Tricuspid valve vegetation in a chronic renal failure patient with an ostium secundum type atrial septal defect after placement of a peripheral catheter

Ostium sekundum tip atriyal septal defekti olan kronik böbrek yetmezlikli hastada periferik kateter yerleştirilmesinden sonra görülen triküspit kapak vejetasyonu

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A 75-year-old man was admitted to department of nephrology with renal dysfunction. During follow up, the patient developed high fever. He had no history of intravenous drug abuse or congenital heart disease. On physical examination his systolic and diastolic blood pressures were 130 and 80 mmHg respectively, heart rate was 90 bpm, body temperature was 39 oC and no murmur or extra sound was heard with auscultation. Non-specific ST-T changes with atrial fibrillation were noticed on his electrocardiogram (ECG). Laboratory tests revealed erythrocyte sedimentation rate of 51 mm/hr, C-reactive protein of 110 mg/dl and white blood cell count of 6200/mm³. No pathogen was grown in multiple blood cultures. The chest-X ray revealed bilateral pulmonic infiltrates. Due to his poor general condition, a peripheral catheter was placed for monitoring and liquid replacement. Transthoracic echocardiography showed a mobile mass (14 x 11 mm diameter) attached to the atrial surface of the anterior leaflet of the tricuspid valve (Fig. 1). An ostium secundum type atrial septal defect was also found on echocardiography (Fig. 2). Investigation of the disease history revealed that the patient had been given antibiotics for a long time, because of pneumonia. Intravenous third generation cephalosporin and vancomycin were started and catheter was removed. During short period of follow-up patient's general condition have worsened. Unfortunately, no further followup could be obtained.

Tricuspid valve endocarditis may occur in patients with venous catheters. Both transthoracic and transesophageal echocardiography techniques contribute to the diagnosis and therapeutic management of patients suspected of having infective endocarditis.. Echocardiographic evaluation should be performed in all patients with clinically suspected infective endocarditis, including those with negative blood cultures. In conclusion, in the chronic renal failure patients, having peripheral catheters with fever and high inflammatory markers, infective endocarditis should be suspected and echocardiographic observation should be obtained.

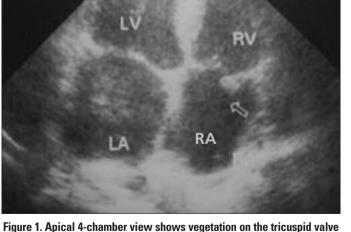


Figure 1. Apical 4-chamber view shows vegetation on the tricuspid valve (arrow). RV, Right ventricle; LV, left ventricle; LA, left atrium; RA, right atrium

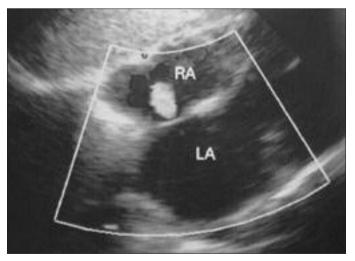


Figure 2. Doppler echocardiography shows a substantial flow from left atrium to right atrium. LA, left atrium; RA, right atrium