

“The ring”: echocardiogram sign of a giant interatrial septum aneurysm

“The ring”: signo ecocardiográfico de un aneurisma del septo interauricular gigante

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Atrial septal aneurysm (ASA) is defined as redundant and mobile tissue in the region of the oval fossa. It is usually an incidental finding with an incidence of < 2%¹.

A 70-year-old male presented with myocardial revascularization 10 years ago. Physical examination showed dyspnea and NYHA-III/IV, with mitral systolic murmur radiating to the apex. Transthoracic echocardiogram showed severe mitral and tricuspid regurgitation, due to annular dilation, with moderate pericardial effusion. The coronary angiography revealed occlusion of the saphenous vein graft to the posterior descending artery treated with a stent.

Intraoperative transesophageal echocardiogram (TEE) showed an oscillating image of the atrial septum aneurysm during the cardiac cycle (Fig. 1A). Left atriotomy revealed a large ASA (Fig. 1B), which was confirmed by right atriotomy (Fig. 1C). Mitral and tricuspid valve repair and plication of the ASA (Fig. 1D) were performed under cardiopulmonary bypass. Post-operative course was uneventful and no residual aneurysm in the echocardiogram control.

The ASA is an infrequent entity that protrudes into the atria according to the cardiac cycle, due to pressure fluctuations between the atria². This results in a ring-like image on TEE, which is the most sensitive diagnostic test². In general, ASA is asymptomatic, but when associated with atrial septal defects, they can be a cause of thromboembolism³. The treatment involves

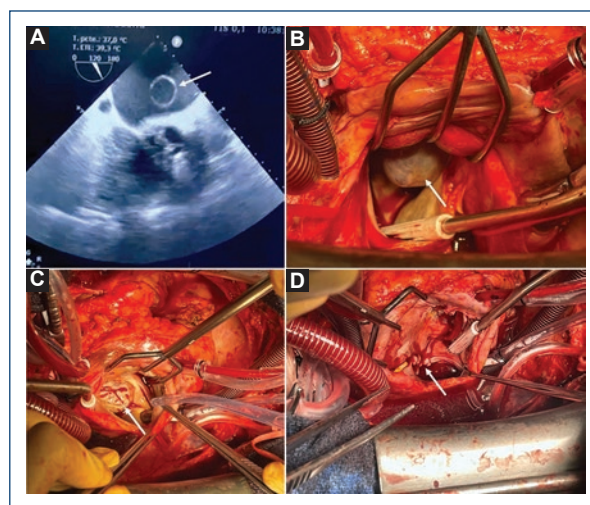


Figure 1. A: transesophageal echocardiogram: giant atrial septal aneurysm (white arrow). B: left atriotomy showed the giant aneurysm of the interatrial septum (white arrow). C: right atriotomy showed the giant aneurysm of the interatrial septum collapsed (white arrow). D: plication of the aneurysm with suture from the right atriotomy (arrow).

plication and closure of the defect to prevent future complications.

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Conflicts of interest

None.

Ethical disclosures

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