

Infective endocarditis of a forgotten valve

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Imaging in Internal Medicine

A 62-years-old man with IV [interventricular (IV)] communication was admitted to our hospital with a 6-month history of anorexia, asthenia, weight loss and fever. Physical examination revealed fever and a grade III/VI continuous murmur heard in all precordium. Patient's blood analysis showed elevation of inflammatory markers. *Granulicatella adiacens* was isolated on two sets of blood cultures. Transesophageal echocardiogram diagnosed infective endocarditis of the AV [aortic valve (AV)] with associated moderate-to-se-

vere AV insufficiency and preserved BVEF [biventricular ejection fraction (EF)]. The patient completed 3 weeks of ampicillin and gentamicin and was submitted to AV replacement and correction of the IV communication. Before hospital discharge (30 days after the initial echocardiogram), routine transthoracic echocardiogram was done and a PV [pulmonary valve (PV)] vegetation measuring 6×7 mm, not previously described, was noted, as well as *de novo* severe PV insufficiency (PASP + CVP [pulmonary artery systolic pressure (PASP); central venous pressure (CVP)] 19 mmHg) (Figure 1). Blood cultures were negative. Surgical risk was very high in this patient, so antibiotic therapy with ampicillin and gentamicin was extended for 26 additional days. The patient was maintained under close follow-up in monthly appointments and remained asymptomatic and clinically stable. BVEF remained preserved, with normal dimensions of the right cardiac chambers, and PASP + CVP 27 mmHg.

Right side endocarditis accounts for 5-10% of all cases of infective endocarditis and only 1.5-2% compromise the PV.¹ Multiple factors are associated with the rarity of the PV involvement: lower pressure on the right side of the heart, lower oxygen concentration in venous blood, as well as differences in endothelial

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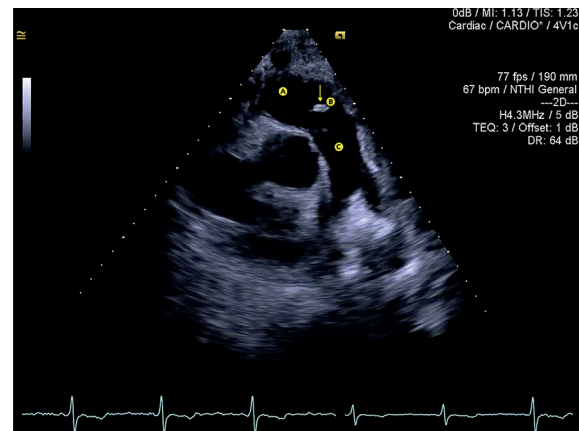


Figure 1. Transthoracic echocardiogram showing the right ventricle (A), pulmonary valve (B) and pulmonary artery (C), with a vegetation (arrow) in the valve.

lining and vascularization of the valve.² PV endocarditis is frequently associated with risk factors such as congenital heart disease.^{2,3} Signs and symptoms are nonspecific and the course of the disease may be sub-acute. Echocardiography is essential to the diagnosis of endocarditis, but evaluation of the PV is difficult, mainly due to the anterior position of the valve.^{3,4} This may lead to delayed or missed diagnosis. The authors want to highlight the importance of clinical suspicion of right-side endocarditis, mainly in patients with risk factors such as congenital defects. Most of the times its management courses with parental antibiotics without need for surgical repair.³

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