Cheshire and Merseyside Health and Care Partnership

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Cheshire & Merseyside Cardiac Network

NHS North West Coast Clinical Networks

Initiating a DOAC in Patients with Atrial Fibrillation / Flutter (AF)

Patients to consider

- Newly identified patients with AF or previous diagnosis not on an OAC
- Patients on VKAs with consistently low TTR < 70%, we recommend considering interventions to improve TTR or switching to DOACs

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Determine risk of stroke using CHA_2DS_2-VASc score and bleeding risk

- Patients with a CHA2DS2-VASc =1 in men or =2 in women should be considered for an oral anticoagulant (OAC)
- Patients with a CHA2DS2-VASc score ≥2 in men and ≥3 in women: It is recommended that these patients should be prescribed an OAC
- Assess bleeding risk using HAS-BLED score or ORBIT score and address modifiable risk factors for anticoagulation in all AF patients e.g. BP control, use of NSAIDs, alcohol intake, obesity

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Assess if suitable for oral anticoagulation

- Consider contraindications, concomitant medicines (e.g. aspirin, SSRIs, NSAIDs, bisphosphonates), alcohol and drug abuse.

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Does the patient have a contraindication to a DOAC?

- With a prosthetic mechanical valve
- With moderate to severe mitral stenosis
- With antiphospholipid antibody syndrome (APLS)
- Who are pregnant, breastfeeding or planning a pregnancy
- With severe renal impairment - Creatinine Clearance (CrCl) < 15ml/min (edoxaban, apixaban and rivaroxaban). If CrCl 15-30 mL/min use edoxaban, apixaban and rivaroxaban with caution. Do not prescribe dabigatran if CrCl<30 ml/min.
- Requirement for triple therapy (dual antiplatelet therapy plus OAC) or those requiring a higher INR than the standard INR range of 2.0 – 3.0, without appropriate discussion with an anticoagulant specialist or cardiologist
- With active malignancy/ chemotherapy (unless advised by a specialist)
- Prescribed interacting drugs – check SPCs for full list e.g. HIV antiretrovirals and hepatitis antivirals - check with HIV drug interactions website at https://www.hiv-druginteractions.org/ and some antiepileptics – phenytoin, carbamazepine, phenobarbitone or rifampicin are likely to reduce DOAC levels so should be discussed with an anticoagulation specialist
- If the patient has a lesion or condition considered a significant risk for major bleeding, including current or recent gastrointestinal ulceration, recent brain or spinal injury, recent brain, spinal or ophthalmic surgery, recent intracranial haemorrhage, known or suspected oesophageal varices, arteriovenous malformations, vascular aneurysms or major intraspinal or intracerebral vascular abnormalities – seek specialist advice.
- There is no data to suggest lack of DOAC efficacy in patients with active CA but consider specialist advice before initiation
- There are little data on DOACs for patients with venous thrombosis at unusual sites (e.g. portal vein thrombosis) - discuss with an anticoagulation specialist

If YES to any of the above, consider warfarin if clinically appropriate and discuss with specialist if required

If the answer if NO to all of the above, continue down the flowchart

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Is the patient at high risk of GI bleeding or known previous GI bleeding? e.g. current or recent gastrointestinal ulceration (within previous 6-8 weeks)

YES

Initiate apixaban 5mg BD or

Initiate apixaban at 2.5mg BD if your patient meets the following criteria:

- CrCl 15-29 ml/min

OR if your patient has at least TWO of the following risk factors:

- Age ≥80 years old
- Weight ≤60kg
- Serum creatinine ≥ 133 micromole / L

NO

Is the patient at high risk of ischaemic stroke?
e.g. Recurrent ischaemic stroke /systemic embolism/TIA despite good anticoagulation control (TTR≥70%) or other DOAC

YES

***Preferred*: Dabigatran 150mg BD if appropriate.** However, if the patient qualifies for the lower dose of dabigatran, use edoxaban* at the appropriate dose instead i.e. patients who are:

- Age ≥80 years old
- Age 75-79 years and bleeding risk high
- Weight <50kg
- CrCl 30-50ml/min (alternative agent preferred)
- Concomitant verapamil
- High bleeding risk (HAS-BLED ≥3, ORBIT ≥4)

- **Dabigatran cannot be crushed or put in a blister pack**

*Only dabigatran 150mg BD showed significant superiority reducing ischaemic stroke vs. warfarin

NO

Edoxaban 60mg daily, otherwise edoxaban 30mg daily if:

- Weight ≤60kg
- CrCl 15-50[a]ml/min
- On strong P-gp inhibitors e.g. ciclosporin, dronedarone, erythromycin or ketoconazole (see SPC)

Edoxaban is appropriate to initiate for the majority of patients including the following:

- Moderate-severe renal impairment CrCl 15-49 mL/min
- Patients requiring a blister pack /swallowing difficulties requiring crushing/NG tube
- High risk of bleeding HAS-BLED ≥3, ORBIT ≥4
- In patients with prior unprovoked bleeding, warfarin-associated bleeding, or at high risk of bleeding
- History of GI symptoms/ dyspepsia - start a PPI alongside edoxaban
- Once daily dosing or preference to have a lower pill burden
- Patients with a BMI >40 kg m^2 or a weight >120kg can be considered for a DOAC such as edoxaban
- Therapeutic monitoring of DOACs * is not routinely recommended and the availability of drug concentration level measurement is variable. Consider discussion with a Haematologist before requesting drug concentration levels under special circumstances e.g., bleeding
- Patients with AF ≥ 48 h or unknown duration undergoing elective electrical or pharmacologic cardioversion, for at least 3 weeks before cardioversion and for at least 4 weeks after successful cardioversion to sinus rhythm, regardless of the baseline risk of stroke

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Abbreviations:

DOAC = direct-acting oral anticoagulant
AF = atrial fibrillation
VKA = vitamin K antagonist
TTR = time in therapeutic range
BP = blood pressure
NSAIDS = non-steroidal anti-inflammatories
SSRIs = selective serotonin reuptake inhibitors
TIA = transient ischaemic attack
GI = gastrointestinal
BMI = body mass index
PPI = proton pump inhibitor

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