

GUIDANCE STATEMENT

Atrial fibrillation anticoagulation guidelines

PAC recommendation

- The recommendations relating to anticoagulant use included in the NICE Clinical Guideline CG180 are supported.
- Once a decision has been made to anticoagulate, the choice of anticoagulant should be made taking into account the patient's clinical features and preferences (see clinical checklist and PDA <http://www.prescqipp.info/resources/viewcategory/335-af-anticoagulation-resources>) and consideration of the following key points:
 - » Warfarin is well known and has been used successfully for > 50 years.
 - » NOACs are relatively new agents and the side effects and drug interactions are still being discovered.
 - » Currently the NOACs apixaban, rivaroxaban and edoxaban have no proven antidote in case of major bleeding.
 - » The protective effect of a NOAC disappears after a single missed dose.
 - » Poor compliance will not necessarily be improved with a NOAC and will go unnoticed.
- Apixaban, dabigatran, edoxaban and rivaroxaban should generally be initiated by a secondary care consultant (haematologist, cardiologist or stroke physician as appropriate) with the support of the anticoagulant clinic. Prescribing can then be passed to the GP with shared care advice. Prescribing may also be initiated by GPs with appropriate expertise in anticoagulation as agreed locally.
- Arrangements must be in place to ensure that all patients prescribed long term anticoagulants are reviewed and monitored (as outlined below and in the AF anticoagulation clinical decision aid that accompanies this document). Particular care should be taken to monitor renal function in frail or elderly patients, during times of acute illness, and appropriate adjustment of doses made where necessary.
- PAC in collaboration with the East of England Cardiovascular Strategic Clinical Network have produced a package of resources to support the safe and effective use of anticoagulants in patients with AF in line with NICE guidelines. The resources can be found here: <http://www.prescqipp.info/resources/viewcategory/335-af-anticoagulation-resources>
 - » AF anticoagulation clinical decision aid
 - » AF anticoagulation patient information and decision aid
 - » NOAC counselling checklist
 - » NOAC patient information leaflet.

Background

In June 2014, NICE issued Clinical Guideline 180 on the management of atrial fibrillation.¹
<http://www.nice.org.uk/guidance/CG180>

The following recommendations have been identified as priorities for implementation. For the full list of recommendations, consult the full guidance.

Personalised package of care and information

- Offer people with atrial fibrillation a personalised package of care. Ensure that the package of care is documented and delivered, and that it covers:
 - » Stroke awareness and measures to prevent stroke
 - » Rate control
 - » Assessment of symptoms for rhythm control
 - » Who to contact for advice if needed
 - » Psychological support if needed
 - » Up to date and comprehensive education and information on:
 - Cause, effects and possible complications of atrial fibrillation
 - Management of rate and rhythm control
 - Anticoagulation
 - Practical advice on anticoagulation in line with recommendation 1.3.1 in 'venous thromboembolic diseases' ([NICE Clinical Guideline 144](#))
 - Support networks (for example, cardiovascular charities).

Referral for specialised management

- Refer people promptly at any stage if treatment fails to control the symptoms of atrial fibrillation and more specialised management is needed.

Assessment of stroke and bleeding risks

Stroke risk

- Use the [CHA₂DS₂-VASc](#) stroke risk score to assess stroke risk in people with any of the following:
 - » Symptomatic or asymptomatic paroxysmal, persistent or permanent atrial fibrillation
 - » Atrial flutter
 - » A continuing risk of arrhythmia recurrence after cardioversion back to sinus rhythm.

Bleeding risk

- Use the [HAS-BLED](#) score to assess the risk of bleeding in people who are starting or have started anticoagulation. Offer modification and monitoring of the following risk factors:
 - » Uncontrolled hypertension
 - » Poor control of international normalised ratio (INR) ('labile INRs')
 - » Concurrent medication, for example concomitant use of aspirin or a nonsteroidal antiinflammatory drug (NSAID)
 - » Harmful alcohol consumption.

Interventions to prevent stroke

- Do not offer stroke prevention therapy to people aged under 65 years with atrial fibrillation and no risk factors other than their sex (that is, very low risk of stroke equating to a [CHA₂DS₂-VASc](#) score of 0 for men or 1 for women).

Rate and rhythm control

As per NICE guidelines. This policy does not cover rate and rhythm control in AF.

