The new NICE AF guideline and NOACs: a response

Campbell Cowan, Matthew Fay, Neal Maskrey

Authors

Campbell Cowan
Honorary Consultant Cardiologist, and Chair of Guideline Development Group

Leeds General Infirmary, Great George Street, Leeds LS1 3EX

Matthew Fay
GP Principal and Member of the Guideline Development Group.

Westcliffe Medical Practice, Westcliffe Road, Shipley BD18 3EE

Neal Maskrey
Consultant Clinical Adviser, Medicines and Prescribing Centre, NICE, and Honorary Professor of Evidence-informed Decision Making, Keele University

Keele University, Keele, Staffordshire ST5 5BG

Correspondence to:
Dr C Cowan
(campbell.cowan@nhs.net)

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We share Professor Brady *et al.*'s opinion[1] that stroke prevention is the single greatest priority in the management of patients with atrial fibrillation (AF). It is reasonable to say that highlighting the inappropriately low levels of anticoagulant uptake as a major public health issue and seeking to improve anticoagulant uptake nationwide was uppermost in the minds of the Guideline Development Group (GDG) members.

We believe that the new guideline[2] will be a major advance in stroke prevention in AF. We would suggest that Professor Brady and colleagues, in their focus on non-vitamin K oral anticoagulants (NOACs), have overlooked the importance of a number of crucial aspects of the guideline.

- It represents a paradigm change in stroke management. The GDG were very keen to promote the concept that, whereas previously risk assessment was undertaken to define patients at high risk of stroke requiring anticoagulation, under the new guideline anticoagulation has become the norm for all but the lowest-risk patients.
- It represents a considerable simplification in the approach to stroke prevention. The essential information on stroke prevention can be summarised in a single, relatively simple algorithm (**figure 1**).[3]
- It has removed the confounding issue of aspirin. In many patients, particularly the elderly, aspirin has been a barrier to more effective stroke prevention.[4]
- It promotes, for the first time, consideration of quality of anticoagulation among patients receiving vitamin K antagonists with specific recommendations for review of time in therapeutic range (TTR) and for consideration of alternative therapies, including NOACs, for patients with an inadequate TTR.
- It promotes annual review of stroke and bleeding risk in all patients with AF.
- It promotes equality of access to vitamin K antagonists and NOACs.

