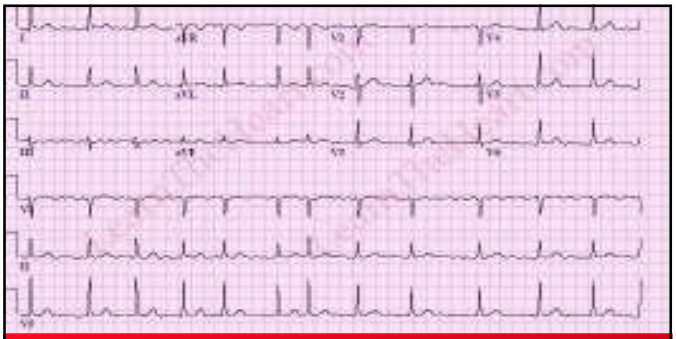
Are you "Fibbing" again?

Shirley Mohr-Burt APRN

Bryan HEART



Atrial Fibrillation—What is it?

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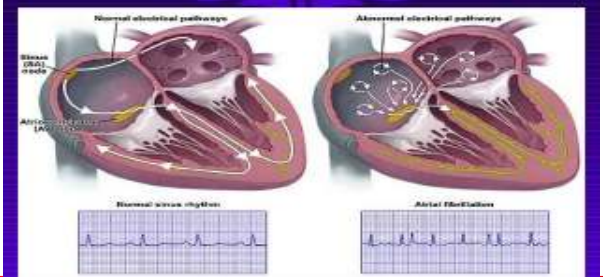
The hallmark of AF is chaotic atrial impulses leading to irregularly irregular ventricular contraction, usually with incessant tachycardia



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Symptoms of AF

- General fatigue
- Rapid and irregular heartbeat
- Fluttering or "thumping" in the chest
- Dizziness
- Shortness of breath and anxiety
- Weakness
- Faintness or confusion
- Fatigue when exercising
- Sweating
- CHEST PAIN

Types of Atrial Fibrilation

Paroxysmal AF

AF that terminates spontaneously or with intervention within 7 days of onset.

Persistent AF

Continues AF that lasts longer than 7 days.

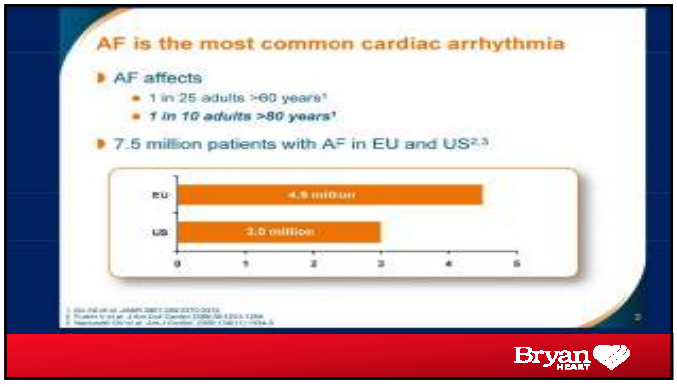
Long standing persistent AF

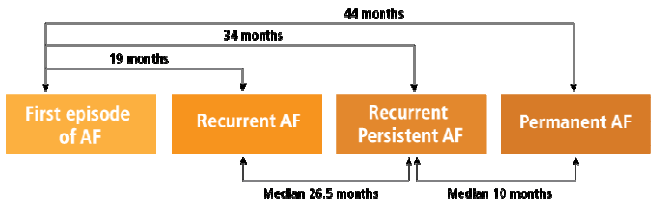
Continuous AF that lasts for > 12 months in duration.

Permanent AF

When the patient and provider make a joint decision to decision to stop further attempts to restore and/or maintain sinus rhytm.

Nonvalvular AF -AF not related to Heart Valve issue.





