Long-term Follow-up of Selectsecure Lead at Atrial and Ventricular Position

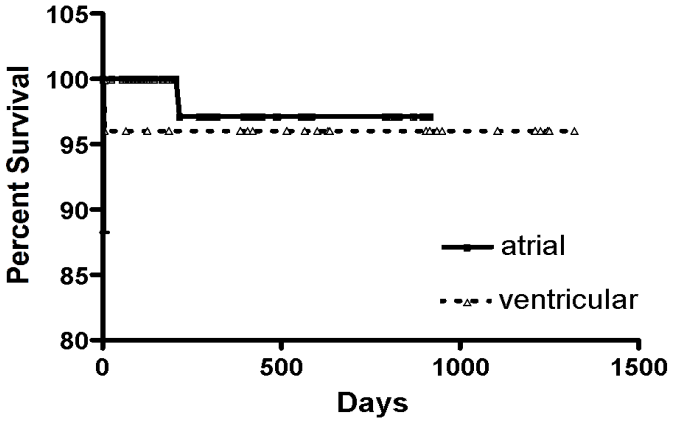
Shimon Rosenheck, Alexey Weiss, Zehava Sharon

Heart Institute, Arrhythmia Therapy Center, Hadassah Hebrew University Medical Center, Jerusalem, Israel

Background: During 2005 a 4 French lumen less silicon coated pacing lead (Medtronic Selectsecure 3830) was clinically released. No data on long-term survival of this lead is available. The purpose of this study was to evaluate the long-term survival of Selectsecure lead at atrial and ventricular position.

Methods: Between November 2005 and November 2008, 761 patients had pacemaker implantation at Hadassah Hebrew University Medical Center, and 81 received Selectsecure lead: 58 at atrial position, 24 at ventricular position and 2 at both atrial and ventricular position. The atrial site was usually the lateral wall, except in one patient the posterior septum that was the only site with acceptable pacing parameters. The ventricular site was usually the outflow septum except in two patients when the apex was selected. The implant included a steerable guiding catheter insertion, location of the tip at the desired location (0.5-3 cm apart) and fixation of the lead by 2.5 clockwise rotations of the whole lead.

Results: During 499±352 days there was only one atrial and one ventricular dislocation. The figure presents the survival curve at both sites.



p=0.6410

The curves are comparable and even better than any other active fixation leads at both positions. The lead can be located at any site in the right atrium and ventricle.

Conclusions: The long-term performance of Selectsecure lead is excellent and comparable or superior to other previous active fixation leads. The lead can be placed at any atrial or ventricular site. The small size may prevent future complications.