Effects of Multiple Sclerosis on Motor Movement

Kate Benny*
Department of Medicine, University of Florida, USA

Abstract
This article explains about what the effects of multiple sclerosis on motor movement are which includes muscle weakness and what is the reason for muscle weakness, spasticity & loss of coordination and what are the symptoms of multiple sclerosis.

Keywords: Multiple sclerosis

Introduction
In the diseased condition of multiple sclerosis, myelin sheath present within the nerve fibres of central nervous system gets damaged due to which it causes pain, tingling and numbness of arms and legs. It causes muscle weakness as the muscles in a person's body get damaged due to which slowdowns messages/signals. Multiple sclerosis also causes spasticity and loss of coordination. Muscle weakness associated with multiple sclerosis is a type in which there is depleted energy or no energy but the person's inability to exhibit movement of the muscles. It is mostly likely to be perceptible in limbs. Muscle weakness can cause a major negative impact in a person's daily life which involves walking, showering, & even dressing. Foot drop is a condition in which a person will feel extreme incapability & difficulty to lift the front part of foot.

Spasticity is a condition in which muscle tone rises or muscle tightness occurs due to loss/damage of myelin sheath in channels where signals between motor & chain takes place. As the pathways are destructed signal transfer between muscles and brain is slowed down due to which the persons muscles gets harden and clutch up on their own. Due to the spasticity, muscles become harder and inflexible due to which a lot of pain occurs.as time passes since the person will not likely be able to use the muscle which hurts it will result in muscle atrophy. Loss of coordination includes vertigo, blurry vision, sensory problems and numbness in legs. Ataxia is a condition in which person shown to have a clumsy walking pattern due to malfunction in coordination. Reduction in the ability to control force in the course of submaximal contractions are related with submaximal contractions in movement in people who are suffering with multiple sclerosis. They have discovered that force steadiness; force alterations during submaximal isometric contractions might be associated with multiple sclerosis. There was a seminal study conducted on force steadiness which revealed that 74% of variations in force throughout a steady contraction accompanied with a hand muscle in an MVC of 10% might be low frequency modulation. So an index of variability in the common input signal is been received by the motor. Throughout the fatiguing contractions force steadiness decreases which can be upgraded with practice.

They are certain symptoms for multiple sclerosis which affect certain parts of the body which is unique from patient to patient. In some patients symptoms gets pronounced and in some patients symptoms just appear and disappear.

Relapse: when symptoms get decorated overtime, the condition is called relapse. Remission: if the symptoms are bad or if they get improved, the condition is called remission. There are some of the symptoms which occur commonly which are as follows

Fatigue, problems with sight, trouble with balance & dizziness, Osteoporosis, numbness and tingling, muscle spasms, stiffness, weakness, problems when decision making, sexual problems, bladder problems, Bowel Problems, Problems with speech & swallowing.

Conclusion
Multiple sclerosis is an autoimmune disease which mainly have a target muscular movements of a body leading to a person's incapability to walk to due to muscle weakness which is caused due to persons incapability to move the muscle as the signal channel between motor and brain is damaged due to abolishment of myelin sheath in nerve fibres of central nervous system. Multiple sclerosis symptoms are varied from person to person in which some of the symptoms may come and disappear whereas in others they might improve or get cleared.