

Three-Dimensional Transesophageal Echocardiographic Imaging of Mitral Valve Bioprosthesis Leaflets Perforation due to Infective Endocarditis

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Echocardiographic aspects have been added to the criteria used to investigate the diagnosis of infective endocarditis¹. However, under some circumstances, the two-dimensional echocardiographic technique, whether transthoracic or transesophageal, fails to provide sufficient diagnostic information. We report the case of a 43-year old patient with a biological prosthesis in the mitral position, who presented an episode of infective endocarditis with positive blood cultures for *Staphylococcus aureus*. The patient underwent two-dimensional transthoracic and transesophageal echocardiographic investigation and later to three-dimensional transesophageal reconstruction. The perforation of the leaflets of the bioprosthesis was evidenced only after the three-dimensional echocardiographic analysis was carried out (Figure 1). The patient underwent bioprosthesis replacement, and discharged from hospital seven weeks after the surgery. Three-dimensional echocardiography adds diagnostic information as it allows the study of the heart from multiplane structural observation^{2,3}.

Potential Conflict of Interest

No potential conflict of interest relevant to this article was reported.

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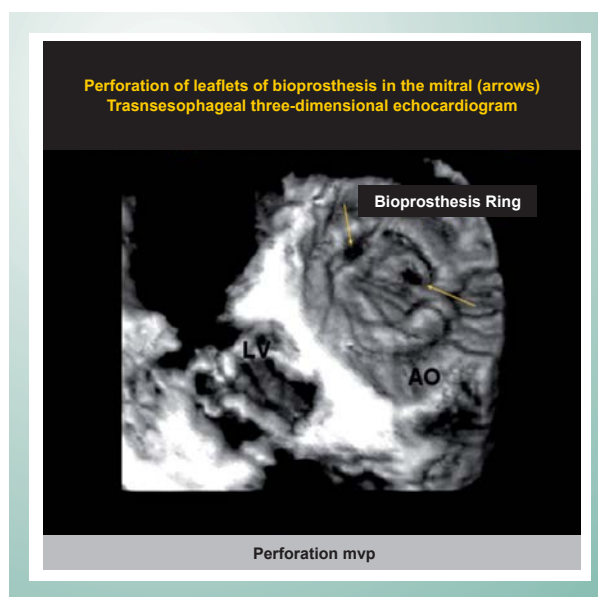


Fig. 1 - Transesophageal three-dimensional echocardiographic view (from the left atrium) of the perforation of leaflets of bioprosthesis in the mitral position (arrows) as a result of infective endocarditis. AO - aorta; LV - left ventricle; mvp - mitral valve prosthesis.

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Key words

Echocardiography, three-dimensional; echocardiography, transesophageal; heart valve prosthesis; endocarditis.

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