Clinical vignette

Myocardial metastasis of a bronchial carcinoid

Sylvestre Maréchaux1,1, Joël Dagorn1, Virginia Gaxotte2, Pierre-V. Ennezat3, Jean-Paul Beregi3, Christophe Bauters4, Ghislaine Deklunder3 and Thierry le Tourneur1,4

1Echocardiography and Physiology Laboratories, Lille University Hospital, France; 2Cardiovascular Radiology, Lille University Hospital, France; 3Intensive Care Unit, Lille University Hospital, France; 4Cardiology C, Lille University Hospital, France

*A Corresponding author. Tel: +33 3 20 44 52 31; fax: +33 3 20 44 44 14. E-mail address: sylvestre.marechaux@yahoo.fr

A 78-year-old woman was admitted to the Intensive Care Unit for cardiogenic shock due to cardiac tamponade. She had no past medical history and was previously healthy. Transsthoracic two-dimensional echocardiography performed after pericardial drainage demonstrated a myocardial infiltrative mass localized in the septum (Panel A, four-chamber apical view, arrow) and in the left ventricle (LV) inferior wall (Panel B, parasternal short axis, arrow). Cardiac valves were normal. Pathological examination of pericardial fluid did not reveal abnormal cells. A lower lobe right pulmonary mass was diagnosed using chest CT scan (Panel C, arrow). Magnetic resonance imaging (Panel D, four-chamber view, and Panel E, short-axis view) demonstrated not only the septal, anteroseptal (Panels D and E, arrow), and the inferior masses associated with circumferential pericardial effusion but also masses localized in the LV lateral wall and in the free wall of the right ventricle (head arrow, Panels D and E, respectively). Bronchial endoscopy failed to biopsy the pulmonary mass. However, histological analysis of a myocardial biopsy performed by thoracoscopy diagnosed a metastasis of a differentiated bronchial carcinoid. A somato-statin treatment was introduced. After 1 year of follow-up, despite a preserved healthy state, the patient suddenly expired. The cause of death was supposed to be ventricular arrhythmia as a consequence of tumoural invasion. In conclusion, myocardial metastasis is an unusual clinical presentation of bronchial carcinoid particularly with a preserved health. These data are in contrast with the clinical deterioration often described in patients with malignant tumours and metastatic myocardial invasion. Asterisk indicates pericardial effusion. LV, left ventricle; RV, right ventricle.