Efficacy of stroke prevention in atrial fibrillation: a way of improvement

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Aims

Improve stroke prevention in atrial fibrillation (AF) patients.

Methods

AF patients on warfarin who visited Bradford Anticoagulation Clinic between January and December 2013 were listed randomly, then the first 200 patients were selected. Time in therapeutic range (TTR) over that year was calculated for each patient using the Rosendaal method.

Exclusion criteria:

1. Patients recently started on warfarin (within 6 weeks).
2. Patients with a target international normalised ratio (INR) range other than 2.0–3.0.
3. Patients with a single visit to the clinic in the 12-month period.

Separately, AF patients were identified amongst all stroke cases that presented to Bradford Royal Infirmary (BRI) in 2013 to point out their INR.

Results

AF patients accounted for 50% of all warfarin clinic attendants. Around 1,000 AF patients visited the clinic more than 8,700 times, using transportation in 1,700 occasions. TTR varied between 100% to less than one percent, averaging at 65%. Almost half the patients had suboptimal anticoagulation therapy (defined as TTR less than 65%). Patients visiting the warfarin clinic more frequently seemed to have poorer INR control than the less frequently visiting groups, with average TTRs of 50% and 68% for patients visiting more than 10 times a year and fewer than five, respectively.

With regards to stroke cases, 14 AF patients presented to BRI with acute stroke in 2013; 13 of them had ischaemic events. Six patients (46%) had their warfarin stopped prior to stroke, and five (38%) had an out-of-range INR at the time of presentation.

At the warfarin clinic, there was no established way to consider switching patients to direct oral anticoagulants (DOACs), even if inadequate TTR remained in spite of frequent clinic visits.

A new pathway was implemented in Bradford to consider switching patients to DOACs through primary care physicians.

Conclusions

AF is a major cause of stroke, and proper anticoagulation should be achieved by either warfarin or a DOAC. Patients already on warfarin with poor INR control should be considered for an alternative option after a thorough consultation. NHS hospitals should have an idea about efficacy of INR control at their warfarin clinics and establish a stepwise process for DOAC consideration.

Conflict of interest statement

We have no conflict of interests. ■

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