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UNDERSTANDING AUTONOMOUS PRACTICE

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INTRODUCTION

What is autonomous practice? As one of the elements of Vision 2020, autonomous practice is one whose meaning may not always be readily understood. The confusion can stem from the meaning of autonomy, which is sometimes misinterpreted to mean that the physical therapist (PT) practices in a vacuum, without coordinating and communicating with other health care providers. Nothing could be further from the truth. In fact, many PTs might be surprised to learn that they already practice autonomously.

The operational definition of autonomous practice provided by the Task Force on Strategic Plan to Achieve Vision 2020[1] is as follows:

> Physical therapists accept the responsibility to practice autonomously and collaboratively in all practice environments to provide best practice to the patient/client. Autonomous physical therapist practice is characterized by independent, self-determined, professional judgment and action.

Inherent in the definition is the need for the PT to use his or her professional judgment—for example, by not following orders from a physician that the PT knows to be contraindicated for a particular patient, but rather coordinating quality care for the patient by communicating with the physician.

A compelling piece on autonomous practice in the acute care setting was written by Sue Griffin, PT, MS, GCS.[2] In it, she describes a case scenario in which a PT recognizes signs of deteriorating neurologic status in a postoperative patient in an intensive care unit. Reporting her concern to the nurse, she is told, "Well, she is 80 years old!" When the PT states that she believes that the patient's physician should be informed, the nurse replies, "[H]e's not going to appreciate you calling him on a Saturday afternoon." The PT nevertheless places the telephone call, informing the physician of her clinical findings; the physician subsequently orders magnetic resonance imaging, which shows that the patient has suffered a stroke. Ms. Griffin gives this anecdote as an example of autonomous practice, explaining common misconceptions of autonomous practice in the acute care setting. For example, she states that some PTs believe that it is not possible to be an autonomous practitioner without direct access. However, these 2 elements of Vision 2020 are actually completely independent. In fact, autonomous practice is not synonymous with direct access; rather, it is a characteristic of the clinician, while direct access is a benefit to the consumer.[3]

Another insightful piece that relates to autonomous practice was written by Katherine Sullivan, PT, PhD, FAHA.[4] In this article, she describes the role of the PT in differential diagnosis in neurology, stating that it is important that the PT report findings that are not consistent with the working medical diagnosis to the physician. While she describes this process in terms of differential diagnosis, it also demonstrates autonomous practice as defined by the American Physical Therapy Association.[1] Inherent in both articles is the concept of advocacy: the PT uses independent, self-determined, professional judgment and action to advocate for the patient within the health care system.

In 2007 and 2008, a group of Neurology Section members wrestled with the question of how to define autonomous practice across various neurological settings. They produced a presentation and panel discussion[5] that was presented to the membership during Combined Sections Meeting 2008 and then further refined to incorporate member feedback as well as comments from the Neurology Section Board of Directors. The approved, final document[3] is available at www.neuropt.org. The statement presents 3 key concepts inherent in autonomous physical therapist practice in neurology: excellence, communication and collaboration, and advocacy and caring. The statement maintains that, while features of the practice setting may impact these components (eg, face-to-face communication with physicians and other practitioners may be easier in some settings), autonomous practice is, in fact, not setting-specific. Also, autonomous practice is a professional behavior that may be demonstrated at all levels of experience, including entry level.

This statement is applicable to clinical practice in geriatric physical therapy as well. The following case studies illustrate autonomous practice in geriatrics.

CASE STUDY 1: SKILLED NURSING FACILITY

Case Description

Ms G, a 73-year-old female, was hospitalized 1 week ago after a sudden 10-lb weight gain and extreme shortness of breath. After she was stabilized, she was admitted to a skilled nursing facility with a diagnosis of acute congestive heart failure. Prior to admission, she lived with her husband in a single-story home, was independent in all activities of daily living, and was active in her church. She used a cane for community ambulation due to osteoarthritis pain in her knees and had been taking medication for chronic obstructive pulmonary disease for the past 6 years. Recently, she had been limiting her activities due to worsening shortness of breath that she attributed to the cold winter air and had begun using the cane indoors because she felt more confident with it.

