

Where is the lead? An uncommon twist in a defibrillator Twiddler syndrome

Gdzie jest elektroda? Nietypowy przypadek skręcenia elektrody w zespole Twiddlera

Zainab Raissuni*, Marie Pierre Douchet*, Michel Chauvin*

University Hospitals of Strasbourg, Strasbourg, France

*These authors contributed equally to this work.

A 70-year-old woman had a single-chamber implantable cardioverter-defibrillator (ICD) inserted four years previously for ventricular sustained tachycardia caused by ischaemic heart disease. She was admitted for assessment of grade II dyspnoea and muteness of the ICD. Chest X-ray showed that the generator had been rotated clockwise through almost 180°, and the lead displaced and fully wrapped around the defibrillator (Fig. 1A, B). During device extraction, the generator was mobile within the pocket, and the lead found to be twisted around itself multiple times between the generator and suture sleeve (Fig. 1C). We found also fibrosis connecting the loops of the lead (Fig. 1C, D) and several traces of inappropriate shocks on the pulse generator (Fig. 1E) not felt by the patient. The device was safely removed and a new one was placed in a pocket and sutured tightly to the underlying muscle for stability. The patient denied having manipulated the generator box; the post implantation period was without event during 12 months of follow-up. Twiddler's syndrome is well described in patients with pacemakers, but is unusual in patients with a defibrillator, because this device is larger and usually more difficult to move. The risk of Twiddler's syndrome in patients with ICD is greater in obese, elderly patients who have abundant subcutaneous fat or loose connective tissue. Chest radiographs may allow the clinician to recognise this syndrome before a major fatal event.

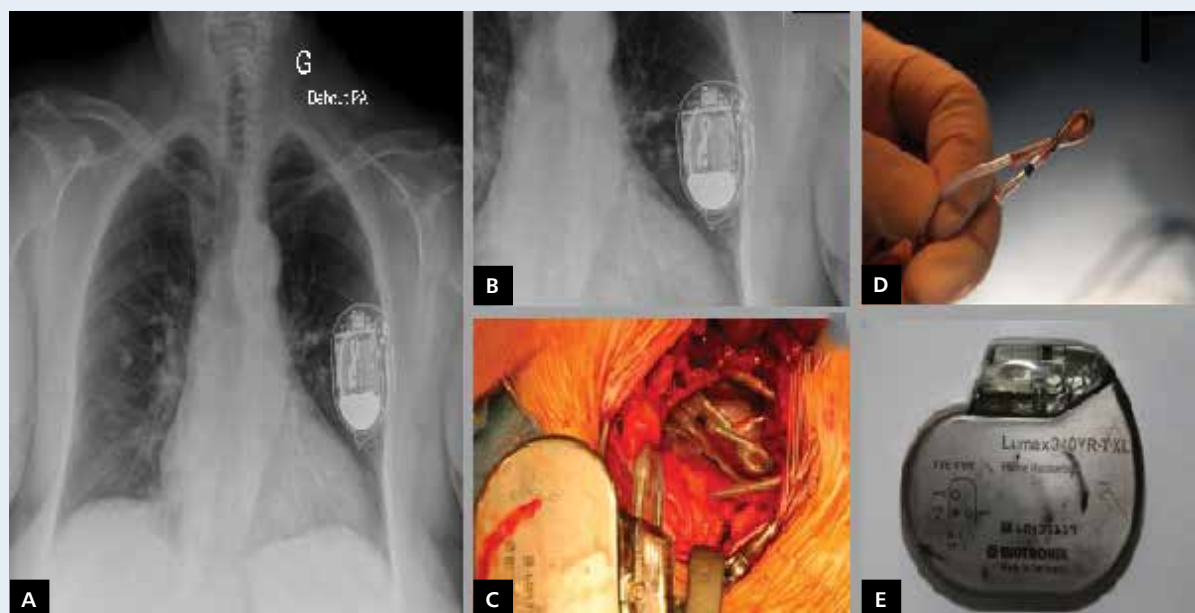


Figure 1. A–E. Twiddler defibrillator syndrome: from the diagnosis to the device extraction

Address for correspondence:

Zainab Raissuni, MD, Pôle d'Activité Médico-Chirurgicale Cardiovasculaire, Service de Cardiologie, Nouvel Hôpital Civil, 1, Place de l'Hôpital, 67000 Strasbourg, France, tel: + 33 3 69 55 08 21, fax: + 33 3 69 55 08 69, e-mail: zainab.raissouni@hotmail.com

Conflict of interest: none declared