


---

**IMAGE FOCUS**

**Giant and electrically silent right atrium**

*Paulo Fonseca*, José Ribeiro, Nuno Bettencourt, Luís Adão, and Vasco Gama

Department of Cardiology, Vila Nova de Gaia Hospital Center, Rua Conceição Fernandes, Vila Nova de Gaia 4434-502, Portugal

* Corresponding author. Tel: +351 227865100, E-mail: paulobarbosa@fONSECA@hotmail.com

A 22-year-old man with no significant past medical history was referred to our centre due to an incessant supraventricular tachycardia with variable atrioventricular conduction and no evidence of sinus rhythm during Holter monitoring. Transthoracic echocardiogram showed a remarkably dilated right atrium and a severe tricuspid regurgitation secondary to annular enlargement (Panels A and B). The tricuspid valve was not displaced, and the right ventricle was slightly dilated with preserved systolic function. Cardiac magnetic resonance imaging confirmed a severe enlargement of right atrium with an estimated volume of 830 mL and excluded other cardiac anomalies (Panels C and F). He underwent an electrophysiological study that showed an atypical atrial flutter with a cycle length of 254 ms. The sole right atrial electric activity was recorded in the posteroseptal region, with the rest of atrium being inexcitable and devoid of electrogram (Panels D and E). No ablation was performed due to probable absence of sinus rhythm after tachycardia interruption. He was successfully submitted to an extensive right reduction atrioplasty and a tricuspid valve annuloplasty (Panel G). His post-operative period was uneventful. Histologic examination of the resected atrial tissue revealed an extreme wall thinning with no other relevant abnormalities (Panel H).

Idiopathic dilatation of right atrium is a rare condition of unknown aetiology; whether it is congenital or acquired is still controversial. Almost 50% of patients are asymptomatic, with others presenting with thromboembolic complications or rhythm abnormalities (frequently atrial fibrillation or atrial flutter). Associated atrial standstill has been rarely described.

Published on behalf of the European Society of Cardiology. All rights reserved. © The Author 2015. For permissions please email: journals.permissions@oup.com.