Examination and Evaluation

During the initial physical therapy examination, Ms G was pleasant and motivated. She was using 2 L of oxygen via a nasal cannula to maintain her oxygen saturation level at 98%. Her resting vital signs were as follows: blood pressure of 130/84 mm Hg, heart rate of 72 beats per minute, and respiratory rate of 22 breaths per minute. During the gait analysis, she required the use of a rolling walker for support and minimal

assistance to ambulate 15 ft before her oxygen saturation level dropped to 86%. Her heart rate increased to 75 beats per minute, and her respiratory rate increased to 30 breaths per minute. Her long-term goals included ambulation with a rolling walker with modified independence for 150 ft within 14 to 21 days, with an anticipated discharge disposition of home with outpatient physical therapy to help her return to her prior level of function. Ms G was taking the following medications: Lopressor (metoprolol), Lasix (furosemide), and Tylenol (acetaminophen).

Intervention and Outcome

Ms G participated in physical therapy sessions of 45 minutes daily for 14 days and was progressing well toward her goals. She was able to transfer independently to and from the toilet and wheelchair and was highly motivated, but, for the last 5 visits, she was only able to walk 75 feet with a rolling walker with supervision due to her poor endurance. On the 15th day of treatment, Ms G was late to therapy due to the late arrival of her breakfast. The PT started the session with gait training. Before gait training, Ms G's vital signs were as follows: blood pressure of 122/80 mm Hg, heart rate of 88 beats per minute, respiratory rate of 20 breaths per minute, and oxygen saturation level of 98% on 2 L of oxygen. Ms G was able to walk 100 ft with a rolling walker with supervision only to manage the oxygen tank and verbal cues to maintain the rolling walker a safe distance from her body. She demonstrated increased shortness of breath. Her vital signs while seated in the wheelchair after gait training were as follows: blood pressure of 110/76 mm Hg, heart rate of 78 beats per minute, respiratory rate of 28 breaths per minute, and oxygen saturation level of 95%, again on 2 L of oxygen. The patient verbalized satisfaction with the treatment but reported feeling nauseous, stating that she must have eaten too fast. The PT noticed that she exhibited pallor.

The PT was concerned that Ms G may not have tolerated the gait training well and should be medically evaluated. The PT noted that even though the vital signs were generally within normal limits, they were not normal for this patient and had not responded as expected to the physical activity of ambulation. The respiratory rate increased as expected, while the oxygen saturation level declined only 3% and remained in a safe range; however, the heart rate decreased by 10 beats per minute, and the systolic blood pressure decreased by more than 10 mm Hg, necessitating exercise discontinuation.[6,7] The physiologic responses demonstrated by the vital signs are clinical features of cardiovascular pump failure and could have been signs that the heart was unable to keep up with the physical demands that were placed on it. Also, congestive heart failure places individuals at risk for myocardial infarction. Though Ms G did not present with the classic symptom of an acute myocardial infarction of radiating chest pain, she may have been having a silent myocardial infarction. One of the symptoms of myocardial infarction in women is gastrointestinal upset. Also, she did exhibit increased shortness of breath and pallor. The combination of these findings indicates the presence of a possible medical emergency.

The PT knew it was vital to immediately report the signs and symptoms to the attending nurse or physician. The PT called the physician, who ordered an immediate electrocardiogram, which confirmed the occurrence of an acute myocardial infarction. Ms G was transferred by ambulance to the local hospital emergency department, where she was then admitted for an emergency coronary artery bypass graft. She remained hospitalized in the cardiac intensive care unit for 10 days and, when stabilized, was transferred to the inpatient rehabilitation setting for continued therapy.

Discussion

Physical therapists must know the expected response to physical activity including exercise and not rely solely on normative values when assessing tolerance; rather, they should attend to changes in values for heart rate, blood pressure, and other measures and correlate those changes with physical signs and symptoms (eg, nausea, diaphoresis, pallor). It is also important to recognize that patients with myocardial infarction—particularly women—may exhibit an atypical presentation that could be missed because of the subtlety of the signs and symptoms. Finally, it is vital to communicate with other disciplines regarding patients' medical and functional statuses. In this case, if the PT had attributed the nausea to medication side effects or a late breakfast and continued the therapy session, hoping for the nausea to resolve, then the outcome may have been fatal. Autonomous practice derives from the responsibility of the PT to assess, treat, and, when appropriate, terminate treatment and refer as needed for immediate medical attention.

