

Infective endocarditis of the patent oval fossa assessed by three-dimensional echocardiography

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We obtained blood cultures positive for *Staphylococcus aureus* from a preterm neonate weighing 2.0 kilograms. Only a peripheral venous line had been inserted in the patient, and there were no other predisposing factors, nor any cardio-respiratory symptoms. Transthoracic cross-sectional echocardiography showed no structural cardiac defect, but there was a large vegetation attached to the persistently patent oval fossa, which prolapsed through the tricuspid valve during diastole. This was imaged also in the four-chamber view using real time three-dimensional echocardiography, using the Sonos 7500 device manufactured by Philips with the 2–4 megahertz probe (Figure – with link to video clip on website: http://journals.cambridge.org/Acar_et_al_endocarditis_movie), which gave additional information concerning the volume of the mass.

The patient was treated with intravenous antibiotics and oral aspirin. After two weeks, the vegetation had resolved spontaneously, without any adverse events for the patient. Specifically, there was no evidence of pulmonary embolization on chest radiography.

The persistently patent oval fossa is an extremely rare site for infective endocarditis, most cases occurring in relation to closure with a percutaneously implanted device. While thrombus could produce similar echocardiographic findings, the presence of

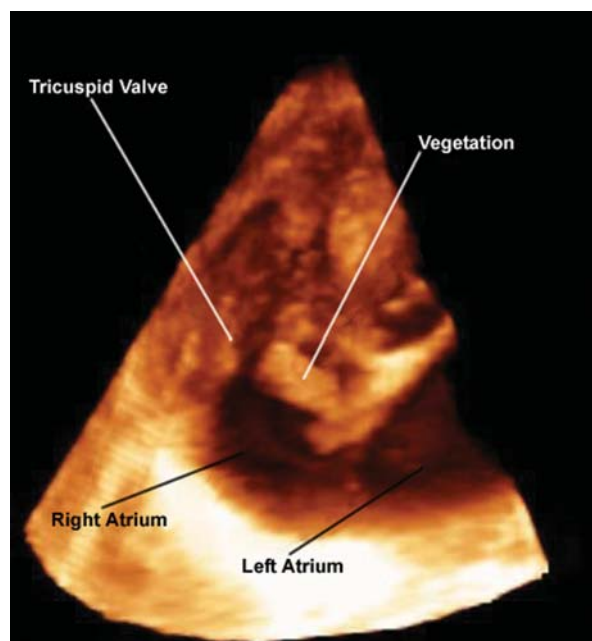


Figure 1.
3D echocardiography. The large vegetation attached to the atrial septum is floating and crossing the tricuspid valve.

positive blood cultures in our patient, coupled with the response to antibiotic treatment, support the diagnosis of acute infective endocarditis.