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

Marcelo Luiz Campos Vieira, Pablo M. A. Pommerantzelli, Carlos M. Brandão, Max Grinberg, Wilson Mathias Junior, José A. F. Ramires
Instituto do Coração do Hospital das Clínicas – FMUSP - São Paulo, SP, Brazil

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 observation2,3.

Potential Conflict of Interest
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References

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