

## **FOCAL SPASTICITY IN MULTIPLE SCLEROSIS: TREATMENT-GOAL ATTAINMENT EVALUATION AFTER BOTULINUM TOXIN TYPE A THERAPY AND PHYSICAL REHABILITATION**

### *FOCAL SPASTICITY IN MULTIPLE SCLEROSIS*

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**INTRODUCTION:** botulinum toxin type A (BT-A) is effective in reducing focal spasticity, both in lower and upper limb. A few data, instead, are available on BT-A efficacy in improving function and quality of life, mostly in Multiple Sclerosis (MS) patients. In fact, their disability is heterogeneous and variable depending on disease stage and evolution. The final clinical objective of reducing MS patient disability has to go through a correct assessment of the treatment-goal as well as an adequate planning of different interventions. In particular, it's necessary a correct timing and an adequate and realistic individuation of the specific target for BT-A and physiotherapy treatment.

**OBJECTIVE:** to assess the level of achievement of the predefined goals in MS patients with focal spasticity through the treatment with BT-A and physiotherapy.

**MATERIALS AND METHODS:** a longitudinal prospective study was drawn. Consecutive hospitalized patients presenting with focal spasticity and Multiple Sclerosis, were evaluated. A personalized goal has been defined for each patient; a rehabilitative program was drawn and BT-A was administered depending on the spasticity pattern. The evaluation of the adequate achievement of the target was done at week 4 using the Goal Attainment Scale (GAS). Specific scales for each goal were applied depending on the function or disability domain involved.

**RESULTS:** 15 patients have been included. All of them had a progressive form of MS and their EDSS had a mean value of 6.5 (range 4-8). BT-A was administered in proximal muscles in 7 pts, in distal muscles in 5 pts and in both districts in 3 pts. The fixed targets were: gait improvement for 9 patients, postural changes for 4 patients, improvement of the posture for 1 patient, spasms 1 patient. 8 out of 9 with gait improvement as a target reached the goal, 3 out of 5 patients with both postural changes and posture improvement reached the target.

**CONCLUSION:** these preliminary data suggest that the achievement of the individualized objective, targeted on actual and specific needs of the patient is possible through an integrated and multidisciplinary approach in treating focal spasticity in MS patients. This is the first step for a subsequent evaluation of a real impact of our intervention in reducing global disability of patients.

Multiple sclerosis

Spasticity

Botulinum toxin

Goal Assessment Scale

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