A Trick for a Dislodged Atrial Pacemaker Lead

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Cardiac pacemakers emerged more than 60 years ago and are now one of the most well established artificial organs. Pacemaker-related complications are acceptable and they can mostly be resolved by minor interventions. The dislodgment of a pacemaker lead is one of the common complications and its incidence is estimated range from around 1-3% (1). An active fixation lead is usually applied to avoid this complication, and a J-shaped passive fixation lead is sometimes utilized, especially for atrial pacing to prevent other complications, such as perforation or cardiac tamponade. Aizawa Y et al. experienced the dislodgement of a J-shaped passive fixation atrial lead in a 95-year-old female with a high-degree of atrio-ventricular block (2). Although physiological DDD pacing is normally recommended in such cases to achieve a better hemodynamic effect, the performance of repositioning surgery may increase the risk of a device-related infection (3, 4). Yoshida N (5) and Ekizler FA (6) have reported percutaneous repositioning methods using a deflectable catheter for a dislodged J-shaped atrial lead to avoid any subsequent infectious complications and to offer a more tolerable procedure for the elderly. These techniques are applicable only for J-shaped passive fixation atrial leads. However, a dislodged lead was observed to spontaneously reposition itself into the right atrial appendage, and the atrial sensing and pacing capability was thereby restored in the one patient reported by Aizawa Y (2). This surprising phenomenon is extremely rare, and its mechanism is unknown. Even in patients in whom an early invasive reoperation cannot be performed because of either the patient’s refusal or frailty, this phenomenon means that there is hope in such cases for a spontaneous resolution of the problem.

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References


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