CASE STUDY 2: LONG-TERM CARE SETTING

Case Description

Ms R, an 82-year-old female, had resided in a nursing home for 4 years. Her past medial history included mild dementia, osteoarthritis in both knees, cataract surgeries, hypertension, Type 2 diabetes, and stroke. She had recently been able to ambulate with a rolling walker and supervision for about 200 ft with restorative nurses and participate in most recreational activities in the nursing home. Then, Ms R experienced a fall while attempting to go to the toilet without assistance, sustaining no apparent injury; however, she subsequently refused to walk with the restorative nurses, and her participation in other activities declined as well. She was referred for a physical therapist examination.

Examination and Evaluation

Upon initial examination, Ms R was able to perform rolling in bed independently. She needed minimal assistance to transition from supine to sitting, and she required moderate assistance to stand with a rolling walker and was very retropulsive. She agreed to walk and took 5 steps, keeping her center of gravity quite posterior and demonstrating a narrow base of support. Ms R denied pain at rest but complained of pain upon weight bearing in the right knee. Palpation revealed tenderness at the lateral joint line near the femoral condyle. The anterior drawer test was negative, but the varus test was positive for reproduction of pain. Her active range of motion was normal globally except for limited extension in both knees, and her gross strength was greater than 3+/5 globally. She scored 46% on the Activities-specific Balance Confidence scale (range, 0-100%; higher scores indicate greater confidence),[8] indicating a low level of physical functioning.[9] Her medications included Lasix (furosemide), Glucophage (metformin), and Tylenol (acetaminophen).

Intervention and Outcome

The PT contacted the physician to discuss the findings concerning the right knee. The physician ordered magnetic resonance imaging, which revealed a minor tear of the lateral collateral ligament. The PT established a plan of care specifying a visit frequency of 3 times per week for 2 weeks and then 2 times per week for 2 weeks to focus on pain control, strength, balance, and functional mobility. The initial treatment sessions focused on pain control for the right knee. A brace was ordered to provide Ms R with support in standing. The PT continued with sit-to-stand transfer training, standing exercises in the parallel bars for balance, and gait training with the rolling walker. By the second week, Ms R began to exhibit improved quality of gait and ability to stand upright with only supervision; therefore, the visit frequency was decreased to 2 times per week as planned. At this point, the PT established a range-of-motion program as well as a restorative walking program for 3 days per week, alternating with the days that she had physical therapy sessions. The PT was present to train the restorative nurses during the first 2 sessions of restorative care. At the end of 4 weeks, Ms R was discharged from physical therapy with a score of 66% on the Activities-specific Balance Confidence scale,[8] indicating a moderate level of physical functioning[9] and continued with the restorative nursing program.

Discussion

Ms R's decline in function was attributed to a recent fall resulting in pain at the right knee. Her knee was likely injured during the fall, damaging the lateral collateral ligament. While many long-term care facilities have standing orders for or request plain films after a fall, in this case, a plain film would not have revealed the injury. Ms R's functional status began to improve once she developed a relationship of trust with the PT and, more importantly, regained her confidence. In the long-term care setting, the PT has great autonomy to determine if a patient is appropriate for skilled services, determine and change the frequency of services, monitor restorative programs, and request additional tests, if indicated. Physical therapists must develop good communication with other team members since the PT is often the first one to identify signs and symptoms of injury or illness.

CASE STUDY 3: HOME HEALTH SETTING

Case Description

Mr L, a 78-year-old male who lived with his spouse of 55 years, had fallen twice in his home in the past month and reported dizziness. Following a routine visit to his physician, Mr L was referred for home health physical therapy. His past medical history included hypertension, coronary artery disease, mild chronic obstructive pulmonary disease, and constipation. He stated that a physician told him that he had experienced several small strokes. Mr L's spouse expressed concern that he might "fall and hurt himself" and did not need to be driving because of his dizziness.

