Impact of a Multidisciplinary Management Program on Recurrent Hospitalization and Mortality in Older Individuals With Chronic Atrial Fibrillation: A Multicentre Randomized Trial

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Background: We tested the hypothesis that an Atrial Fibrillation (AF)-specific, nurse-led, multidisciplinary management program would significantly improve the primary endpoint of death or recurrent unplanned hospitalization in older individuals with chronic AF.

Methods: SAFETY (Standard versus Atrial Fibrillation spEcific managemenT studY) was a multicentre, randomized trial with blinded endpoint acquisition and adjudication. 335 eligible subjects were randomized on a 1:1 basis with stratification for intended rate versus rhythm control to the Standard Management (n=167) or SAFETY Intervention (n=168) group. The latter were exposed to a structured, nurse-led, multidisciplinary care program specifically designed to improve AF-specific management and outcomes (including prevention of thrombo-embolic events and progressive cardiac dysfunction). The primary endpoint was measured as both a time-dependent, discrete event (event-free survival) and a continuous variable (days out-of-hospital alive). Key secondary endpoints were rate of hospitalization and days of stay with a specific focus on unplanned, cardiovascular-related and AF-related hospital activity. A full health economic analysis of outcomes is also planned.

Results: Mean age of the study cohort was 72±11 years, 48% were female and two thirds were being managed according to rate control. The two groups were well matched according to demographic and clinical profile. Mean follow-up of Standard Management and SAFETY Intervention subjects was 865±286 days and 888±295 days, respectively, with 49 deaths (14.6%) and 1411 hospitalizations comprising 7203 days of hospital stay (cost $AU12.6 million) documented. Overall, there were 987 (70.0%) emergency hospitalizations (including 1 day admissions) and 5530 (76.8%) days of hospital stay. There were also a total of 574 (40.7%) hospitalizations attributable to a primary cardiovascular diagnosis, comprising 2424 (33.7%) days of hospital stay. Endpoint analyses will be presented at the meeting.

Conclusions: This is the first trial of an out-reach program designed to reduce re-hospitalization and prolong survival in a representative cohort of older individuals with chronic AF and typically complex clinical presentations.

Disclosure:

S. Stewart: None. J. Ball: None. Y.K. Chan: None. M. Carrington: None.