



# Lung Cancer-Related Pneumopericardium

## Pneumopericárdio Secundário a Cancro do Pulmão

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**Palavras-chave:** Filme para Raios X; Neoplasias do Pulmão; Pneumopericárdio; Tomografia Computadorizada Espiral

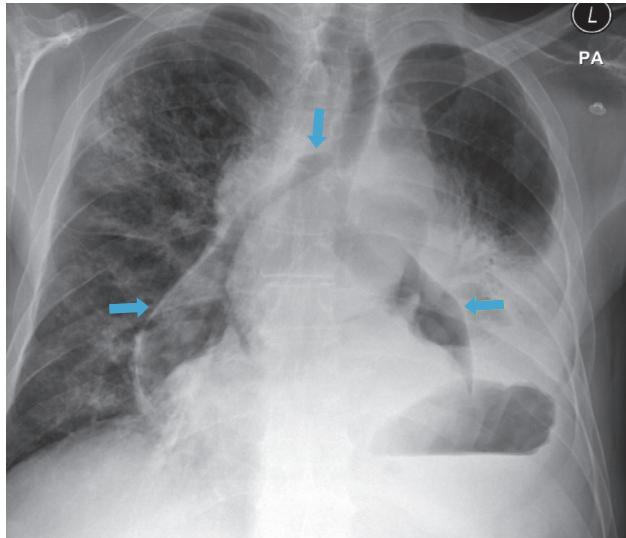


Figure 1 – Chest PA view radiograph showing air (blue arrows) around the heart, the aorta and the main pulmonary artery

A 52-year-old man presented to our hospital with chest pain and shortness of breath. He was being treated with chemotherapy for a peri-hilar, infiltrative squamous cell carcinoma of the left lung with nodal involvement.

The chest radiograph (Fig. 1) revealed air outlining the inner surface of the mediastinal pleura, particularly around the aorta and the main pulmonary artery, consistent with pneumomediastinum. A computed tomography (Fig. 2) confirmed the pneumopericardium diagnosis, associated with a sizeable broncho-pericardial fistula created by the necrotic tumour.

Pneumopericardium consists of air around the mediastinal structures, often extending to the neck, chest wall or even causing pneumothorax.<sup>1,2</sup> It is a rare and often fatal entity.<sup>3,4</sup> Although pneumopericardium is commonly associated with blunt trauma or iatrogenic causes (such as invasive procedures or mechanical ventilation), other causes should be considered, such as cancer (particularly esophageal and lung cancer).<sup>1,3,4</sup>

### AUTHORS CONTRIBUTION

POS: Analysis of the clinical file of the patient. Draft of

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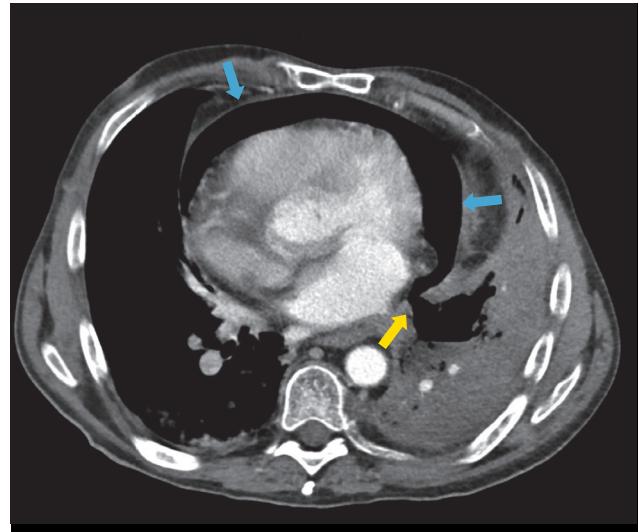


Figure 2 – Axial computed tomography image depicting the pneumopericardium (blue arrows), the broncho-pericardial fistula (yellow arrow) and the necrotic lung tumor

the paper and selection of images.

JPC: Interpretation of medical images. Critical review of the paper and final approval of the manuscript.

### PROTECTION OF HUMANS AND ANIMALS

The authors declare that the procedures were followed according to the regulations established by the Clinical Research and Ethics Committee and to the 2013 Helsinki Declaration of the World Medical Association.

### DATA CONFIDENTIALITY

The authors declare having followed the protocols in use at their working center regarding patients' data publication.

### PATIENT CONSENT

Obtained.

### COMPETING INTERESTS

The authors have declared that no competing interests exist.



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