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CARDIOVASCULAR FLASHLIGHT

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Completely percutaneous repair of a failing surgical mitral valve repair

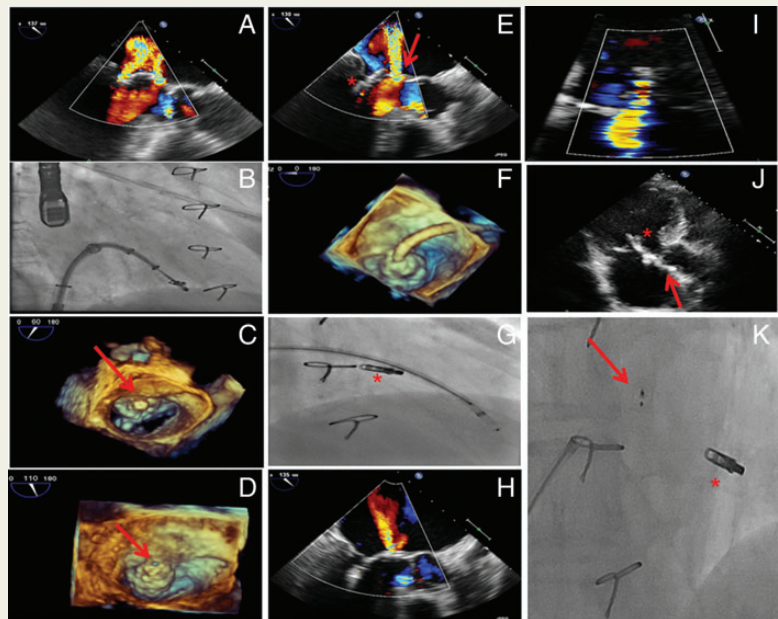
Luiz Carlos Bergoli^{1,2}, Pieter Vriesendorp¹, Ramón Rodríguez-Olivares¹, and Nicolas M. Van Mieghem^{1*}

¹Department of Interventional Cardiology, Thoraxcenter, Erasmus Medical Center, Room Bd 171, 's Gravendijkwal, CE Rotterdam 230 3015, the Netherlands; and ²Hospital de Clínicas de Porto Alegre, Porto Alegre, RS, Brazil

* Corresponding author. Tel: +31 107035260, Fax: +31 104369154, Email: n.vanmieghem@erasmusmc.nl

A 70-year-old female patient with hypertrophic cardiomyopathy was admitted 18 months after surgical septal myectomy, venous bypass of the left circumflex artery, and mitral valve repair using an autologous pericardial patch extension of the anterior mitral leaflet. Echocardiogram revealed severe mitral insufficiency with a central regurgitation based on malcoaptation of the mitral leaflets and an additional leak due to a perforation in the anterior leaflet patch (Panel A). The heart team agreed upon Mitraclip implantation and plug closure of the patch perforation.

Panel B demonstrates the mitraclip opening in the left ventricle before leaflet grasping. The mitral double orifice after Mitraclip implantation as seen by three-dimensional by transoesophageal echocardiography (TOE) is shown in Panel C. Panels D and E display the residual leak through the patch (red arrow) after mitraclip (arrowhead) implantation. The patch perforation is crossed by a 6-French multipurpose diagnostic catheter (Panel F—TOE, Panel G Fluoroscopy, note mitraclip (*) in situ). A 8 × 6 mm AMPLATZER™ Duct Occluder (St Jude Medical, St Paul, MN, USA) is deployed in the patch perforation with initially mild residual patch leakage (Panel H—TOE). Transthoracic echocardiography 4 days later confirms mild central mitral regurgitation with no residual patch leakage (Panel I). Panel J (TTE) and K (fluoroscopy) illustrate the mitraclip (*) and duct occluder within the patch (arrow) in situ.



A 8 × 6 mm AMPLATZER™ Duct Occluder (St Jude Medical, St Paul, MN, USA) is deployed in the patch perforation with initially mild residual patch leakage (Panel H—TOE). Transthoracic echocardiography 4 days later confirms mild central mitral regurgitation with no residual patch leakage (Panel I). Panel J (TTE) and K (fluoroscopy) illustrate the mitraclip (*) and duct occluder within the patch (arrow) in situ.

Supplementary material is available at *European Heart Journal* online.