

Nervous System Case Study

Professor Daniels' Case: Misplaced Memories

OVERVIEW:

Professor Daniels is experiencing some troubling changes in his personality and memory. His wife, Mrs. Daniels, is quite distraught. When he runs a stop sign near their home and nearly hits a person walking a dog, his wife realizes it is time to take him to get evaluated by the doctor.

GOALS:

1. Determine a diagnosis from subjective & objective information.
2. Create an aligned, thoughtful, and evidence-based plan.

ROLE:

You are Professor Daniels' family doctor; he has been your patient for 15 years.

OBJECTIVE:

Obj. 14.4: Identify the structures, functions, and pathophysiology of the nervous system.

DELIVERABLE:

- 1) SOAP Note
- 2) Pre-Assessment Questions
- 3) Written Statement of Health

ASSESSMENT CRITERIA:

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

Plan: 1) comprehensive (includes physical, social & mental health); 2) aligned to facts of the case; 3) evidence-based; 4) addresses short- & long-term



Case Study Steps:

_____ 1. Review the coversheet. Assign team roles. Discuss what how you will carry out these roles to make an effective team.

_____ 2. Review Mrs. Daniels' phone call explaining Professor Daniels' symptoms. Add information to SOAP note.

_____ 3. Review Mr. Daniels' narrative account in the physicians' office. Add information to SOAP note.

_____ 4. Review Mrs. Daniels' notes. Add information to SOAP note.

_____ 5. Complete the *Pre-Assessment Guiding Questions* Write out your SOAP.

_____ 6. Research information on a diagnosis and treatment plan. Request vital signs & 1-2 tests/labs. Be sure you can provide evidence & rationale for needing tests or labs!

_____ 7. Formulate diagnosis & treatment plan in SOAP note.

_____ 8. Write a Statement of Health

Mrs. Daniels' Phone Call:

Transcript:

"My husband is a patient, and he retired from his work as a professor a few years ago. Since then, I've notice that he just doesn't seem as sharp as he used to. But recently, in the past 3-4 months it has gotten much worse. He forgets things I just told him a few moments ago, he gets angry at nice people when we go out to eat or go shopping, and he is starting to become a very awful driver. Yesterday, he blew through a stop sign that is two blocks away from our home. He knows that stop sign like the back of his hand. He almost hit a poor dog that was walking ahead of one of our neighbors. I'm afraid that someone is going to report his driving. And I certainly won't let him drive our grandkids anymore. I keep making excuses because I'm afraid to tell him the truth about his driving--he won't understand and will just get angry at me. One last thing: he has stopped doing his crossword puzzles and no longer wants to play Scrabble with me. He has been getting worse at these games lately, but now he has just given up out of frustration, and, I think, embarrassment. I just don't know what to do. I want the doctor to put into writing what he thinks is happening to my poor husband. I just can't hide what is going on anymore."

Mr. Daniels' Narrative Account:

Transcript:

Doctor: "Your wife seems concerned by your behavior lately. Can you explain what has been going on?"

Professor Daniels: "My wife is becoming an old worry wart. She is always reading the Reader's Digest and a few years ago she read this article on Alzheimer's Disease. She has been talking about it non-stop ever since. And she over-analyzes every little thing I do. I can't forget or misplace a single thing without her giving me a huge lecture about watching for signs of Alzheimer's. It's true I've become a bit more forgetful over time. I seem to have trouble listening to my wife these days...but I think that's what 56 years of marriage does to anyone. She's just an old worry wart, that's all."

Doctor: "How has driving been for you lately?"

Professor Daniels: "Well, I'm sure she told you about the stop sign I ran. I was totally distracted by her, and just messed up. She was rambling on about how we need to start thinking about selling the house because it's just too large and most of our children and grandkids have moved away. But we've lived in that house for... 17... no, 23...whatever, lots of years anyway. I'm not ready to just up and sell it. Anyway, she shouldn't get all argumentative when I'm driving. Anyone would have gotten distracted."

Mrs. Daniels' Notes:

Mrs. Daniels recorded notes over the past few weeks to document examples of changes she has noticed in Professor Daniels.

8/24: *I suggested we play a short game of Scrabble. He replied: "Darn it, you are always trying to get me to play that game. You just want to test my math don't you. Your stupid theories about that Old Timers Disease have got to end, HEAR ME!?"*

9/4: *He spent 45 minutes looking for the lawnmower. He tore up the shed and garage and then swore that someone stole it. He even tried to make me call the police to report the theft. The next day, I found it behind the shed. For some reason he left it there last time he mowed the lawn.*

9/5: *When I suggested we finally hire someone to do the lawn, he said, "What? Pay \$3 a week for something I can do myself!?" I said, "\$3!? What is this--1960? We would have to pay at least \$20." He replied, "\$20... you are out of your mind?" He has been forgetting how much things cost lately.*

9/12: *I asked him if he remembered whose birthday it was. (It was our youngest granddaughter's 2nd birthday. He said, "Why are you always testing me? I don't keep track of these kinds of things." When I told him it was Evie's birthday he gave me a blank stare as if he couldn't figure out who I was talking about. Then he thought I meant our church friend, Eve. I eventually showed him a picture on our refrigerator and that helped him remember.*

9/18: *We were talking about the house and I was trying to explain all the reasons we should think about selling it. He started yelling at me, so I stopped. A few minutes later, he ran a stop sign right near our house. He almost ran over a dog! I'm sure I distracted him, but it was like he totally never realized there was a stop sign there. Afterward he even said, "since when did they decide that is a place for a stop sign!?" It's been there for over 20 years!*

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	
Vital Signs	
Exam Results	
Lab Results	

Pre-Assessment Questions:

1. What is a neuron? Describe its parts and draw a simple picture labeling them.
2. What might be occurring in Professor Daniels' brain?
3. What are the main functions of the nervous system? Which functions are causing Professor Daniels' problems?
4. What is the difference between the central and peripheral nervous system? Autonomic & somatic? Sympathetic & parasympathetic?
5. How is a nerve impulse conducted? Describe the process? Might there be any problem in the conduction of Professor Daniels' nerve impulses?

Research:

Team Member	Research Focus	Notes from Team Member

Labs/Tests Requested (explain reasoning, expected results, & actual results for each!)

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>	
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STATEMENT OF HEALTH: Written Presentation of Patient

Often, physicians are asked to provide a written statement of health for patients for various reasons. In this case, Professor Daniels' wife is requesting it as a formal way to understand what her husband is going through, as well as a document to use if she should need to try to have his drivers' license legally revoked or eventually get help in the home or an assisted living facility for him.

Draft a professional letter that includes the following information:

- Diagnosis and explanation
- Treatment plan
- Prognosis and expected outcomes
- Recommendations for future care
- Restrictions, if any

Outline of Statement of Health: