

Aortic bioprosthesis dehiscence in the context of a chronic endocarditis

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A 74-year-old woman carrier of an aortic bioprosthetic valve Trifecta St. Jude 21[®] implanted in 2013 in context of severe aortic stenosis was referred for a regular follow-up transthoracic echocardiogram. The patient was asymptomatic. Clinical examination revealed a systodiastolic murmur, grade IV/VI. Transthoracic echocardiogram showed a significant periprosthetic leak with rocking and expansion of the ascending aorta which was confirmed with transesophageal echocardiogram. It showed an aortic bioprosthetic valve with thickened leaflets, without images suggestive of vegetations, but there was evidence of an anechogenic free perivalvular space with flow inside and expansion during systole compatible with multiple pseudoaneurysms and a severe leak between 4 and 12 hours (Fig. 1A, B). The patient was proposed to undergo cardiac surgery. Blood cultures and microbiological exam of the excised valve were negative. During the procedure,

an excision of the aortic bioprosthetic valve and the aortic root was made with enlarged surgical cleaning due to the presence of a false aneurysm down the prosthesis suggestive of chronic endocarditis (Fig. 1C). A Freestyle[®] stentless porcine aortic root was successfully implanted. The post-operative period was uneventful.

Prosthetic valve endocarditis, 20–30% of all endocarditis¹, presents as dehiscence, fistula or pseudoaneurysm. A significant dehiscence of a prosthesis with pseudoaneurysm formation is a rare complication that necessitates an urgent re-operation, given the high risk of spontaneous rupture, however it is particularly challenging due to the destruction of the aortic root and the need for complex repairs. The present case is notable as a complete asymptomatic presentation of pseudoaneurysm formation, demonstrating the role and importance of an specialized follow-up in these patients.

Conflict of interest: None declared

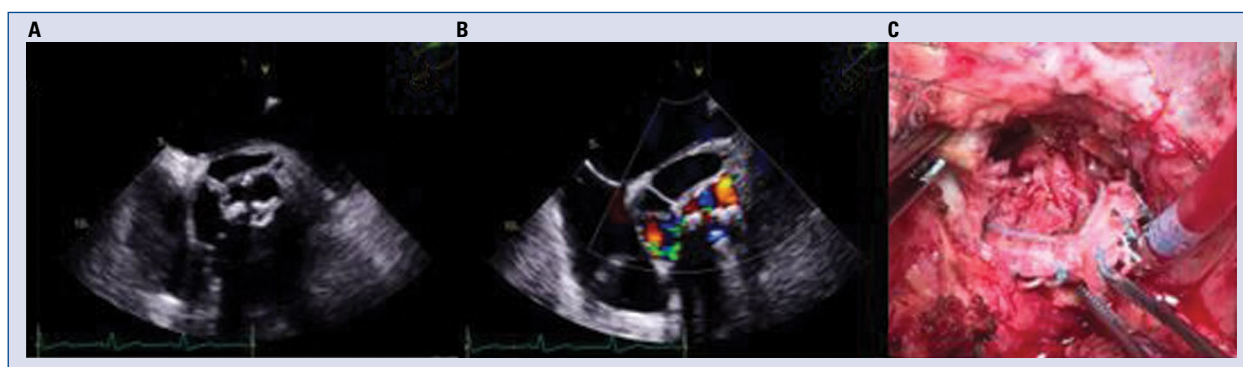


Figure 1. Transesophageal echocardiogram and surgical view of multiple pseudoaneurysms down the prosthesis.

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Received: 29.02.2020

Accepted: 26.03.2020