Hazards of antitachycardia pacing to treat ventricular tachycardias with implantable cardioverter defibrillators

Alexander H. Maass\textsuperscript{1*} and Isabelle C. Van Gelder\textsuperscript{1,2}

\textsuperscript{1}Department of Cardiology, Thoraxcenter, University Medical Center Groningen, University of Groningen, PO Box 30.001, 9700 RB Groningen, The Netherlands and \textsuperscript{2}The Interuniversity Cardiology Institute Netherlands, Utrecht, The Netherlands

* Corresponding author. Tel: +31 50 3612355, Fax: +31 50 3614391, Email: a.h.maass@thorax.umcg.nl

Antitachycardia pacing has been shown to significantly reduce the number of shocks in patients with implantable cardioverter defibrillators. Figure 1 highlights the possible pitfalls of programming this feature.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure1.png}
\caption{Intracardiac ECG showing a fast ventricular tachycardia (cycle length 250 ms) with AV dissociation that is detected after eight beats and treated with the programmed antitachycardia pacing (burst pacing). This therapy led to degeneration of the ventricular tachycardia in ventricular fibrillation and syncope of the patient who was treated adequately with a 28 J shock. We would like to emphasize the importance of careful programming of antitachycardia pacing with a sufficiently long detection algorithm to prevent degeneration of possibly non-sustained ventricular tachycardias in electrically and haemodynamically less stable rhythms.}
\end{figure}