

Initial Experience With an Autocapture Pacemaker System

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Abstract

Introduction: Autocapture management aims to extend pacemaker longevity without compromising on patient safety by automatically monitoring the pacing threshold and adjusting the pacemaker output for consistent capture. This paper describes our initial experience with the Pacesetter Regency pacemaker with autocapture management. **Materials and Methods:** Nineteen patients were implanted with single chamber pacemakers with autocapture management. Autocapture was programmed "ON" the day after implantation if Evoked Response (ER) amplitude was at least 2.8 mV. The patients were followed up at 2 weeks, 2 months and 6 months. At each visit, pacing threshold and lead impedance were measured. Autocapture was turned "ON" during follow-up if it had not been done previously. **Results:** In 16 out of 19 patients, autocapture could be turned "ON" the day after implantation. One patient had an ER signal that was less than 2.8 mV and 2 patients were in fast atrial fibrillation of more than 120 beats per minute which precluded ER signal testing. These patients could not have autocapture programmed "ON". **Conclusion:** The benefits of autocapture management can only be realised if an ER signal of at least 2.8 mV is obtained. This requires intraoperative testing of the ER signal. Since there is no commercially available pacing system analyser presently that can measure this, modification of the standard implantation procedure with some prolongation of procedure time is needed.

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