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WHY SHOULD SPASTICITY BE IN A FOCUS OF PRM DOCTORS?

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Spasticity or as it is proposed with new name "spastic movement disorder" is clinically a motor-sensory phenomena, which is a feature of the „Upper moto-neuron lesion syndrome" and is presented as velocity dependent muscle tone increase and hyperreflexia. Spasticity occurs due to a hyperexcitability of the stretch reflex and hyperexcitability occurs from an imbalance of descending inhibitory signals from the dorsal reticulospinal tract and the excitatory signals from the medial reticulospinal and vestibulospinal tracts. Neurological changes include supraspinal and intraspinal influences on the muscle stretch reflex. Muscular level changes involve alterations to extensibility, collagen content and extracellular matrix composition. Untreated spasticity leads to irreversible muscle changes: atrophy and shortening of muscle fibers, increased intramuscular connective tissue, increased adipose tissue and degenerative changes at musculotendinous junctions Functionally spasticity can represent only a mild inconvenience for a person, but on other hand it can cause restricted function with severe disability and limitation in the activity and participation. Spasticity as a clinical problem has nevertheless an important influence on persons ability and quality of life and therefore it represents a major rehabilitation problem and should be a focus of interventions for PRM specialist.

Spasticity is an expensive, often undertreated condition, with heavy economic burden for patients, caregivers and society and a cause of disability due to decreased mobility, weakness and fatigue. Spasticity results in increased dependence on family and institutional caregivers for activities of daily living and can consequently ends in costly complications such as joint contractures, pain, severe malnutrition and pressure sores with decreased quality of life. Long term consequences of neglected spasticity leads to secondary clinical complications and furthermore to severe morbidity, functional impairment and dependency on caregivers, representing significant burden of care. The likelihood of stroke survivors with untreated spasticity to live in institution compared to those with treated or less severe spasticity is significantly higher. The treatment of spasticity should be a part of a wider rehabilitation program, which is patient-centred, performed by the multi-professional team, working in an interdisciplinary way, with the preferred leadership and coordination of the PRM physician. The treatment consists of general and specific objectives, reached by general and focal interventions and should include multimodal treatment. The general objectives of multimodal approach are to improve passive and active range of movement, reduced shortening of the muscle-tendon complex, to prevent deformity and contractures, reduced need for surgery and improved effect of treatment and quality of life.

Keywords: Spasticity, quality of life, multimodal treatment

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