AF in Special groups

By

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AF IN SPECIAL GROUP

1) HCM
2) AF complicating ACS
3) Hyperthyrodism
4) Pulmonary disease
5) WPW & Pre- excitation syndromes
6) Heart Failure
7) Genetic AF
8) Post operative AF

(Cardiac & thoracic Surgery)

Recommendations	COR	LOE
Hypertrophic cardiomyopathy		
Anticoagulation indicated in HCM with AF independent of the CHA2DS2-VASc score	I	B
Antiarrhythmic drugs can be useful to prevent recurrent AF in HCM. Amiodarone, or disopyramide combined with beta blockers or nondihydropyridine calcium channel antagonist are reasonable	IIa	C
AF catheter ablation can be beneficial for HCM to facilitate a rhythm control strategy when antiarrhythmics fail or are not tolerated	IIa	B
Sotalol, dofetilide, and dronedarone may be considered for a rhythm control strategy in HCM	IIb	C

Recommendations	COR	LOE
AF complicating ACS		
Urgent cardioversion of new onset AF in setting of ACS is recommended for patients with hemodynamic compromise, ongoing ischemia, or inadequate rate control	I	C
IV beta blockers are recommended to slow RVR with ACS and no HF, hemodynamic instability, or bronchospasm	I	C
With ACS and AF with CHA2DS2-VASc (score ≥2), anticoagulation with warfarin is recommended unless contraindicated	I	C
Amiodarone or digoxin may be considered to slow a RVR with ACS and AF, and severe LV dysfunction and HF or hemodynamic instability	IIb	C
Nondihydropyridine calcium antagonists might be considered to slow a RVR with ACS and AF only in the absence of significant HF or hemodynamic instability	IIb	C

Recommendations	COR	LOE
Hyperthyroidism		
Beta blockers are recommended to control ventricular rate with AF complicating thyrotoxicosis, unless contraindicated	**I**	**C**
Nondihydropyridine calcium channel antagonist is recommended to control the ventricular rate with AF and thyrotoxicosis when beta blocker cannot be used	**I**	**C**

Recommendations	COR	LOE
Pulmonary diseases		
Nondihydropyridine calcium channel antagonist is recommended to control the ventricular rate with COPD and AF	**I**	**C**
Cardioversion should be attempted with pulmonary disease patients who become hemodynamically unstable with new onset AF	**I**	**C**

Recommendations	COR	LOE
WPW and pre-excitation syndromes		
Cardioversion recommended with AF, WPW, and RVR who are hemodynamically compromised	I	C
IV procainamide or ibutilide to restore sinus rhythm or slow ventricular rate recommended with pre-excited AF and RVR who are not hemodynamically compromised	I	C
Catheter ablation of accessory pathway is recommended in symptomatic patients with pre-excited AF, especially if the accessory pathway has a short refractory period	I	C
IV amiodarone, adenosine, digoxin, or nondihydropyridine calcium channel antagonists with WPW who have pre-excited AF is potentially harmful	III: Harm	B

Recommendations	COR	LOE
Heart failure		
Beta blocker or nondihydropyridine calcium channel antagonist is recommended for persistent or permanent AF in patients with HFpEF	I	B
In the absence of pre-excitation, IV beta blocker (or a nondihydropyridine calcium channel antagonist with HFpEF) is recommended to slow ventricular response to AF in the acute setting, exercising caution in patients with overt congestion, hypotension or HFrEF	I	B
In the absence of pre-excitation, IV digoxin or amiodarone is recommended to acutely control heart rate	I	B
Assess heart rate during exercise and adjust pharmacological treatment in symptomatic patients during activity	I	C

Recommendations	COR	LOE
Heart failure		
Digoxin is effective to control resting heart rate with HFrEF	**I**	**C**
Combination digoxin and beta blocker (or a nondihydropyridine calcium channel antagonist with HFpEF), is reasonable to control rest and exercise heart rate with AF	**IIa**	**B**
Reasonable to perform AV node ablation with ventricular pacing to control heart rate when pharmacological therapy insufficient or not tolerated.	**IIa**	**B**
IV amiodarone can be useful to control the heart rate with AF when other measures are unsuccessful or contraindicated	**IIa**	**C**
With AF and RVR, causing or suspected of causing tachycardia induced cardiomyopathy, it is reasonable to achieve rate control by AV nodal blockade or rhythm control strategy	**IIa**	**B**

Recommendations	COR	LOE
Heart failure		
In chronic HF patients who remain symptomatic from AF despite a rate-control strategy, it is reasonable to use a rhythm-control strategy	**IIa**	**C**
Amiodarone may be considered when resting and exercise heart rate cannot be controlled with a beta blocker (or a nondihydropyridine calcium channel antagonist with HFpEF) or digoxin, alone or in combination	**IIb**	**C**
AV node ablation may be considered when rate cannot be controlled and tachycardia-mediated cardiomyopathy suspected	**IIb**	**C**
AV node ablation should not be performed without a pharmacological trial to control ventricular rate	**III: Harm**	**C**
For rate control, IV nondihydropyridine calcium channel antagonists, IV beta blockers and dronedarone should not be given with decompensated HF	**III: Harm**	**C**

Recommendations	COR	LOE
Familial (Genetic) AF		
With AF and multigenerational AF family members, referral to a tertiary care center for genetic counseling and testing may be considered	**IIb**	**C**

Recommendations	COR	LOE
Postoperative cardiac and thoracic surgery		
Beta blocker is recommended to treat postoperative AF unless contraindicated	**I**	**A**
A nondihydropyridine calcium channel blocker is recommended when a beta blocker is inadequate to achieve rate control with postoperative AF	**I**	**B**
Preoperative amiodarone reduces AF with cardiac surgery and is reasonable as prophylactic therapy for high risk of postoperative AF	**IIa**	**A**
It is reasonable to restore sinus rhythm pharmacologically with ibutilide or direct-current cardioversion with postoperative AF	**IIa**	**B**

Recommendations	COR	LOE
Postoperative cardiac and thoracic surgery		
It is reasonable to administer antiarrhythmic medications to maintain sinus rhythm with recurrent or refractory postoperative AF	IIa	B
It is reasonable to administer antithrombotic medications for postoperative AF	IIa	B
It is reasonable to manage new-onset postoperative AF with rate control and anticoagulation, with cardioversion if AF does not revert spontaneously to sinus rhythm during follow-up	IIa	C
Prophylactic sotalol may be considered for patients with AF risk following cardiac surgery	IIb	B
Colchicine may be considered postoperatively to reduce AF following cardiac surgery	IIb	B

Conclusion & Take Home message

- Betablockers & nondihydropyrdine CCBs are the best drugs to treat AF with HCM & may be accompanied with Rhythme control drugs .

-DC shock is the treatment of choice for AF complicating ACS if there is Haemodynamic unstability, if the patient is stable IV Beta blockers recommended to slow RvR with Acs .

Conclusion & Take Home message

- If AF complicating thyrotoxicosis Beta blockers or non dihydropyridine CCBs is the TTT of choice.

-CCBs recommended to treat AF in COPD patient.

-Proconamide & ibutilide recommended to treat stable patient AF with WPW , if the patient unstable DC is the TTT of cloice

-Amiodarone , CCBs , Betablockers,& digoxin CI in TTT of AF with WPW.

Conclusion & Take Home message

- BB & CCBs recommended as rate control in AF with HFPEF
- IV Amiodarone or Digoxin recommended to decrease HR in absence of preexcitation .
- B Blockers & CCBs not given in case of Decompensated HF
- Beta blockers is the TTT of choice in post operative AF , also amiodarone can be used .

THANK YOU