

- Drugs used to treat cardiac arrhythmias



Objectives

At the end of this session you should be able to:

- Classify anti-arrhythmic drugs.
- Describe the electrophysiological effects of the major groups of antiarrhythmic drugs.
- List the uses and toxicities of these drugs
- Explain how hypo- or hyperkalemia and

antiarrhythmic drugs can cause arrhythmia

■ The Basics

- SA Node and AV node cells are slow conductors activated by calcium, thus blocked by calcium channel blockers such as verapamil
- Atrium, Bundle of His, and ventricle cells are fast conducting and activated by sodium, thus blocked by sodium channel blockers (class 1 anti-arrhythmics) such as quinidine, lidocaine and propafenone.

■ Normal Sinus Rhythm

■ Antiarrhythmia Agents

- **Classification of Anti-arrhythmics**
- **Anticoagulation Rules for A-Fib**
 - ♥ Everybody who has rheumatic heart disease should be anticoagulated
 - ♥ If <65 yo and with h/o DM, HTN, CHF, CVA, prosthetic valves, thyrotoxicosis, LV dysfunction or LA enlargement, then give coumadin
 - ♥ If no risk factors, do nothing.
 - ♥ 65-75 yo with any of above risk factors, give coumadin; if no

additional risk factors, give
coumadin or aspirin

- ♥ >75 yo give coumadin but keep
INR 2-2.5 due to increased risk
of bleed