

Images in Congenital Heart Disease

Thrombus in a juxtaposed right atrial appendage

Sangeetha Viswanathan,¹ Balu Vaidyanathan,² R. Krishna Kumar²

¹Department of Congenital Heart Disease, Yorkshire Heart Centre, Leeds General Infirmary, Leeds, United Kingdom;

²Department of Paediatric Cardiology, Amrita Institute of Medical Sciences, Cochin, Kerala, India

Keywords: Atrial juxtaposition; echocardiography; restrictive atrial shunt

A FEMALE INFANT WITH COMPLEX CYANOTIC cardiac disease presented at the age of 45 days with absence of the right atrioventricular connection, the left atrium connecting to a dominant left ventricle, discordant ventriculo-arterial connections, and moderate pulmonary stenosis. As the saturations of oxygen were acceptable, the interatrial communication was sizable, and there was balanced flow of blood to the lungs, surgical intervention at this time was deferred. The family failed to attend follow-up appointments, and the child returned in an extreme state, with chronic liver failure at the age of one year. At presentation, the child was in sinus rhythm, with haemoglobin measured at 11 grams per decilitre. The echocardiogram now showed significant restriction of the atrial shunt from the hugely dilated right atrium (RA) into the left atrium (LA) through a patent oval fossa (Fig. 1 – arrow). The right ventricle (RV) was hypoplastic, with the aorta (Ao) arising anteriorly, and the pulmonary trunk (PT), posteriorly, from the left ventricle (LV). A large, well-organized thrombus (Fig. 2 – arrows) was seen within the right atrial appendage (RAA), which was juxtaposed to the left of the arterial pedicle. Left juxtaposition of the right atrial appendage has been well described in the setting of tricuspid atresia,¹ and may constitute a risk factor for intracardiac thrombosis in this sub-set of patients.

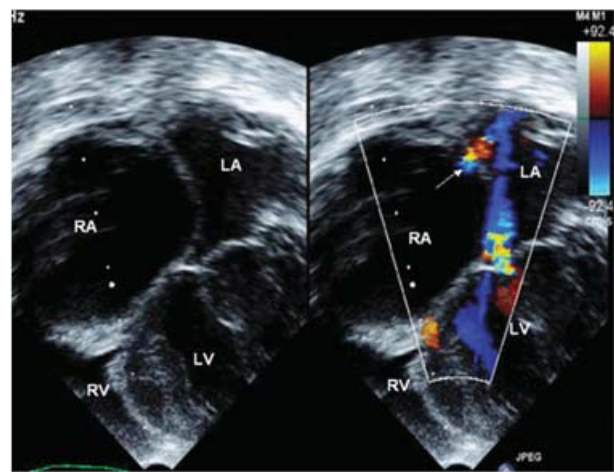


Figure 1.
Apical view of echocardiogram.



Figure 2.
Parasternal view of echocardiogram.

Reference

1. Thoele DG, Ursell PC, Ho SY. Atrial morphological features in tricuspid atresia. *J Thorac Cardiovasc Surg* 1991; 102: 606–610.

Correspondence to: R Krishna Kumar, Department of Paediatric Cardiology, Amrita Institute of Medical Sciences, Cochin 26, Kerala, India. Tel: 00 91 484 280 1234 Ext 1599; Fax: 00 91 484 280 2020; E-mail: rkrishnakumar@aims.amrita.edu

Accepted for publication 23 March 2007