WELSH GUIDELINES - All Wales clinical pathway for Atrial Fibrillation (AF)

All Wales clinical pathway for Atrial Fibrillation (AF)

Diagnosis and management

Primary care **Secondary care** **Primary and secondary care**

New onset Atrial Fibrillation/Atrial Flutter with symptoms **Targeted AF case finding (eg chronic** <48 hours or haemodynamically unstable. **disease clinic) or clinical suspicion of AF**

- History and examination.
- Manual pulse check.
- If irregular pulse, perform an ECG to confirm the rhythm.

Acute Medical Referral Recommended.

ECG inconclusive – AF still suspected (paroxysmal) Organise ECG monitoring for long enough to capture suspected episodes

Use a 24-hour ambulatory ECG monitor in those with

- Cardioversion or Rate Control. suspected asymptomatic episodes or symptomatic
- Consider Anticoagulation. episodes less than 24 hours apart. Use an event recorder

ECG in those with symptomatic episodes more than 24 hours apart. Consider use of a commercial ambulatory ECG event-recording device such as AliveCor®

AF confirmed

- ECG evidence of AF confirmed.

Perform an Echo

- On those for whom a baseline echocardiogram is important for long-term management.
- For whom a rhythm-control strategy that includes cardioversion (electrical or pharmacological) is being considered eg severely dilated left atrium would suggest a rate related strategy may be best.
- In whom there is a high risk or a suspicion of underlying structural/ functional heart disease (such as heart failure, heart murmur or abnormal ECG).
- When the findings may influence subsequent management (for example, choice of antiarrhythmic drug or in whom refinement of clinical risk stratification for antithrombotic therapy is needed).

Type of Atrial Fibrillation

Permanent – Accepted and longstanding.

Persistent – Lasting >7 days, unlikely to revert to Sinus Rhythm spontaneously. **Paroxysmal** – Recurrent episodes lasting <48 hours, maximum 7 days.

AF confirmed

Assess risk of Stroke using CHA2DS2-VASC score (see overleaf) and initiate anticoagulation as appropriate:

- Score ≥2 Warfarin or NOACs as per NICE Patient Decision Aid (local guidance may inform choice of NOAC).
- Score ≥1 in men, consider anticoagulation (females score 1 by default).
- Assess Bleeding Risk using HASBLED score (see overleaf) NB: Not to be used to determine need for anticoagulation.
- Estimate stroke risk and benefits and risk of antithrombotic therapy using SPARCtool http://sparctool.com
- Please See Notes re; anticoagulation below.

Perform routine investigations

• TFT, FBC, U&E, glucose, chest x-ray, manual blood pressure

Wales Cardiac Network, Dr Richard Cowell, 04.12.18. To be reviewed August 2020.

Risk Factor (CHA2DS2-VASC)	**Score**

Congestive heart failure/LV dysfunction	1
Hypertension	1
Age ≥ 75 years	2
Diabetes mellitus	1
Stroke/TIA/thrombo-embolism	2
Vascular disease	1
Age 65-74 years	1
Sex category (i.e. female sex)	1
Maximum score	**9**

Primary Care Management:

General measures: Blood pressure control and weight optimisation.

Prescribe beta-blocker as first line e.g. Bisoprolol 1.2510mg daily if rate control is needed.

If beta-blocker contraindicated and LV function is normal, prescribe rate-limiting calcium channel blocker: Diltiazem or Verapamil. Only consider Digoxin as monotherapy if patient is predominantly sedentary.

If beta-blocker contraindicated and there is LV dysfunction, prescribe Digoxin as first line.

HASBLED SCORE		
Letter	**Clinical Characteristic**	**Pts awarded**
H	Hypertension	1

A	Abnormal renal and liver function (1pt each)	1 or 2
S	Stroke	1
B	Bleeding	1
L	Labile INRs	1
E	Elderly (e.g. age > 65 years)	1
D	Drugs or alcohol (1 point each)	1 or 2
		Maximum 9 pts

Amiodarone, Dronedarone, Sotolol and Flecainide should only be initiated by a Cardiologist. Monitor Apical HR and BP. If resting ventricular rate is ≥110 or is symptomatic consider increasing dose of beta-blocker, calcium channel blocker or add digoxin.

CHA2DS2-VASC score	**Adjusted stroke rate (%/y)**
0	0%
1	1.3%
2	2.2%
3	3.2%
4	4.0%
5	6.7%

6	9.8%
7	9.6%
8	6.7%
9	15.2%

Patients who should be referred for out patient specialist assessment

- Symptomatic AF despite adequate rate control (when ablation may be considered).
- If patient cardioversion considered.
- Inadequate ventricular rate control despite treatment with the combination of a beta-blocker and digoxin or rate-limiting CCB and digoxin, or if intolerant of these.
- Structural heart disease on echocardiogram.
- AF and co-existing heart failure.

Notes re: anticoagulation

Patients with mitral stenosis, mechanical prosthetic heart valves or significant renal impairment should be treated with warfarin.

Adjusted-dose Warfarin (target INR 2.5, range 2.0 to 3.0) reduces relative stroke risk by 60%.

Use HASBLED Score (above) to determine bleeding risk and to identify modifiable risk factors- in itself not a tool to determine whether patients should be anticoagulated or not.

The latest European Society of Cardiology Guidelines suggest that the Direct Oral Anticoagulants- Apixaban, Dabigatran, Edoxaban and Rivaraxaban should be considered first line therapy in patients with AF as opposed to Warfarin (see local guidelines).

Where Warfarin control is poor and INR time in therapeutic range <60% over a period of 6 months (excluding first 1-3 months after initiation having checked compliance), consider a new oral anticoagulant (Apixaban, Dabigatran, Edoxaban or Rivaroxaban). These new drugs require dose reduction or cessation when creatinine clearance is significantly

reduced using the Cockcroft Gault formula. Do not use eGFR to determine renal function.

- New oral anticoagulants require at least annual fbc, u+e and LFT monitoring in primary care.
- If anticoagulation is appropriate, **do not co administer aspirin purely for thromboprophylaxis**. Aspirin mayused only if clearly indicated separately e.g. post MI or coronary stenting.
- Clopidogrel 75mg daily plus aspirin 75mg daily has a small benefit (approx 20% relative risk reduction each) but **significantly increases the bleeding risk** when used concurrently.

This All Wales Clinical Pathway for AF has been devised with reference to the following AF Guidelines on Anticoagulation:

- BCUHB AF Guidelines 2017
- South East Coast Strategic Clinical Networks Anticoagulation in AF Pathway Secondary Care June 2015
- South East Coast Strategic Clinical Networks Primary Care AF Pathway
- Greater Glasgow and Clyde Heart MSN Guidelines for the Management of AF June 2014, Dr David Murdoch.