

Adequate sensing of ventricular fibrillation?

A. W. G. J. Oomen¹ · B. M. van Gelder¹ · F. A. L. E. Bracke¹

Published online: 26 April 2017
© The Author(s) 2017. This article is an open access publication.

We present a case of an 81-year-old female patient who was resuscitated after out-of-hospital ventricular fibrillation. Clinical recovery was fine, but cardiological analysis showed a dilated cardiomyopathy with a poor systolic left ventricular function, left bundle branch block and persistent atrial fibrillation. There was no significant coronary artery disease. We prescribed heart failure medication and implanted a biventricular implantable cardioverter-defibrillator (ICD – Medtronic Viva Quad XT CRT-D).

Despite medication, atrial fibrillation with a high ventricular rate persisted. To ensure adequate biventricular pacing, she underwent a successful atrioventricular node ablation. Because of a relative low amplitude R wave in the RV tip to RV ring configuration, RV sensing was programmed to

the RV tip to RV coil configuration. A few weeks later, she presented at the emergency department with recurrent complaints of dizziness and lightheadedness. ICD interrogation showed several episodes as shown in Fig. 1 and 2.

What could be the explanation of this phenomenon?

Answer

You will find the answer elsewhere in this issue.

Open Access This article is distributed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made.

✉ A. W. G. J. Oomen
adoomenjr@gmail.com

¹ Catharina Hospital, Eindhoven, The Netherlands



Fig. 1 Detection of a fast ventricular tachycardia/ventricular fibrillation that terminated spontaneously. Upper tracing is the atrial electrogram, middle tracing the ventricular electrogram, lower tracing the marker channel

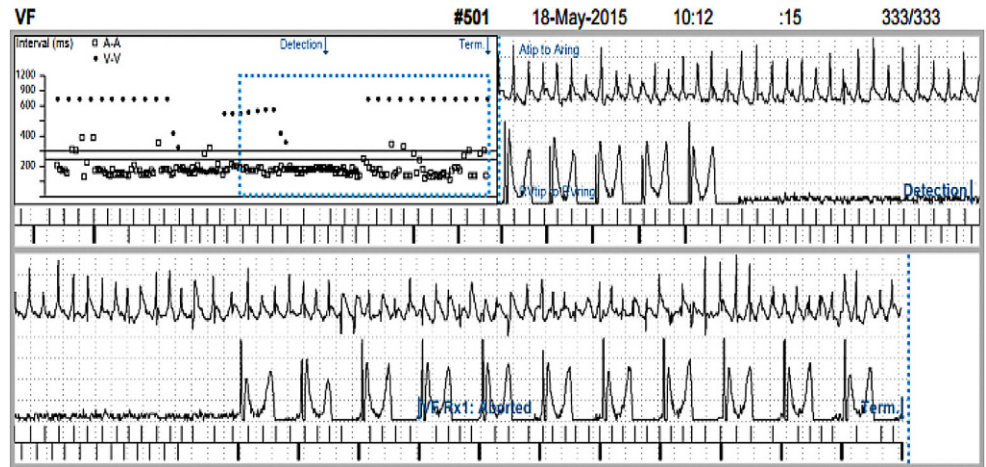


Fig. 2 Interval plot with V-V and A-A intervals of a similar episode as demonstrated in Fig. 1

