

Atrial Fibrillation

Patient Profile

E.W., a 76-year-old white man, comes to the emergency department after a syncopal episode at a local restaurant. He is accompanied by two friends.

Subjective Data

- Has been feeling weak for a few days
- Became dizzy and fainted while awaiting his dinner
- Takes one medication, a “water pill” for high blood pressure (BP)

Objective Data

Physical Examination

- BP 92/50, pulse 125 and irregular, respirations 24, temperature 97°F
- Alert and oriented
- Lung sounds clear in all fields

Diagnostic Studies

- ECG monitor shows atrial fibrillation

Discussion Questions

1. What is atrial fibrillation?

Answer: Its is an irregular and rapid heart rhythm that can increase your risk of developing a blood clots that can cause ischemia or strokes. HR is 100-175bpm.

Rationale: High blood pressure could be contributing to this, during atrial fibrillation, the atria beat chaotically and irregularly.

2. What are your priority actions at this time?

Answer: calcium channel blockers, beta blockers, digoxin. Drug of choice amiodarone. cardioversion

Rationale: the goal is to decrease ventricular rate, prevent stroke, conversion to sinus rhythm,

3. What additional history should you obtain from E.W.?

Answer: other OTC medications, prescribed medications and stimulants(caffeine)

Rationale: Collecting relevant past medical history and social history are important to provide overall care to the patient. Try to obtain a complete medication history as medication reconciliation is important to the patient's ongoing treatment.

4. Describe the risks associated with atrial fibrillation.

Answer: ischemia, stroke, blood clots,

Rationale It result in decreased cardiac output because of ineffective atria contraction, thrombi form because of blood statis which has a high incidence of ischemia and stroke

5. E.W. is placed on diltiazem, warfarin, and dronedarone. What is the purpose of each of these medications in treating E.W.'s atrial fibrillation?

Answer: diltiazem- calcium channel blocker, warfarin- anticoagulation, dronedarone- antiarrhythmic.

Rationale: It helps convert a fib to sinus rhythm. It will also prevent blood clots and reduce incident of stroke.

Case Study Progress

E.W. is admitted with a diagnosis of new onset of atrial fibrillation. Despite medical therapy, 12 hours later, he is still experiencing dizziness, and his systolic BP remains below 100. A transesophageal echocardiogram is done, showing E.W. does not have any blood clots, so the provider elects to perform a cardioversion.

6. What instructions should you give E.W. to prepare for a cardioversion? What do you tell him to expect during the procedure and what nursing assessments will you be performing?

Answer: A shock will be delivered to the patient. Since the patient is stable, the patient will be awake but will be sedated with IV midazolam. The nurse will monitor the patients airway at all time , pulse and the monitor.

Rationale: cardioversion is the therapy of choice for this ventricular tachydysrhythmias