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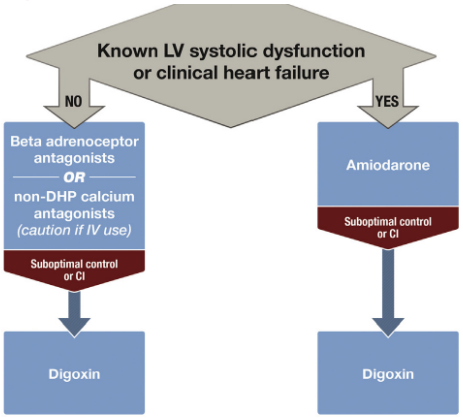
Changes in management as a result of the guideline:

Opportunistic screening in the clinic or community is recommended at >65yr.

Rate v rhythm control strategy:

- beta-blockers or non-dihydropyridine calcium channel antagonists are first line for acute and chronic rate control.
- Cardioversion remains first line for acute rhythm control when clinically indicated.
- Flecainide is preferable to amiodarone for acute and chronic rhythm control.
- Failure of rate or rhythm control should prompt consideration of ablation.

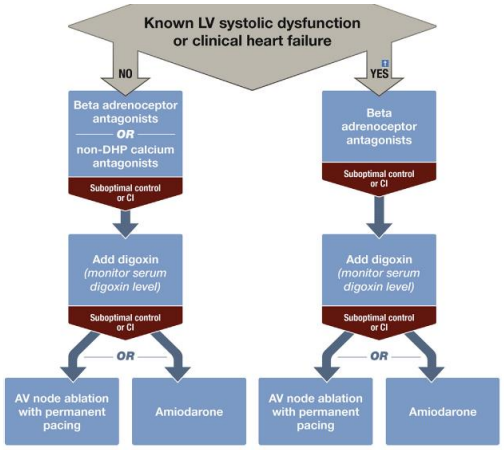
1 Acute rate control of atrial fibrillation with rapid ventricular response



CI = contraindications; DHP = dihydropyridine; IV = intravenous; LV = left ventricular. ◆

For longer term rate control, digoxin has a slow onset of effect and is of limited efficacy on its own. Maintain levels < 1.2 ng/ml. Amiodarone is last line option due to toxicity. Flecanide or sotalol should not be continued if choosing a long term rate control strategy.

2 Chronic rate control of atrial fibrillation with rapid ventricular response

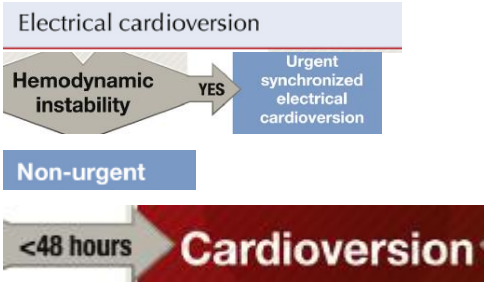


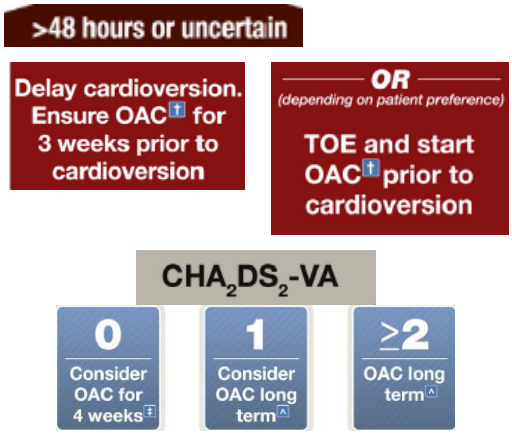
AF = atrial fibrillation; AV = atrioventricular; CI = contraindications; DHP = dihydropyridine; IV = intravenous; LV = left ventricular. * Ensure membrane-active antiarrhythmic rhythm control agents are ceased once rate control strategy adopted. † Re-evaluate the potential role of a rhythm control strategy (in particular with catheter ablation) in patients with heart failure, with the goal of reversing systolic dysfunction and improving prognosis. ◆

