STUDIUM PRZYPADKU / CLINICAL VIGNETTE

Typical and atypical aspects of cardiac myxomas in a single patient

Typowe i nietypowe aspekty przypadku śluzaka serca

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A 69-year-old man was referred to our hospital for surgical evaluation of a large left atrium (LA) mass unexpectedly discovered by computed tomography performed during the study of anaemia and elevation of acute phase reactants. The physical examination was remarkable for a Raynaud phenomenon. Interestingly, transthoracic echocardiography documented the presence of an 8×2.5 cm LA mass prolapsing to the left ventricle in diastole. When studied with transoesophageal echocardiography, it seemed to be anchored to the interatrial septum (Fig. 1). Surprisingly, a magnetic resonance (MR) study done to better define the mass characteristics showed a hypointense mass in a delayed enhancement sequence, which was suggestive of a thrombus or an important thrombotic component (Fig. 2). A coronary angiography (CAG) was performed before surgery, demonstrating three-vessel coronary artery disease (CAD) and a rich tumour vascularisation from the right coronary artery (Fig. 3). The patient underwent surgery for tumour resection and coronary artery bypass grafting. One year later, the patient is doing well, acute phase reactants have normalised, and Raynaud's phenomenon has disappeared. Histology demonstrated that the tumour was an atrial myxoma with huge thrombotic component (Fig. 4). The major differential diagnosis of myxoma is thrombus, which in theory may have a more rapid growth rate. Imaging techniques, especially MR, may contribute to differentiating myxomas from thrombi. In our patient, the atrial myxoma had a large thrombotic component that probably prevented proper identification of the tumour by MR and may explain its extremely rapid tumour growth rate. The association between atrial myxoma and Raynaud's phenomenon is rare, but small series of cases have been described in the literature. Raynaud's phenomenon may be another systemic manifestation of atrial myxomas, possibly due to the release of cytokines to the blood stream by the tumour. Finally, the presence of a "tumour blush" in CAG is a common finding, not so the presence of asymptomatic CAD associated with the mass.



Figure 1. A. Transoesophageal echocardiography reveals an 82×25 mm pedunculated mass (cross) prolapsing into the left ventricle in diastole; **B.** Raynaud's phenomenon



Figure 3. Coronary angiography. Chronic total occlusion of right coronary artery and rich vascularisation of the tumour (arrow) arising from a proximal branch

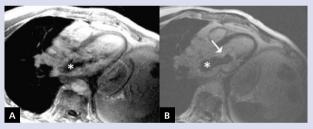


Figure 2. A. Cardiac magnetic resonance delayed enhancement sequence shows a hypointense left atrial mass protruding into the left ventricle, with no late enhancement (asterisk); B. Subtle rim of high signal intensity (arrowheads) surrounding the low signal intensity mass (asterisk)

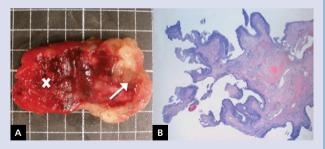


Figure 4. **A.** Myxoma of $8 \times 3.5 \times 2.5$ cm showing two different tissue zones. One (cross) is a dark red, fibroelastic complex 4.2 cm in length. The other (arrow) is a bright, papular, white lesion 3.8 cm in length; **B.** Microscopic section with characteristic staring cells in the surrounding area over a richly vascularised myxoid stroma

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