## Late migration of abandoned ventricular pacemaker lead following failed traction

Başarısız traksiyon sonrası bırakılan ventriküler pacemaker telinin geç migrasyonu

Remzi Karaoğuz, Timuçin Altın, A. Rüçhan Akar\*

From Departments of Cardiology and \*Cardiovascular Surgery, University of Ankara School of Medicine, Ankara, Turkey

A 62-year-old man was admitted to our institution with skin erosion and perforation of retained pacemaker lead pocket. Five years earlier, he had undergone permanent dual chamber pacemaker implantation because of complete atrioventricular (AV) block in another hospital. Subsequently, the pacemaker pocket had to be revised three times because of skin erosion and perforation. Three years after the original pacemaker implantation, the pacemaker generator had been implanted to the contralateral side. However, percutaneous removal by simple



Figure 1. Lateral chest X-ray demonstrating migration of abandoned and deformed ventricular pacing lead into the pulmonary artery

traction from the implant vein had been attempted and failed for the ventricular lead. Finally it had been decided to abandon the lead.

A chest X-ray on admission revealed deformed ventricular pacing lead tip located at the right ventricular apex, but the body of the lead migrated into the pulmonary artery (Fig. 1). Two-dimensional transthoracic echocardiography confirmed migration of the lead looping at the level of pulmonary artery bifurcation (Fig. 2). At inspection during surgery tricuspid chordal disrupti-



Figure 2. Two-dimensional transthoracic echocardiography parasternal view: the position of the electrode is indicated by arrow

on and insulator breakage at the level of right atrium were confirmed. Lead extraction was achieved under complete cardiopulmonary bypass and beating heart. Chordal disruption caused by ventricular lead was repaired. The postoperative course was uneventful. Because of entrapment of the distal electrode tip at the right ventricular apex, previous transvenous manual traction of the lead resulted in permanent conductor material stretching and insulator material breakage (Fig. 3).



Figure 3. The extracted lead illustrating insulator material breakage (arrow) and conductor material stretching