Functional Mobility for An Elderly Person with Amyotrophic Lateral Sclerosis: A Case Report

Gianna G. Pezzano, BS, DPT Student, and Amy J. Litterini, PT, DPT
Doctor of Physical Therapy Program, University of New England, Portland, Maine

UNIQUE

Amyotrophic Lateral Sclerosis (ALS)

Ice Bucket Challenge began in 2014 to increase public awareness and funding for ALS.

Purpose

Describe a palliative care physical therapy (PT) plan for maintenance of functional mobility and fall risk reduction for a patient with ALS.

Foundation

- Weakness - Muscle Atrophy - Muscle Fasciculation
- Spasticity - Abnormal Reflexes - Paralysis

Goals of PT Treatment for ALS: Promotion of independence and improvement in quality of life during disease progression

- Assess fall risk
- Assess need for adaptive equipment
- Strength & Range of motion within the lower extremities (LE)
- Balance
- Aerobic exercise
- Refer to the outpatient clinic by PCP
- PT Diagnosis: High fall risk; decreased functional mobility; left hip/knee pain
- The patient returned to the clinic and was receiving PT, OT, and SLP services.
- PT intervention included balance training, strengthening, and aerobic exercise to maintain functional mobility for 12 weeks.

Case Description

An 82-year-old female with ALS received PT treatment for balance training to decrease fall risk, as well as therapeutic exercise to maintain strength for activities of daily living.

Diagnosis

ALS: decreased functional mobility, high fall risk, & left hip/knee pain secondary to osteoarthritis

Primary Complaint

Weakness in the LE, especially in the left hip from osteoarthritis

PT Goal

Maintain strength & balance

Patient Challenges

Stairs, (static/dynamic/standing) balance, dysarthria, dropping things, & dysphagia

Level of Function in Episode Of Care

Community ambulator with a walker; required some assistance with activities of daily living by husband

Timeline of Care

Spring (Previous Year)

- Medical Diagnosis: ALS
- Referred to PT by PCP
- PT examination and evaluation was performed. Therapeutic exercise, aerobic exercise, and balance exercises were given for treatment.

Winter

- Patient received PT services, after moving, at home for 6 months involving strengthening exercises.

Spring (Start of Episode of Care)

- Referred to the outpatient clinic by PCP
- PT Diagnosis: High fall risk; decreased functional mobility; left hip/knee pain
- The patient returned to the clinic and was receiving PT, OT, and SLP services.
- PT intervention included balance training, strengthening, and aerobic exercise to maintain functional mobility for 12 weeks.

Summer

- Final outcome measures of interventions

The patient continued with PT, OT, and SLP services.

Table 1. Tests & Measures

<table>
<thead>
<tr>
<th>Test</th>
<th>Initial Evaluation</th>
<th>Final Follow Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timed Up &amp; Go</td>
<td>23.75 seconds</td>
<td>29 seconds</td>
</tr>
<tr>
<td>Berg Balance Scale</td>
<td>37/60</td>
<td>29/60</td>
</tr>
<tr>
<td>6 Minute Walk Test (6MWT)</td>
<td>420 feet =128.02 meters</td>
<td>412 feet =125.58 meters</td>
</tr>
<tr>
<td>Strength Left Dorsiflexion</td>
<td>4/5</td>
<td>5/5</td>
</tr>
</tbody>
</table>

Conclusion

- Balance training and therapeutic exercise, in this case report, demonstrates the role of maintaining function in palliative care.
- It is an example of how PT services can be utilized by continuing to promote functional independence with terminal neurodegenerative diseases.
- This public policy charge to the APTA has the potential to allow future practitioners to help patients, such as this, with support for reimbursement of care due to degenerative diseases.

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References


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