


**IMAGE FOCUS**

Multimodality imaging assessment of a rare intracardiac mass: caseous calcification of the mitral valve annulus

Promporn Suksaranjit*, Lowell Chang, Brent Wilson, and Christopher J. McGann

Division of Cardiovascular Medicine, Department of Medicine, University of Utah School of Medicine, 30 N 1900 E, Room 4A100, Salt Lake City, UT 84132, USA

* Corresponding author. Tel: +1 801 213 2356; Fax: +1 801 581 7735. E-mail: promporn.suksaranjit@hsc.utah.edu

A 75-year-old man with a poorly defined intracardiac mass on transthoracic echocardiogram was referred for further evaluation by cardiac magnetic resonance (CMR) imaging. CMR cine (Panel A) and dark blood (Panel B) images demonstrated a large, hypointense mass involving a mitral valve (MV) annulus. Perfusion images revealed no enhancement of the mass compared with normal myocardium (Panel C and see Supplementary data online, Video S1), consistent with an avascular mass. Late gadolinium enhancement demonstrated peripheral enhancement surrounding the mass (Panel D), consistent with a fibrous cap. Cine and velocity-encoded gradient-echo images showed no significant transmitral gradient with moderate regurgitation (see Supplementary data online, Videos S2 and S3). CMR findings indicated diagnosis of caseous calcification of the MV annulus. Further imaging with non-contrast computed tomography shows nicely the bulky extent of the annular calcification (Panels E–H and see Supplementary data online, Video S2).

Caseous calcification of the MV annulus is considered a rare variant of mitral annular calcification with the prevalence of 0.06–0.07%. In the absence of related symptoms or significant MV dysfunction, surgical intervention is not indicated and the patient can be followed clinically as in our case.

LV, left ventricle; RV, right ventricle; LA, left atrium; RA, right atrium.

P.S. was involved with data and image acquisition and performed the initial review of the literature and manuscript drafting. L.C. was involved in video acquisition and manuscript drafting. C.J.M. and B.W. were involved in manuscript revising and editing. All authors read and approved the final manuscript.

Corresponding author had full access to all the data and final responsibility for the decision to submit for publication.

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

Published on behalf of the European Society of Cardiology. All rights reserved. © The Author 2014. For permissions please email: journals.permissions@oup.com.