Cases

Na Mee Kim, MD

- 77 yo W with h/o non-ischemic cardiomyopathy (NICM), atrial fibrillation, stroke, colon cancer, DM2 and PAD (carotid artery stent)
- For NICM
 - optimal medication regimen (carvedilol, spironolactone, losartan (failed entresto); maintenance furosemide)
 - Limited by chronic low blood pressure (sbp 90s)
 - no h/o chemotherapy
- For Afib
 - anticoagulation
 - Rate control: carvedilol, digoxin
- Upgraded to Biventricular pacemaker/defibrillator 6 months prior
- Referred for LVAD at outside hospital: declined

- Not too active
- Using electric scooter at assisted living facility
- Walking with PT

• Ejection fraction 25%



- Device Interrogation
 - CRT-D
 - V paced 22%
 - "Frequent rapidly conducting atrial fibrillation"

• Next step?

• Labs

```
Hgb 15.1
Na 137 / K 4.0 / BUN 21 / cre 0.6
```

Dig 1.1

TSH 1.36

A1c 9.4

- If no improvement, plan for AVN Ablation

- Series of medical complications
 - transaminitis/jaundice (passed choledocholithiasis vs abx adverse effect)
 - CAP
 - Cellulitis/sepsis
 - AMS/delirium (?side effect to tramadol)
 - Recurrent UTI exacerbated by hyperglycemia

• Ejection fraction 50%



- 62 yo W with h/o paroxysmal SVT (pSVT), gastric bypass (roux en y), NASH, HTN, DM2
- Reason for consultation: palpitations
 - Last seen by cardiology 7 yrs prior for palpitations
 - correlated to sinus tachycardia, PACs, PVCs, brief pSVT 140s bpm
 - Remained on metoprolol
 - Over the years, metoprolol was titrated to 100mg BID
 - Recently self-titrated to 100mg TID
 - Palpitations: brief, irregular, associated with globus sensation
 - No syncope
 - Mild orthostasis
 - Mild dyspnea but not consistently exertional

- Meds
 - Lisinopril 20mg
 - Metoprolol 100mg TID
 - PPI
 - Aripiprazole/Cymbalta/gabapentin
 - Metformin
 - Recently started semaglutide
- FH
 - Brother, MI, age 50
 - Father, MI, age 42
 - Mother, stroke, age 70s
- SH
 - Retired engineer
 - Occ etoh, no tobacco use

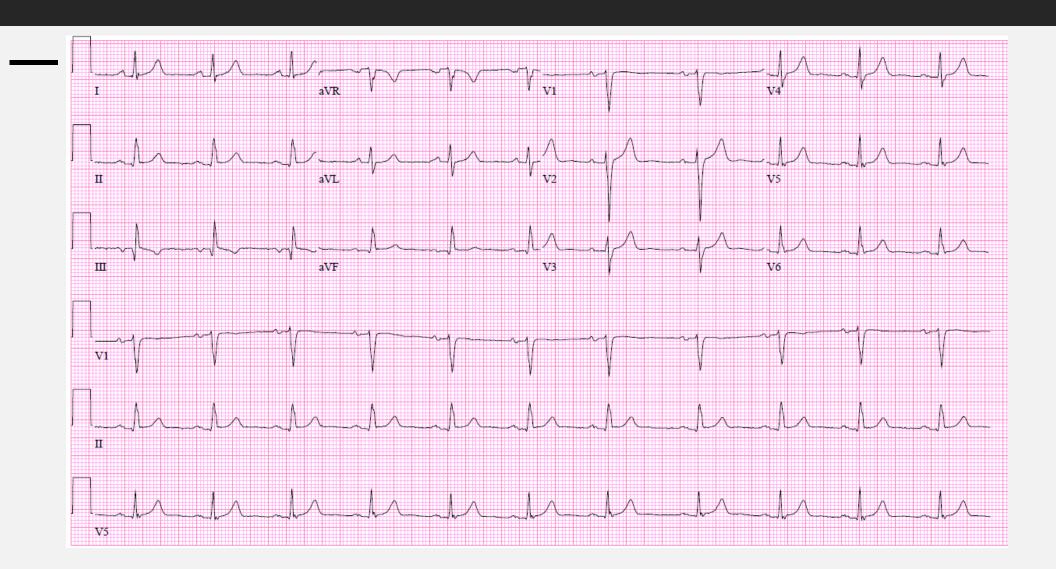
- Patch monitor (last year)
 - "symptoms corresponding to sinus rhythm. On occasion short SVT run (longest 8 beat run). Otherwise normal monitor"
- Holter (this year)
 - Avg HR 85 bpm / min HR 65 bpm / max HR 117 bpm
 - no pauses
 - Minimal ectopic beats
 - Brief atrial run, 11 beats
 - But was asymptomatic while wearing the monitor

• BP 109/71 HR 78 BMI 38

• PE: no significant findings

• Labs

Hgb 11.2 / MCV 82
Na 138 / K 4.4 / BUN 16 / cre 0.6
ALT 35 / AST 19
A1c 7.4 / TSH 0.775
TC 162 / trig 118 / HDL 55 / LDL 83



- Follow up visit
 - Echocardiogram

LV EF 65-70%

Concentric remodeling: IVSd 1.3cm

No significant valvular abnormality

• Event monitor: symptoms correlated with PACs, PVCs PVC burden 3%



- Five month later: hospitalized for syncope
 - Multifactorial
 - Recently started tramadol / acetaminophen/ diphenhydramine / gabapentin
 - Orthostatic: had recently started on HCTZ (for LEE)
 - New onset diarrhea
 - ?vasovagal (nauseated / back pain/anxiety)
 - TTE: EF 70%, SAM, increased LVOT velocity
 - Resting grad 11.1mmHg
 - With Valsalva 51mmHg

- Event monitor: PVCs (burden < 1%), PACs, brief pSVT (12 beats)
- Proceeded with ILR implant

Follow up

- Another brother with MI, s/p PCI
 - Brother, MI age 50
 - Brother, MI age 65
 - Father, MI, age 42
 - Mother, stroke, 70s
- SBP was low for few months but stabilized, ongoing chronic palp, no sig arrhythmia on LINQ
 - Cont MTP
 - Add verapamil

 In course of thre monitored on LI



• Next steps?

- Coronary angiogram: negative for obstructive CAD
- cMRI: "asymmetrical septal hypertrophy, maximal thickness 15mm, meeting criteria for hypertrophic cardiomyopathy"
 - Brother, MI age 50 passed away suddenly from "heart attack"
 - "weighs 770g. LV measures up to 2.2cm in thickness and RV measures 0.5mg thickness.... includes an area of old scarring in the vicinity of the LV's apex. The affected area measures 2cm in its greatest dimension causing reduction in the thickness of the ventricular walls. At this level the wall measures 0.5cm in thickness. The coronary arteries show moderate diffuse atherosclerotic changes with over 60-70% obliteration of the lumen mainly observed in the more peripheral and smaller branches of the LAD..."
 - Brother, MI age 65
 - Father, MI, age 42
 - Mother, stroke, 70s
- Underwent dual chamber ICD implant