## **IMAGING IN INTENSIVE CARE MEDICINE**

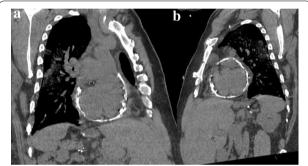
# Intra-alveolar hemorrhages due to left heart dysfunction and calcified constrictive pericarditis

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Constrictive pericarditis is a chronic inflammatory disease responsible for fibrocalcific pericardial thickening. This usually limits right ventricular filling, resulting in signs of right ventricular dysfunction. Left heart dysfunction is rare and pulmonary edema exceptional. A 53-year-old man developed an atrial fibrillation requiring anticoagulation. The patient rapidly developed dyspnea and hemoptysis. A bronchoalveolar lavage confirmed an intra-alveolar hemorrhage that was suspected on a thoracic CT scan. Despite absence of a specific diagnosis and because of the significant dyspnea, a bilateral embolization of bronchial arteries was performed. Three months later, the patient was admitted for an acute respiratory failure with clinical and radiological evidence of acute left heart failure. No sign of right heart failure was observed. An echocardiography confirmed this observation. A thoracic CT scan showed pulmonary edema, right pleural effusion, and pericardic calcifications. A coronal reconstruction showed complete pericardic calcifications with bilateral atrial distension (Fig. 1). A total pericardiectomy was performed and relieved the patient from most cardiopulmonary clinical signs. The pathology analysis did not allow any etiologic diagnosis. Hemoptysis was the result of pulmonary venous congestion and was favored by anticoagulation.



**Fig. 1** Coronal **(a)** and sagital **(b)** CT scan reconstruction showing the extensive pericardic calcifications

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#### Compliance with ethical standards

### Conflicts of interest

On behalf of all authors, the corresponding author states that there is no conflict of interest.

Received: 26 December 2016 Accepted: 29 December 2016 Published online: 21 January 2017

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