

## Image in cardiology

## Infective Endocarditis in a Patient With a Transcatheter LOTUS Valve



## Endocarditis infecciosa en paciente con prótesis aórtica percutánea LOTUS

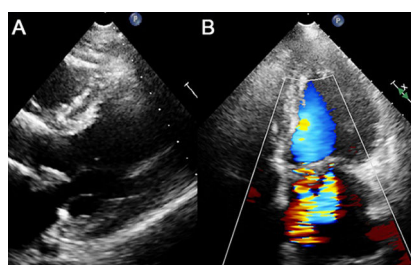
Ricardo Mori Junco,<sup>a,\*</sup> Juan Ramón Rey Blas,<sup>b</sup> and Esteban López de Sá<sup>b</sup><sup>a</sup>Servicio de Cardiología, Hospital Universitario La Paz, Madrid, Spain<sup>b</sup>Unidad Coronaria, Servicio de Cardiología, Hospital Universitario La Paz, Madrid, Spain

Figure 1.

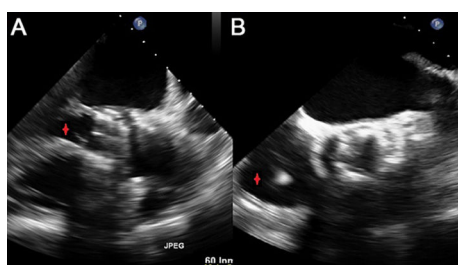


Figure 2.

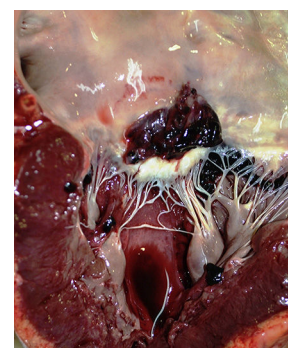


Figure 3.

A 71-year-old hypertensive man, who was an exsmoker with respiratory and renal comorbidities, presented with severe, symptomatic aortic stenosis. Due to his high surgical risk (EuroSCORE of 20.5%), we successfully implanted a LOTUS Boston Scientific percutaneous aortic valve transfemorally, with suitable depth. Implantation of a definitive pacemaker was also required, due to complete atrioventricular block. Two months later, the patient was admitted to hospital for acute pulmonary edema, and a new grade V/VI systolic murmur was auscultated in mitral focus. The transthoracic echocardiogram revealed a thickened and perforated anterior mitral leaflet, causing severe mitral regurgitation (Figures 1A and B). Transesophageal echocardiogram showed that the anterior mitral leaflet had heterogeneous echogenicity and irregular margins, suggestive of an abscess (video 1 of the supplementary material). The prosthetic aortic ring and its leaflets were thickened and had a mobile and filiform structure compatible with vegetation (Figure 2A and video 2 of the supplementary material). Moreover, vegetation was visible in the pacemaker lead (Figure 2B and video 3 of the supplementary material). Serial blood cultures isolated *Streptococcus gallolyticus*. In view of the diagnosis of early infective endocarditis of the aortic valve complicated by severe mitral regurgitation due to valve rupture and pacemaker lead endocarditis, we discussed the case with the cardiac surgery team, who ruled out surgery due to the high risk. The patient died 48 hours later due to severe sepsis and heart failure. Clinical autopsy confirmed the diagnosis (Figure 3). This is the first known case of infective endocarditis in a patient with a LOTUS percutaneous aortic valve.

## SUPPLEMENTARY MATERIAL

Supplementary material associated with this article can be found in the online version available at [doi:10.1016/j.rec.2015.02.012](https://doi.org/10.1016/j.rec.2015.02.012).

\* Corresponding author:

E-mail address: [rmori11@hotmail.com](mailto:rmori11@hotmail.com) (R. Mori Junco).

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