

## Image in cardiology

## Four MitraClips® Deployed in a Mitral Valve



## Cuatro MitraClips® en una válvula mitral

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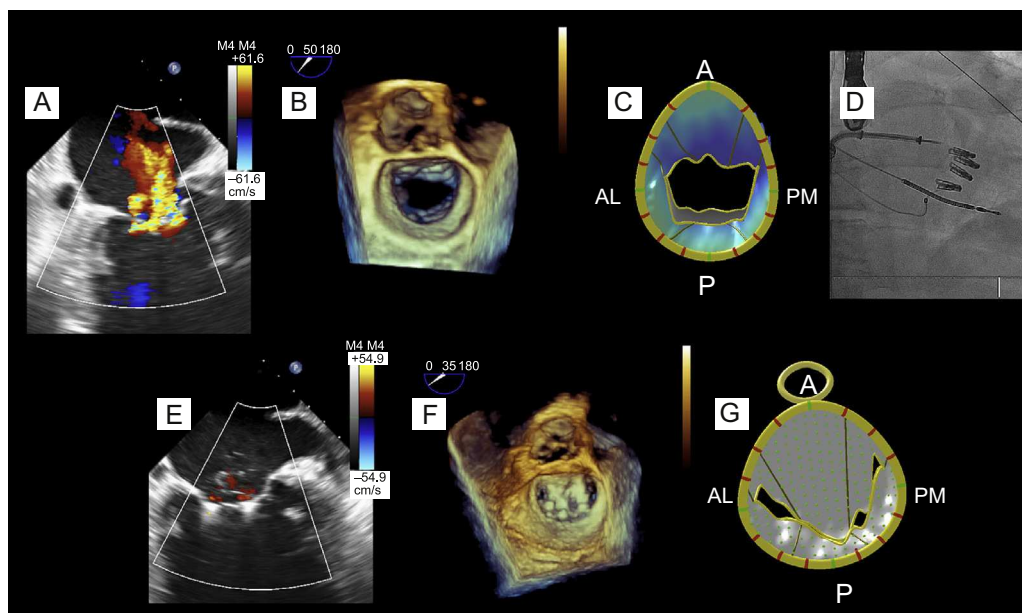


Figure.

We present an exceptional case of a treatment with four MitraClip® devices in a 72-year-old man with ischemic heart disease. In 1985, the patient had a nonrevascularized anterior infarction. He experienced 2 acute coronary episodes in 2004, and coronary angiography showed occlusion of the left anterior descending artery. Isotope study disclosed mild anterolateral ischemia with inferior and apical necrosis; hence, conservative management was decided. During follow-up, the patient presented negative ventricular remodeling, a considerable reduction in the ejection fraction, and severe secondary mitral regurgitation. His functional capacity improved following resynchronization therapy, but the effect was transient and he was referred to assessment for MitraClip® placement.

The patient's mitral valve area was 5 cm<sup>2</sup>, mean baseline gradient was 2 mmHg, and he had grade III-IV regurgitation (Figures A-C). Following implantation of four clips (Figure D), there was no regurgitation (Figure E) and the final mean gradient was 4 mmHg, with no increase in the left atrial filling pressures (the pulmonary vein Doppler pattern before the procedure depicted systolic wave inversion at atrial filling, which normalized thereafter). Figures B and C show the preprocedure mitral valve opening on 3D echocardiography (Figure B) and in a schematic model (Figure C). Following implantation of the four MitraClips®, we observed the unification of the central portion with the opening of the 2 lateral orifices that are characteristic of this procedure, seen in the 3D transesophageal echocardiography image (Figure F) and schematic model (Figure G).

## CONFLICTS OF INTEREST

Dr. Li received funding from Abbott Vascular for this research.

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Available online 23 January 2014