Unusual twiddler syndrome: movement ties the knot

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Introduction

The ‘twiddler syndrome’ is a rare condition (incidence reported below 0.1%), which occurs when a patient, either consciously or unconsciously, rotates or “twiddles” the implanted pacemaker or ICD in its pocket, resulting in torsion, dislodgement, and often fracture of the pacing lead [1]. The diagnosis is confirmed by a chest radiograph which reveals a twisted, entangled, and dislodged

pacing lead. The condition, which was first described by Bayliss et al. in 1968, can occur if the subcutaneous tissues are lax, if the pacemaker is untethered in its pocket, or if the size of the pacemaker pocket exceeds that of the device and occurs especially in obese or old patients [2].

Case report

An 82-year-old woman with subcutaneous DDD pacemaker implantation 10 years ago because of third-degree AV block and device replacement 4 years ago presented with dizziness caused by third-degree AV block and malcapture of the ventricular lead. At physical examination, an axial rotation of the pulse generator from side-to-side in the pocket was seen during postural change. Chest radiography showed a normal position of the pulse generator and tangled leads without visible damage

Fig. 1 Normal position of the pulse-generator and tangled leads without visible damage

Fig. 2 Pacemaker pocket revision revealed tangling leads with four insulation defects on the ventricular lead

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(Fig. 1). Interrogation of the device showed 98% sub-threshold ventricular pacing with low impedance and normal atrial lead parameters. Pacemaker pocket revision revealed tangling leads with four insulation defects on the ventricular lead (Fig. 2). After insertion of a new ventricular lead, a new device was sutured in a new subcutaneous pocket. We describe an unusual case of the twiddler syndrome because the patient denied device manipulation, but stated that the device moved frequently from a vertical to a horizontal position in the pocket when changing upper body position.

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Conflicts of interest None.

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