

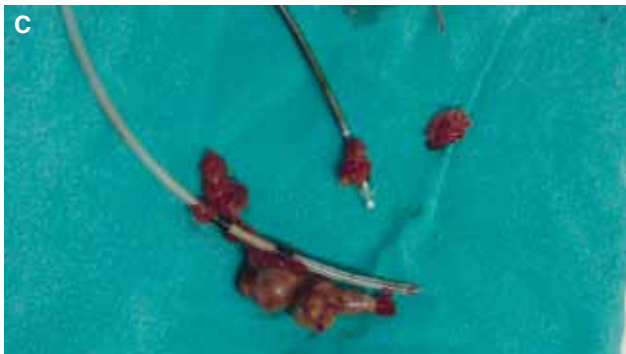
## Grapes in the heart: pacemaker lead endocarditis treated with surgery

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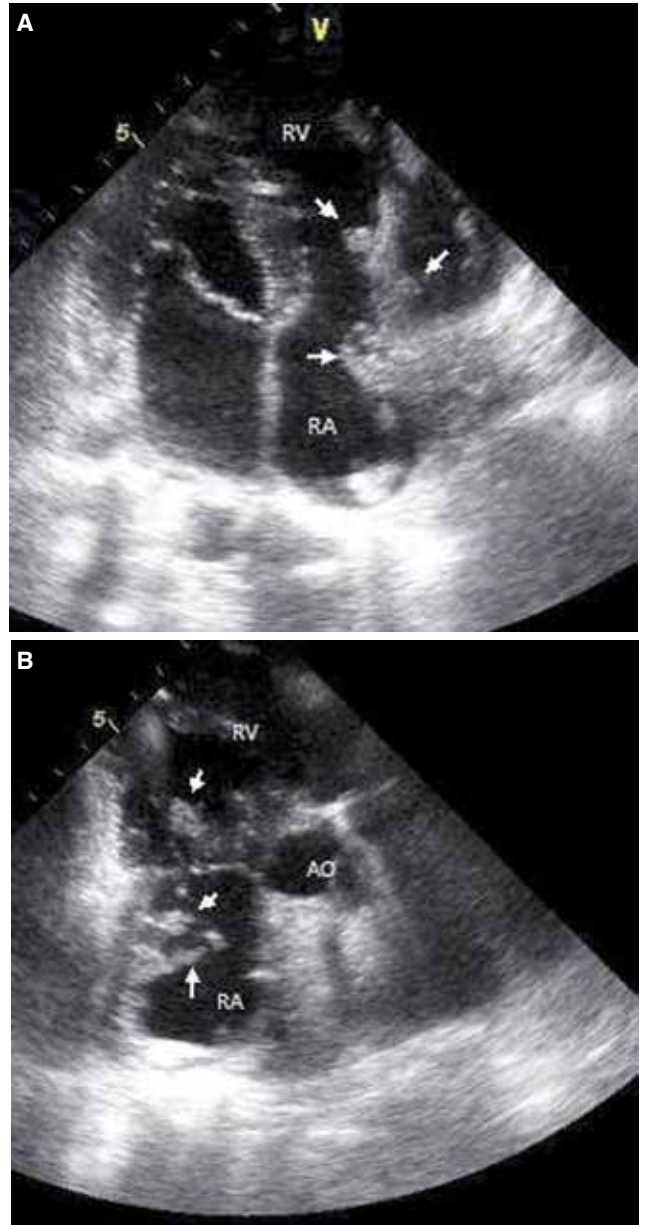
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A 27-year-old patient bearing an implanted pacemaker presented to our clinic with discharge in the incision area. No vegetations were observed on transthoracic echocardiography. Transesophageal echocardiography was planned, but the patient refused this examination. In discharge cultures from the incision

area, methicillin-susceptible *Staphylococcus aureus* was isolated as the cause of infection and appropriate antibiotherapy was started. The pacemaker was extracted and replaced. One year later, the patient presented to our emergency room with high fever. On physical examination, an apical 3/6 pansystolic murmur was heard. Laboratory tests showed high levels of inflammatory markers including erythrocyte sedimentation rate (ESR) of 80 mm/hr, and hs-CRP of 17 mg/l. Transthoracic echocardiography showed grape-like multiple vegetations in pacemaker leads (Fig. A, supplementary video files 1 and 2). The same microorganism was detected in blood culture. After one month of antibiotherapy (cephazolin 2 g 3x1, rifampin 300 mg 3x1, gentamicin 1 mg/kg for 2 weeks), the patient was referred to cardiovascular surgery for lead extraction and epicardial pacemaker implantation (surgically extracted leads and vegetations are shown in Fig. B). After surgery, ESR and hs-CRP levels returned to normal and blood cultures were negative.



## Kalpte üzüm taneleri: Kalp pili elektrodu endokarditi ve cerrahi tedavisi



**Figures.** Grape-like vegetations seen in pacemaker leads in (A) apical and (B) parasternal short-axis views on transthoracic echocardiography. (C) Vegetations seen in surgically extracted pacemaker leads. RA: Right atrium; RV: Right ventricle; AO: Aorta; Arrows: Vegetations.

\*Supplementary video files associated with this case can be found in the online version.