Class 1/2 Certification- Atrial Fibrillation

Atrial Fibrillation

Unfit

Cardiology review (note 1)
- **Blood tests**
- **Exercise ECG**
- **24 Hour ECG(s)**
- **Echocardiogram**
- **Further tests as necessary**

Initial results and treatment acceptable (note 2)

Class 1 OML
Class 2 Unrestricted

Follow-up results and treatment acceptable (note 3)

Class 1/2 Unrestricted Follow-up (note 4)

NOTES:

1) By a cardiological specialist

No significant symptoms and adequate rate control if paroxysmal, persistent or permanent

Blood tests - Thyroid function normal. Alcohol as a cause of AF should be excluded with a minimum of LFTs (to include GGT and MCV.

Exercise ECG - Bruce protocol and maximal effort or symptom limited on current treatment. At least 9 minutes with no significant abnormality of rhythm or conduction, nor evidence of myocardial ischaemia. (See UK CAA exercise ECG protocol

24 hr ECG - More than one may be required. The following criteria should be met:

If in sinus rhythm - No episodes of AF and no pauses >2.5s whilst awake. Ventricular arrhythmia should not exceed an aberrant beat count >2% of total, with no complex forms.

Established AF - RR interval >300ms and <3.5s (i.e. no very rapid rates or long pauses).

Paroxysmal, persistent & permanent AF - As above plus the longest pause on recapture of sinus rhythm should not exceed 2.5s whilst awake.

Echocardiogram - Should show no significant selective chamber enlargement, or significant structural or functional abnormality, and an LVEF of 50% or more.

Further tests - may include repeat 24 hour ECG recordings, electrophysiological studies, cardiac MRI, myocardial perfusion scanning and/or coronary angiography.

2) For class 1 certificate holders the cardiology report(s) will be reviewed by the Authority Medical Section (AMS). Class 2 applicants will be re-certificated by the AME in consultation with the AMS. It may be necessary to see the investigations, in which case the actual tracings/films/videos/ CDs will be requested. In difficult cases a secondary review panel of cardiologists may be consulted.

CHA_2DS_2-VASc score

C Congestive heart failure (or Left ventricular systolic dysfunction)=1
H Hypertension=1
A_2 Age ≥75 years=2
D Diabetes Mellitus=1
S_2 Prior Stroke or TIA or thromboembolism=2
V Vascular disease (e.g. peripheral artery disease, myocardial infarction, aortic plaque)=1
A Age 65-74 years =1
Sc Sex category (i.e. female gender)=1

Assessment of CHA_2DS_2-VASc score for certification

0	Class 1 OML / Class 2 Unrestricted
1	Individual assessment
2	Class 2 OSL
>2	Unfit all classes

Acceptable treatment includes sotalol, bisoprolol or other beta-blocking drugs, digitalis, dronedarone (periodic blood testing required to check for hepatotoxicity), diltiazem and verapamil. Exceptionally flecainide or propafenone may be used in consultation with the AMS (with 6 months demonstrated stability). Amiodarone is normally unacceptable for Class 1, but may be acceptable for Class 2 (maximum dose 200mg daily, night flying will require an AMS ophthalmological review).

3) Initial cardiological follow-up should be 6 monthly to include a minimum of 24 hour ECG monitoring. Subsequent follow-up at the discretion of the AMS, normally annual cardiological review with 24hr ECG and echocardiogram. Other tests if clinically indicated.

4) After 2 years follow up for Class 1, only applicants with a single original episode of AF with no recurrence may be able to achieve unrestricted Class 1 certification. Subsequent follow up normally annual with 24hr ECG.

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