A 69-year-old man presented with a 2-week history of back discomfort and fevers, having had bioprosthetic aortic valve replacement (AVR) for prosthetic valve infective endocarditis (PVE) 4-months ago. Past medical history included coronary artery bypass grafting in 2008, bioprosthetic AVR with root replacement for ascending aortic dissection in 2010, diabetes mellitus, and chronic renal impairment. In June 2016, he was admitted with Streptococcus mitis bacteriaemia treated with 6 weeks of ceftriaxone. Transoesophageal echocardiography was negative for endocarditis and root abscess. In November 2016, the patient was admitted with heart failure secondary to new severe aortic regurgitation. Transoesophageal echocardiography showed dehiscence of the anterior leaflet of aortic valve prosthesis. Blood cultures were negative. He was commenced on vancomycin prior to re-do AVR and discharged on lifelong amoxicillin.

His current admission blood cultures grew Enterococcus faecalis treated with ampicillin and ceftriaxone with no source identified. Magnetic resonance imaging of his thoracolumbar area demonstrated T10/T11 discitis suggestive of septic emboli. Transoesophageal echocardiography demonstrated an aortic root abscess (Figure 1, Panel A, arrowed) extending from 9 to 3 o’clock position with severe para-valvular leak. Overnight, the patient developed an external pulsatile mass 4 cm × 3 cm in diameter arising from the sternotomy scar (Supplementary material online, Video). Fluorodeoxyglucose positron emission tomography demonstrated radiotracer uptake (brightness intensity indicates increased inflammation) around the aortic root and a contained leak into the anterior mediastinum with extension through the anterior chest wall (Figure 1, Panel B, arrowed).

Development of a chest wall pulsatile mass from an aortic root abscess has not been described before in the literature but should be considered a potential complication. Recurrent PVE is reported to be <15% at 10-year follow-up and early surgery can improve outcome. However, due to multiple previous operations and comorbidities, our patient was not considered a surgical candidate, treated palliatively, dying 3 weeks later.

**Supplementary material**

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

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**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.

**References**


Figure 1 Panel A (arrowed): Transosophageal echocardiography demonstrated an aortic root abscess extending from 9 to 3 o’clock position with severe paravalvular leak. Panel B (arrowed): Fluorodeoxyglucose positron emission tomography demonstrated radiotracer uptake around the aortic root and a contained leak into the anterior mediastinum with extension through the anterior chest wall.