

Scientific Research – Cardiovascular

7 REVIEW OF TIME IN THERAPEUTIC RANGE ON WARFARIN FOR NON-VALVULAR ATRIAL FIBRILLATION (NVAF) IN ADMISSIONS TO A GERIATRIC MEDICINE WARD

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Introduction: Approximately 10% of elderly patients are diagnosed with Atrial fibrillation (AF) (Go AS *et al*, *JAMA*, 2001, 285(18):2370–5). They are five times more likely to develop stroke or TIA (Damani RH *et al*, *South Med J*. 2016, 109(11):721–729). Traditionally, Warfarin has been used to reduce the incidence of Stroke (DC Anderson *et al*, *Circulation* 1991, 84:527–539) and more recently direct oral anticoagulants (DOAC) have been used. DOACs have the advantage of no monitoring or loading regime, whilst having comparable stroke reduction rates. There is an increasing number of post-trial

data confirming DOACs are safe in the elderly. UK national institute for clinical excellence (NICE) guidance advises the following criteria to switch to a DOAC: 1) If the patient's time in therapeutic range (TTR) is <65% in the preceding 6 months. 2) If they have more than 2 readings above 5, 1 above 8 or 2 below 1.5. We wanted to review the TTR for elderly patients on warfarin at Southend University Hospital.

Methods: During a 6 month period, we reviewed the TTR for all patients admitted to an elderly medicine ward who were on warfarin for AF. TTR for the 6 months preceding admission was calculated by Rosendaal method.

Results: We identified 42 patients on warfarin. The mean age was 84 years old. 21 (50%) patients met the NICE standard of 65% TTR, with a range of 7–64%. Of the 21 patients, 15 (71%) had an unacceptable degree of variation in INR with more than 2 results either less than 1.5 or more than 5. Only 6 patients (14%) met both NICE criteria.

Conclusions: Our study demonstrates the significant difficulty in maintaining elderly patients within Warfarin's narrow therapeutic range. Reasons for this include poor compliance, difficulty with INR monitoring, poor diet and polypharmacy. We suggest Geriatricians adopt a proactive approach in reviewing the appropriateness of warfarin and to offer a DOAC as an alternative in elderly patients.