INFECTIVE VEGETATION IN THE INTERVALVULAR FIBROSA: 3D-TRANSESOPHAGEAL ECHO AIDS ACCURATE DIAGNOSIS AND TRACKS THE NATURAL HISTORY

Poster Contributions
Poster Hall B1
Sunday, March 15, 2015, 3:45 p.m.-4:30 p.m.

Session Title: FIT Clinical Decision Making: Imaging and Valvular Heart Disease
Abstract Category: Non Invasive Imaging
Presentation Number: 1213-137

Authors: Layth Saleh, See Wei Low, Rajesh Janardhanan, University of Arizona, Tucson, AZ, USA

Case: A 75-year-old male with prior bioprosthetic aortic valve replacement (AVR) presented with chest pain and elevated troponins. Coronary angiogram was normal. A cardiac MRI revealed an interlateral infarct, presumed embolic. CT-abdomen showed new splenic and renal infarcts. He endorsed recent fevers/night sweats. TTE and 2D-TEE did not show any vegetations. However a 3D-TEE revealed a sub-valvular vegetation in the left ventricular outflow tract (Fig. Panel A). There was no valvular dysfunction or regurgitation. His blood cultures grew Propionibacterium acnes, sensitive to ampicillin/sulbactam, and he received treatment for 6 weeks. A repeat 3D-TEE confirmed resolution of the vegetation. But it showed development of new, significant paravalvular aortic regurgitation (Fig. Panel B), and dehiscence of the AVR. The patient is scheduled for surgery.

Conclusion: Small vegetations in the LVOT can be missed by 2D-TEE. Our patient had evidence of recurrent embolic infarcts in multiple organs, hence identifying the source of emboli was critical. The perivalvular area, which is a surgical suture site could provide the initial nidus for microorganisms. The relative avascularity of the intervalvular fibrosa is probably the reason for the development of complications, inspite of adequate antibiotic therapy in our patient. In addition to aiding the accurate diagnosis, 3D-TEE was also able to detect development of significant paravalvular regurgitation and prosthetic valve dehiscence.