

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: Normal sinus with 2 PVC (unifocal)
- 2) Identify two reasons why F.B. may be experiencing this ectopy: Heart failure & past MI, low K⁺,
- 3) Why is F.B. on an amiodarone infusion? Slowing conduction through the heart and suppress arrhythmias.

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? Third degree heart block.
- 5) What is the main purpose of a temporary pacemaker in this situation? Prevent severe bradycardia or cardiac arrest.
- 6) Based on F.B.'s history and hospitalization, is he a candidate for an implantable cardioverter-defibrillator (ICD) prior to discharge? Yes, due to his past cardiac arrest and cardiac history that place him at a high risk for dysrhythmias