

Background & Purpose

- Transient ischemic attack (TIA): an episode of focal brain dysfunction that is temporary (<24 hrs.) and is due to a dysfunction of an arterial territory of the brain.¹
- Most common symptoms include facial droop, arm weakness, and speech difficulty.²
- An estimated 200,000 to 500,000 people per year experience a TIA in the U.S.³
- After having TIA, a 1/3 will have a stroke within a year.²
- About 25% of people will die within a year after a $TIA.^{2}$
- While research for secondary prevention of stroke is clear for pharmacological and surgical interventions, there is limited research on non-pharmacological interventions.²
- The purpose was to describe the immediate home health physical therapy (PT) management of an elderly community-dwelling patient following a TIA.

Case Description

- Patient (pt) was a 90-year-old Caucasian female with dementia.
- Pt's daughter reported finding her on the floor with symptoms of a TIA that resolved upon hospital arrival.
- Hospital testing included: magnetic resonance imaging, magnetic resonance angiogram, and an echocardiogram, confirming a TIA.
- Medical history was limited as pt had not seen a doctor in 6 years.
- At initial evaluation (IE), the problem list included: decreased strength of bilateral lower extremities (LE) using manual muscle testing (MMT), increased fall risk based off of the patient's Tinetti Performance Oriented Mobility Assessment (POMA) and Timed Up and Go (TUG) scores.
- Pt ambulated with a wide base of support and crouched posture reaching out for support surfaces.
- Pt's goal was to remain at home with daughter.



Home Health Physical Therapy for a 90-Year-Old Patient Following a Transient Ischemic Attack: A Case Report

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Timeline





Outcomes





Discussion

- Pt demonstrated improvements in LE strength, balance and activity tolerance.
- Pt had improved scores in MMT, POMA, and TUG.
- Pt ambulated inside the home with an upright posture and without the use of support surfaces.
- When ambulating outdoors on uneven ground, pt used a single point cane 50% of the time.
- When comparing IE to re-evaluation at DC, the pt appeared to have benefitted from caregiver education, LE strength training, walking program and balance training.
- Daughter reported being confident and was observed to be proficient in implementing pt's HEP.
- Limitation: pt's impaired cognition.
- Strengths: daughter's adherence and involvement in pt's HEP and PT sessions.
- Pt was DC home with daughter.

Conclusion

- Outcome measures suggest combined balance training, strength training, and walking program may have contributed to improvements in the pt's functional mobility and balance.
- With little research on immediate PT care of a pt following a TIA, more research is needed to further study the best approach.

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