ABSTRACTS FOR ORAL PRESENTATION, SESSION 3, HRC 2014

Allied professionals

ELECTRICAL CARDIOVERSION OF ATRIAL FIBRILLATION WITH THE NOVEL ORAL ANTICOAGULANTS: A SINGLE CENTRE UK-BASED REGISTRY EXPERIENCE

A. Arujuna, G. Ooues, A. Abbas, P. Sivanandarajah, B. Sidhu, P. Forsey, M. Banks, R. Huggett, Craig Barr, and J. Martins
Russell’s Hall Hospital, Birmingham

Background: Oral anticoagulation is mandatory in patients undergoing electrical cardioversion (ECV) for atrial fibrillation (AF) to help negate the potential stroke risk. Independent prospective data concerning safety, procedural outcome and impact on procedural waiting times using novel oral anticoagulant (NOAC) treatment in ECV is limited.

Methods: Analysis of all consecutive patients undergoing electrical cardioversion (ECV) between January 2013 and March 2014 was performed. Data on baseline demographics, waiting times for cardioversion, cancellations, procedural success and complications were collected.

Results: A total of 229 procedures were performed during this period. 122 were anticoagulated with a NOAC (Rivaroxaban 120, Dabigatran 2, and mean age 63 ± 12, female 31%) and 107 with Warfarin (mean age 67 ± 10, female 41%). The mean CHA2DS2-Vasc score was 2.4 ± 1.5 versus 2.7 ± 1.4 respectively for NOAC vs Warfarin (p = 0.22). Similar corresponding mean HAS-BLED scores were observed in both groups 1.5 ± 0.8 and 1.6 ± 0.7 for NOAC vs Warfarin (p = 0.13). No major bleeding episodes, stroke, thromboembolic events or death occurred in either group. There were significantly less cancellations in the Rivaroxaban group, 1 patient (0.8%) due to dose omission of Rivaroxaban versus 11 patients (10.3%) in the warfarin group due to sub-therapeutic INRs on the day of the procedure (p = 0.004). Shorter mean procedural waiting time duration was observed in the NOAC group in comparison to warfarin group (mean ± SD = 67 ± 49 versus 95 ± 66 days, p = 0.006). A trend towards greater procedural success was observed in the NOAC group 94% (115/122) compared to Warfarin, 79% (85/107 p = 0.001).

Conclusions: This single centre experience of cardioversion with the NOAC’s demonstrates that the procedure is safe and effective. Cardioversion is performed in a more timely fashion, with very few cancellations and shorter waiting time, which may impact upon a greater long-term maintenance of sinus rhythm.