



British Hypertension Society Statement on the Publication of the NICE Guidelines on Atrial Fibrillation

June 2014

The National Clinical Guideline Centre has published its clinical guideline on the management of atrial fibrillation, commissioned by the National Institute for Health and Clinical Excellence (NICE). The British Hypertension Society has been a stakeholder in the development of this guideline, and our representatives have been involved in commenting on its progress.

Our society welcomes this comprehensive and erudite guideline on atrial fibrillation. We congratulate the guideline development group, led by Dr Campbell Cowan, on the excellent work they have done in producing this landmark document.

Hypertension is the most important risk factor for non-valvular atrial fibrillation. In the recently published trials comparing each of the non-vitamin K-antagonist oral anticoagulants (NOACs) with warfarin, 80-90% of patients in these trials had a history of hypertension. Hypertension is recognised as an independent risk factor for stroke in patients with atrial fibrillation, and is a key component of both the CHADS₂ scoring system and the more recent CHA₂DS₂-VASc scoring system for assessment of stroke risk in patients with atrial fibrillation.

We are pleased that the NICE guideline recommends routine use of the CHA₂DS₂-VASc scoring system for risk assessment in patients with atrial fibrillation (AF). We emphasise that all male patients with hypertension and AF will have a CHA₂DS₂-VASc of at least 1, and *should be considered for anticoagulation* (NICE recommendation 12, page 50), and furthermore all female patients with AF and hypertension will have a CHA₂DS₂-VASc of at least 2, and *should be offered anticoagulation* (NICE recommendation 13, page 50). Our own advice would be that anticoagulation should be "*strongly recommended*" rather than simply considered or offered in these patients: all hypertensive patients with AF have an estimated 10-year risk of stroke of > 10%, and in some instances the 10-year stroke risk may be 40-50% or higher (depending on the presence of additional risk factors).

The NICE guideline refers to the individual studies comparing NOACs with warfarin, but fails to mention the recent meta-analysis of these studies published recently in the *Lancet*. This meta-analysis, based on data from over 70,000 patients, demonstrated conclusively that the NOACs offer major clinical advantages over warfarin for stroke prevention in non-valvular AF. In particular, patients treated with NOACs had a 19% lower risk of stroke or systemic embolism, a 10% reduction in all-cause mortality, and a staggering 52% reduction in the risk of intracranial haemorrhage compared to warfarin. Although there has hitherto been concern about the risk of bleeding with these drugs and the lack of a readily-available antidote to the NOACs, recent evidence has shown that in fact the mortality rate from major bleeding is substantially lower with these new drugs than with warfarin.

The NICE guideline authors repeat the commonly-stated assertion that patients with a CHA₂DS₂-VASc score of zero are at low risk of stroke and do not require long-term anticoagulation. In fact, recent Danish registry data has shown that the annual risk of stroke in patients with AF and a CHA₂DS₂-VASc score of zero is close to 1% (equivalent to a ten-year risk approaching 10%). We consider that, while at present there is no clinical-trial evidence for anticoagulation in these patients (and the NOACs are not licensed for use in this group), there is a need for further refinement of the risk stratification process. As an example, we might consider that young patients with "lone AF" should be screened for "pre-hypertension", glucose intolerance, and subclinical vascular disease. There is also a need for further research to identify novel risk factors for stroke, in order to better identify healthy young people who might be at risk of the devastating effects of a stroke at a young age.

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Reference:

Ruff CT, Giugliani RP, Braunwald E, *et al.* Comparison of the efficacy and safety of new oral anticoagulants with warfarin in patients with atrial fibrillation: a meta-analysis of randomised trials. *Lancet* 2014; 383: 955-62