

CONFERENCE ABSTRACT

Integrated Care Management in Atrial Fibrillation is associated with improved outcomes – a systematic review and meta-analysis

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Introduction: Atrial fibrillation (AF) is a global epidemic and a major public health burden with an estimated 33.5 million patients globally in 2010, and evidence suggests that these figures are continuing to rise. AF contributes to a significant burden on the health care system mainly due to AF hospitalisations with an annual cost of \$3.46 billion in Australia alone. AF management is highly fragmented and integrated care management has been recognised as a way to reorganise AF treatment.

Theory/methods: A systematic review of Pubmed, Embase and CINAHL databases until February, 2016 was undertaken. Studies were deemed suitable for inclusion if they incorporated integrated multidisciplinary care, focussed on the holistic management of AF with at least a six month follow up period. Studies were excluded if they focussed on one aspect of AF management (e.g. anticoagulation) or were not published in English.

Results: Three studies with a total of 1383 participants were identified for inclusion. Mean age was 67 ± 15 years and 50% were female.

Two studies reported on all-cause mortality, odds ratio (95% confidence interval): 0.51 (0.32-0.80), p=0.003. Three studies reported on cardiovascular hospitalizations: 0.58 (0.44-0.77), p=0.0002; two studies reported on AF related hospitalisations: 0.82 (0.56-1.19), p=0.29; and three studies reported on cerebrovascular events: 1.00 (0.48-2.09), p=1.00.

Discussion: A crucial aspect of integrated care in AF is the management of AF risk factors like hypertension, diabetes mellitus, obesity, sleep apnoea, smoking and alcohol intake, as these are established to result in the substrate predisposing to the development and progression of AF. From the studies included in our analysis it is apparent that AF risk factor management is often not integrated in AF practice. In prior research from our group we demonstrated that aggressive risk factor management is associated with a significant reduction in AF symptom burden and significant improvement of AF free survival.

Conclusion: Outcomes in patients with AF have demonstrated significant improvements with the use of the integrated care approach in AF management.

Lessons learned: Integrated Care in AF should include: a comprehensive treatment approach including AF risk factor management steered by Evidence Based Guidelines; a patient-centred

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approach with active patient involvement in the care process; well prepared, proactive, multidisciplinary treatment teams; and dedicated smart software to guide decision making in the treatment team.

Limitations: Aside from one trial, all studies have been limited to single centre sites and not yet replicated in larger randomised controlled studies. Future studies need to address the optimal methods, settings and components of delivering integrated care to the AF population.

Suggestions for future research: Therefore we propose to integrate the evidence in AF specific and risk factor management to extend the Integrated Care approach to AF management. We will perform a multi-centre, randomised controlled trial to evaluate this approach involving sites in Australia and New-Zealand.

Keywords: atrial fibrillation; integrated management approach; multidisciplinary team; active patient participation; improved outcomes
