A Retrospective Study Of The Pacing Activity In A University Hospital, Uk

Abstract

Objectives: To analyse pacemaker implantations; its indications, type of the pacing and devise-related complications

Methods and data collection: details of the pacing procedures are routinely entered into the pacing module of a medical software package called “Datacam”. A period of 30 months was used to minimise errors due to sample size. The data mounted to 527 records

For each record, additional flags were added from the pacing code details to indicate separately whether the pacemaker concerned was single or dual chamber, and rate responsive or not.

Some details that might be relevant to procedure complications were contained elsewhere within the database outside the pacing module—comments and notes entered by either the technician or doctor at the time of the procedure. The data was extracted with the intention of matching the records to those in pacing to complete the overall clinical picture.

Analysis: All data was extracted to Microsoft Excel to allow charting, and analysis using pivot tables and charts. Analysis consisted primarily of frequencies of particular procedures and their related measures

Results: the level of activity showed some occasional peaks, but it seems that these peaks followed or preceded months of less activity.

It was clear that more pacing procedures were performed for men at mid age group and the trend continued until mid eighties, after which the frequency were similar in both gender. The pacemaker implant and pacemaker replacement dominated the pacing activity. The most common indication was syncope and most common complication was lead replacement/repositioning. It also showed an increasing use of rate-responsive implants which reflects growing recommendations as it provides a much better quality of life

Conclusion: Upon the introduction of pacemakers several decades ago, management options were limited. However, the repertoire of options have and will increase as technological advances are made; as evidence-based medicine identifies benefits of pacing for a wider population, indications are extended, leading to resource implications.