


IMAGE FOCUS

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A giant pneumopericardium of rare cause

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A 27-year-old male was admitted with complaints of chest pain and dyspnoea for 4 days on 7 June 2022. He had a history of squamous cell carcinoma of the tongue, treated in June 2021. Reassessment in May 2022 revealed that despite adequate chemotherapy, the tumour had metastasized (T3N3M1). Electrocardiogram (ECG) (Panel A) revealed suspected ST-segment elevation acute anterior myocardial infarction with obvious ST-segment elevation at leads I, aVL, V1–V5. Bedside echocardiography showed that the pulmonary gas interference was serious; the imaging quality was poor, and the left ventricle was small (left ventricle end diastolic dimension 35 mm, left atrium dimension 22 mm, left ventricular ejection fraction 66%) (Panel B). Biochemical markers of myocardial injury were essentially normal, whereas carbohydrate antigen 125 levels were elevated (50.8 U/mL). Emergency coronary angiography revealed normal coronary arteries (Panel C, [Supplementary data online, Videos S1 and S2](#)). Chest radiograph on the second day indicated a large radiolucent area around the heart, identified as a giant pneumopericardium (Panel D). Enhanced CT of the chest showed irregular posterior wall cavities (metastases?) in the middle lobe of the right lung. Parts of the walls of the cavities were adjacent to the bronchus and connected to the pericardial cavity, with a large amount of pericardial gas accumulation (Panel E and F, [Supplementary data online, Videos S3 and S4](#)).

Since the pericardial cavity could communicate with the bronchus, tension pericardium was avoided. Pneumopericardium is a very rare entity. It can be a serious complication of tumours metastasizing to the pericardium and adjacent tissues.

[Supplementary data](#) are available at *European Heart Journal - Cardiovascular Imaging* online.

Conflict of interest: None declared.

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