

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: Atrial fibrillation is an irregular heartbeat that usually occurs with an underlying heart disease. Patients may experience the feeling that their “heart is skipping a beat”, sweating, and chest pain.

Rationale: Atrial fibrillation is the disorganization in the atria of the heart in which the atria “quivers”, and blood is not effectively being moved to the ventricles.

2. What are your priority actions at this time?

Answer: Priority actions include: placing the patient on continuous cardiac monitoring to determine the nature of the rapid, irregular heart rate and provide continuous assessment, assess the apical pulse, validate the low BP, continue to monitor BP, mental status, and respiratory status, administer supplemental oxygen, establish intravenous access. Ensure E.W.’s safety and instruct him to remain on the stretcher and notify the nurse if he has any chest pain or lightheadedness.

Rationale: Constant monitoring is needed as cardiac output is decreased. Low oxygen saturations and low BP may require early interventions.

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

Answer: I would try to get more information from E.W. to figure out if there could be a cause of this acute A-fib. Is he experiencing chest pain, weakness, “heart flutters”, or shortness of breath? Does he have a history of heart disease? When did he last take his diuretic? How long has he been feeling weak? Has he ever fainted before?

Rationale: Gathering medical 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: The patient is at risk for heart failure, angina, and more serious dysrhythmias. He is also at risk for stroke, as blood pooling in the atria could clot and make way to his brain.

Rationale: Because of the decrease in cardiac output with ineffective atrial contractions or a rapid ventricular response, E.W.'s heart may not function as well.

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 is an antidysrhythmic agent and is used to slow ventricular response rate. Warfarin is an anticoagulant used to prevent blood clots in the atria of the heart. Dronedarone is also a dysrhythmic.

Rationale: These medications all serve a purpose to prevent episodes of atrial fibrillation and lower the possibility of a 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: It is important to teach E.W. that a cardioversion is used to restore a normal heart rate and is performed relatively quickly (1-2 minutes). Before the procedure, he will be given medicine to help relax him, and special electrodes will be put on his chest. He will remain on the heart monitor. His vital signs will be monitored frequently during and after the procedure.

Rationale: The patient has a right to understand and consent to the procedure that is about to be performed on him. He needs to understand its risks and benefits (in his case, it would definitely benefit him).