Eustachian Valve Endocarditis Associated with Complicated Cardiac Resynchronization Therapy Defibrillator Generator Pocket Infection

A 76-year-old male with ischemic cardiopathy was admitted with fever and purulent drainage from cardiac resynchronization therapy defibrillator generator pocket, two months after its implantation. Prompt device removal was performed. Cultures identified methicillin-sensitive *Staphylococcus aureus*. Transthoracic echocardiography revealed a highly mobile filamentous right atrial mass with 30mm in length, apparently attached to interatrial septum (Figure 1 and Video 1). Transesophageal echocardiography (TEE) showed that the echogenic mass was attached to the Eustachian valve (EV) (Figure 2 and Video 2) and the diagnosis of EV endocarditis was made. There was no involvement of tricuspid valve. The patient completed a 4-week course of flucloxacillin, with good clinical response and without embolic complications. Repeat TEE revealed a significant decrease in vegetation size (Figure 3 and Video 3).

Authors’ contributions

Research conception and design: MIFB Pires, I Almeida, ML Gonçalves, JM Santos, M Correia; data collection: MIFB Pires, I Almeida, ML Gonçalves, JM Santos, M Correia; manuscript writing: MIFB Pires, I Almeida, ML Gonçalves, JM Santos, M Correia.

Conflict of interest

The authors have declared that they have no conflict of interest.

Keywords

Cardiac resynchronization-therapy devices; Endocarditis; Heart valves.

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Video 1 – Transthoracic apical 4-chamber view showing a right atrial mass with 30mm, apparently attached to interatrial septum.

Figure 2 – Midesophageal modified bicaval view showing a mobile filamentous mass attached to the Eustachian valve.

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Figure 3 – Modified bicaval view revealing the decrement of vegetation size during antimicrobial therapy.

Video 3 – Modified bicaval view revealing the decrement of vegetation size during antimicrobial therapy.