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Pacemaker Pocket Infection with Generator Migration and Extrusion from the Left Mammary Areola

Bataryanın Kayması ve Sol Meme Areolasından Dışarı Çıkması ile Seyreden Kalp Pili Cebi Enfeksiyonu

CASE IMAGE
OLGU GÖRÜNTÜSÜ

A 70-year-old woman had undergone implantation of a cardiac resynchronization therapy–defibrillator in 2017 for non-ischemic dilated cardiomyopathy (left ventricular ejection fraction 25% and left bundle branch block) and generator replacement in 2023. She presented with progressive pain and drainage at the left mammary areolar region for one month, followed by skin breakdown and extrusion of the device from the areolar region. She had been hospitalized for antibiotic therapy at a private hospital two weeks earlier. Device interrogation revealed normal sensing and pacing parameters, with normal pacing impedances, and device therapies had been set to OFF during the previous hospitalization. Chest X-ray on admission demonstrated a stretched and dislocated atrial lead, while other leads were in place; the generator was located at the level of the left mammary region (Figure 1). Panels B and C show extrusion of the generator through the left mammary areolar region with adherent debris and inflammation. Blood cultures grew Pseudomonas aeruginosa (there were no risk factors other than recent hospitalization). The findings were consistent with cardiac implantable electronic device (CIED) infection complicated by pocket erosion and extrusion of the generator from an unexpected location. The device system was successfully removed using a locking stylet (Lead Locking Device® EZ, Spectranetics Corp, Colorado, USA) and a 13-French mechanical dilator sheath (Tight Rail, Spectranetics Corp, Colorado, USA) without periprocedural complication, and targeted intravenous antibiotic therapy was initiated. The areolar region was primarily sutured (Figure 1). The patient was consulted for reconstruction of the areolar region; however, she refused reconstructive surgery. Breast ultrasonography revealed no damage to the breast tissue or glandular structures. The CIED battery should be carefully secured and fixed to the pectoral muscular tissue, particularly in women with a large amount of subcutaneous fatty tissue. During the replacement procedure, the new CIED battery should be implanted within the previous capsule, and the capsule should be securely closed without disruption of its integrity. If capsule formation has not occurred despite an adequate time interval at the time of battery replacement, operators should create a new, deeper subfascial or submuscular pocket to ensure safe placement of the new battery. Written informed consent was obtained from the patient for publication of this article and the accompanying images.

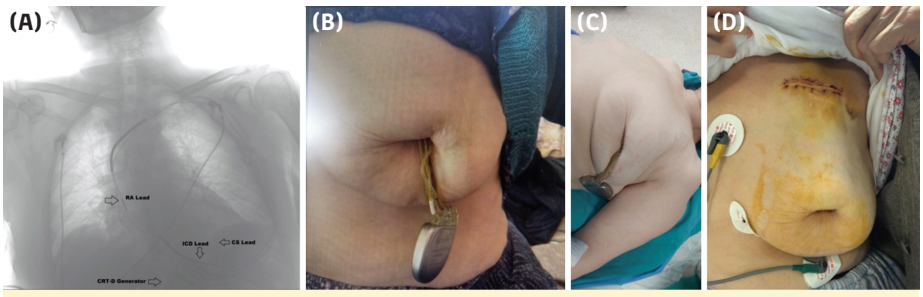


Figure 1. Chest X-ray on admission demonstrated a stretched and dislocated atrial lead; the other leads were in place, and the generator was located at the level of the left mammary (A). Extrusion of the generator through the left mammary areolar region with adherent debris and inflammation (B and C). The left mammary areolar region was primarily sutured (D).

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