

INTRA-PATIENT COMPARISON OF IMPLANTABLE CARDIAC MONITOR AND PERMANENT PACEMAKER DIAGNOSTIC PERFORMANCE

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ABSTRACT

We studied 19 patients with both an ICM (BioMonitor 2 Biotronik) and a DDD-PM implanted for standard indications. ICM-detected arrhythmic events were compared with those detected by intracavitary EGM of the PM.

ICM diagnosed some false positive (FP) asystole and bradycardia events, all related to the presence of recurrent premature ventricular complexes. ICM correctly detected 30 high ventricular rate (HVR) events, but missed 4 HVR episodes, while it showed 14 FP HVR events (sensitivity 88%; positive predictive 68%). The ICM diagnostic sensitivity for atrial fibrillation was 96% with a positive predictive value of 82%.

Our intra-patient comparison confirms that ICM is an effective tool for cardiac arrhythmia detection. Despite the presence of some FP episodes, ICM can be helpful to have a complete arrhythmic characterization of the patient, useful to guide the therapeutic strategy.