**COMPLICATIONS RELATED TO CARDIAC RHYTHM MANAGEMENT DEVICES (CRMD’S) THERAPY AND THEIR FINANCIAL IMPLICATION:**

**A PROSPECTIVE SINGLE-CENTER TWO YEARS SURVEY**

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*Objective:* The objective of this study is to estimate the complications rates relate to CRMD¢s implantations and moreover to estimate the additional hospital stay and cost which is associated with the management of these complications.

*Background*: Cardiac rhythm management devices (CRMD¢s) have proven their clinical effectiveness for patients with heart rhythm disorders. Little is known about safety and complication rates during implantations of these devices.

*Methods*: During a period of one year in total 464 consecutive recipients were subjected to CRMD¢s implantation and furthermore were recruited and followed up for 2 years. Finally, data were analyzed for 398 patients who completed the two years follow up, resulting in a total of 796 patient-years.

*Results:* From the 201 patients with initial pacemaker (PM) implantations, 6 (2,99 %) patients had seven complications (5 patients had leads dislodgement, 1 of them twice) and 1 patient developed pocket infection, while from the 117 PMs replacements 1 (0,85 %) patient developed a complication (pocket erosion). 2 patients with complication (1 with an initial PM and 1 with replacement) died before they complete the follow up from reasons unrelated to cardiac causes. There weren’t any complications neither in initial implantations (69 patients) nor in replacements (11 patients) of implantable cardioverter defibrillator (ICD). The average prolongation of the hospital stay was 7 days ranging from 1 to 35 days, resulting in 17.411 ¤ of total additional direct hospital cost.

*Conclusion*: This study provides relatively low rates of complications in patients subjected to CRMDs implantation, initial or replacement, in our center compared with others studies. The additional hospitalization days and cost attributed to these complications depends on the nature of complication.