Anticoagulation

NICE guidance states that anticoagulation may be with apixaban, dabigatran etexilate, rivaroxaban or a vitamin K antagonist.^{2,3,4,5} Since publication of NICE guidance, a fourth NOAC, edoxaban, has been granted a licence in the UK for the prevention of stroke.⁶ NICE have issued a positive TA on

the use of edoxaban for preventing stroke and systemic embolism in people with non-valvular atrial fibrillation.⁷ Although not specifically referred to in NICE CG180, edoxaban is recommended in this document as a treatment option alongside the other agents.

- Consider anticoagulation for men with a [CHA₂DS₂-VASc](#) score of 1. Take the bleeding risk into account.
- Offer anticoagulation to people with a [CHA₂DS₂-VASc](#) score of 2 or above, taking bleeding risk into account.
- Discuss the options for anticoagulation with the person and base the choice on their clinical features and preferences.

Assessing anticoagulation control with vitamin K antagonists

- Calculate the person's time in therapeutic range (TTR) at each visit. When calculating TTR:
 - » Use a validated method of measurement such as the Rosendaal method for computer assisted dosing or proportion of tests in range for manual dosing.
 - » Exclude measurements taken during the first six weeks of treatment.
 - » Calculate TTR over a maintenance period of at least six months.
- If poor anticoagulation control cannot be improved, evaluate the risks and benefits of alternative stroke prevention strategies and discuss these with the person.

Antiplatelets

- Do not offer aspirin monotherapy solely for stroke prevention to people with atrial fibrillation.

Monitoring requirements

The following monitoring requirements have been developed and agreed with the East of England Cardiovascular Strategic Clinical Network:

- ALL patients on long term anticoagulants require a general review at least once a year.
- Recalculate CHA₂DS₂-VASc and HAS-BLED scores.
- Check risks and benefits are unchanged.
- Renal function: Patients on NOACs should have renal function checked:⁸⁻⁹
 - » Annually if CrCl > 60ml/min.
 - » Six monthly if CrCl 30-60ml/min.
 - » Three monthly if CrCl < 30ml/min, or ≥ 75 years or expected decline in renal function.
 - » During acute illness (dose many need to be modified).
- Assess if dose change is required.
- Check compliance.
- Check patient understanding of risks etc. – see patient information.
- Patients on warfarin require INR checks as per local protocol and a check for time in therapeutic range (TTR) at every visit.

Document history

PAC approval date	14 November 2016	Version	v2
Consultation process	PAC members		
QA process	Katie Smith, Regional Medicines Information Director, East Anglia Medicines Information Service, 18th November 2016		

References

1. NICE Clinical guideline 180. Atrial fibrillation: the management of atrial fibrillation. Published June 2014, last updated August 2014. <http://www.nice.org.uk/guidance/CG180>
2. Summary of Product Characteristics - Eliquis 2.5 mg film-coated tablets, Bristol-Myers Squibb-Pfizer. Updated 22/01/15, accessed 29/07/16. <https://www.medicines.org.uk/emc/medicine/24988>
3. Summary of Product Characteristics - Xarelto 15mg film-coated tablets, Bayer plc. Updated 20/05/16, accessed 29/07/16. <https://www.medicines.org.uk/emc/medicine/25592>
4. Summary of Product Characteristics - Pradaxa 110 mg hard capsules, Boehringer Ingelheim Limited. Updated 08/03/16, accessed 29/07/16. <https://www.medicines.org.uk/emc/medicine/20760>
5. Summary of Product Characteristics - Marevan 1mg Tablets, Amdipharm Mercury Company Limited. Updated 26/05/14, accessed 29/07/16. <https://www.medicines.org.uk/emc/medicine/21562>
6. Summary of Product Characteristics - Lixiana 30mg Film-Coated Tablets, Daiichi Sankyo UK Limited. Updated 24/11/15, accessed 29/07/16. <https://www.medicines.org.uk/emc/medicine/30512>
7. NICE Technology appraisal TA355. Edoxaban for preventing stroke and systemic embolism in people with non-valvular atrial fibrillation. Published date: 23 September 2015 accessed 29/07/16 via <https://www.nice.org.uk/guidance/ta355?unlid=120251590201652864213>
8. National clinical guideline for stroke, Prepared by the Intercollegiate Stroke Working Party, Fourth edition 2012. <https://www.rcplondon.ac.uk/guidelines-policy/stroke-guidelines> Accessed 27/10/15. 11.
9. NICE Clinical Guideline 172 MI – secondary prevention: Secondary prevention in primary and secondary care for patients following a myocardial infarction. Published November 2013. <http://www.nice.org.uk/guidance/cg172/chapter/1-recommendations#drug-therapy-2> Accessed 23/10/15.