

# Are You Sure I've Seen You Before?: Problem Handouts



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# Are You Sure I've Seen You Before?

## Part 1

Rachel is a 37-year-old female who works as an administrative assistant for a Fortune-500 company in downtown Chicago. It is Monday, and she is walking along the lakefront to work from her north-shore condominium. As she is walking south she notices the beginnings of an oncoming migraine headache. She notices a flashing aura in her peripheral vision. In addition, she is becoming increasingly sensitive to light. By the time she reaches her office she is unable to tolerate even normal sound, and is advised by her boss to "head for home" and take the day off. Rachel's assistant (Charles) accompanies her during the cab ride home, and helps her pull the blinds in her bedroom and settle her into bed for the day. Rachel is advised by Charles to call the office if she needs anything.

Two hours later, Charles receives a garbled telephone call from Rachel. She is agitated and very frightened. Charles advises her to remain calm, and tells her that he will be right over. Immediately after hanging up from Rachel's call, Charles dials 9-1-1 and requests an ambulance at Rachel's address. He immediately hails a cab and meets the ambulance at Rachel's condo. She is immediately placed on oxygen and rushed to Northwestern Memorial Hospital.

Upon admission to the ER, Rachel tells the attending physician that she had been laying in bed trying to sleep when she felt a sudden intense headache, followed by a continual dull pain. Immediately after the intense headache Rachel noticed that she could not feel her right side.

As a result of the sudden onset of symptoms the attending ER physician suspects a CVA (stroke). A neurologist was immediately called for consult. When the neurologist received the page she phoned the ER and ordered preliminary lab tests to be started immediately.

Upon examination in the ER the following patient information and physical examination results are obtained:

### ***Patient History:***

- The patient is a 37-year-old female in excellent physical condition. She has previously played highly competitive tennis 3 times weekly at her local tennis club. However, due to a current medical condition has limited her tennis activity to "recreational" tennis.
- The patient is an avid bird-watcher.
- The patient is 5 feet 2 inches tall, weighs 117 pounds.
- The patient has no history of smoking or alcohol abuse.
- The patient has a history of recurring migraine headaches since puberty. Attempts to regulate the onset of migraines pharmacologically have demonstrated limited success.
- The patient has been under the care of a cardiologist for the past 2-3 weeks for atrial fibrillation. The condition has persisted, and is poorly responding to medication. Her cardiologist is determined to treat the condition pharmacologically rather than surgically.
- Remainder of patient history is unremarkable.

### ***Lab tests:***

- CBC with platelet count was ordered.



- Prothrombin time, activated partial thromboplastin time, electrolytes, creatinine, serum creatine kinase and serum glucose were ordered.
- A full head MRI was ordered in an attempt to localize the possible stroke mechanism.

***Preliminary neurological assessment:***

The attending ER physician determined the following prior to the neurologist's arrival:

- The patient has a widespread sensory loss, starting slightly lateral to the midline and apparently covering (either partially or totally) the right side of the body. The sensory deficit was very pronounced in the patient's right hand and foot, but less pronounced in the proximal portions of the right upper and lower appendage, as well as the right side of the trunk.

As a result of the lab tests the patient was determined to be a good candidate for thrombolytic therapy (i.e. intravenous tissue plasminogen activator [tPA]). Therapy was initiated immediately.

***Questions:***

1. What is a migraine headache? Is the onset of the migraine coincidental, or is it a significant clinical symptom to this patient's problem?
2. What is your preliminary diagnosis for this patient?

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## Part 2

Charles arrives in the emergency room at the same time as the consulting neurologist. Immediately upon entering the treatment room Charles pulls the neurologist aside and asks her opinion about Rachel's condition. As he is standing there talking to the neurologist Rachel asks if both of them are physicians, and inquires as to her condition. Charles is surprised that Rachel doesn't recognize him visually. However, as soon as Charles speaks she recognizes his voice, but still does not recognize him facially.