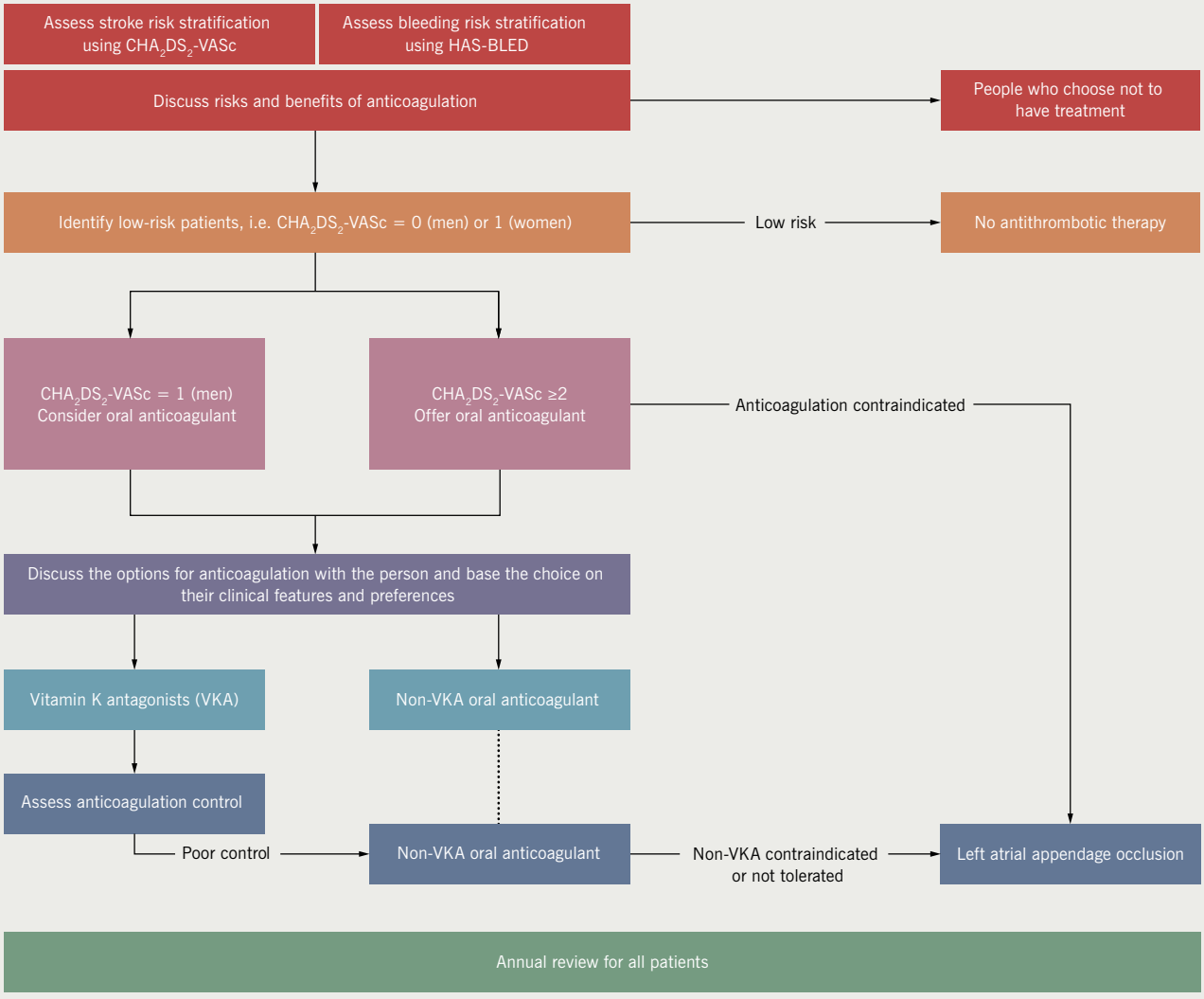
Professor Brady and colleagues have focused on the issue of NOACs. It is a principle of all National Institute for Health and Care Excellence (NICE) guidelines, and one understood by all GDG members, that they should not duplicate or seek to re-interpret existing NICE appraisals. In this case, a single technology appraisal on dabigatran[5] had been published a matter of months before the commencement of work on the AF guideline and appraisals on rivaroxaban[6] and apixaban[7] were, at that time, ongoing. It was always the case that these individual technology appraisals would be incorporated directly into the new guideline without reassessment and without revision.

The brief of the GDG, therefore, was integration of the existing technology appraisals into the new guideline, with the aim of evidence-based, personalised decisions for stroke prevention. This is fundamentally different from didactic statements advocating an overly simplistic change in clinical practice at the level of the population. Professor Brady *et al.* have focused on the recent Ruff *et al.* meta analysis.[8] As the accompanying editorial pointed out, the individual NOACs are not the same, nor are the trials homogeneous and "ultimately the drug could be fitted to the patient, or the patient to the drug, dependent on a focus on safety or efficacy, and on other patient factors…".[9]

The GDG were cognisant of problems nationally in relation to the use of NOACs, and the fact that a number of commissioning groups had constructed local algorithms, at variance with the NICE technology appraisals, limiting their use. With this in mind, the GDG made the clear statement and recommendation: "Anticoagulation may be with apixaban, dabigatran etexilate, rivaroxaban or a vitamin K antagonist. Discuss the options for anticoagulation with the person and base the choice on their clinical features and preferences".[2]

Equality of access to NOACs is made equally clear in the stroke prevention algorithm (**figure 1**). The GDG hoped that the promotion of equality of access would signal an end to local commissioning pathways, where these are at variance with existing

Figure 1. Simple algorithm for stroke prevention in people with non-valvular atrial fibrillation (AF)[3]



NICE guidance in requiring patients to show poor control on a vitamin K antagonist before a NOAC can be considered.

NICE has been particularly concerned about the variable uptake of NOACs geographically following publication of the technology appraisals on dabigatran, rivaroxaban and apixaban, and the first task of the NICE Implementation Collaborative (NIC) was to encourage implementation of the existing appraisals. NICE supported the Academy of Royal Medical Colleges to produce a consensus statement to support the guideline,[10] and produced its first patient decision aid, relating to anticoagulation and stroke prevention.[11] The aid, published alongside the guidance, helps both patients and their doctors to assess the risk and benefits of commencing anticoagulation. The aid additionally considers the relative merits of a vitamin K antagonist or a NOAC, providing a checklist for patients to consider the relative merits of each, including such factors as monitoring, convenience, bleeding risk, drug interactions, side effects and reversibility. Patients are encouraged to assess the importance of individual factors to assist in reaching a decision as to the type of agent they would prefer.

