patients with symptomatic atrial fibrillation after atrioventricular node ablation. Am Heart J 2010;159:264–70.


---

**Challenges in cardiac resynchronization therapy-defibrillator upgrade in a patient with right pneumonectomy**

Jeremy Chow1* and Ruth Kam2

1Department of Cardiology, Changi General Hospital, 2 Simei Street 3, Singapore 529889, Singapore and 2Mount Elizabeth Medical Centre, 3 Mount Elizabeth, Singapore, 228510, Singapore

* Corresponding author. Tel: +65 91887038; fax: +65 62609173. Email: jchow@dr.com

**Clinical problem**

A 73-year-old male with a history of right pneumonectomy had a single-chamber defibrillator implanted for secondary prevention. He required a cardiac resynchronization therapy defibrillator upgrade as he had worsening symptoms with VVI pacing. He was admitted for ventricular tachycardia storm and was started on intravenous amiodarone prior to upgrade.

The coronary sinus venogram (see Supplementary video) showed an ideal lateral target vein but there was either no capture at 7.5 V or phrenic stimulation in all possible positions in that vein. With no other options we made the decision to position the left ventricular (LV) lead in the anterior cardiac vein with a threshold of 4.5 V at 1.5 ms (see figure). His right atrial (RA) lead also had a high threshold of 2 V at 1.5 ms. Following this procedure, his amiodarone was weaned off and his pacing threshold improved significantly and had no episodes of ventricular arrhythmia at 9 months of follow-up.

In this patient, we had to place the LV lead in a non-conventional position due to limitation of his venous anatomy. Epicardial lead was also not in consideration in view of his previous pneumonectomy and anaesthesia risk. Pacing threshold <2 V has been accepted as optimal but in our patient, we had to accept the high initial pacing threshold as a result of amiodarone usage during implant. When we rechecked our patient 2 weeks after stopping amiodarone, his RA pacing threshold was 0.5 V at 1.5 m and his LV pacing threshold dropped to 1.75 V at 1.5 ms.

**Supplementary material**

Supplementary material is available at Europace online.


Published on behalf of the European Society of Cardiology. All rights reserved. © The Author 2012. For permissions please email: journals.permissions@oup.com.