

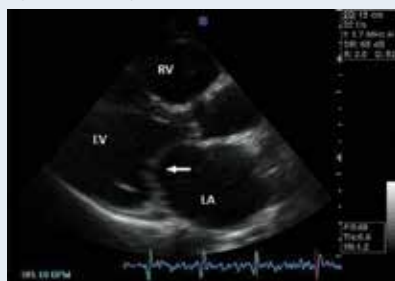
# A rare case of tricuspid valve mass in a patient with left and right ventricular dysfunction and severe ischaemic mitral regurgitation

Guz zastawki trójdzielnej u pacjentki z dysfunkcją lewej i prawej komory oraz ciężką niedokrwienną niedomykalnością mitralną

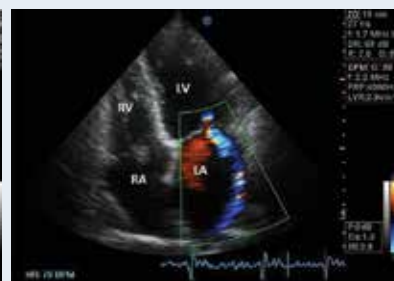
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Ischaemic mitral regurgitation (MR) is common and increases heart failure (HF) and mortality after myocardial infarction (MI). In our patient, it was accompanied by a rare entity of tricuspid valve (TV). A 70-year-old woman was admitted to the Department of Cardiology due to persistent atrial fibrillation with progressive exertional dyspnoea and worsening of exercise capacity. On admission, she presented signs of congestive HF — NYHA class II/III. Her medical history was notable for hypertension, apical MI 3 years previously, inferior MI complicated by right ventricular MI 30 years ago, breast cancer treated by surgery and X-ray therapy, and recurrent episodes of pneumonia. Transthoracic echocardiography (TTE) revealed lack of mitral leaflets coaptation with apical tenting and severe MR by colour Doppler and PISA method assessment (ERO 0.4 cm<sup>2</sup>, VOL 60 mL) (Figs. 1–3). Akinesis of left ventricular inferior, posterior and septal wall was found. Left ventricular systolic function was impaired with an ejection fraction of 33%. Inferoposterior wall underlying papillary muscle was significantly thinner with enhanced fibrosis. Right ventricular free wall was hypokinetic. Except for left atrium enlargement, the diameters of other chambers were within normal limits. A surprisingly spherical, mobile, 13 mm diameter mass was found attached to the atrial side of anterior tricuspid leaflet (Figs. 4, 5). No flow obstruction through the valve or pericardial effusion were seen. Moderate tricuspid regurgitation was diagnosed. Regarding the aetiology, due to the medical history of our patient, thrombus, secondary or primary neoplastic tumour or vegetation should be considered. Transoesophageal echocardiography (TEE) confirmed both left and right sided pathologies. Based on clinical assessment, TTE and TEE findings, the patient was referred for cardiac surgery. Mitral valve replacement with implantation of bioprosthesis (Hancock II 27 mm), resection of TV tumour and valvuloplasty with ring implantation (C-E Classic Tricuspid – 32 mm) was performed. The histopathological diagnosis was myxoma of TV. Among all myxomas, this localisation is rarely encountered. The tumour is usually clinically silent and may be detected accidentally.



**Figure 1.** Parasternal long axis view. Thin akinetic posterior wall of the left ventricle (LV) and lack of mitral leaflets coaptation (arrow); RV — right ventricle; LA — left atrium



**Figure 2.** Colour flow Doppler in an apical 4-chamber view. Systolic eccentric colour flow of severe mitral regurgitation in the left atrium (LA); RV — right ventricle; RA — right atrium; LV — left ventricle



**Figure 3.** Colour flow Doppler in an apical 4-chamber view. Quantitative assessment of mitral regurgitation severity. Measurement of the PISA radius indicates severe ischaemic mitral regurgitation; MV — mitral valve; LA — left atrium



**Figure 4.** Modified parasternal short-axis view demonstrating tricuspid valve (TV) mass attached to the anterior tricuspid leaflet (arrow); RV — right ventricle; RA — right atrium; LA — left atrium



**Figure 5.** Apical 4-chamber view demonstrating tricuspid valve mass attached to the anterior tricuspid leaflet (arrow); RV — right ventricle; RA — right atrium; LV — left ventricle; LA — left atrium

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**Conflict of interest:** none declared