



The *Staphylococcus aureus* cardiac snake

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Accepted: 25 April 2023 / Published online: 6 July 2023
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A 73-year-old male presented to the emergency department with delirium and fever (39.2°C) 1 week after receiving an intra-articular corticosteroid injection in his left glenohumeral joint to treat bursitis. Janeway lesions were noticed. The cardiologist was consulted and performed transthoracic and transoesophageal echocardiography, on which an impressive 8-cm snake-like vegetation was seen on the mitral valve with minor regurgitation (Fig. 1a; see also Video 1 in Electronic Supplementary Material). Blood cultures grew *Staphylococcus aureus*. Based on the modified Duke criteria (two major criteria and three minor criteria), definite endocarditis was diagnosed [1]. Given the size and mobility of the vegetation, emergent cardiac surgery was performed, in which the vegetation was removed en bloc and the mitral valve was replaced (Fig. 1b; see also Video 2 in Electronic Supplementary Material). The patient died on the 17th postoperative day as a result of uncontrolled infection. Swift diagnosis and treatment in patients

with (suspected) *S. aureus* endocarditis is crucial to improve outcomes.

Conflict of interest G.J. van Steenberghe, W. Tunnissen, N. Timmermans, P. Houthuizen, R. van den Broek and T. van Brakel declare that they have no competing interests.

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References

1. Habib G, Lancellotti P, Antunes MJ, et al. 2015 ESC Guidelines for the management of infective endocarditis. *Eur Heart J*. 2015;36:3075–123.

Video online The online version of this article contains two videos. The article and the video are available online (<https://doi.org/10.1007/s12471-023-01790-3>). The videos can be found in the article back matter as 'Electronic Supplementary Material'.

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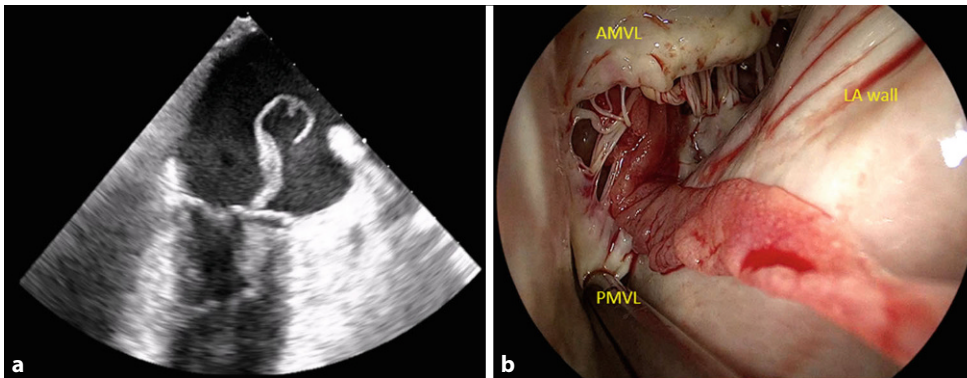


Fig. 1 Image of the vegetation on transoesophageal echocardiography moving freely between the left atrium and left ventricle (**a**, Video 1). Intraoperative inspection of the mitral valve revealed that the vegetation originated from the subvalvular apparatus of the mitral valve and had damaged seg-

ment P1 of the posterior leaflet (**b**). The vegetation was removed en bloc (Video 2) and due to the damaged posterior leaflet, the mitral valve was replaced with a biological prosthesis. *AMVL* anterior mitral valve leaflet, *PMVL* posterior mitral valve leaflet, *LA* left atrium