Gait analysis

Oral communications

CO50-001-e
Posture and gait assessment in spastic patients: Key points for practice
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Introduction Posture and gait are frequently disturbed in patients suffering from diseases affecting central nervous system. Whether the origin of these troubles (neuromotors, sensory, coordination or cognitive deficiencies), they can lead to major impact on activities, participation and quality of life. Thus they represent an important rehabilitation goal for patients.

Method In order to assess consequences of neuromotor deficiencies, posture and gait evaluations have two main aspects. A first part of assessments are designed to study posture and gait troubles and to search for their determining factors; in a therapeutic point of view, they can help to choose treatment target(s) and tools and to measure their efficacy on gait or posture troubles. The second part is intended to assess the impact of gait and posture disturbances on activity, participation and quality of life; these evaluations allow measuring the overall efficacy of the treatment in daily living.

Results There are multiple clinical and instrumental evaluation tools to deal with these two aspects. The use of these measurements in daily practice must be considered with regards to their feasibility, practical aspects and usefulness.

Discussion We will make an overview of some of these posture and gait assessment tools in neurological disease, keeping in mind their utility in clinical practice.

Keywords Gait; Posture; Spasticity; Assessment; Hemiplegia

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CO50-003-e
Walking patients treated for disabling spasticity
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Objective Analysis of the management of walking adult patients with disabling spasticity in Algeria.

Method In 2014 a multicenter survey has been conducted through 7 PRM centers in north Algeria; 450 adult patients treated for disabling spasticity have been identified. We report a post-hoc subgroup analysis of 259 walking patients.

Results n = 259. Mean age = 46.2 years. The most frequent etiology was post stroke hemiplegia. The patient’s grievance was function (65.63%) and comfort (57.91%). The treatments received were physiotherapy (81.85%) botulinum toxin injections (67.18%) and oral medication (40.92%). Botulinum toxin therapy targeted the soleus, the gastrocnemius and the adductor muscles.

Discussion The identified population is young, the botulinum toxin therapy has been used in 2/3 of the patients but the targeted muscles were not consistent with the literature. This analysis of our practice will let us improve and unify our management of spasticity.

Keywords Spasticity; Locomotion

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Effects of vibration on the bearing asymmetry walking in chronic stroke patients
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Introduction The asymmetry of support when walking, common after a stroke, is a known risk factor for falls. The objective of this study is to assess effects of muscle vibrations on various sites on correcting this asymmetry.

Keywords Spasticity; Locomotion

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