(S115) RESUMPTION OF AMBULATION IN A NONAMBULATORY 68-YEAR-OLD FEMALE WITH MULTIPLE SCLEROSIS FOLLOWING PHYSICAL THERAPY WITH MULTIPLE SCLEROSIS CLINICAL SPECIALISTS

R.J. Schreyer,1  H. Karpatkin2

1Doctor of Physical Therapy Program, Touro College, New York, NY; 2Doctor of Physical Therapy Program, Hunter College, New York, NY

Background: A 68-year-old patient was diagnosed with multiple sclerosis (MS) at age 25. She was ambulatory until age 48, when she began using a manual wheelchair and later a motorized chair. She continued to receive physical therapy (PT) during this time, consisting of regular group exercise programs emphasizing general fitness. When the current course of PT began, she was living at home and required a full-time home health aide (FT HHA). The patient started at an outpatient center specializing in MS, and her two therapists were both MS clinical specialists. Evaluation revealed bilateral lower extremities (BLE) and left upper extremities (LUE) spasticity measuring a 1 on the Modified Ashworth Scale. Lower-extremity strength was 2/5 at the hips and knees and 1/5 at the ankles. Upper-extremity strength was 4/5 on the left and 5/5 on the right. Posture was remarkable for a fixed thoracic kyphosis and stiff but flexible posterior pelvic tilt. She was dependent in all transfers and unable to sit unsupported without assistance. Objectives: Both the patient’s and the therapist’s goals were to achieve independent ambulation. Initial PT goals were to improve trunk posture by strengthening of postural extensors and stretching of hip flexors and anterior trunk muscles. Methods: The patient received PT twice per week, as well as a home program. Range of motion was addressed in the supine position with a horizontal towel roll to increase lumbar lordosis. A strengthening program was designed emphasizing eccentric contractions of hip flexors, extensors, and abductors, as well as the latissimus and triceps, for use with a rolling walker. When the patient was able to sit unsupported, standing training was initiated, consisting of the patient standing with a standard walker with knees and trunk held in extension. When the patient was able to maintain independent trunk extension, she was given knee immobilizers to keep her knees locked in extension, allowing her to maintain unassisted standing with a walker. Gait training was then initiated via a modified swing-through gait, utilizing her improved upper-extremity and hip flexor strength. Upon ambulation of 10 feet with minimal assistance, she was casted for knee-ankle-foot orthosis bilateral [(B) KAFOs]. Results: At the time of this writing, the patient was ambulating 20 to 30 feet with contact guard with minimal assistance. She is still receiving outpatient PT twice per week, as well as performing a home program daily. Conclusions: This case illustrates the necessity of PT performed by MS clinical specialists, as the patient showed no prior improvement with more generalized PT.

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