

Image in cardiology

Intracardiac Echocardiography as Sole Guidance for the MitraClip Procedure



Ecocardiografía intracardiaca como única guía para el implante de MitraClip

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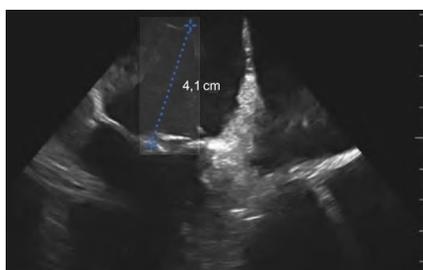


Figure 1.

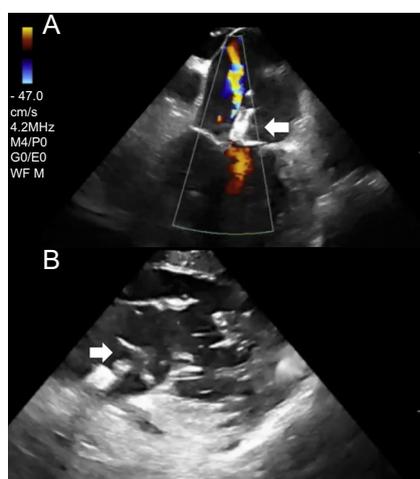


Figure 2.

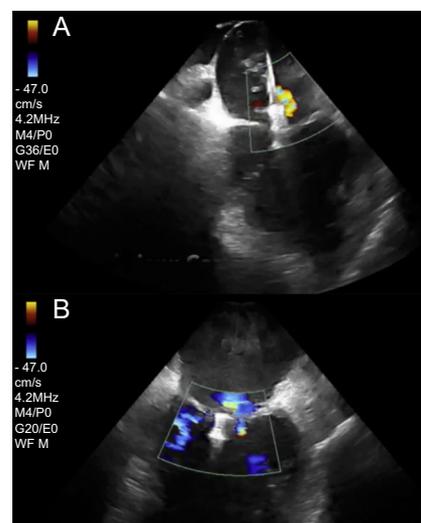


Figure 3.

We present the case of an 85-year-old woman with New York Heart Association functional class III heart failure secondary to ischemic cardiomyopathy with left ventricular cardiomyopathy due to an anterior infarct 4 years prior, which had been completely revascularized. In the previous year, she had experienced progressive dyspnea as a result of severe mitral regurgitation that, given the surgical risk, was to be treated percutaneously. However, due to a hiatus hernia that had been present for decades, there was practically zero visualization on transesophageal echocardiography. Therefore, it was planned to perform the procedure under intracardiac echocardiographic guidance. First, a transseptal puncture was made (Figure 1) at 4 cm from the mitral valve annulus, a suitable position for leaflet capture. To guide the transseptal puncture, the catheter was advanced to the right atrium and positioned at the interatrial septum, then turned clockwise until the fossa ovalis could be adequately visualized. Using catheter tip deflection, and advancing or withdrawing, the height of the interatrial septal tenting and its anteroposterior position, respectively, were adjusted. Then, the path of the clip within the left atrium was monitored until an adequate crossing position was reached (Figure 2A, view from the right atrium; Figure 2B, view from the right ventricle, the arrow indicates the clip). Finally the leaflets were captured (Figure 3A) and the clip was released, leaving slight residual mitral regurgitation (Figure 3B). A shortened version of the procedure can be viewed in the [video of the supplementary data](#).

APPENDIX. SUPPLEMENTARY DATA

Supplementary data associated with this article can be found in the online version available at <https://doi.org/10.1016/j.rec.2018.08.001>.

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