

## IMAGE FOCUS

doi:10.1093/ehjci/jet032  
Online publish-ahead-of-print 10 March 2013

## Multimodality imaging of aortic valve fibroelastoma

Sachin S. Saboo<sup>1\*</sup>, Yiannis S. Chatzizisis<sup>1</sup>, Ashish Khandelwal<sup>1</sup>, R. Morton Bolman III<sup>2</sup>, and Michael Steigner<sup>1</sup><sup>1</sup>Department of Radiology, Brigham and Women's Hospital and Harvard Medical School, 70 Francis Street, Boston, MA, USA and <sup>2</sup>Department of Cardiovascular Surgery, Brigham and Women's Hospital and Harvard Medical School, Boston, MA, USA

\* Corresponding author: Non-invasive Cardiovascular Imaging Program, Brigham and Women's Hospital, 75 Francis Street, Radiology, L2, Shapiro Building, Boston, MA 02115, USA. Tel: +1 617 817 9353; fax: +1 857 307 2011; Email: ssaboo@partners.org

A 66-year-old hypertensive female with occasional palpitations and non-specific ECG changes underwent screening transthoracic echocardiogram which revealed a 1.0 × 0.7 cm, mobile, echogenic mass attached to the left aortic valve cusp (Panel A, Supplementary data online, Video S1). Subsequent transoesophageal echocardiogram confirmed the presence and anatomical location of the mass (Panels B and C, Supplementary data online, Videos S2 and S3). Surgical resection was planned. Pre-operative evaluation with a coronary angiogram was not attempted due to the proximity of the mass to the left main ostium. 320-MDCT coronary angiography was alternatively performed. Axial (Panel D), oblique coronal reformatted (Panel E), and volume-rendered (Panels F and G) images of the aortic root demonstrated a solid, 1.1 × 0.7 × 0.7 cm, low attenuation, bilobed mass in the left coronary sinus attached to the left coronary cusp by a thin stalk in close proximity to the left coronary ostium. Additionally, a long non-calcified plaque was noted in the proximal LAD with associated moderate stenosis of 50–70% (Panel H). Valve-sparing shave excision of the mass revealed two papillary fibroelastomas arising from the left coronary cusp and a smaller third one of 0.5 cm attached to the right coronary cusp. In addition, the patient underwent the left internal mammary artery to left anterior descending bypass grafting. On post-operative Day 3, patient developed an embolic left posterior cerebral artery stroke of undetermined aetiology. She was finally stabilized and discharged to a rehabilitation centre. This case demonstrates the high-resolution capability of 320-MDCT coronary angiography in visualization of small aortic valve fibroelastomas as well as significant coronary artery disease.

Supplementary data are available at *European Heart Journal – Cardiovascular Imaging* online.

