



Tricuspid Valve Prolapse: An Uncommon Pathology Revealed by TEE

MULTIMODALITY
MUSEUM IMAGE

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A 73-year-old male with a history of dilated cardiomyopathy and paroxysmal atrial fibrillation underwent transthoracic echocardiography (TTE) to evaluate for endocarditis due to fever and gram-positive cocci in chains on blood cultures. TTE revealed a 3 × 8 mm mass on the ventricular aspect of the tricuspid valve (Figure 1A). Subsequent transesophageal echocardiography (TEE) showed that the mass in question was actually myxomatous degeneration of the tricuspid valve (TV) and redundant chordae with significant valve prolapse. Figure 1B shows the prolapsing TV leaflets at the same level as the mitral valve. Figure 1C and 1D show the valve at the level of the annulus in early systole and then prolapsing 8 mm in mid-late systole, respectively.

Tricuspid valve prolapse (TVP) is uncommon, and one study of 118,000 patients reported an incidence of 0.3%.¹ Since diagnostic parameters are not clearly defined, diagnosis is often determined subjectively. One objective criteria, > 2 mm atrial displacement of the TV leaflets in the TEE parasternal short-axis view, is noted to have high diagnostic accuracy. TVP is commonly associated with mitral valve prolapse. Patients with TVP have more severe tricuspid regurgitation and right-sided chamber enlargement compared to patients with no TVP. Due to the lack of significant tricuspid regurgitation in this case, the patient was reassured, and no further intervention was recommended.

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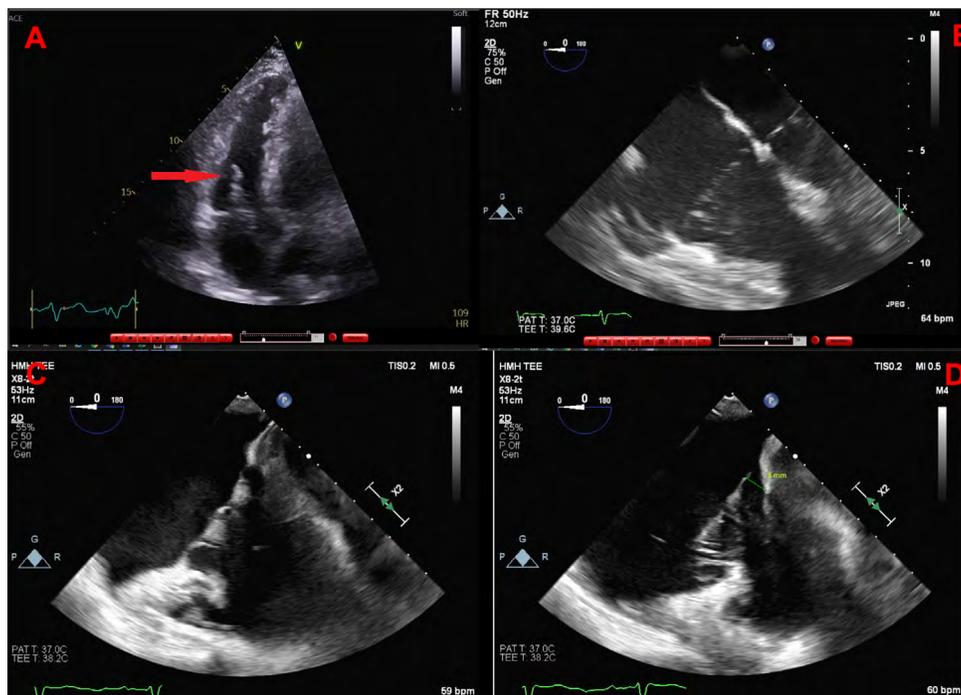


Figure 1 (A) Transthoracic echocardiography image demonstrates an apparent echo density on the tricuspid valve. (B) Transesophageal echocardiography (TEE) image demonstrates tricuspid prolapse with the mitral and tricuspid valves at equal level in systole. (C) TEE image shows the tricuspid leaflets in early systole at the level of the annulus. (D) TEE image shows the tricuspid leaflets in late systole prolapsing 8 mm into the right atrium.

COMPETING INTERESTS

The authors have no competing interests to declare.

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