Atrial Fibrillation is a progressive disease

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People with Atrial Fibrillation have

4-5 times greater risk of stoke

AF and stroke risk

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CHA_2DS_2-VASc

CHA_2DS_2-VASc criteria	Score
Congestive heart failure/ left ventricular dysfunction	1
Hypertension	1
Age ≥75 yrs	2
Diabetes mellitus	1
Stroke/transient ischaemic attack/thromboembolism	2
Vascular disease (prior myocardial infarction, peripheral artery disease or aortic plaque)	1
Age 65–74 yrs	1
Sex category (i.e. female gender)	1

Total score	Patients (n=7329)	Adjusted stroke rate (%/year)*
0	1	0.0
1	422	1.3
2	1230	2.2
3	1730	3.2
4	1718	4.0
5	1159	6.7
6	679	9.8
7	294	9.6
8	82	6.7
9	14	15.2

*Theoretical rates without therapy; assuming that warfarin provides a 64% reduction in stroke risk, based on Hart RG et al. 2007

Lip G et al. *Chest* 2010;137:263-72; Lip G et al. *Stroke* 2010; 41:2731-8; Camm J et al. *Eur Heart J* 2010; 31:2369-429; Hart RG et al. *Ann Intern Med* 2007;146:857-67.

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Who needs anticoagulation

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Reduce risk of stroke?
Improve quality of life?
Maintain integrity of the left atrium?
Avoid progression of disease?
Avoid development of heart failure?

Decisions for treatment

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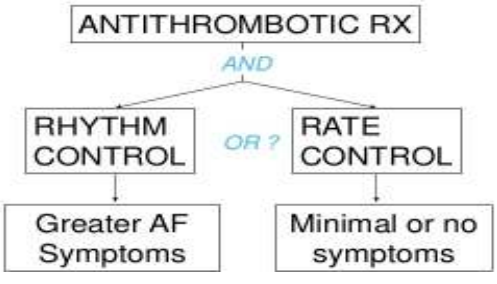

AF options

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Prevention of Thromboembolism

- With AF or atrial flutter for ≥48 h, or unknown duration, anticoagulate with warfarin for at least 3 wk before and 4 wk after cardioversion (Class I)
- With AF or atrial flutter for >48 h or unknown duration, requiring immediate cardioversion, anticoagulate as soon as possible and continue for at least 4 wk (Class I)
- With AF or atrial flutter <48 h and high stroke risk, IV heparin or LMWH, or factor Xa or direct thrombin inhibitor, is recommended before or immediately after cardioversion, followed by long-term anticoagulation (Class I)
- With AF or atrial flutter <48 h and low thromboembolic risk, IV heparin, LMWH, a new oral anticoagulant, or no antithrombotic may be considered for cardioversion (Class IIb)

Rhythm Control

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Direct-current cardioversion

- Cardioversion is recommended for AF or atrial flutter with RVR, that does not respond to pharmacological therapies and contributes to ongoing myocardial ischemia, hypotension, or HF (Class I)
- Cardioversion is recommended for AF or atrial flutter and pre-excitation with hemodynamic instability (Class I)

Rhythm Control

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Pharmacological cardioversion

- Flecainide, dofetilide, propafenone, and IV ibutilide are useful for cardioversion of AF or atrial flutter, provided contraindications to the selected drug are absent (Class I)
- Amiodarone is reasonable for pharmacological cardioversion of AF (Class IIa)
- Propafenone or flecainide ("pill-in-the-pocket") to terminate AF out of hospital is reasonable once observed to be safe in a monitored setting (Class IIa)

Rhythm Control

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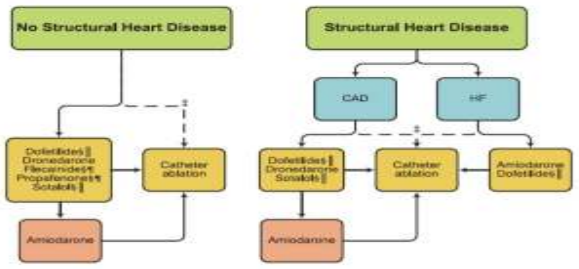


