

Recurrent prosthetic mitral valve infective endocarditis and perivalvular abscess: first description by PET/CT angiography

Jordi Lozano-Torres¹ · María Nazarena Pizzi¹ · Albert Roque¹ · Hug Cuéllar-Calàbria¹ · Nuria Fernández-Hidalgo¹ · Pilar Tornos Mas¹ · Santiago Aguadé-Bruix¹

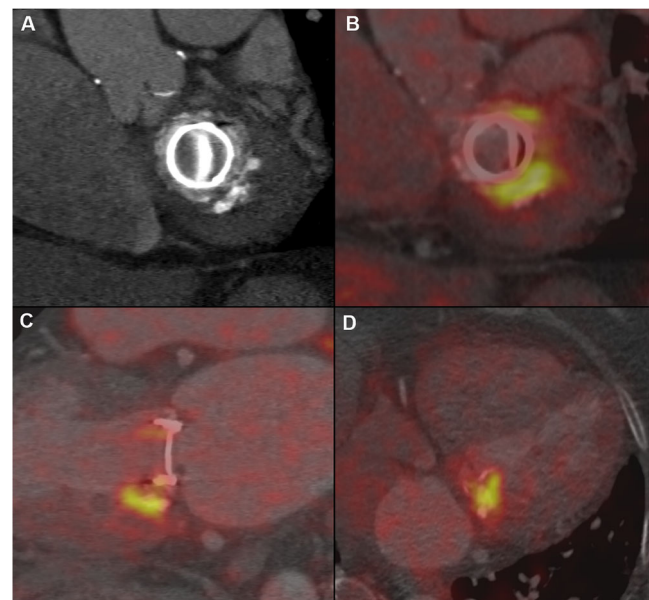
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A 69-year-old woman with a history of rheumatic valvulopathy requiring mechanical prosthetic valve substitution 11 years previously was admitted to our service because of fever. Physical exploration was unremarkable. Blood cultures were positive for cloxacillin-resistant *Staphylococcus epidermidis*. The echocardiogram showed a large mitral vegetation without signs of perivalvular abscess or prosthetic dysfunction. The patient received a 6-week regimen of daptomicin, gentamicin and rifampicin, with immediate negativization of the blood cultures and a good evolution. However, blood cultures became positive for the same microorganism 2 weeks after the end of the treatment. Repeat transoesophageal echocardiography showed only a small residual vibrating mass.

¹⁸F-FDG PET/CT angiography with myocardial suppression showed a periprosthetic mitral abscess that was able to explain the recurrent endocarditis. The oblique coronal view (a) shows a large residual nodular calcification of the posterior mitral ring. Short-axis, two-chamber and four-chamber fused images in the mitral plane (b–d) show intense focal FDG uptake (SUVmax 13) in the same location [1, 2].

The patient underwent surgery during which a periprosthetic mitral abscess at the inferior ring was completely



resected. The antibiotic regimen was repeated and the blood cultures remained negative after 3 months of follow-up.

References

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✉ Jordi Lozano-Torres
jordilozano87@gmail.com

¹ Hospital Universitari Vall d'Hebron, Barcelona, Catalunya, Spain