

# Right-sided atrial tumour in a patient with abdominal neoplasm

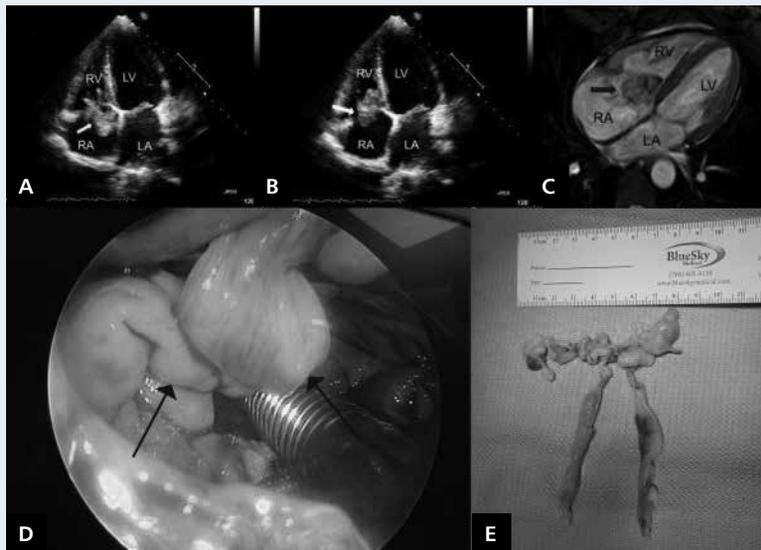
Guz prawego przedsionka u chorej z nowotworem w obrębie jamy brzusznej

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A 47-year-old woman was admitted to hospital due to a loud diastolic murmur of the whole heart. One month earlier, she had been diagnosed with a huge abdominal tumour (130 mm × 119 mm × 290 mm), which probably came from the uterus, with metastases in the lungs, hence the patient was prepared for surgery. Her past medical history was negative for any cardiopulmonary disease. On admission, the electrocardiogram demonstrated sinus tachycardia and incomplete right bundle branch block. Transthoracic echocardiography revealed big, mobile masses with a maximum dimension of 20 mm × 60 mm attached to the tricuspid valve leaflets with moderate tricuspid regurgitation, without obstruction of the valve orifice (Figs. 1A, B). Magnetic resonance imaging confirmed irregular, mobile masses which were attached to the tricuspid valve leaflets from atrial and ventricular sites, with one of them prolapsing into the right ventricle (Fig. 1C). Both lungs presented with diffuse tumours, the largest in the tenth segment of the left lung with dimensions of 20 mm × 20 mm, suggestive of metastatic lesions. To broaden the diagnosis, trans-thoracic fine needle aspiration of the lung under computed tomography (CT) guidance was performed, however histopathology revealed only histiocytes and inflammatory cells. The patient was consulted by a heart surgeon and a gynaecologist. Based on performed diagnostic resets, a metastatic tumour was suspected. At first the patient underwent abdominal tumour resection and the sections showed a histologically benign tumour — cotylenoid dissecting leiomyoma, an extremely rare variant of uterine leiomyoma. The patient was admitted again to our department for clinical evaluation. CT pulmonary angiography revealed peripheral pulmonary embolism, which might suggest cardiac thrombus. Secondly cardiac surgery was performed — excision of tumour and tricuspid valvuloplasty through the right minithoracotomy. Intraoperatively, a large tumour which was attached to the right atrium near the annulus of the tricuspid valve with 4 branches entangled into the chordae tendineae, was found (Fig. 1D). The tumour branches measured 10 mm × 50 mm, 16 mm × 45 mm, 8 mm × 66 mm, and 14 mm × 100 mm (Fig. 1E). Postoperative course was uneventful. Histopathological examination revealed myxoma. Primary tumours of the heart are extremely rare entities, with about half of these being cardiac myxomas. They are most commonly of left atrial origin (85% to 90%), less commonly right atrial (10% to 12%). Our case presents two different benign tumours — cotylenoid dissecting leiomyoma and cardiac myxoma, which is an extremely rare phenomenon. Before the gynaecological surgery, we were convinced that the patient had abdominal neoplasm with metastases in the lungs and heart. Then we expected thrombus in the right atrium with concomitant pulmonary embolism. Finally, the tumour turned out to be a cardiac myxoma. It was a long and complicated diagnostics. However, so far we have not established the nature of the changes in the lungs.



**Figure 1.** A, B. Two-dimensional transthoracic echocardiogram in the 4-chamber view demonstrating a large, mobile right atrial (RA) tumour; C. Magnetic resonance imaging scan of the heart with masses, which were prolapsed into the right ventricle (RV); D. Large RA tumour during cardiac surgery excision, with branches entangled into the chordae tendineae; E. The large tumour removed from the RA; LA — left atrium; LV — left ventricle

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