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IMAGE

Cardiac tumor mimicking acute myocardial infarction

Tumeur cardiaque mimant un infarctus aigu du myocarde

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MOTS CLÉS

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Case presentation

A 51-year-old man was admitted to our hospital for chest pain and a 2-week history of worsening dyspnoea (NYHA II). The patient had been suffering from chest pain for two months. His medical history was limited to pulmonary tuberculosis nine years earlier. His main cardiovascular risk factor was tobacco smoking. He took no medications.

Physical examination revealed a strong systolo-diastolic murmur. Resting blood pressure was 126/82 mmHg and heart rate was 83 beats per min. The patient reported worsening pain, and as the electrocardiogram (Fig. 1A) was typical of an anterior acute myocardial infarction, he was admitted to the cath lab for immediate coronary angiography. Surprisingly, the angiogram was normal.

Routine laboratory tests showed a normal blood cell count, electrolyte balance and clearance. Notably, the concentration of troponin I was normal. Inflammation was evident, with elevated concentrations of C-reactive protein ($168\,\text{mg/L}$, N < 0.5) and B-natriuretic peptide ($852\,\text{ng/L}$, N < 100). Transthoracic echocardiography (Fig. 1B) revealed a cardiac tumour with left ventricle extension. The tumour was analysed using chest tomodensitometry (Fig. 1C) and nuclear magnetic resonance imaging (Fig. 1D). Note the extension to the left ventricle, circumferential pericardial effusion ($25\,\text{mm}$), probably progressively constituted as well tolerated. The results of endomyocardial biopsies were normal, but scan-guided transthoracic biopsies revealed an adenocarcinoma. The patient was therefore

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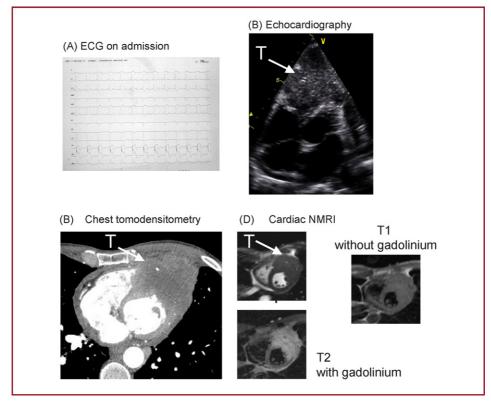


Figure 1. (A): admission electrocardiogram; (B): echocardiogram showing cardiac tumour; (C): chest tomodensitometry; and (D): nuclear magnetic resonance imaging without (T1) and with (T2) gadolinium; T: tumour.

diagnosed with pulmonary adenocarcinoma with left ventricle extension and no other localization. A chemotherapeutic regimen comprising cisplatin and docetaxel was initiated immediately.

Discussion

This clinical case underlines a rare cause of differential diagnosis for acute myocardial infarction. Cardiac tumours are

infrequent, and this patient also had a rare case of adenocarcinoma.

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