

Cardiovascular System

Case Study

Amelia's Case: Faint of Heart

OVERVIEW:

Amelia is a 20-year-old college student who has recently started to experience headaches, fainting, and fluttering of her heart. When she faints twice in one day, her family is concerned and decides she needs to see a doctor.

GOALS:

1. Determine a diagnosis from subjective & objective information.
2. Communicate health information to a patient in a clear, understandable way.

ROLE:

You are a college health center composed of physicians assistants, nurse practitioners, nurses, medical assistants, social workers, dietitians, health educators and other public health practitioners.

OBJECTIVE:

Obj. 14.5: Identify the structures, functions, and pathophysiology of the cardiovascular system.

DELIVERABLE:

- 1) SOAP Note
- 2) Pre-Assessment Guiding Questions
- 3) Patient Education Skit

ASSESSMENT CRITERIA:

Assessment: 1) clear, accurate, and precise diagnosis (claim); 2) supporting subjective and objective data (evidence); 3) logical reasoning and explanation (warrant)

Communication: 1) clear, comprehensive, and understandable presentation of information; 2) professional tone, body language, and style; 3) culturally competent and responsive to patient needs, questions, and dialogue.



Case Study Steps:

_____ 1. Review the coversheet. Assign team roles.

_____ 2. Review Amelia's vital signs and measurements (see Objective section of SOAP Note)

_____ 3. Ask Amelia questions as if you were the health professionals conducting her interview at the visit. Record all information in your SOAP Note.

_____ 4. Research!

_____ 5. Conduct a final follow up interview with any new or neglected questions for Amelia.

_____ 6. Request 1-4 labs/tests to collect for the patient.

_____ 7. Determine the Assessment & Plan

_____ 8. Complete Post-Assessment Questions

Health Care Provider Roles:

Determine the role of each team member. Refer to the "Role" description on the coversheet for ideas, or come up with your own roles. Then determine at least one contribution each team member will make to the case challenge, based on the roles.

Team Member	Role	Contributions

Questions for Patient Interview:

Questions for Patient Interview

SOAP Note	
Subjective:	
Signs & Symptoms	
Allergies	
Medications	
Past medical history	
Last oral intake	
Events leading to injury or illness	
Frequency	
Associated Symptoms	
Radiation	
Character	
Onset	
Location	
Duration	
Exacerbating Factors	
Relieving Factors	

Objective:	
Measurements	Age: 20; Height: 5'7" Weight: 134 lbs
Vital Signs	HR: 82; RR: 21 Temp: 98.5 degF BP: 85/55
Exam Results	
Lab Results	

Assessment:

Summary	
Differential Diagnoses	
Final Diagnosis	<p><i>Claim (Diagnosis):</i></p> <p><i>Evidence:</i></p> <p><i>Reasoning:</i></p>

Plan:

<p>Steps of Plan</p> <p><i>(Consider mental, social and physical health; short- and long-term needs, and follow-up care required)</i></p>	
--	--

Research:

Team Member	Research Focus	Notes from Team Member

Follow Up Questions & Labs/Tests:

Follow Up Questions:

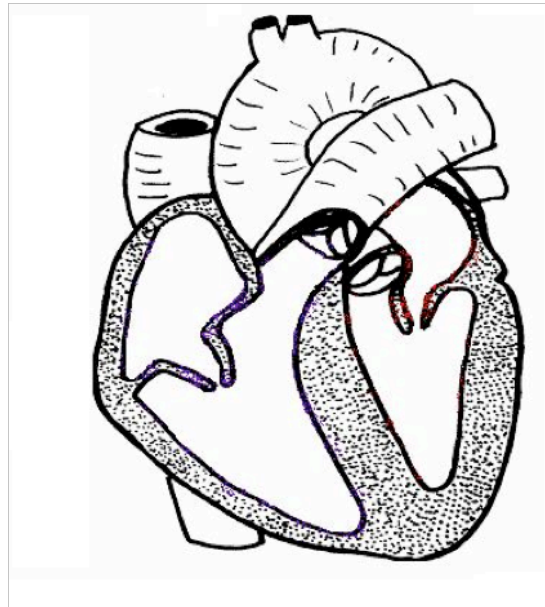
Labs & Tests:

Possible Labs or Tests	Purpose	Expected/Possible Results

Post-Assessment Questions:

1. Label Amelia's heart with the 4 main chambers, valves, and vessels. Based on your diagnosis, is there a problem with any of these areas of her heart?

2. Color each chamber and vessel in the heart either red or blue, based on the oxygen-level of the blood. Describe what caused Amelia's fainting, using the concepts of blood-oxygen level.



3. Add the following to the diagram: SA node, AV node, AV bundle, Purkinje fibers. Describe how Amelia's heart should contract using these terms.

4. What are the names of the vessels that blood travels through when it leaves the heart, in order? How many capillary beds does blood pass through from the time it leaves the right ventricle until the time it reaches the vena cava? When Amelia fainted, what was happening in the vessels of her brain?

5. Based on Amelia's blood pressure and heart rate, describe the state of her cardiovascular health at the doctor's visit. Write a prediction for her heart rate and blood pressure immediately before and after she fainted. Explain why you chose those numbers.

COMMUNICATION: Patient Education Skits

Health professionals have a huge responsibility to educate and inform their patients, but there are many challenges to this. Often, time is short and appointments are rushed for a variety of reasons. Sometimes, health professionals do not have the skills or training to educate patients well. Other times, there is simply a break down in communication, for a variety of reasons.

You have made your final diagnosis for Amelia and determined a comprehensive plan for her health. You are ready to enter her room to meet with her again (and her parents) to explain this information. Create a skit depicting excellent communication between the health professional(s) and Amelia. Be sure to meet the following criteria.

- All team members must have a role
- Skit must be 3-5 minutes in length
- Information must be communicated in a clear & understandable way
- Professional tone, body language, & style
- Display compassion, cultural competence, and responsiveness to patient questions, needs, and concerns

Notes & Planning for Skit

--