

Abstract

Background: The present study was intended to be a pacemaker registry for the Critical Care Medicine Department at Cairo University. It is a continuation for a series of similar studies that were conducted in our department

Methods: Observational, retrospective and single center study based on data incoming from the follow up files of the patients at the pacemaker follow up clinic and the main archiving system and computerized system of the Critical care department, Cairo University. In the period from January 2007 till December 2013. Demographic, clinical, etiological and electrocardiographic (ECG) variables were collected before pacemaker implantation. Type of intervention, electrical measurement at implantation, as well as early complications (before hospital discharge) were also recorded and complication or malfunction detected later on during follow up.

Results: During this period 1307 interventions have been reported: 961 first implants (73.5%) and 346 replacements (26.4%). The total number of patients is lower than interventions because some of them were included as first implants and as replacements after years. In first implant the average age, clinical signs, ECG disorders and pacing modes were described. Data collected in device replacement interventions were pacing modes and cause for replacement. From 2007 to 2013 we have seen a decline in VVI(R) pacing mode in favor to DDD(R) mode. AAI(R) disappeared and VDD(R) modes have remained invariable. Also there was marked increase in biventricular pacing in the last seven years. Finally, we show data on any detected complications or malfunction.

Conclusions: The permanent pacemaker implantation rate has significantly increased over the years reflecting the continuously increasing referral to the Critical Care Department at Cairo University as one of the most important centers in permanent pacemakers implantation and follow up in Egypt.

Key words: *pacemaker, registration, critical care department.*