

## 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:** characterized by a total disorganization of atrial electrical activity due to multiple ectopic foci, resulting in loss of effective atrial contraction

**Rationale:** complete disorganization of atrial electrical activity causes the heart to “fib”

2. What are your priority actions at this time?

**Answer:** place E.W on continuous cardiac monitoring & provide continuous assessment

**Rationale:** goals of treatment include a decrease in ventricular response, prevention of stroke, & conversion to sinus rhythm

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

**Answer:** Is he currently experiencing any angina, syncope, weakness, palpitations, or shortness of breath? Does he have a history of heart disease? When did he last take the “water pill”? Does he have family members that need to be notified of his treatment in the emergency department? How long has he been feeling weak? Has he ever fainted before?

**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:** angina, HF, thrombi, stroke

**Rationale:** due to the decrease in CO w/ineffective atrial contraction &/or rapid ventricular response

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 a calcium channel blocker. As an antidysrhythmic agent, it is used to slow ventricular response rate.

Warfarin, an anticoagulant, is used to prevent development of blood clots in the fibrillating atria of the heart.

**Rationale:** dronedarone (Mutlaq), which is a multichannel blocker, is used to restore & maintain a normal heart rhythm

### **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:** teach that cardioversion is used to restore a normal heart rate. Before the procedure he will be given medication to help relax him, & electrodes will be placed on his chest. He will remain on the heart monitor and his vital signs will be monitored frequently.

**Rationale:** teaching is important so the patient will know what to expect and his care during & after the cardioversion