

**22nd International Conference on
Neurology and Neurophysiology**

&

**23rd International Conference on
Neurology and Neurosurgery**

April 23-24, 2018 Rome, Italy

Use of weighted exercise and gait training to improve function in the ataxic patient: A case study on a patient with acute motor-sensory axonal neuropathy**Mathilde DeGraff and Holly Battsek**
NYU Langone Health, USA

Acute motor-sensory axonal neuropathy (AMSAN) is a rare subtype of Guillian Barre Syndrome (GBS) accounting for 3-5% of cases. Symptoms include impaired joint proprioception and ataxia. Treatment includes medication and physical therapy (PT), with limited research on PT protocols. This case demonstrates the effectiveness of weighted exercise and gait training in an ataxic patient with AMSAN in an inpatient rehabilitation unit. Patient is a 40yo female with AMSAN initially treated with plasmapheresis and IVIG prior to admission to rehabilitation. Physical therapy presented with bilateral extremity ataxia, weakness and impaired proprioception and sensation in all extremities. Patient received daily 60-90 minute PT sessions for seven weeks. Patient initially required a 3-person assist for transfers and was unable to ambulate. Week one focused on frenkel exercises and beasy-board transfers. Weighted exercise started on week two with 3 lb ankle weights (AW) for proprioceptive feedback, starting with standing weight-shifting and seated multidirectional toe taps. This progressed to pre-gait exercises including standing marching and toe taps onto a step with body weight support (BWS). This advanced to gait training over-ground with BWS and RW. At week 6 AW were removed for all training. By discharge patient was independent with bed mobility, supervision with RW for transfers, and ambulating 160 ft. There is evidence on using weights to improve proprioception and ataxia in populations such as multiple sclerosis, and further research is needed in the GBS/AMSAN population. This case describes a PT protocol that can effectively improve functional independence in AMSAN patient with ataxia.

Biography

Mathilde DeGraff completed her Undergraduate degree in Health Sciences and Doctorate of Physical Therapy at Boston University in 2013. In 2017, she became Neurologic Certified Specialist. She has over four years of experience working at Rusk Rehabilitation at NYU Langone Health located in New York City where she is now a permanent Senior Physical Therapist in the acute inpatient rehabilitation department. She has presented at multiple conferences across the USA to promote physical therapies impact in both acute care and inpatient rehabilitation, with a focus on neurological conditions including Parkinson's disease and she is an active member of the APTA

mathilde.degraff@nyumc.org

Holly Battsek completed her Undergraduate degree in Health Sciences and Doctorate of Physical Therapy at Boston University in 2013. In 2017, she became a Neurologic Certified Specialist. She has over four years of experience working at Rusk Rehabilitation at NYU Langone Health located in New York City, with her most recent rotation being inpatient rehabilitation for the medically complex patient. She has presented at multiple conferences across the USA and has an abstract published in a Journal of Rehabilitation Medicine. Her presentations and research focus on promoting the benefits of physical therapy in the acute, inpatient and outpatient settings for the neurologically impaired population.

hbattsek@gmail.com

Notes: