CASE IMAGE

Complicated endocarditis with bilateral pseudoaneurysm formation in a patient with valvular heart disease

Valvüler kalp hastalığı olan hastada bilateral psödoanevrizma ile komplike endokardit oluşumu

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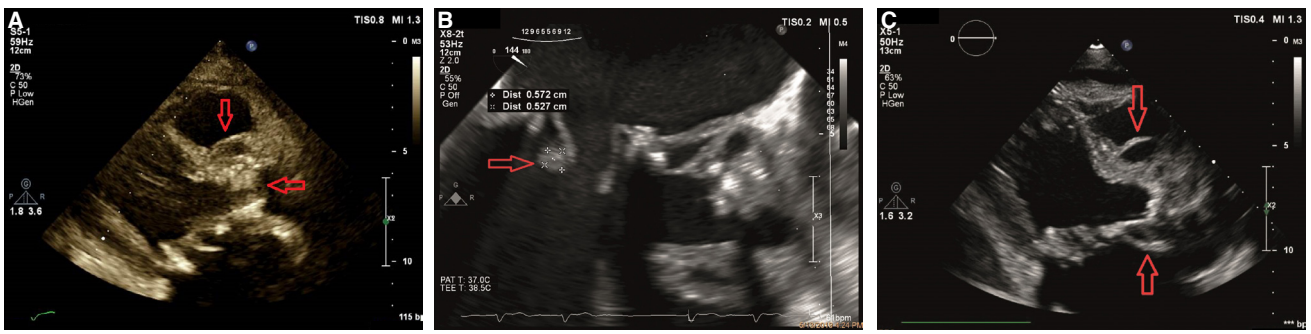
A 69-year-old female with a history of mitral valve (MV) and aortic valve (AV) replacement surgery (both biological valves, 1 year earlier) presented at the emergency department with prolonged fever, dyspnea, and weakness ongoing for 3 weeks. A transthoracic echocardiogram showed a marked increase in AV gradients with a large, semimobile mass suggestive of vegetation and an echo-free space compatible with abscess formation (Fig. A). Surgery was recommended but the patient and her family declined the procedure. The patient was discharged after antibiotic administration. Approximately 4 weeks later, the patient returned with renewed complaints of severe dyspnea and fever. On this admission, transesophageal echocardiography revealed a bioprosthetic MV with a mildly increased gradient and a semimobile mass (6×8 mm) on the MV leaflets (Fig. B). The bioprosthetic AV had an increased gradient with moderate paravalvular leakage and a large semimobile mass (6×6 mm) on the leaflets. In addition, there were 2 large pulsatile echo-free spaces (14×24 and 16×8 mm): 1 in the aortomitral intervalvular fibrosa with a fistula to the left ventricular outflow tract and the other in the anterior side of the AV sewing ring, suggesting pseudoaneurysm (PA) formation (Fig. C, Video 1*, Supplementary file). A blood culture revealed staphylococcus aureus colonization. The patient agreed to undergo a re-do AV replacement plus reconstruction of AV discontinuities.

In most cases, a PA is unilateral and close to the aortomitral fibrosa; a bilateral PA formation is not a common finding. Early administration of antibiotics and early, high-quality surgery can prevent this complex complication. Therefore, careful follow-up and timely surgery are mandatory for patients with valvular endocarditis, particularly if there is abscess formation.



Figures– (A) Large semimobile mass on the atrial valve and abscess formation. Transesophageal echocardiography. **(B)** Bioprosthetic mitral valve with a semimobile mass; **(C)** Bioprosthetic atrial valve with a large, semimobile mass and bilateral pseudoaneurysm formation.

*Supplementary video files associated with this presentation can be found in the online version of the journal.