

Atrial Fibrillation

- Atrial fibrillation (AFib) increases stroke risk x 5
- AFib is also associated with increased risk of mortality, silent cerebral ischaemia, cognitive impairment, dementia and heart failure
- Aspirin does not help to prevent stroke or mortality in AFib
- Atrial flutter is managed in the same way as AFib
- Paroxysmal AFib increases with age but is easily missed

Risk Factors for Atrial fibrillation

Excessive alcohol	Older age
Obesity	Male sex
Hypertension	Diabetes
Valvular heart disease	Genetic
Coronary heart disease	Sleep apnoea
Heart failure	Chronic endurance training
Hyperthyroidism	

Transfer to casualty if acutely unwell, decompensated fast AFib, haemodynamically unstable

Detection

Look out for AF, and check for irregular pulse especially if:

- Palpitations/chest discomfort
- Syncope/dizziness
- Breathlessness
- Stroke/TIA

Investigations

ECG: to confirm diagnosis (24-48h tape/refer cardiology if Paroxysmal AFib suspected)

Bloods: Hb, creatinine, TSH (other bloods as indicated)

Echo: Check for valvular disease and for heart failure (if not affordable or easily available, then prioritise those with a murmur or suspicion of heart failure)

CHA₂DS₂Vasc score

CHF	1
Hypertension	1
Age 65-74y	1
Age ≥75y	2
Diabetes	1
Stroke/TIA	2
Sex (female)	1
Vascular disease	1

Score = 0 no anticoagulation
Score = 1 Male: consider anticoag
Female: no anticoag
Score ≥2 Offer anticoagulation

1. AVOID STROKE

- Assess stroke and risk using CHA₂DS₂Vasc
- If anticoagulation being considered, assess bleeding risk with ORBIT (in most cases, the benefits of anticoagulation outweigh the risks)
- Assess, address and monitor modifiable factors that increase bleeding: -
 - harmful alcohol consumption
 - drugs that increase bleeding risk (antiplatelets, NSAIDs, SSRIs)
 - uncontrolled hypertension
 - reversible causes of anaemia
- Anticoagulate if indicated and patient agrees
- Rivaroxaban first line (20mg OD; 15mg OD if creat clearance 15-50)
- Warfarin if rivaroxaban contraindicated (see box)

ORBIT score

Man with Hb<13	2
Woman with Hb<12	
Age ≥75y	1
Bleeding history (GI/intracranial bleed or haemorrhagic stroke)	2
eGFR<60	1
On antiplatelets	1

0-2 = low risk
3 = medium risk
≥4 = high risk

2. RATE or RHYTHM CONTROL

- **RATE CONTROL with any beta blocker** (rate control is first line unless meets criteria for rhythm control); AIM: pulse <110bpm and symptom free
- **RHYTHM CONTROL** (cardioversion - the minority); AIM: to restore sinus rhythm
 - Consider if new-onset AFib (a clear 'onset' such as a sudden heave in the chest and palpitations since then), AFib with reversible cause (e.g. pneumonia), heart failure caused by AFib, younger patients
 - **Discuss with consultant if considering cardioversion**

Discuss with consultant if:

- Monotherapy ineffective
- Beta-blocker contraindicated (severe asthma/COPD, unstable heart failure, PAD)
- Considering rhythm control (cardioversion)
- If patient taking SSRI, antiplatelet or NSAID

3. CARDIOVASCULAR RISK FACTOR MANAGEMENT

Look at chronic diseases and risk factors (as above) and try to reduce/optimize

REVIEW

Titrate medication according to pulse rate and symptoms (max dose bisoprolol 10mg OD; max dose carvedilol 25mg BD)
Once AFib is controlled, review annually
Check creatinine and review dose of rivaroxaban

Contraindications to rivaroxaban

creat clearance <15;
active bleeding;
high risk of bleeding; recent brain/spine/eye surgery;
medications: protease inhibitors, rifampicin, carbamazepine/phenytoin/phenobarbital, St John's Wort, prasugrel/ticagrelor, ketoconazole/itraconazole posaconazole/voriconazole

References