**Title and Focus of Activity**: Physical therapy examination for a patient presenting with dizziness.

*Patient/client management model*

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**Course Information**: Physical Therapy Management of Adults and Elders with Neurological Dysfunction II (Examination and intervention for patients with stroke, brain injury, multiple sclerosis, basal ganglia disorders, vestibular disorders and Alzheimer’s); 4 credit hours; Year 2 spring semester. Occurs after Neuroanatomy and Physical Therapy Management of Adults and Elders with Neurologic Dysfunction I (Examination and intervention for patients with spinal cord injury, neuromuscular diseases, and peripheral neuropathies).

**Learning Activity Description**:

Context: This activity is conducted as part of the laboratory portion of the class. Students have already been instructed in the physical therapy examination for a patient with neurological dysfunction as well as the oculomotor and peripheral vestibular exam. Two students are selected to role play either a physical therapist or a patient whose primary complaint is dizziness.

Purpose: Provide opportunities for clinical decision making and psychomotor practice when working with a patient who complains of dizziness. There is also a differential diagnosis component as students have to decide the need for referral if the cause of dizziness is outside of the scope of physical therapy practice.

* In preparation for the activity, the instructor selects 4 or 5 case studies. The total number chosen depends on the class size and how much time you can devote to the activity. The case studies can be derived from primary literature, a textbook or simply evaluation information from patients previously treated by the instructor.
* The class is divided into groups of 8 to 10 students. All groups of 8 to 10 students have the same 4 or 5 case studies selected in preparation for the activity assigned to them. These 8 to 10 are then divided into pairs. Each pair of students is responsible for the preparation of one case study. This preparation includes:
	+ reading and understanding the case,
	+ creating a patient chart that includes age, gender, history of present illness, past medical history and patient medications,
	+ learning how to perform all of the parts of the exam, and
	+ being able to interpret the results of the exam.

The chart review is posted on Blackboard “Discussion Board” so all students can access it. The instructor can also read this prior to class to make sure the information is appropriate.

* During the actual class time, each group works independently of the other groups in a separate class space. Students are informed that the group must correctly identify the physical therapy diagnoses for their role-played patients to obtain full rubric points for the activity.
* Within each group, the patient chart is viewed. One of the two students assigned to this case will role play the physical therapist and the other will role play the patient. The other students in the group are gathered around the pair and will be referred to as the audience. It is the responsibility of the audience to ask appropriate history questions and suggest examination techniques.

**Patient Chart Example**

Patient: 90 year old male

HPI: Referred to outpatient physical therapy by an otolaryngologist. Script reads “treat for dizziness”.

PMH:

* HTN
* hyperlipidemia
* atherosclerosis
* OA
* LBP
* Incontinence
* Tinnitus
* CA

Medications: daily aspirin

* The student role playing the patient answers the history questions accurately based on information provided in the case study and presents with the signs and symptoms of the patient in the case study. The student role playing the therapist has to perform the requested examination techniques correctly and inform the audience of any eye movement deviations that are observed during the testing procedures. The results of the history and examination signs and symptoms should lead the audience to arrive at a physical therapy diagnosis for the patient’s dizziness.
* If a central or cardiovascular cause for dizziness is found then a physician’s referral letter will be submitted by the role playing students. If the cause for dizziness is found to be within the scope of practice for a physical therapist then a treatment plan is submitted. These are to be completed after class is over and turned in within one week of the actual case presentation.

Time for student to complete the activity:

* Preparation for activity outside of/before class: Approximately 4 hours with their case presentation partners.
* Class time completion of the activity: Approximately 30 minutes per case study. A class of 40 students would be given 5 case studies. These case studies would take approximately 2.5 to 3 hours of class time to complete.

Readings/other preparatory materials:

Pairs of students involved in role playing a specific case will have to read and prepare for each of their presentations. The rest of the students should already have covered the basic material as part of the class and should be familiar enough with this material to be able to instruct the physical therapist on the examination procedure. This is necessary since the students not presenting will be guiding the flow of the examination process by asking history questions and requesting tests to be performed by the presenting therapist. Any case studies highlighting a patient presenting with dizziness that have been previously published can be used. Alternatively, students can be given examination results from a patient previously treated by the class instructor. Examples of cases I have used in the past include patients with diagnoses of BPPV (anterior, posterior or horizontal canal), vestibular hypofunction, cervicogenic dizziness, orthostatic hypotension, Meniere’s disease, stroke, brain tumor and normal idiopathic hydrocephalus.

Learning Objectives:

1. demonstrate proper performance of an examination
2. demonstrate accurate interpretation of patient signs and symptoms during the examination process.
3. provide a physical therapy diagnosis for the patient’s dizziness.
4. provide rationale for either treatment of patient or referral to a physician.

Methods of evaluation of student learning:

An instructor is present for each group and is responsible for grading the rubric. Ratio of instructors to students for this activity is about 1:10.

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| **Grading Criteria**  | **Weight** | **Score** | **Comments** |
| Role playing student accurately portrays the patient | 25 |  |  |
| Therapist positions patient correctly for all tests an measures | 25 |  |  |
| Audience provides correct physical therapy diagnosis | 25 |  |  |
| Role playing pair provides accurate written documentation | 20 |  |  |
| Documentation uses correct spelling and grammar | 5 |  |  |
| **Total** | **100** |  |  |