#### ANOCA/INOCA: THIS ISN'T GERD

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Case Presentation: Tafadzwa Mtisi MD

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#### **Presenting History**

42 year old female active smoker with history of migraines and who reported a syncopal episode at home for which she received a Holter monitor. She was later admitted at Elmhurst hospital where she presented with chest pain that preceded several episodes dizziness. Holter monitor events revealed evidence of high degree AV block with a 3second pause before she was transferred to North Shore University Hospital for permanent pacemaker placement.



#### **Past Medical History**

Migraine headaches

#### **Social History**

- Married
- Active smoker 18 pack-years
- Denied alcohol or illicit drug use

#### **Medications**

No prescription medications

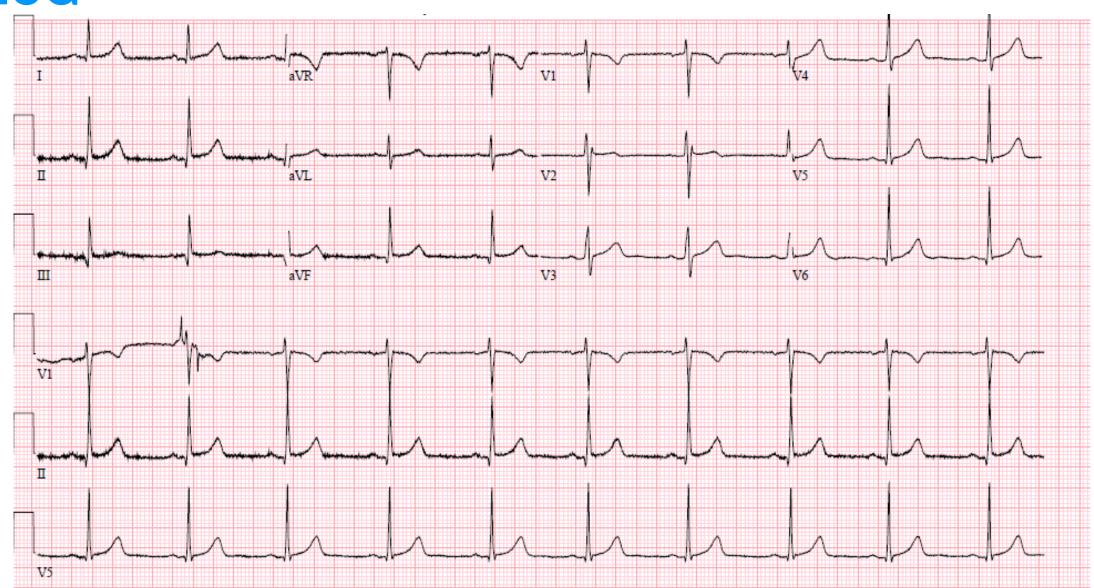


## Work up

- Lyme antibodies Negative
- Chagas Antibodies Negative
- WBC 9, Hgb 11.2, Plt 234
- Na 138 K 4.2 Cl 105 CO2 21 BUN 20 Cr 0.59



### **ECG**





### QUESTION

What it the most appropriate next step?

- a. Cardiac coronary CT
- b. Cardiac MRI
- c. Nuclear stress test
- d. Transthoracic echocardiogram
- e. Cardiac PET scan



### Work up continued

#### Cardiac MRI

LEFT VENTRICLE: Left ventricle measures 5.4 cm at and diastole and 3.4 cm at end systole. There is no asymmetric or concentric thickening of the left ventricular myocardium. There is no resting first pass perfusion abnormality. There is no convincing focus of late gadolinium enhancement.

#### Impression:

- 1. The ejection fraction measures 66.61%.
- 2. No convincing focus of late gadolinium enhancement to suggest fibrosis or scarring.

#### Transthoracic Echocardiogram

- 1. Left ventricular systolic function is normal with an ejection fraction of 71 % by Simpson's method of disks.
- 2. Mildly enlarged right ventricular cavity size, with normal wall thickness, and normal systolic function. Tricuspid annular plane systolic excursion (TAPSE) is 2.9 cm (normal >=1.7 cm).
- 3. No pericardial effusion seen.



## QUESTION

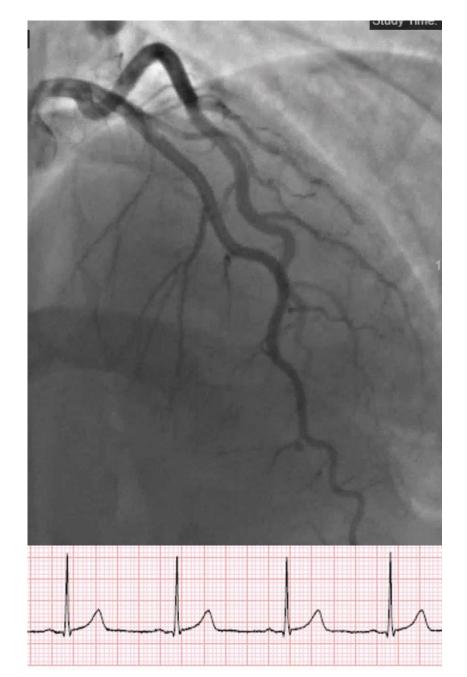
What is the next step in the evaluation of this patient?

- a. Nuclear Stress test
- b. Electrophysiology study
- c. Proceed to pacemaker placement
- d. Left heart catheterization/Coronary Spasm testing

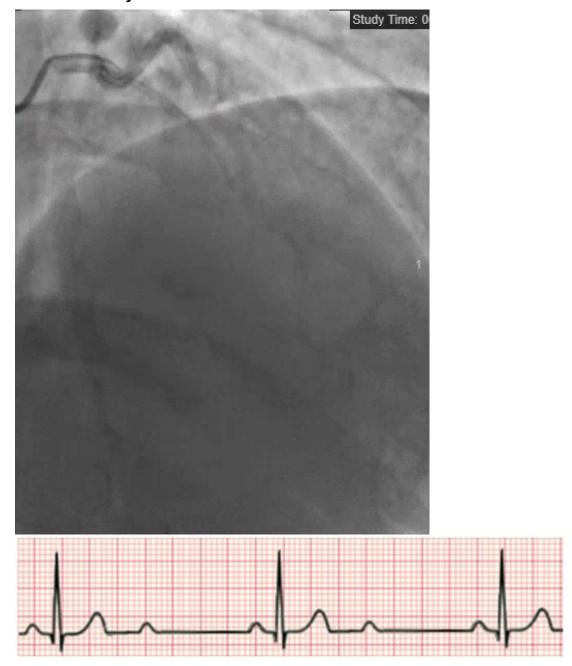




Baseline LAD



Post-Acetylecholine



#### Follow up

- Patient was started on amlodipine 5mg and strongly encouraged to quit smoking
- She underwent placement of an implantable loop recorder which has been interrogated regularly (most recently in June) and all the interrogations have not shown any evidence of paroxysmal AV block.



# THANK YOU

