Management of atrial fibrillation following cardiac surgery: Observational study and development of a standardized protocol

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Background: Postoperative atrial fibrillation (POAF) is the most common complication occurring after cardiac surgery. Guidelines for the management of this complication are scarce, often resulting in differences in treatment strategy use among patients.

Objective: to evaluate the management of POAF in a cardiac surgery department, characterize the extent of its variability and develop a standardized protocol.

Methods: observational retrospective study with data from patients who underwent cardiac surgeries with subsequent POAF between 1 January 2017 and 1 June 2018. The primary outcome was the difference in the proportions of patients whose first POAF episodes were treated with a rate control (RaC) strategy, a rhythm control (RhC) strategy and both among different hospital units. Secondary outcomes included the mean duration of POAF episodes, POAF recurrences, and the management of anticoagulation.

Results: Data from 97 patients were included in this study. The POAF management strategy differed significantly among the three types of hospital units (p = 0.001). Considering all POAF episodes (including all recurrences), 83 from the 97 patients (85.6%) received amiodarone as part of the RhC strategy. Anticoagulation was used in 58 (59.8%) patients and was suboptimal according to the study criteria in 29.5% of the patients included. Based on these results, a hospital working group developed a standardized protocol for POAF management.

Conclusions and Relevance: POAF management was heterogeneous at our institution. This paper highlights the need for clear practice guidelines based on large prospective studies to provide care according to best practices.

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