

Why Am I Getting More Clumsy, Doc?: Problem Handouts



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Why Am I Getting More Clumsy, Doc?

Part 1

Symptoms:

Marshall, a 62-year-old attorney, presented to his family physician with questions as to why he was shuffling a little more when he walked, and occasionally slurring his words, especially at the end of a hard day of work.

Patient History:

- Patient is 62 years old, 5'11", 175.
- At the age of 50 Marshall was diagnosed with insulin-dependent diabetes. Since his diagnosis his blood sugar levels have been well regulated. However, Marshall has struggled to maintain his body weight, initially dropping from 198 to 171 pounds. He now is able to maintain his weight at 175, but with considerable difficulty.
- Medications: Currently on his home insulin sliding scale, and occasionally takes an OTC analgesic for minor aches and pains. Does not use herbal remedies or any other OTCs.
- Habits: Marshal is a life-long non-smoker, does not drink alcohol and has never used illicit drugs. Occasionally he has one cup of Starbucks when shopping with his wife, but does not drink coffee regularly.
- His physician noted a slight shuffle in his gait at the age of 52, with noticeable progression in the intervening years.
- Blood pressure and all cardiovascular parameters are normal.
- Patient demonstrates loss of vibration and joint position sense.
- Patient's father (who was also a patient in the same clinic) demonstrated a medical history of shuffling gait, seizures and movement disorders.

The patient is referred to Rush Presbyterian-St. Luke's Medical Center in Chicago for a neurological consult.

Is My Pitching Career Over?

Part 2

Additional History and Physical Exam:

A physical examination by the neurologist confirms previous findings, and provides the following:

History:

- Since the age of 52, Marshall has encountered increased difficulty in walking.
- Progressive loss of vibratory sense and joint positions.
- Positive family history of a similar disorder in the patient's father.
- No complaints of vertigo or dizziness.

Neurologic Examination:

- Confirms a broad-based gait (ataxia), loss of vibration and joint position sense.
- Nystagmus, abnormal vestibuloocular reflex (VOR), scanning dysarthria, dysphagia, dysmetria, and dysidiadochokinesia.
- Tone/Movement: mild tremor with movement, mild spasticity. No evidence of bradykinesia, cog-wheel rigidity or fatigability with repetitive movement.
- Normal cognitive and/or pyramidal function. MMSE examination was intact, without deficits. Affect was normal and no evidence for dementia or depression.
- MRI brain and cervical spine: Isolated cerebellar atrophy, with no evidence of a structural lesion or infarct.
- EMG: SCA1 was characterized by markedly prolonged peripheral and central motor conduction times in motor evoked potentials.
- Edrophonium Chloride (Tensilon) Test, antibodies to acetylcholine receptor: negative
- CBC/coags = normal
- Electrolytes, $\text{Ca}^{2+}/\text{PO}_4^{--}$ = normal
- Fasting Blood Sugar (FBS) = normal

Utilizing sound logic, consider the following questions:

1. What is your diagnosis for this patient?
2. Where would you locate the patient's lesions/s? What specific neurons and/or nuclei would be involved in this condition?
3. Yes or No? Should this patient and his offspring see a genetic counselor? Defend your answer.
4. Explain why does this patient exhibit progressive pancerebellar dysfunction without involvement of cognitive, pyramidal or extrapyramidal function? Defend your answer.



Why Am I Getting More Clumsy, Doc?

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



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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