The neurologist asks Charles to leave the treatment center while she conducts a complete examination of Rachel. Her neurological work-up yields the following information:

- Presence of a pure hemisensory loss on the right side of the body. The neurologist confirms the internist's evaluation that this sensory loss was very pronounced in the patient's right hand and foot, but less pronounced in the proximal portions of the right upper and lower appendage, as well as the right side of the trunk.
- No motor deficits of any kind were noted.
- The neurologist and an attending nurse exit the room and return within 1-2 minutes. When the nurse asks Rachel who the physician is she does not know. However, when the physician speaks she recognizes her voice and remembers that she is her neurologist.
- When Rachel is asked to read a sign posted on the wall of the examining room she is unable to do so. However, when asked to write her name and the date she is able to do so without difficulty.
- When presented with photographs of a Robin and Downy Woodpecker the patient was able to recognize the photographs as birds, but was unable to identify the specific type of bird.

***Utilizing sound neuroanatomical logic, consider the following questions:***

1. Was the preliminary diagnosis of a stroke by the attending ER physician correct? If your answer is "no," then provide a diagnosis for the patient.
2. If the diagnosis of a CVA is correct localize the vessel and the corresponding neurological lesion responsible for Rachel's symptoms.
3. If the diagnosis of a CVA is correct, trace the course of the vessel from its origin in the left ventricle.
4. Rachel was unable to visually recognize her assistant until he spoke. What is the medical term for this condition, and provide a neurological explanation for the mechanism of this deficit.
5. What, if any of the patient's symptoms will diminish within the next 6-12 months? What symptoms will persist? What are the neurological mechanisms that would account for the diminishing of some or all of Rachel's symptoms?
6. What was the underlying pathological/physiological abnormality that ultimately precipitated Rachel's neurological problems?

# Are You Sure I've Seen You Before?

## Team and Self Assessment Form

Your name: \_\_\_\_\_

Please use the rating scale below to describe how you and your team members performed on each of the tasks listed associated with your PBL group's activities. The purpose of the grading is not to divide groups but to reward those making above average effort and to encourage those not giving their fair share to the group overall effort.

5 if Always    4 if Very Often    3 if Sometimes    2 if Rarely    1 if Never

PBL Group Number:

Please fill in PBL Group Members' *Last* Names (including your own)

Names                      \_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_

Completed assigned tasks \_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_

Contributed valuable  
information to the group    \_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_

Attended group meetings \_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_

Was honest in reporting  
progress about his/her  
assigned tasks                      \_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_

Participated in writing  
final report                      \_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_



Now, ***please circle*** the rating below that you feel you would best describe your group's overall performance:

Very good

Good

Barely Acceptable

Poor

Very Poor



# Are You Sure I've Seen You Before?

## PBL Self Evaluation Form

This evaluation form will not be utilized in assigning any grades. However, it is beneficial to reflect on any progress that you might have made in various areas as a result of participating in a PBL course. Therefore, please evaluate yourself utilizing the following scale.

Scale:

- 5 = Strongly agree
- 4 = Agree
- 3 = Neutral
- 2 = Disagree
- 1 = Strongly disagree

Your name: \_\_\_\_\_

As a result of my participation in PBL in Human Anatomy I feel that I have improved in the areas of:

1. Effective group participation \_\_\_\_\_
2. Effective group communication \_\_\_\_\_
3. Evaluation of myself (self evaluation) \_\_\_\_\_
4. Evaluation of others (peer evaluation) \_\_\_\_\_
5. Acquiring information to solve complex problems \_\_\_\_\_
6. Evaluation of the quality of information needed  
to solve complex problems \_\_\_\_\_
7. Working effectively with others \_\_\_\_\_



8. Higher-order, critical thinking skills \_\_\_\_\_

Overall improvement rating of yourself: \_\_\_\_\_

5 = excellent; 4 = good; 3 = average; 2 = needs work; 1 = poor

