NHS Scarborough and Ryedale Clinical Commissioning Group

NHS Vale of York Clinical Commissioning Group

York Teaching Hospital NHS Foundation Trust

Anticoagulation choices in non valvular AF

Patient confirmed to have non valvular atrial fibrillation on ECG recording.
All forms of atrial fibrillation (paroxysmal, persistent, long term and permanent) require stroke risk assessment.

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Is the patient less than 65 years old with no cardiovascular risk factors?
Such as diabetes, hypertension, PVD, IHD, LVSD, CCF

No → Undertake a CHA_2DS_2VASc score

Score ≥1 for men or ≥2 for women

No → No thromboprophylaxis required.
Do not give aspirin again unless it is indicated for other medical conditions.

Yes → Discuss with patient the risk of stroke, options for anticoagulation and bleeding risk. Consider:

- The patient's clinical features and their individual preference (see GP/patient decision aid)
- Can the patient take warfarin (any previous allergic response or adverse effects)?
- Does the patient have adequate venous access?
- Can the individual manage medications without a compliance aid?

IS WARFARIN THE TREATMENT OF CHOICE?

Anticoagulation declined

Yes → Initiate warfarin therapy under the direction of an anticoagulation clinic / GP with a target INR of 2.0 – 3.0

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Reassess anticoagulation for patients with poor anticoagulation control shown by any of the following over a six month period:

- 2 INRs over 5.0; or 1 value over 8.0
- 2 INRs less than 1.5
- Time in therapeutic range (TTR) less than 65% (or INR in range under 50%)

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GP to discuss with patient reasons for poor results:

- Cognitive function
- Adherence
- Illness
- Interacting medications
- Lifestyle factors including diet and alcohol consumption.

COULD INR BE IMPROVED?

Yes → Continue warfarin & check INR control. Annual reassessment by the GP of FBC, U&Es, LFTs and bleeding risk.

No → Treatment is non-coumarin oral anticoagulant (NOAC). There are four agents licensed:

- Apixaban
- Dabigatran
- Edoxaban
- Rivaroxaban

Apixaban is the NOAC of choice for the Trust, GPs from Vale of York CCG can prescribe any agent.

Dose adjustments are required for age, renal function and body mass (refer to SPC/BNF). Renal function, FBC, LFT and bleeding risk should be checked at least every 12 months. Review compliance including the number of prescriptions issued.

These medications require no monitoring. There is a specific reversal agent for dabigatran but not currently for the other NOACs.

Version number: 3	Author: Jayne Knights	Check by: Jane Crewe
Date active: June 2016	Next Review Due: June 2018	Approved by: Drug & Therapeutics Committee, Medicines Commissioning Committee

Anticoagulation choices in non valvular AF

NICE Atrial Fibrillation Guidelines CG180: June 2014

Updated recommendations:

- Do not offer aspirin monotherapy solely for stroke prevention to people with AF.
- Use the CHA_2DS_2-VASc stroke risk score & offer anticoagulation to people with score of 2 or above taking into account the bleeding risk using the HAS-BLED score.
- Patients should be offered a choice of all anticoagulants (warfarin, apixaban, dabigatran edoxaban or rivaroxaban); treatment should be based on their clinical features and preferences. The Vale of York CCG GP/Patient decision aid is available to assist with this process. http://www.valeofyorkccg.nhs.uk/rss/prescribing-novel-oral-anticoagulants
- For patients on warfarin assess INR control at each visit. Reassess anticoagulation for a person with poor anticoagulation control shown by the following:
  - 2 INR values over 5.0 or 1 INR value higher than 8 within the past 6 months
  - 2 INR values less than 1.5 within the past 6 months
  - Time in therapeutic range (TTR) less than 65% within the past 6 months excluding measurements taken during the first six weeks.
- When reassessing anticoagulation take into account and address the following factors
  - Cognitive function
  - Adherence to prescribed therapy
  - Illness
  - Interacting drug therapy
  - Lifestyle factors including diet & alcohol consumption
- For people who are taking an anticoagulant, review the need for anticoagulation and the quality of anticoagulation **at least annually**, or more frequently if clinically relevant events occur affecting anticoagulation or bleeding risk.
- For people who are not taking an anticoagulant because of bleeding risk or other factors, review stroke and bleeding risks annually, and ensure that all reviews and decisions are documented

Within primary care, choice of agent will be discussed to determine which anticoagulant (warfarin or NOAC) option is suitable. The current NOAC of choice for York Teaching Hospital NHS Foundation Trust is apixaban.

Cardioversion

Warfarin can be used pre & post cardioversion to prevent thromboembolic events. Prior to cardioversion the INR should be in range for three weeks which can take up to eight weeks to achieve. A single INR below 2.0 can result in the cardioversion being cancelled. It is time consuming for the patients to attend for weekly blood tests and warfarin treatment can be effected by diet, medication & alcohol.

Alternatively, NOACs can be used and patients will not require weekly blood tests. Apixaban is the hospital choice pre cardioversion and when appropriate it will be prescribed by the cardiologist for both before and for four weeks after the procedure. Anticoagulation is now routinely being continued long term even when the cardioversion is successful. All patients should be reviewed by their GP post cardioversion to discuss the on-going risk of stroke, options for long term anticoagulation and bleeding risk and be given a choice of all anticoagulants.