E-Poster

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Spasticity and Clonus Management of Outpatient Multiple Sclerosis Patients With Botulinum Toxin A Rehabilitation Center

Topic: Complications/Sequelae (ie Spasticity, Immobilization and Frailty)

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BACKGROUND

The management of regional spasticity with botulinum toxin type A (BNT-A) is common medical practice for multiple sclerosis (MS) patients. To highlight the necessity of BNT-A regonal spasticity treatment of patients with MS during their outpatient rehabilitation and the targeting of muscles according to the principles of Neurorehabilitation.

METHODS

Forty two patients with MS with clinical signs of regional spasticity and clonus were assessed at our Outpatient Rehabilitation Clinic during a one year period from 6/2023 to 6/2024, 25 /42 (59.5%) women and 17/42 (40.4%) men.

Their spasticity grade was according to mAshworth scale between 1-3 with a mean values of 1.9. All patients 1.9. All patients had clinical manifestation of incomplete spinal cord lesion with satisfactory cognitive capacity. 6/42 ((14.2%), presented spasticity in the upper and lower limbs while 36/42 (85.7%) only in the lower limbs.26/45 (61.9%) from patients with lower limb spasticity had clinical sign of ankle joint clonus. 8/42 (19.04%) where wheelchair users while 34/42 (80.9%) presented midscale to severe difficulty ambulating with spastic equinovarus and common falls. BNT-A was injected with EMG guidance and electrostimulation.

RESULTS

6/42 of the patients (14.2%) were injected in both upper and lower limbs from which only 2/42 (4.7%) in both upper limbs. 15/42 (35.7%) were injected at the adductors bilateraly and 35/42 (83.3%) in both lower limbs and 7/45 (16.6%) in lower limb unilaterally (targeted muscles: soleus, gastrocnemius both heads and tibialis posterior) 6/42 (14.2%) of the patients were treated at the extensor hallucis longus and 12/42 (28.5%) at the flexor hallucis longus. Within the year of the study 32/45 (76.19%) had two treatment sessions whereas 6/42 (14.2%) 3.

All patients underwent an outpatient rehabilitation program with functional improvement , as well as improved ambulation pattern and safety when walking.

CONCLUSION

Botulinum toxin type A treatment of patients with MS is a safe and effective spasticity treatment method that contributes to a favorable rehabilitation outcome.

Statement of Disclosures

None

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