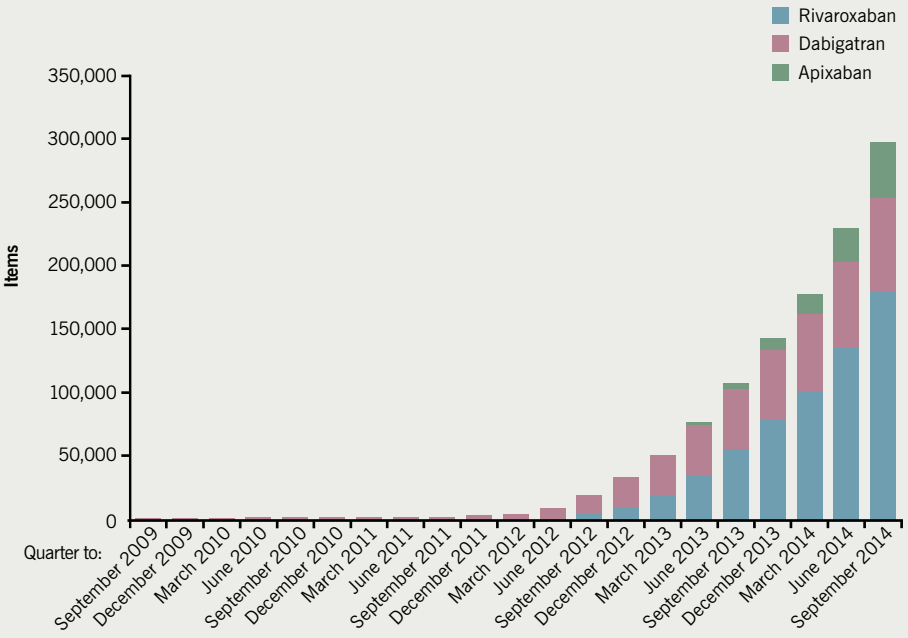
There is, of course, a limit to the extent of the information that can be conveyed in this manner. In some cases, healthcare professionals may need to help the patient to understand the issues; in others, health professionals may wish to expand on the information in the decision aid, for example considering the more specific risks of intracranial haemorrhage or gastrointestinal bleeding, as discussed in the Ruff *et al.* meta-analysis.[8] Obviously, there will also be patients

where one or other agent is specifically indicated on clinical grounds, for example in cases of renal impairment. Nonetheless, within this constraint, the emphasis of the patient decision aid, and, indeed, the emphasis of the AF guideline as a whole, is on equality of access, shared decision-making and patient choice.

NICE, with others, is facilitating the many discussions required to review and revise complex existing local arrangements for stroke prevention in people with AF. Its Implementation Consultants, Regional Technical Advisers and Medicines and Prescribing Centre Associates are all active in such conversations, and it is encouraging to see a number of Academic Health Science Networks prioritising this topic for local implementation.

While there is still work to do, early results are encouraging. The NICE guideline was published in June 2014. **Figure 2** shows the latest available data for primary care prescribing in England for the three available NOACs for all indications, including AF.

Figure 2. Trends in prescribing of new oral anticoagulants (NOACs) on NHS prescriptions in England



Conclusion

In conclusion, the GDG shared Professor Brady *et al.*'s concern that stroke prevention should be paramount in AF management. We would contend that the new guideline is a major step forward in stroke prevention and changes the paradigm for AF management. The new guideline emphasises the role of NOACs and promotes equality of access with vitamin K antagonists. Early data indicate implementation support is proving beneficial. Above all, the new guideline promotes patient education, patient empowerment and informed patient choice in anticoagulant selection

Conflict of interest

MF is an ad hoc advisor to Oberoi Consulting. His practice partnership has received funding from Abbott, Bayer, Boehringer-Ingelheim, Bristol Myers Squibb, Dawn, INRStar, Medtronic, Oberoi Consulting, Pfizer, Roche, Sanofi-Aventis, and Servier. CC and NM: none declared.

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