Atrial Fibrillation

Four types of Atrial fibrillation

Determine the type to help develop treatment plan.

New Onset, Paroxysmal, Persistent, Chronic

If new onset-ensure TTE (surface Echo) has been performed within last year and thyroid studies to rule out hyperthyroidism.

If Paroxysmal, Persistent or Chronic - ensure TTE has been performed within the last year.

New Onset

- For RVR: Start Cardizem drip or load with digoxin if hypotensive.
- Once rates are controlled start oral Cardizem every 6 hours (transition to daily prior to discharge) , Metoprolol 25mg BID or increase home dose if HR/BP allows
- Start anticoagulation if indicated based on CHADS-VASC and not contradicted.
- If new onset recommend Cardiology consult.

Paroxsymal:

- For RVR: Start Cardizem drip if NOT hypotensive, Amiodarone drip or load with digoxin if hypotensive.
- Once rates are controlled start oral Cardizem every 6 hours (transition to daily prior to discharge), Metoprolol 25mg BID or increase home dose if HR/BP allows. If frequency of Afib episodes are increasing consider AAD (anti-arrhythmic drug)therapy and Cardiology consult.
- Start/Continue anticoagulation if indicated based on CHADS-VASC and not contradicted.
- If symptomatic would recommend cardiology consult to arrange for TEE/CV or CV based on duration

Persistent:

- For RVR: Start Cardizem drip if NOT hypotensive, Amiodarone drip or load with digoxin if hypotensive.
- Once rates are controlled start oral Cardizem every 6 hours (transition to daily prior to discharge), Metoprolol 25mg BID or increase home dose if HR/BP allows. Consider AAD (anti-arrhythmic drug) therapy and Cardiology consult.
- Start/ continue anticoagulation if indicated based on CHADS-VASC and not contradicted.
- If symptomatic would recommend cardiology consult to arrange for TEE/CV or CV based on duration

Chronic Afib-now with RVR:

- Start Cardizem drip or load with digoxin if hypotensive.
- Increase home medications for better rate control.
- No need to start AAD. (anti-arrhythmic drug)
- Start/Continue anticoagulation if indicated based on CHADS-VASC and not contradicted.

Calculate CHADS-VASC score:

0-No indication for anticoagulation

1-ASA or NOAC/Coumadin should be considered

2 or greater-NOAC, Lovenox, Heparin or Coumadin

At Discharge:

0-No indication for anticoagulation

1-ASA or NOAC/Coumadin should be considered (if they are in Afib at discharge with plans for CV in near future would recommend NOAC/Coumadin)

2 or greater-NOAC or Coumadin

How to Select Anticoagulation:

Wafarin/Coumadin:

- **Benefits:** low cost, has been in use for 60+ years, once a day dosing, reversal agent
- **Pitfalls:** Multiple medications and food interactions, Frequent INR's, can be difficult to dose, must be bridged until INR is therapeutic

NOAC's(Novel oral anticoagulants or New oral anticoagulants) -Nonvalvular Afib ONLY

- **Benefits:** No significant drug or food interactions, No blood draws, effective within a few hours after dosing
- **Pitfalls:** Can be costly, only Pradaxa has a reversal agent at this time. Xarelto and Eliquis do NOT have reversal agents-however one is in the process of being tested.

Pradaxa :

- Oral direct thrombin inhibitor
- Renal clearance
- Dosing: For CrCl greater than 30mL/min then 150mg BID. If CrCL is 15-30 mL/min then 75mg BID

Xarelto:

- Direct factor Xa inhibitor
- Renal clearance

- Dosing: 20mg daily if CrCL is greater than 50mL/min. If CrCl is 15-50 ml/min then 15mg daily-needs to be given with the evening meal

Eliquis:

- Direct factor Xa inhibitor
- Hepatic clearance
- Dosing: 5mg BID unless the patient meets two out of the 3 criteria, then the dose is reduced to 2.5mg BID.
  - Age greater than 80 years
  - Body weight equal or less than 60kg
  - Creatinine greater or equal to 1.5mg/dL

Tips:

- In patients with ESRD, use of NOAC's have NOT been studied so Coumadin/Warfarin is recommend.
- All three of the NOAC's mentioned have co-pay cards offering 30 days free.
- If a patient's INR is difficult to maintain in the therapeutic range consider switching to a NOAC.
- Do NOT use Cardizem in patients with a history of HF-it may worsening HF symptoms.
- All AAD need long term monitoring-would NOT recommend starting unless Cardiology has been consulted.