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## An alien in the heart: giant infective endocarditis

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**Keyword:** *Infective endocarditis.*

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A 78-year-old woman was referred to our department because of acute confusion and somnolence. Her usual medication was corticosteroid injection once a month for hip arthrosis. The clinical examination showed an obese patient. Blood pressure was 90/60 mmHg and heart rate 160 bpm. On admission, the patient had fever (38.6°C) and meningism, but no focal neurologic deficits were found. Heart and lung auscultation was normal. Because of progressive respiratory insufficiency, the patient was mechanically ventilated. Blood analysis showed an inflammatory syndrome and mild renal failure. The cerebral CT showed no focal lesions. An antibiotic regimen with ampicilline and geomycine was started on the basis of suspected bacterial meningitides on lumbar puncture. A transthoracic echocardiography revealed endocarditis with a giant vegetation on the posterior mitral valve leaflet (P2) and a severe valvular regurgitation (figure 1: A, B, C). Transoesophageal echocardiography confirmed the diagnosis and did not show perivalvular extension (figure 1D). Methicillin-sensitive *staphylococcus aureus* was isolated in several blood cultures. Magnetic resonance imaging was performed and showed ischaemic lesions less than 1 mm in the protuberance, left cerebellar and cerebral cortex, without evidence of rupture of the haemato-encephalic barrier. Early heart surgery was decided. The opening of the pericardium revealed a purulent pericardial

effusion (figure 2A). The left atrium was opened and allowed adequate viewing of the vegetation on the mitral valve (figure 2B). There was also an infectious annular lesion. The inflamed tissue was removed with the posterior leaflet (P2) (figure 2C) and annuloplasty completed the repair (figure 2D). Postoperative transoesophageal echocardiography did not show any mitral regurgitation (figure 1: E, F). The further course was complicated by a nosocomial pneumonia and critical care polyneuropathy. The patient finally developed multiple organ failure and died after 37 days.

### References

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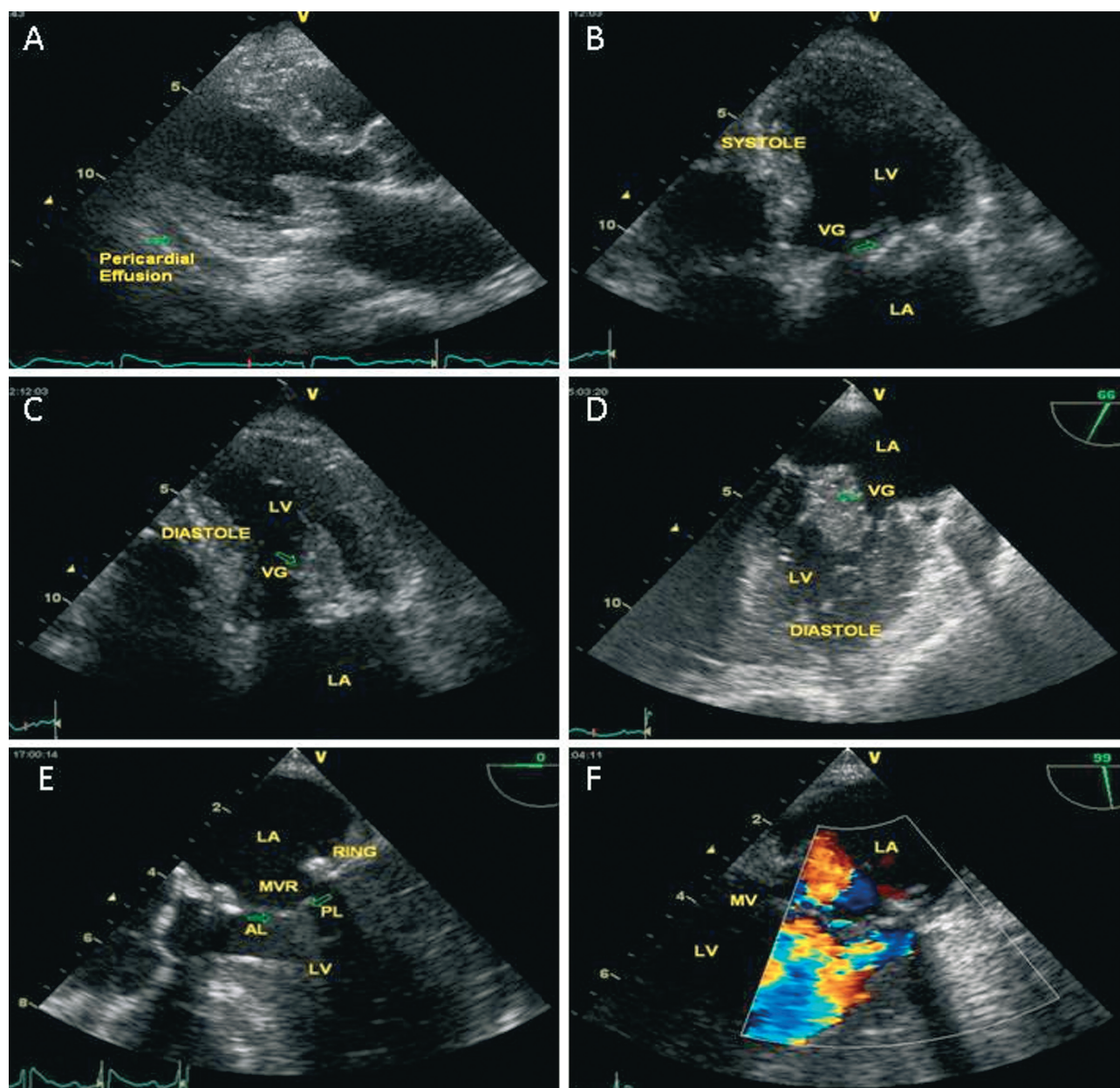


