

The Burden of Atrial Fibrillation

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56 year old white male referred to Atrial Fibrillation Clinic for management of AF.

HPI: 6 month history of palpitations with associated breathlessness, chest tightness and exercise intolerance and intermittent lightheaded spells. One near syncopal spell while climbing stairs. Episodes have increased over the past 2 months.

Past Medical History:

Diabetes Mellitus (Hgb A1C 7.2)

Hypertension

Depression

Asthma

Probable Sleep Apnea (Berlin Questionnaire score high risk)

Morbid Obesity (BMI 44.0)

History of ETOH (binge drinking)

Review of Diagnostic Tests

- Echocardiogram: Moderate decrease in LV function, ejection fraction 45%, mild LVH, LA size 4.3 cm
- Labs: TSH normal range (4.4), AST 68 , electrolytes, CBC normal range
- Adenosine stress test showed no evidence of stress induced ischemia with EF 42%.

PHYSICAL EXAMINATION

- BLOOD PRESSURE: (162/98)
- EKG: Sinus rhythm 60 bpm.
- WEIGHT: 133 kg
- HEENT: *THYROID, CAROTID BRUIT, negative*
- CHEST: *CRACKLES lower lobes*
- CV: *JVP elevated , No MURMURS, GALLOPS, CLICKS*
- ABD: *ORGANOMEGALY, AORTIC OR RENAL BRUITS, negative*
- EXTREMITIES: *PULSES, + 2 bilaterally pitting edema lower extremities*

It is going to be a journey.....

- Referred for sleep evaluation, CPAP recommended
- Lisinopril 5 mg started for BP control
- Lasix increased from 20 mg QD to 40 mg BID for increased HF symptoms
- Metoprolol 25 mg BID added for rate control
- Lifestyle modifications (sodium restriction, weight loss, increase exercise, ETOH)
- Coumadin 5 mg daily (goal INR 2.0-3.0)
- Holter monitor then f/u in clinic in 2 weeks
- Consider anti arrhythmic drug therapy

Clinical Course

- Holter monitor showed several paroxysms of atrial fibrillation with rapid ventricular response lasting 1-2 hours in duration with associated palpitations and breathlessness. 5 second pause with conversion to sinus rhythm with lightheadedness
- Dual chamber pacemaker implanted.
- Sotalol started at 120 mg BID. Stopped at 2 month follow up due to increased fatigue and breathlessness. AF burden on device 10%, longest episode 12 hours in length. Improved rate control.
- Ejection fraction normalized to 55% with rate control.
- Anti arrhythmic drug switched to Dofetilide. Ineffective with increase in AF burden to 30% at 4 month follow up.
- Not an ideal candidate for Amiodarone due to young age and elevation in baseline LFTs

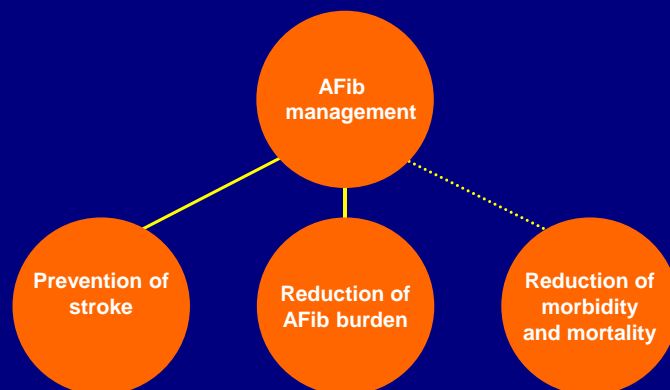
Referred to EP for Ablation

- Pulmonary Vein Isolation (PVI) May 2008 (PVI with roof line)
- Post procedure Left Atrial flutter with sustained HRs 160 bpm, cardioverted X 2, then started on Amiodarone therapy.
- Repeat PVI May 2009 (3 of 4 vein reconnected). Amiodarone stopped at 3 months. Coumadin stopped at 1 year after 30 day STM showed no Afib.
- No documented episodes of AF in 2 years
- S/p lap band surgery May 2010 with 75 pound weight loss
- Hg A1C 6.5 of Rx therapy
- No ETOH since ablation procedure
- Returned to work full time driving position

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Goals of AF Management and Treatment

Successful management of AFib should also aim at further reducing Cardiovascular morbidity, mortality, and hospitalization¹⁻⁴



*Total percentage of time a patient has AF as determined by the number and duration of AF episodes.

1. Wolf PA, et al. *Stroke*. 1991;22:983-988; 2. Prystowsky EN. *J Cardiovasc Electrophysiol*. 2006;17(suppl 2):S7-S10; 3. Singh SN, et al. *J Am Coll Cardiol*. 2006;48:721-730; 4. Wolf PA, et al. *Arch Intern Med*. 1998;158:229-234.