

Aortic valve endocarditis by a rare infectious agent in a patient with a rare congenital mitral valve abnormality

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Case description

A 66-year-old woman with a past medical history of high blood pressure, Type 2 diabetes *mellitus* and no clinical evidence of immunocompromise, presented to the emergency room with fever and acute pulmonary oedema. The patient had presented low-grade fever and anorexia in the previous 3 weeks.

Transthoracic echocardiography showed severe aortic regurgitation related to the presence of large aortic vegetations affecting all cusps. Despite the stabilization of the patient after anti-congestive and vasodilator therapy, urgent surgery was considered given high embolic risk. Blood cultures were positive for penicillin-sensitive *Leuconostoc mesenteroides*.

Transoesophageal echocardiographic examination confirmed the presence of large vegetations attached to the aortic valve cusps with friable appearance and great mobility, prolapsing to the left ventricular outflow tract (*Figure 1*). It also revealed a double-orifice mitral valve, with a presence of a central bridge connecting the two leaflets (complete bridge type) and dividing the valve into two adequate orifices (medial and lateral) causing neither significant stenosis nor significant regurgitant associated jets (*Figures 1 and 2*).

The patient underwent aortic valve replacement and a biological prosthesis was implanted.

With these images, the authors describe and illustrate a normally functioning double-orifice mitral valve associated with *L. mesenteroides* aortic valve infection an infrequent agent in humans and an extremely rare cause of endocarditis.

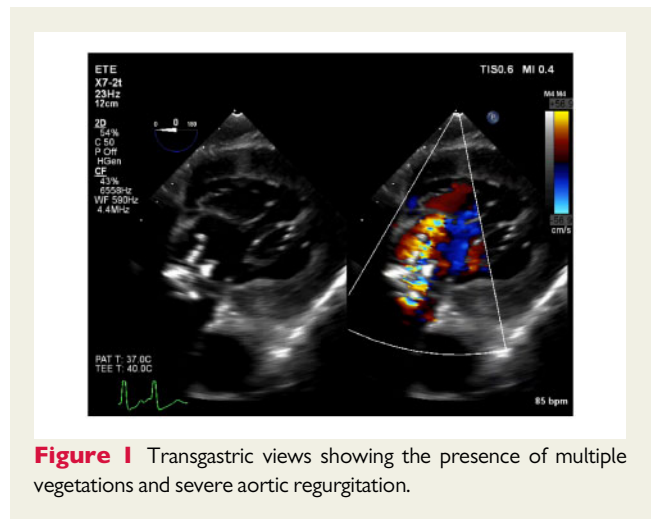


Figure 1 Transgastric views showing the presence of multiple vegetations and severe aortic regurgitation.

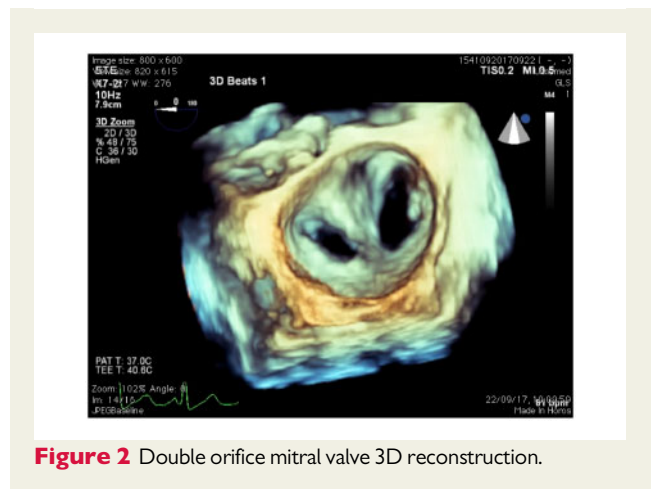


Figure 2 Double orifice mitral valve 3D reconstruction.

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Supplementary material

Supplementary material is available at *European Heart Journal - Case Reports* online.

- **Consent:** The author/s confirm that written consent for submission and publication of this case report including image(s) and associated text has been obtained from the patient in line with COPE guidance.
- **Conflict of interest:** none declared.