The Relevance of Real-Time Intraoperative Echocardiogram as a Guide to Percutaneous Treatment of Septal Defects Through Amplatzer Device

Gabriel Antonio Stanisci Miguel e Lilian M. Lopes
Real e Benemérita Associação Portuguesa de Beneficência de São Paulo, Hospital das Clínicas - FMUSP - São Paulo, SP - Brazil

Introduction

This is the report on a 14-year-old female patient with a diagnosis of ostium secundum interatrial communication and echocardiographic criteria for percutaneous treatment of septal defect.

The interatrial communication occlusion procedure must be continually monitored by transesophageal or intracardiac echocardiogram, since invaluable detailed information is provided, such as: stretched diameter measure – crucial for the choice on prosthesis size to be used; left atrium disk location guidance – thus avoiding dislocation through the defect; device positioning after all components have been opened; and tracking of possible periprosthetic residual flow (Figure 1).

Potential Conflict of Interest

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

Sources of Funding

There were no external funding sources for this study.

Study Association

This study is not associated with any graduation program.

Key words

Echocardiography, transesophageal; heart septal defects.

Fig. 1 - Left Transesophageal echocardiogram in interatrial communication (IAC) percutaneous occlusion. Transeptal positioning of guidewire to start balloon deployment. Middle Transesophageal echocardiogram showing balloon positioning for stretched diameter measuring. Right Transesophageal echocardiogram showing procedure closing with prosthesis well positioned in septum to completely occlude the defect. Color flow mapping shows in detail the absence of residual shunt when implant is finished. RA - right atrium, LA - left atrium