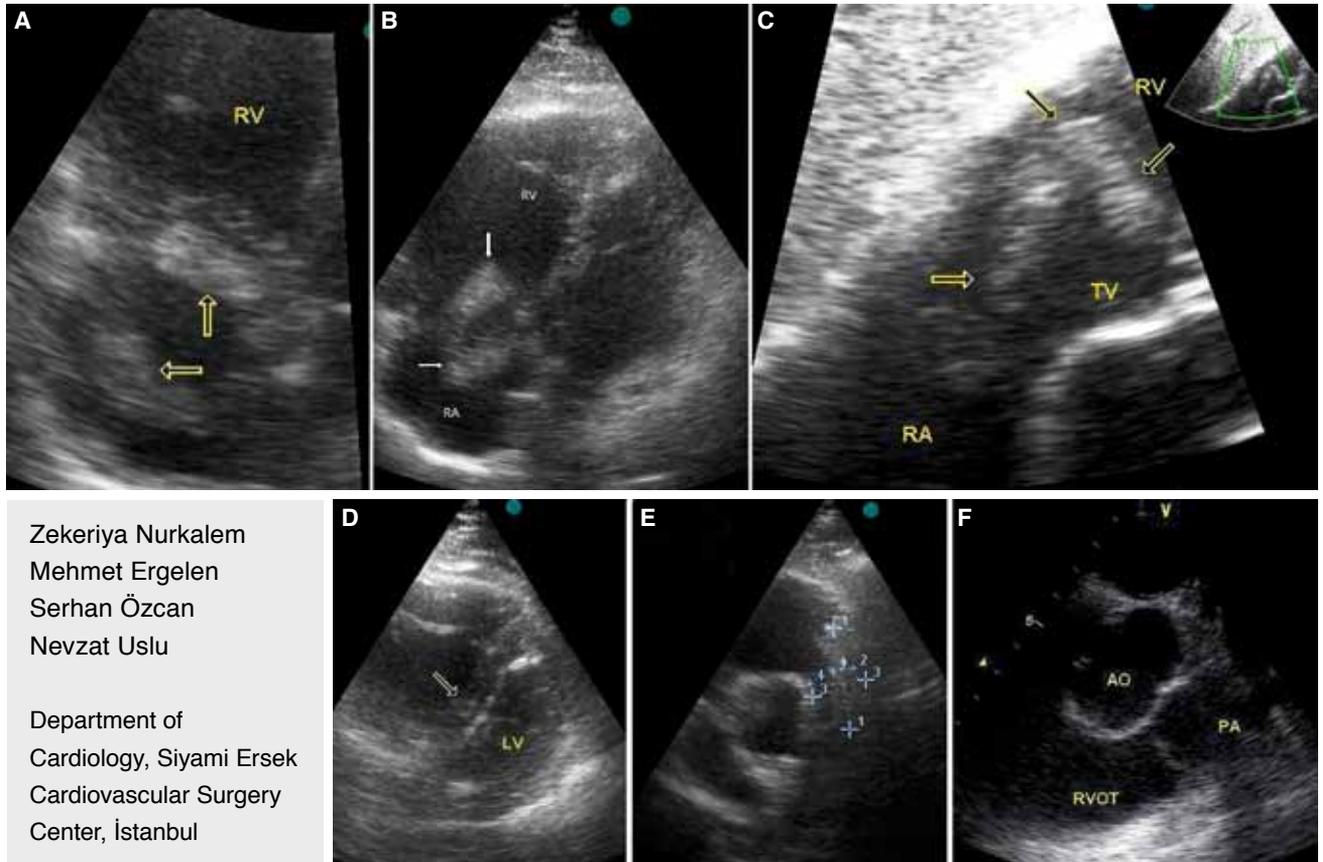


Free-floating thrombus in the right atrium, ventricle, and outflow tract effectively treated with thrombolysis

Sağ atriyum, ventrikül ve çıkış yolunda serbest yüzen trombüs ve trombolitik tedaviyle başarılı tedavisi



A 55-year-old man with a history of deep venous thrombosis for two months was admitted with syncope and shortness of breath. Blood pressure and heart rate were 85/55 mmHg and 125 beats/min, respectively. Electrocardiography demonstrated sinus tachycardia. Routine laboratory examination was normal except for troponin I (1.1 ng/ml) and D-dimer (900 µg/l) levels. Transthoracic echocardiography showed normal left ventricular function, and a mobile, irregular, crescent-shaped mass in the right atrium and ventricle measuring 5.5 x 1.1 cm (Fig. A-E). Massive obstruction of the right ventricle outflow tract by thrombus (5.1 x 1.0 cm) was also evident, with decreased right ventricular outflow size by more than 50%. The patient was consulted with the cardiovascular surgery department, but he refused emergency operation. Thrombolytic treatment was started and the patient's clinical status improved within one hour and then inotropic support was ceased. Both

transthoracic and transesophageal echocardiography performed two hours later showed complete dissolution of the thrombus (Fig. F). Bilateral deep vein thrombosis together with superficial venous thrombosis was detected by compression ultrasonography. A detailed history showed no clinical predisposition other than immobilization due to foot burn. Screening for genetic coagulation disorders was also negative. A ventilation-perfusion lung scan obtained 10 days later showed only small distal perfusion defects. The patient was discharged on warfarin treatment with good hemodynamic status. At three-month follow-up, there were no signs of thrombophlebitis. To our knowledge, this case represents the first case of enormous, highly mobile thrombus together with right outflow tract obstruction. Although surgery is generally recommended, thrombolytic treatment may be a good alternative especially in patients with fresh thrombus.

Figures. (A) A mobile, crescent-shaped, free-floating giant thrombus in the (A) right atrium crossing the (B) tricuspid valve and (C) right ventricle. Parasternal short-axis views from (D) the papillary muscle level showing right ventricle dilatation and septal shift, and (E) from the aortic cusp level showing a huge thrombus obstructing 50% of the right ventricular outflow tract. (F) Control transesophageal echocardiography showing complete disappearance of the right ventricle outflow tract thrombus. RV: Right ventricle; RA: Right atrium.