A 40 year-old female patient who had mitral valve replacement (MVR) with 27-mm St Jude Medical 4 years ago was admitted to cardiology department with exertional dyspnea. On admission, international normalized ratio was 1.5. Transthoracic echocardiography revealed a mean mitral transvalvular gradient of 12 mm Hg and a mitral valve area of 1.5 cm² with normal left ventricular systolic function. Two-dimensional transesophageal echocardiography (2D-TEE) delineated two distinct thrombi located on both of the hinges, but subsequent real-time three-dimensional transesophageal echocardiography (RT-3D TEE) allowed us to see the total thrombi located on entire valve ring (Figure 1A and B).

She was treated with prolonged low-dose infusion of thrombolytics (25 mg tissue plasminogen activator for 6 hours; 2 episodes) which resulted in resolution of symptoms. Serial TEE evaluation permitted visualization of the regression of thrombi (Figure 2A and 2B) until 2D TEE findings was unremarkable and RT-3D TEE depicted a

**Assessment of Thrombus Burden by Serial Three-Dimensional Live Transesophageal Echocardiography in a Patient with Prosthetic Mitral Valve Thrombosis:**

**Letter to the Editor**

**Protez Mitral Kapak Trombozu Olgusunda Trombüs Yüklünün Seri Gerçek Zamanlı 3 Boyutlu Transözofageal Ekokardiyografi Eşliğinde Değerlendirilmesi**
strip-like thrombi located on one-quarter of the valve ring (Figure 3A and 3B) which might still pose a risk for thromboembolism. The patient was discharged with effective-dose anticoagulation.

Prosthetic heart valve replacement has been associated with life-threatening complications including prosthetic valve thrombosis (PVT).\textsuperscript{1-4} 2D TEE has been world-wide used in diagnosis and guidance of management of PVT such as thrombolytic therapy.\textsuperscript{3} However, with the use of 2D TEE, the total thrombus burden may be underestimated, and even some nonobstructive cases may be missed.\textsuperscript{5} RT-3D TEE has emerged as a fantastic complementary tool in assessment of PVT providing ‘en face’ surgical views, especially in mitral position.\textsuperscript{2,4,5} The exact localization, number, size and shape of thrombi may be clearly depicted by RT-3D TEE. Also the evolution of thrombi during anticoagulation or thrombolytic therapy may be precisely evaluated.
REFERENCES


