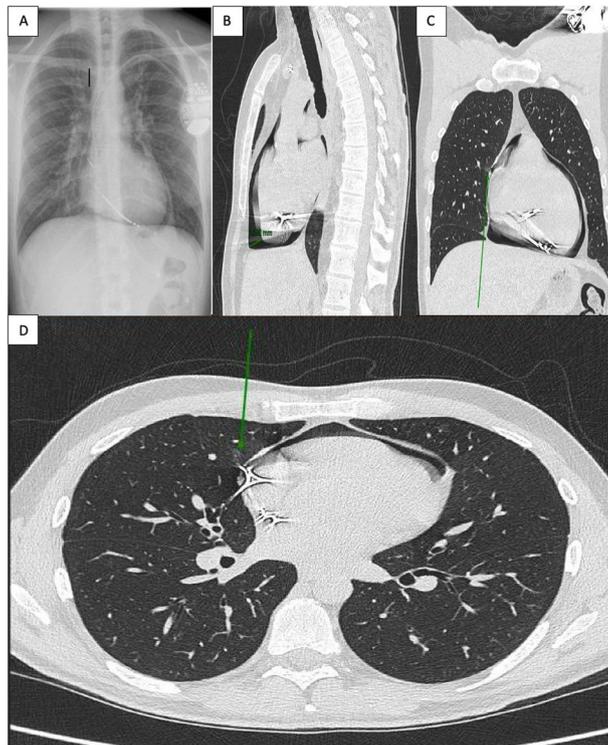


Fig. 1. Posterolateral chest radiography (A). Sagittal section chest computed tomography (B). Coronal and cross-section chest computed tomography (C and D) showing atrial and pleural perforation by pacemaker lead (arrows).

Thirty-eight-year-old patient with previous history of pacemaker insertion one year ago, as consequence of toxic dilated cardiomyopathy following chemotherapy for non-Hodgkin lymphoma. After pacemaker placement, a chest X-ray was performed with no immediate complications. One year later he presents to the emergency department with acute chest pain and bubbling sensation during exercise, not previously reported. A chest X-ray was performed showing pneumopericardium (Fig. 1A).

Chest CT scan confirmed the presence of moderate pneumopericardium (Fig. 1B) secondary to pleural and cardiac perforation by pacemaker lead (Fig. 1C and D arrows).

Treatment consisted of removal and replacement of atrial lead.

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Pneumopericardium is a rare complication usually resulting of myocardium perforation by pacemaker lead entering lung parenchyma and establishing communication between the lung and pericardial space.¹

Late development of pneumopericardium has only been documented in previous history of cardiac surgery and persisting pleuro-pericardial fistula.² Late development of pneumopericardium after pacemaker implantation is therefore a particularly rare complication and potentially life-threatening.

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Conflicts of Interests

The authors declare not to have any conflicts of interest that may be considered to influence directly or indirectly the content of the manuscript.

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