Twiddler’s syndrome in a patient with a single-chamber implantable cardioverter defibrillator

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A 67-year-old, obese, Caucasian female with a history of ischaemic dilated cardiomyopathy and ventricular fibrillation, underwent a single-chamber implantable cardioverter defibrillator (ICD) with a screw, in ventricular lead implantation. Appropriate sensing, pacing, and defibrillation thresholds were obtained at implantation. A chest X-ray after implantation demonstrated a proper lead position. The patient had no history of psychiatric disease. The patient showed-up for a 6-month follow-up visit, having one ICD discharge just 2 days before. The ICD interrogation revealed inappropriate therapy due to sensing problems. During device testing, no ventricular capture was possible, and atrial pacing was achieved at the maximal output. The lead impedance was high (1350 Ω, previously was 590 Ω). A chest X-ray revealed retraction of the lead to the right atrium and its extreme twiddling in the generator pocket (Figure 1A), confirmed intra-operatively (Figure 1B). The lead was damaged with insulation defect at the proximal segment. The lead was safely removed and a new one implanted. The existing ICD was placed in a pocket and sutured tightly to the underlying muscle for stability.

Conflict of interest: none declared.

Figure 1 (A) Chest X ray shows twiddling of the lead in the generator’s pocket; (B) Lead twiddling confirmed intraoperatively.