Atrial fibrillation: diagnosis and management [NG196]

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Atrial fibrillation: diagnosis and management

This guideline covers diagnosing and managing atrial fibrillation in adults, including assessing and managing risks of stroke and bleeding.

Detection and diagnosis

- Perform manual pulse palpation to assess for the presence of an irregular pulse if there is a suspicion of atrial fibrillation. This includes people presenting with any of the following:
  - breathlessness
  - palpitations
  - syncope or dizziness
  - chest discomfort
  - stroke or transient ischaemic attack.
- Perform a 12-lead electrocardiogram (ECG) to make a diagnosis of atrial fibrillation if an irregular pulse is detected in people with suspected atrial fibrillation with or without symptoms.
- In people with suspected paroxysmal atrial fibrillation undetected by 12-lead ECG recording:
  - use a 24-hour ambulatory ECG monitor if asymptomatic episodes are suspected or symptomatic episodes are less than 24 hours apart
  - use an ambulatory ECG monitor, event recorder or other ECG technology for a period appropriate to detect atrial fibrillation if symptomatic episodes are more than 24 hours apart.

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 or catheter ablation.

Bleeding risk

- Assess the risk of bleeding when:
  - considering starting anticoagulation in people with atrial fibrillation and also when
  - reviewing people already taking anticoagulation. Use the ORBIT bleeding risk score because evidence shows that it has a higher accuracy in predicting absolute bleeding risk than other bleeding risk tools. Accurate knowledge of bleeding risk supports shared decision-making and has practical benefits, for example, increasing patient confidence and willingness to accept treatment when risk is low and prompting discussion of risk reduction when risk is high. Although ORBIT is the best tool for this purpose, other bleeding risk tools may need to be used until it is embedded in clinical pathways and electronic systems.
- Offer monitoring and support to modify risk factors for bleeding, including:
  - uncontrolled hypertension (see NICE’s guideline on hypertension in adults)
  - poor control of international normalised ratio (INR) in patients on vitamin K antagonists
  - concurrent medication, including antiplatelets, selective serotonin reuptake inhibitors (SSRIs) and non-steroidal anti-
inflammatory drugs (NSAIDs)
- harmful alcohol consumption (see NICE’s guideline on alcohol-use disorders: diagnosis, assessment and management of harmful drinking and alcohol dependence)
- reversible causes of anaemia.

**Discusting the results of the risk assessment**
- Discuss the results of the assessments of stroke and bleeding risk with the person taking into account their specific characteristics, for example comorbidities, and their individual preferences. For further guidance, see the section on enabling patients to actively participate in their care in NICE’s guideline on patient experience in adult NHS services.

**Personalised package of care and information**

**Assessment of cardiac function**
- 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 the recommendations on information and support for people having anticoagulation treatment in NICE’s guideline on venous thromboembolic diseases
    - support networks (for example, cardiovascular charities).

**Referral for specialised management**

**Medicines adherences and optimisation**
- Refer people promptly at any stage if treatment fails to control the symptoms of atrial fibrillation and more specialised management is needed. This should be within 4 weeks after the failed treatment or after recurrence of atrial fibrillation after cardioversion.

**Stroke prevention**

**Anticoagulation**
- When discussing the benefits and risks of anticoagulation use clinical risk profiles and personal preferences to guide treatment choices. Discuss with the person that:
  - for most people the benefit of anticoagulation outweighs the bleeding risk
  - for people with an increased risk of bleeding, the benefit of anticoagulation may not always outweigh the bleeding risk, and careful monitoring of bleeding risk is important.
- When deciding between anticoagulation treatment options:
  - Discuss the risks and benefits of different drugs with the person and follow the recommendations on shared decision-making in NICE’s guideline on patient experience in adult NHS services.

Follow the recommendations on shared decision-making in NICE’s guideline on patient experience in adult NHS services.

**Antiplatelets**

For guidance on antiplatelet therapy for people who have had a myocardial infarction and are having anticoagulation, see antiplatelet therapy for people with an ongoing separate indication for anticoagulation in NICE’s guideline on acute coronary syndromes.

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

**Review of people with atrial fibrillation**

- For people who are not taking an anticoagulant, review stroke risk when they reach age 65 or if they develop any of the following at any age:
  - diabetes
  - heart failure
  - peripheral arterial disease
  - coronary heart disease
  - stroke, transient ischaemic attack or systemic thromboembolism.

- 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.

- For people who are taking an anticoagulant, review the need for anticoagulation and the quality of anticoagulation (taking into account MHRA advice on direct-acting oral anticoagulants about bleeding risk and the need to monitor renal function in patients with renal impairment) at least annually, or more frequently if clinically relevant events occur affecting anticoagulation or bleeding risk.

Rate control
- Offer rate control as the first-line treatment strategy for atrial fibrillation except in people:
  - whose atrial fibrillation has a reversible cause
  - who have heart failure thought to be primarily caused by atrial fibrillation
  - with new-onset atrial fibrillation
  - with atrial flutter whose condition is considered suitable for an ablation strategy to restore sinus rhythm
  - for whom a rhythm-control strategy would be more suitable based on clinical judgement.

- Offer either a standard beta-blocker (that is, a beta-blocker other than sotalol) or a rate-limiting calcium-channel blocker (diltiazem or verapamil) as initial rate-control monotherapy to people with atrial fibrillation unless the person does no, or very little physical exercise or other rate-limiting drug options are ruled out because of comorbidities or the person’s preferences.

- If monotherapy does not control the person’s symptoms, and if continuing symptoms are thought to be caused by poor ventricular rate control, consider combination therapy with any 2 of the following:
  - a beta-blocker
  - diltiazem
  - digoxin.

  In April 2021, this was an off-label use of diltiazem. See NICE’s information on prescribing medicines.

- Do not offer amiodarone for long-term rate control.

Rhythm control
- Consider pharmacological and/or electrical rhythm control for people with atrial fibrillation whose symptoms continue after heart rate has been controlled or for whom a rate-control strategy has not been successful.

Stopping anticoagulation
- In people with a diagnosis of atrial fibrillation, do not stop anticoagulation solely because atrial fibrillation is no longer detectable.

- Base decisions to stop anticoagulation on a reassessment of stroke and bleeding risk using CHA2DS2-VASc and ORBIT and a discussion of the person’s preferences.
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