Physical Therapy Management of a Patient with Stroke Utilizing Muscular Facilitation Techniques in a Skilled Nursing Facility: A Case Report

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Background

- Stroke is the leading cause of serious long term disability in the United States
- Hemiparesis is a well-known impairment following stroke
- Trunk musculature asymmetry is also common and often overlooked when assessing a patient’s muscular control
- Trunk musculature is an essential link between the upper extremities and lower extremities during activities of daily living.
- Impairments in trunk musculature can result in decreased safety and balance.

Purpose

The purpose of this case is to provide the framework for treatment and an overview of a care plan for a patient following stroke, with special attention to trunk musculature facilitation, in a skilled nursing facility.

Case Description

- Elderly Caucasian woman
- Right cerebrovascular accident and left hemiparesis
- 18 days in acute care at her local hospital, where she received daily physical therapy, occupational therapy, and speech therapy
- Transferred to a skilled nursing facility for continued therapy services, which she received 5-7 days per week for 8 weeks.
- Prior to admission she was living independently in a multi-level home and reported community ambulation, driving, and independence with all mobility and age appropriate activities of daily living.

Examination

Tests and measures were done at admission and again at discharge to get an objective picture of the patient’s progress. Standardized functional testing, using the 10 meter walk test, was also administered at admission and discharge and intermittently throughout the episode of care in order to monitor progress and make adjustments to the plan of care, as well as for justification for continued physical therapy services.

Interventions

Interventions were progressed over time including longer and more complex neuromuscular reeducation activities, increased ambulation distances and decreased rest breaks. The patient did endure some regression during weeks 6 and 7 due to pain and confusion.

Outcomes

- She met all of her short term goals and two of her long term goals. (LTG 1 & 4)
- She made significant progress towards her two unmet long term goals (LTG 2 & 3)
- She was able to complete ADLs, as well as transfers with modified independence and increased time.
- Due to cognitive changes and increased confusion, there was concern for her safety with return to independent living.
- Discharged to home with 24 hours of assistance provided by a private nursing company and her family
- Discharged with a 4WW for use in the community to increase stability and safety with ambulation
- She was able to participate in all of her prior activities, although she was unable to return to her prior level of independence in those activities.
- She increased her strength, activity tolerance, and ability to activate and sustain contractions of left lateral trunk flexors; however, she continued to experience increased fatigue in the left sided musculature compared to the right.

Discussion

Physical therapy has the potential to make significant improvements in a patient’s overall function following a stroke. With proper muscular facilitation techniques it is possible that patients may make even greater gains during their time in rehabilitation.

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