Examination and Evaluation

Mr. L was oriented and cooperative throughout the evaluation. He understood all questions and was a good historian. The physical therapy examination and evaluation also revealed mild right-sided weakness and a resting tremor of the right upper extremity. Cranial nerve testing was negative except for oculomotor testing, which yielded positive smooth pursuits (suggesting central vestibular pathology) and a positive right-sided vestibulo-ocular reflex (suggesting peripheral or central vestibular pathology). In combination, these findings are more suggestive of central vestibular pathology.

Mr L performed his activities of daily living independently, household ambulation with occasional furniture walking with modified independence, and outdoor ambulation over various surfaces with supervision. His scores on both the Berg Balance Scale[10] (42 points) and the Dynamic Gait Index[11] (18 points) indicated an increased risk of falls. Likewise, Mr L's usual gait speed on even surfaces was .88 m/second; usual gait speed of less than 1 m/second is a predictor of future falls.[12] His medications included Norvasc (amlodipine), Toprol (metoprolol), Antivert (meclizine), and Tylenol (acetaminophen). His blood pressure was 104/84 mm Hg in supine, 96/78 mm Hg in sitting, and 84/74 mm Hg after standing for 2 minutes, indicating orthostatic hypotension.[13] Finally, the PT administered the short-form Geriatric Depression Scale,[14] on which Mr. L scored 7 points, indicating possible depression.

Based on the examination results, supported by the patient's report of dizziness and imbalance rather than vertigo, the overall clinical picture is consistent with central vestibular pathology, possibly attributable to his history of strokes. Other findings include mild residual right-sided weakness, also possibly attributable to the patient's history of strokes; a resting tremor suggestive of an undiagnosed neurologic disorder; impairments in gait and balance; orthostatic hypotension; and possible depression.

Intervention and Outcome

The PT contacted the referring physician to report her findings and recommend further medical workup for possible depression; a home health nursing consult for medication management, including regulation of blood pressure medications; and a neurology consult for evaluation of central vestibular signs, right-sided weakness, and resting tremor. The PT then developed the plan of care, which included goals of a normal falls risk as measured by the Berg Balance Scale[10] and Dynamic Gait Index;[11] independence or modified independence in ambulating for 1000 ft (with or without an assistive device) to facilitate community ambulation; and independence with home exercises and home safety training by recall and return demonstration. The treatment plan included therapeutic exercises, gait training, postural control exercises, gaze stabilization and habituation exercises, and patient education.

The referring internist confirmed a medical diagnosis of depression and initiated pharmacologic therapy, and the neurologist confirmed the past medical history of remote strokes and made a new medical diagnosis of Parkinson disease, for which pharmacologic therapy was not needed at this time. The home health nurse determined that Mr. L had been taking his home medications correctly and, in consultation with the internist, helped him adjust the dosages of his antihypertensive medications such that he was no longer orthostatic. The PT determined that Mr L's Hoehn and Yahr classification of disability was Stage I because his current involvement with respect to the Parkinson disease was minimal and unilateral.[15] Therapeutic exercises, including strengthening and

conditioning exercises, along with vestibular rehabilitation resulted in greater postural control and balance and endurance during ambulation. After 7 weeks of treatment, Mr L reported significant improvement of his symptom of dizziness and improved his Berg Balance Scale[10] and Dynamic Gait Index[11] scores to 49 and 20, respectively, indicating a decreased risk of falls. He also met his goals for independence with ambulation and the discharge home exercise program.

Discussion

Mr L's overall clinical picture of a recent decline in functional status was attributable to multiple factors that were subsequently addressed through a multidisciplinary collaboration. The PT's role was to facilitate collaborative practice by identifying issues necessitating referrals to various other providers and ensure effective communication and coordination for optimal outcomes.

SUMMARY

The case studies illustrate the 2 key concepts inherent in the definition of autonomous practice: collaborative practice and independent, self-determined, professional judgment and action.[1] They also illustrate the need for excellence in clinical skills, regardless of practice setting, challenging us to develop a plan for lifelong learning and professional development. Clearly, autonomous practice is also highly interrelated with other components of Vision 2020,[1] including evidence-based practice, practitioner of choice, and professionalism. As Vision 2020 increasingly becomes a reality, let's embrace the component of autonomous practice and recognize that it is what we are already striving for!

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