Rhythm Control–Decision Tree

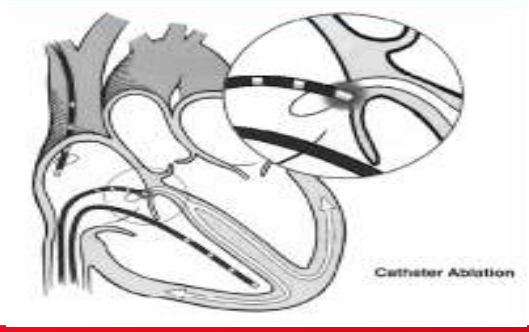
Rate Control

- Control ventricular rate using a beta blocker or non-DHP CCBs for paroxysmal, persistent, or permanent AF (Class I)
- IV beta blocker or non-DHP CCBs is recommended to slow ventricular heart rate in the acute setting in patients without pre-excitation. In hemodynamically unstable patients, electrical cardioversion is indicated (Class I)
- A heart rate control (resting heart rate <80 bpm) strategy is reasonable for symptomatic management of AF (Class IIa)
- IV amiodarone can be useful for rate control in critically ill patients without pre-excitation (Class IIb)

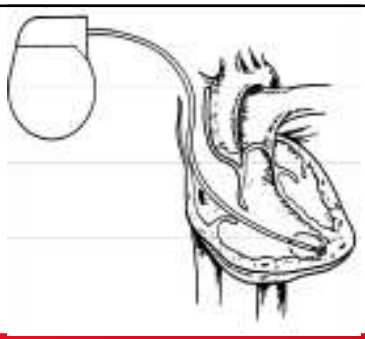
Rate Control

- Rapid, uncontrolled ventricular rates during AF
- Symptomatic Bradycardic episodes
- Refractory or intolerant of antiarrhythmic therapy

AV Node Ablation



AV Node Ablation



AV Node Ablation- Pacemaker required

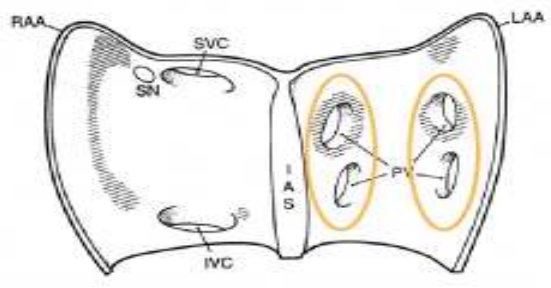
- Pulmonary vein isolation is a procedure used to stop abnormal electrical signals in your heart that cause heart rhythm problems.
- Pulmonary vein isolation is a type of cardiac ablation. Cardiac ablation works by scarring or destroying tissue in your heart that triggers an abnormal heart rhythm. In some cases, cardiac ablation prevents abnormal electrical signals from traveling through your heart and, thus, stops the heart rhythm problem.
- In pulmonary vein isolation, the procedure creates scar tissue in the part of the left upper chamber of your heart where each of your four pulmonary veins connects. Your pulmonary veins bring oxygen-rich blood from your lungs to your heart. Pulmonary vein isolation can reduce the signs and symptoms of atrial fibrillation, which affects the upper chambers of the heart.

PVI Ablation

Why it's done

- Pulmonary vein isolation is used to reduce signs and symptoms and improve quality of life for people living with atrial fibrillation.
- Pulmonary vein isolation usually isn't your fist treatment option. Your doctor may recommend that you try to control your atrial fibrillation with other treatments first.

PVI Ablation



PVI Ablation

www.heart.org ww.uptodate.com
Kearon C., Akl Griffiths,C.L.; Vestal,M.L.;et.al: The Nurse Practitioner.2017:12(11):8-13.
www.guidelines.gov
Kearon C, Akl EA, Ornelas J, et al.Antithrombotic therapy for VTE disease: CHEST Guideline and Espert Panel Report. Chest.2016;149(2) :315-352.
Pathophysiology of heart disease : a collaborative project of medical students and faculty / editor Lilly,L.S.. –Sixth Edition.

References