Transesophageal echocardiography detects an unusual complication of infective endocarditis

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With infective endocarditis, infection can spread to the perivalvular structures. Occasionally, aortic abscesses can rupture into adjacent cardiac chambers and lead to aorto-cavitary fistulas.^{1,2} We highlight images involving a case where intraoperative transesophageal echocardiography played a pivotal role in the surgical management of a male patient who presented with a three-month history of progressive dyspnea. He had a history of disseminated tuberculosis, deep vein thrombosis, and chronic renal insufficiency secondary to glomerulonephritis. Transthoracic echocardiography revealed severe aortic regurgitation with a jet crossing a fenestration in an aneurysmal sinus of valsalva, as well as moderate global hypokinesis of the left ventricle. The patient was scheduled for aortic valve replacement. However, an intraoperative transesophageal echocardiogram revealed a normally appearing trileaflet aortic valve. The sinuses of valsalva did not appear aneurysmal. A false aneurysm of the aortic annulus was protruding into the left ventricular outflow tract with severe aortic regurgitation (Figs. 1, 2) (video images available as Supplemental Material at www.springerlink.com/12630), suggesting that replacement of the aortic valve was not necessarily indicated.

Surgical findings showed a defect at the base of the annulus at the level of the origin of the right coronary leaflet, not involving the right coronary artery (video images available as Supplemental Material at www.springerlink.com/12630). Through the defect, the surgeon observed the

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Fig. 1 Mid-esophageal aortic valve long-axis view showing the defect as indicated by the arrow

Fig. 2 Photograph showing the defect of the aortic valve annulus. RCC right coronary cusp, NCC non-coronary cusp, LCC left coronary cusp. Arrow highlights the defect

existence of a false aneurysm passing through approximately 7.5 cm into the left ventricle. The valve leaflets were otherwise normal. Despite negative blood cultures, this finding was considered to be consistent with previous endocarditis. Valvuloplasty with resuspension of the valve and repair of the defect with bovine pericardial patch was performed. Transesophageal echocardiography performed post-cardiopulmonary bypass showed minimal central aortic regurgitation. The patient recuperated well and he was discharged on postoperative day six.

Competing interests None declared.

References

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