Barns Medical Practice
Service Specification
Outline: Atrial Fibrilation (AF)

Developed July 2017
Review July 2019

Introduction

Atrial fibrillation (AF) is a condition where the heart rhythm beats in an irregularly irregular rhythm. This may be permanent (constant, persisting over several months) or paroxysmal (intermittent, with the heart beating regularly the majority of the time). AF is the most common sustained cardiac arrhythmia. There is often no underlying causes found for AF but some causes include overactive thyroid, hypertension, heart valve disease or excess alcohol consumption. If a cause can be identified early in AF, it may be treated and resolve the AF.

The major complication of an irregularly beating heart due to AF, is the potential for clot formation in the heart. This can increase the risk deep vein thrombosis, pulmonary embolism and ischaemic strokes.

Diagnosis

There may be no specific presenting symptoms of AF. It may be identified incidentally. Some patients experience symptoms of breathlessness, palpitations (awareness of the heart beating fast and irregularly), dizziness and chest pain. All patients complaining of these symptoms should have their pulse checked, heart auscultated and an electrocardiograph (ECG) performed. If the pulse feels irregular, or if the heart rate is fast (>100bpm), this should raise the suspicion of AF. Consideration of the rhythm and rate of the pulse should be given whenever the blood pressure (BP) is measured and, indeed, the BP should not be measured using an electronic BP monitor until the pulse has been confirmed as regular.

A 12 lead ECG should be arranged, urgently, if the patient is symptomatic. A doctor or other qualified person should report the ECG and the diagnosis should not be made exclusively on the automatic machine generated diagnosis. Where the diagnosis is confirmed, the heart should be, or have been, examined for murmurs and the thyroid function test should be checked. If murmurs are found, these should be evaluated by referral either for open access echocardiography or to cardiology outpatient clinic.

Anticoagulation

It is imperative that all patients with AF have their risk of clots assessed. This is done by way of the CHA_2DS_2VASc score which quantifies the risk of stroke. This is a point based system where the appropriate points are assigned to the following conditions

	Condition being tested	Points
C	Congestive heart Failure	1
H	Hypertension	1
A_2	Age ≥75 Age 65-74 Age <65	2 1 0
D	Diabetes Mellitus	1
S_2	Prior Stroke / TIA / Thrombo-embolism	2
VA	Presence of Vascular Disease	1
Sc	Sex - Female	1

Patients with a calculated CHA_2DS_2VASc score of 1 or more if male, or 2 or more if female, should be considered for anticoagulation. The decision for who to treat involves weighing up the patients coagulation and bleeding risks. Scores such as the HAS-BLED score can help calculate an individual's bleeding risk. The choice of therapy in Ayrshire and Arran is currently between Warfarin or Apixaban. Warfarin involves lifelong blood monitoring of levels but can be managed quickly in overdose or if a major bleed occurs on therapy. Apixaban is a standard dose dependent on renal function and requires no dose monitoring although routine blood tests including FBC, UE's, LFT's should be done on a regular basis. This is recovered in the anticoagulation service specification. There is no reversal agent in an acute bleed situation for Apixaban. The choice will come down to patient and clinician preference. Apixaban should be considered for patients where it is suspected INR control will be difficult to achieve or if the patient may be non-compliant with Warfarin monitoring.

Patients with a very low CHA_2DS_2VASc score (0 if male or 1 if female) should not be offered oral anticoagulation therapy.

Treatment

Many patients who have no symptoms will not need any treatment for their heart rate or rhythm. Where the patient has symptoms, the main strategy for treatment consists of either rate control or rhythm control.

Rate control aims to keep the pulse rate below 90 BPM while leaving it in an irregular rhythm. The mainstay of this treatment uses beta blockers such as bisoprolol or

atenolol. If beta blockers are contraindicated (such as in asthma), diltiazem/verapamil or digoxin can be used.

Rhythm control aims to control the irregular nature of the heart rhythm, to allow it to beat regularly. This is often reserved for patients with persistent symptoms despite rate control or those who are young at onset of symptoms. The main drugs used are amiodarone and flecanide (usually reserved for patients with paroxysmal AF as a "pill in pocket" strategy). Occasionally patients are offered more invasive procedures to treat AF by the cardiology team. These include cardioversion, catheter ablation and pacemaker implantation.

Regular Review

As with all long term conditions, all patients with AF will be offered an annual review in the month of their birthday. If they fail to attend within a month this invitation will be repeated twice more at monthly intervals.

The annual review should be carried out by a prescriber. The following will be undertaken

- Symptomatic Enquiry: breathlessness, chest pain, palpitations & dizziness.
- Pulse Assessment: for rate and rhythm
- BP using a manual sphygmomanometer
- CHA_2DS_2VASc should be updated on the patient notes and need for anticoagulation assessed from this
- Medication Review: Assess for concordance and side effects from treatment

Resources for staff/patients

Practice Specific information: None

Internet Information

NICE guideline CG180: https://www.nice.org.uk/guidance/cg180

Patient.co.uk: https://patient.info/health/atrial-fibrillation-leaflet

Staff involved and training required:

HCA: ECG performance, blood sampling at diagnosis

Independent prescribers: If trained in ECG assessment of AF and cardiac auscultation – diagnosis and review

Advertising of service to patients

Details of this service will be available on the practice website.

Patients will be advised of the service at the point of diagnosis.