Acute rhythm control

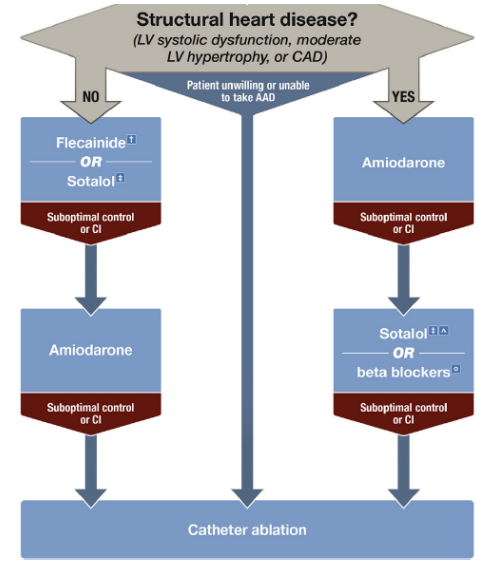
The high spontaneous reversion rate within 48hr makes a wait and see approach appropriate. Electrical cardioversion can be considered acutely after assesing thromboembolic risk. Flecanide can be used orally or IV provided no LV systolic dysfunction/hypertrophy or coronary artery disease; it can be used acutely and for long term rhythm control (not long term rate control). An AV nodal blocker should be given with flecanide to avoid 1:1 conduction of atrial flutter. Amiodarone is effective but not first line due to toxicity. Sotalol is not recommended for acute rhythm control due to limited efficacy; it causes Torsades in about 2%, so monitoring for QT prolongation is required. Beta-blockers are less effective for rhythm control.

Acute rhythm controlled should be avoided for AF of >48hr/unknown duration unless a TOE excludes thrombus; otherwise anticoagulation should be given for 3wk prior to cardioversion, and depending on risk for 4wk after.





3 Long term rhythm control strategies



Percutaneous catheter atrial fibrillation ablation

Catheter ablation should be considered for treatment failures with drugs. About 30% will require a repeat procedure within 12mth.

Stroke prevention

CHA2DS2-VA score to assess stroke risk:

- Don't score differently for females

<u>Anticoagulation</u>

- Not recommended for a score of 0
- Is recommended for a score of ≥ 2
- Can be considered for a score of 1

Non-vitamin K oral anticoagulants are recommended in preference to warfarin for non valvular AF. Non-valvular AF refers to AF in the absence of moderate to severe mitral stenosis or mechanical heart valve. There is less risk of ICH with NOACs than warfarin.

Use warfarin for valvular AF.

4 Definitions and points in the CHA_2DS_2-VA score

Score	Points	Definition
C	1	Congestive heart failure: recent signs, symptoms or admission for decompensated heart failure; this includes both HFrEF and HFpEF, or moderately to severely reduced systolic left ventricular function, whether or not there is a history of heart failure
H	1	History of hypertension, whether or not blood pressure is currently elevated
A_2	2	Age ≥ 75 years
D	1	Diabetes
S_2	2	History of prior stroke or transient ischaemic attack or systemic thromboembolism
V	1	Vascular disease, defined as prior myocardial infarction or peripheral arterial disease or complex aortic atheroma or plaque on imaging (if performed)
A	1	Age 65–74 years

HFpEF = heart failure with preserved ejection fraction; HFrEF = heart failure with reduced ejection fraction. ◆

Reversible bleeding factors should be identified and corrected

Patients at high risk of stroke are also at high risk of major bleeding. The net clinical benefit almost always favours stroke prevention, so bleeding risk scores should not be used to avoid anticoagulation in patients with AF.

Anticoagulation is recommended whether symptomatic or not from AF, for both paroxysmal and persistant AF, and also for flutter where there is also risk as well as episodes of paroxysmal AF.

Antiplatelet therapy is not recommended for stroke prevention in any stroke risk category.

Left atrial appendage occluding devices may be considered if contraindications to anticoag.

5 Bleeding risk factors*

Bleeding risk factor	Comment
Modifiable	
Hypertension (SBP > 160 mmHg)	Blood pressure control reduces the potential risk of bleeding
Non-modifiable	
Advanced age	Stroke risk outweighs bleeding risk
History of major bleeding	
Previous stroke	Risk of recurrent stroke outweighs risk of bleeding
Dialysis-dependent kidney disease	The role of anticoagulation (warfarin only indicated) in this population is controversial
Cirrhotic liver disease	Contraindication to NOACs (patients are excluded from trials); consider advice from hepatologist
Malignancy	Individualise decisions about anticoagulation based on risk and benefit