

# Rapid valve prosthesis deterioration coupled with recurrent giant myxoma in a young asymptomatic adult

Nagłe uszkodzenie protezy zastawkowej serca z nawrotem śluzaka

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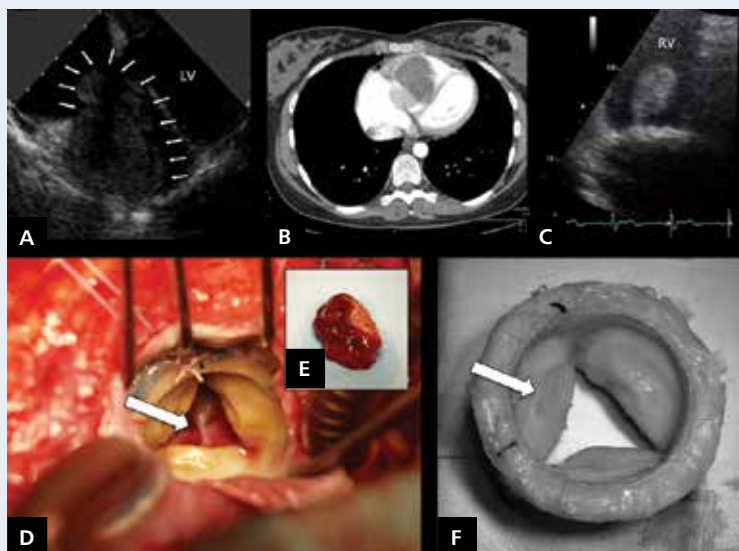
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An 18-year-old female with no past cardiovascular history was admitted to the emergency room due to dyspnoea, reduced exercise tolerance, and mild systolic murmur along the right sternal border. Bedside echocardiography documented a giant polypoid tumour filling the right ventricle (RV), protruding to the right atrium and occluding tricuspid valve in systole. No tricuspid regurgitation and valve stenosis was recorded (Fig. 1A). A second mass located in the left atrium was attached to the atrial septum. With the diagnosis of myxoma, the patient was referred for computed tomography (Fig. 1B) and subsequent surgery. The masses were excised together with tricuspid valve due to extensive, irreparable damage to the anterior leaflet, and mitral biological pericardial prosthesis was implanted. Due to atrioventricular II-block, the patient required permanent pacemaker implantation. The patient remained asymptomatic and was discharged on the eighth postoperative day. Three months later, elective echocardiography revealed hyperechogenic masses in RV ( $1.5 \times 1$  cm), raising suspicion of a substantial thrombus formation (Fig. 1C). Additionally, the concomitant, moderate and centrally-located regurgitation of the valve prosthesis was recorded. A repeated echocardiogram performed after three months of anticoagulative therapy documented enlargement of the tumour diameter to  $2.0 \times 3.5$  cm and a significant progression of prosthesis regurgitation. Second surgical inspection revealed a giant multiple myxoma which was subsequently excised (Fig. 1D, E). Leaflets of the prosthesis were thicker, stiff and shortened (Fig. 1F). Due to rapid biological valve degeneration, mechanical prosthesis was implanted. The postoperative course was uneventful. In 12 months of follow-up, no recurrence of myxoma was recorded. Herein we present a unique case of unexpected rapid biological prosthesis deterioration coupled with a giant RV multiple myxoma, early after surgical tumour excision and valve implantation. This case elucidates the requirement for short-term follow-up in patients with a primary diagnosis of multiple myxoma.



**Figure 1.** Bedside echocardiography (A) and computed tomography (B) documented a giant polypoid tumour filling the right ventricle (RV), protruding to the right atrium and occluding tricuspid valve in systole. Three months later, echocardiography (C) revealed hyperechogenic masses in the RV ( $2.0 \times 3.5$  cm) with significant progression of prosthesis regurgitation raising a suspicion of recurrent myxoma. Subsequently, second surgical inspection was performed and a giant myxoma was successfully excised (D, arrow; and E). Leaflets of the excised prosthesis were thicker, stiff and shortened (F, arrow); LV — left ventricle

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