Fig. 1. – Echocardiographic findings. (A) Transthoracic echocardiography in parasternal long-axis view presented an image of pericardial effusion. (B-C) Transthoracic echocardiography apical 4-chamber images during systole and diastole showing a giant vegetation (VG) attached to the posterior mitral valve leaflet. (D) Transoesophageal echocardiography examination did not show perivalvular extension. (E-F) The postoperative transoesophageal echocardiography did not show any mitral regurgitation.

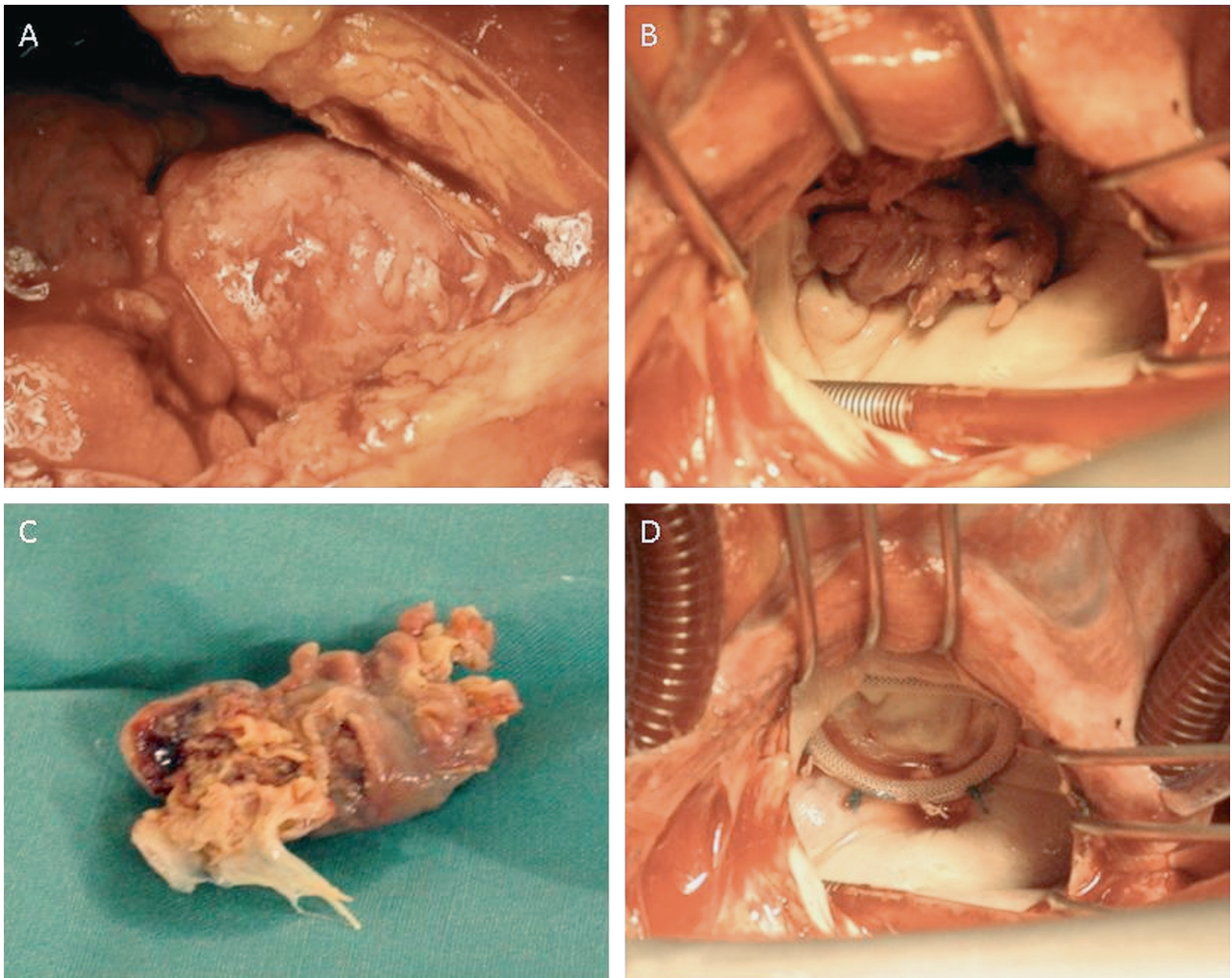


Fig. 2. – Surgical images. (A) The pericardium with a purulent pericardial effusion. (B) Adequate viewing of the vegetation on the mitral valve after opening of the left atrium. (C) The “alien” vegetation excised. (D) The mitral valve repair (MvR) after surgical treatment with annuloplasty.