

Atrial Fibrillation

Classification –

- Paroxysmal – episodes last <7 days
- Persistent – lasts >7 days
- Recurrent - >2 episodes
- Permanent – lasts >1 year with or without cardioversion
- Lone – Afib without structural heart disease, age <60-65

Evaluation –

- H&P – symptoms, pattern, causes?
- EKG – Afib; also look for LVH, prior MI
- Echo – TTE to eval for valves, LVH, LA thrombus (TEE better)
- TSH, T4
- Others
 - GXT – eval for ischemia, exercise induced AF
 - Holter/Event monitor
 - EP?

Treatment

- Cardioversion – DC vs. Chemical
 - IA – quinidine, procainamide, disopyramide
 - IC – flecainide, propafenone
 - III – amiodarone, sotalol, ibutilide, dofetilide
- Sinus Maintenance – only 20-30% maintain NSR without antiarrhythmic therapy!
 - Amiodarone preferred with low LVEF
 - Disopyramide (Norpac) avoided in CHF
 - Surgical (MAZE), RF ablation, Atrial defibrillator
- Rate control
 - Ca channel blocker – verapamil, diltiazem
 - Beta blocker
 - Digoxin (vagotonic, enhances parasympathetic tone)

Rhythm vs. rate control

- **AFFIRM and RACE** trials (NEJM; 2002; 347:1825 and 1837)
 - Embolism rate is equivalent between rate and rhythm control, occurring most often when coumadin is stopped or INR is subtherapeutic
 - Trend toward lower mortality rate with rate control (not significant)

Anticoagulation

- During Cardioversion
 - Patients in Afib >48 hours, target INR 2.5 for 3-4 weeks **before and after** cardioversion
 - 85% of LA thrombi resolve in 3-4 weeks with therapy
 - May eliminate coumadin prior to cardioversion by clearing patients with TEE
 - **BUT** must still anticoagulate for 3-4 weeks after cardioversion
- AF less than 48 hours (Low risk (0.8%) of embolism)
 - Use heparin pre-cardioversion
 - Patients with rheumatic/valvular disease, need to anticoagulate for ≥3-4 weeks afterwards
 - *ASA after spontaneous cardioversion of 1st episode; 4 weeks coumadin for others
- Chronic (for patients with recurrent/permanent AF)
 - 5% risk of CVA/year in afib
 - Coumadin gives 45-82% risk reduction, **beneficial in all age groups**