

Extension of a mitral-aorta intervalvular fibrosa pseudoaneurysm into the interatrial septum resulting in the honeycomb appearance in a patient with Takayasu's arteritis

Takayasu arteriti olan bir hastada interatriyal septuma doğru uzanan bal beteği görünümlü mitral aortik intervalvular fibroza pseudoanevrizması

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A 33-year-old woman was referred to our echocardiography department for follow-up echocardiography. The patient had a history of Takaya-

su's arteritis and had undergone Bentall surgery (composite graft 23) and aortic arch replacement, accompanied by the replacement of the right brachiocephalic artery and the left common carotid artery because of an aneurysmal ascending aorta and severe aortic regurgitation six years previously. She also had a history of significant stenosis in the left main coronary artery, necessitating coronary artery bypass graft surgery, and stenosis in the right internal carotid artery, necessitating stent replacement three years previously.

Transthoracic echocardiography revealed a pulsatile echo-free space on the posterior side of the aortic tube graft (Video 1*). Transesophageal echocardiography demonstrated that the pulsatile echo-free space was between the aortic tube graft and the left atrium, and it was connected to the left ventricular outflow tract (orifice=8 mm). (Figure 1A-1E, Video 2*) The results were suggestive of a mitral-aorta intervalvular fibrosa pseudoaneurysm (MAIVFP). The MAIVFP extended to the interatrial septum, resulting in a honeycomb appearance of some parts of the interatrial septum. The other echocardiographic findings included normal left ventricular size and systolic function and mild-to-moderate mitral regurgitation. Computed tomography angiography confirmed the presence of a MAIVFP (Figure 1F). The patient, however, refused further corrective therapeutic interventions.

The involvement of the mitral-aorta intervalvular fibrosa region in the presence of Takayasu's arteritis has been previously reported. The literature also contains reports of the occurrence of MAIVFPs after Bentall surgery. Accordingly, either of these etiologies or both of them may have caused the MAIVFP in our patient. The extension of MAIVFPs to the interatrial septum in the context of iatrogenic complications or Takayasu's arteritis should be considered in the evaluation of this group of patients.

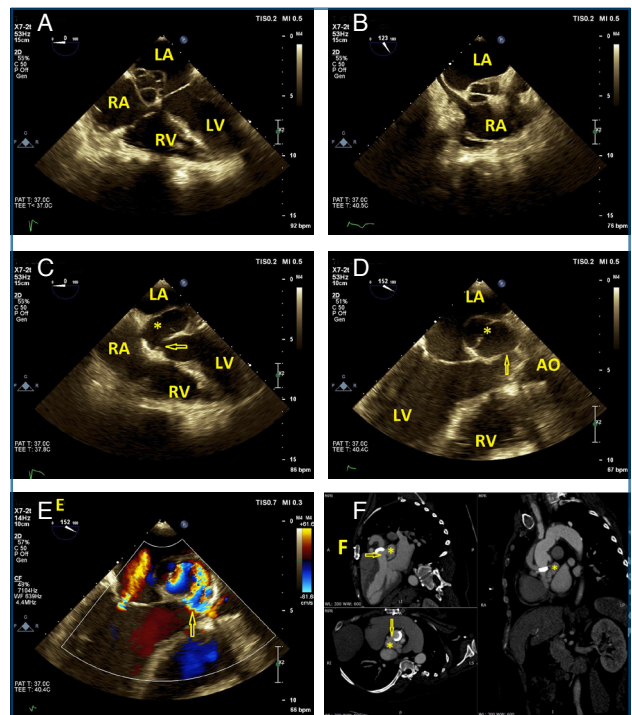


Figure 1. (A and B) Honeycomb appearance of the interatrial septum in the mid-esophageal 4-chamber and bicaval views of transesophageal echocardiography, respectively. (C and D) Mitral-aorta intervalvular fibrosa pseudoaneurysm (*) and its orifice (arrow) in the mid-esophageal 4-chamber view and the aortic valve long-axis view, respectively. (E) Entrance of the flow from the left ventricular outflow tract to the mitral-aorta intervalvular fibrosa pseudoaneurysm (arrow) in systole in the aortic valve long-axis view. (F) Multiplanar reconstruction of cardiac computed tomography angiography, demonstrating a space between the left atrium and the aortic tube graft with its connection to the left ventricular outflow tract, suggestive of a mitral-aorta intervalvular fibrosa pseudoaneurysm (*). AO: aortic tube graft; LA: left atrium; LV: left ventricle; RA: right atrium; RV: right ventricle.

Informed consent was obtained from the patient for the publication of the case image and the accompanying images.

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

