We did not perform an EPS and characterize the properties of the tissue responsible for her arrhythmia. We cannot definitively rule out that a small area of permanent tissue damage occurred at the time of valve deployment. However, she has been arrhythmia-free following the initiation of beta blockade.

**Conflict of interest:** none declared.

**References**


**Figure 2** (A) Intraprocedural transoesophageal echocardiography prior to valve deployment. The left ventricular outflow tract measures 23 mm. (B) Intraprocedural transoesophageal echocardiography following valve deployment demonstrating a well-seated Sapien valve in the aortic position.

---

**CASE REPORT**

**Arrhythmias in heart transplant recipients**

Lieve Van Casteren* and Hein Heidbüchel

Department of Cardiology, University Hospital Gasthuisberg, University of Leuven, Leuven B-3000, Belgium

* Corresponding author. Tel: +32 16 34 42 48, Fax: +32 16 34 42 40, Email: lieve.vancasteren@skynet.be

The suture between the recipient and donor atrium in a heart transplant patient usually gives complete electric isolation. In this case report, we describe two transplant patients with an atrial tachycardia in the recipient atrium. In the first patient there was no conduction to the donor atrium, whereas the second patient had a breakthrough with 2-to-1 conduction.

**Case**

A 78-year-old male patient, who underwent orthotopic heart transplantation 12 years before because of dilated cardiomyopathy, was admitted for his yearly transplant check-up. The routine Holter revealed an atrial arrhythmia with slightly irregular ventricular rate (Figure 1). Another heart transplant patient, a 59-year-old female, was admitted because of paroxysmal palpitations, 5 years after transplantation. An atrial tachycardia with a 2-to-1 conduction block was diagnosed and confirmed by electrophysiological investigation (Figure 2).

**Discussion**

During an orthotopic heart transplantation, a part of the posterior right and left donor atrium is attached to the recipient atrium. The suture between both atria usually leads to complete electric isolation. In the first patient, the recipient atrium developed tachycardia but without breakthrough to the donor heart. When watching carefully, a (donor) P-wave can be seen in front of each QRS complex (Figure 1; black arrowheads). In the second patient, an atrial arrhythmia originating from the recipient atrium was recorded, conducting in a 2-to-1
Despite continuation of the atrial tachycardia in the recipient atrium, sinus rhythm in the donor heart was restored by obtaining an electric isolation during radiofrequency ablation of the connection between both atria (Figure 2B). See text for further explanation.

Figure 1 Holter tracing showing an atrial arrhythmia with slightly irregular ventricular rate. See text for further explanation.

Figure 2 Electrogram recordings during an electrophysiological study, showing 2-to-1 conduction from the recipient atrium to the donor heart (A) followed by complete block between both atria after radiofrequency ablation of the breakthrough-connection (B). See text for further explanation.

Acute pericardial tamponade due to screw-in atrial lead heart perforation

Dante Antonelli1*, Alexander Feldman1, Jorge E. Schliamser2, Arie Militianu2, and Yoav Turgeman1

1Department of Cardiology, Ha Emek Medical Center, Afula 18101, Israel; and 2Department of Cardiology, Lady Davis, Carmel Medical Center, Haifa, Israel

* Corresponding author. Tel: +972 4 6494346; fax: +972 4 6591414, Email: antonelli_dante@hotmail.com

A case of peri-procedural perforation of right atrium following the implantation of atrial screw-in lead in a 74-year-old man is reported. The perforation caused acute pericardial tamponade and worsening of the patient’s clinical and haemodynamic conditions. Urgent surgical intervention with lead extraction was performed.

Published on behalf of the European Society of Cardiology. All rights reserved. © The Author 2011. For permissions please email: journals.permissions@oup.com