

Yana Quel, 2/10

### N202 Unit III

#### Class Preparation Assignment – Dysrhythmia Case Study

##### Patient Profile:

F.B is a 70-year-old male who was admitted to the hospital with decompensated heart failure. During his hospitalization, he experienced a cardiac arrest secondary to pulseless ventricular tachycardia and was successfully defibrillated. He is now in the Intensive Care Unit under your care, receiving close monitoring.

##### PMH:

CAD, CHF, HTN, HLD, previous MI

##### Subjective Data:

Reports dyspnea with activity, fatigue, & mild chest discomfort from the defibrillation

##### Objective Data:

Appears pale & anxious

Vitals: HR 70 bpm, BP 104/56 mmHg, RR 26/min, SpO2 92% on 2L NC, T 100.1 Oral

Focused Assessment: crackles auscultated in lung bases, shallow inspiratory effort, audible S3 present on cardiac auscultation

Diagnostics: Echocardiogram – EF 25%, K+ 2.9 mEq/L on morning labs, Telemetry – strip below



##### Questions:

- 1) Interpret the rhythm above:
  - a. NSR w/ 2 unifocal PVCs
  
- 2) Identify two reasons why F.B. may be experiencing this ectopy:
  - a. Decompensated HF
  - b. MI

- 3) Why is F.B. on an amiodarone infusion?
- a. Increases PR interval r/t QRS is premature
  - b. Inhibits adrenergic stimulation to suppress the unifocal ectopic areas of the ventricles from firing when they shouldn't and where they shouldn't
  - c. Infusion r/t being a reperfusion arrhythmia s/p MI
    - i. Preventative from worsening because the primary rhythm was v tach- this current rhythm could worsen into v tach again if not treated proactively

Change in Condition:

Later that same day, F.B. receives potassium replacement and continues to be monitored on the Amiodarone infusion. He begins to complain of dizziness and increased weakness.

New set of vital signs reveals: HR 42 bpm & BP 88/46 mmHg.

Telemetry now shows: P waves that are present and regular, QRS complexes that are slow and regular, but no consistent relationship between P waves and QRS complexes.

The provider orders a temporary pacemaker.

Questions:

- 4) Based off of the telemetry description above, what rhythm is F.B. now experiencing?
- a. 3rd degree AV block
- 5) What is the main purpose of a temporary pacemaker in this situation?
- a. To increase the HR & support the BP
- 6) Based on F.B.'s history and hospitalization, is he a candidate for an implantable cardioverter-defibrillator (ICD) prior to discharge?
- a. Yes
    - i. Had pulseless V tach with cardiopulmonary arrest
    - ii. Has cardiomyopathy