Case Report

An Uncommon Ventricular Tachycardia due to Inactive PPM Lead

Goutam Datta, A. Sarkar, and A. Haque

Division of Cardiology, Institute of Postgraduate Medical Education and Research, Kolkata 700020, India

Correspondence should be addressed to A. Haque, azizul1234@hotmail.com

Received 15 February 2011; Accepted 15 March 2011

1. Case Report

A sixty-year-old male presented to emergency with recurrent episodes of syncope for the last two weeks. He had VVI pacemaker implantation one year ago in another centre. Subsequently, he had developed pacemaker pocket infection for which new pacemaker was implanted on opposite side but old lead was not explanted completely. Fluoroscopy showed redundant loop of old lead in right ventricular inflow which was snared out subsequently. He never had syncope or VT after that.

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2. Discussion

Syncope following permanent pacemaker implantation is a nightmare for electrophysiologists. VT may occur after pacemaker implantation for several reasons. Lindsay et al. reported a case of ventricular tachycardia four months after dual chamber pacemaker implantation [1]. Patient’s right ventricular pacing wire had wrapped around tricuspid annulus. After repositioning, patient did not have syncope or VT. Bohm et al. presented another case of symptomatic nonsustained ventricular tachycardia induced by mechanical irritation of the right ventricular outflow tract [2]. Repositioning of pacemaker loop eliminated the rhythm disturbance. Lefroy et al. reported a case of ventricular tachycardia following VVI pacemaker implantation due to fusion of a ventricular extrasystole with a pacemaker beat [3], whereas pacemaker stimulus on T wave was reason for VT in the case described by Freedman et al. [4]. Reentry circuit around endocardial pacemaker lead may also be a reason for VT in a patient with pacemaker [5]. Iesaka et al. reported a case of bradycardia-dependent VT which was facilitated
by long pause caused by myopotential inhibition of a VVI pacemaker [6]. Lead-lead interactions may occur in presence of multiple leads. Ventricular tachycardia and sudden cardiac death occur in 12–31% of patients following permanent pacemaker implantation [7]. Coronary artery disease and left ventricular dysfunction account for majority of these cases. In our patient coronary angiography was normal with good biventricular systolic function. Recently, one case of proarrhythmia caused by ICD lead was also reported, which was cured by lead extraction [8]. Under the circumstances in which VT occurred in our patient, it may be inferred that redundant loop was responsible for VT and syncope in our patient. This is an interesting case implicating abandoned PPM lead as a cause of VT where positional variation of
the loop of abandoned PPM lead resulted in a positional-dependant VT and syncope.

**Conflict of Interests**

The author declared no conflict of interests.

**References**


