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Cyclo-ssage Pro-Personal Therapy System. [PPTS] Multiple Sclerosis By Dr. P. Heaton-Ph.D. Consultant Orthopaedic Surgeon.

# Cyclo ssage Pro personal Therapy System in the current concepts management of Multiple Sclerosis.

This article reviews the health impact of multiple sclerosis on the patient, their care team and current concepts with the Cyclo-ssage Pro Personal Therapy System.

### Introduction

Multiple sclerosis is an autoimmune disorder with significant debilitating outcomes. Globally the disease impacts significantly on patients, their care teams and health resources. Despite concerted efforts in the medical and pharmaceutical services, there is currently no evidence of curative treatment of multiple sclerosis in the near future.

Jean-Martin Charcot first described the condition in 1868, thought to be initially due to damage to the nervous system. Estimates of between two and a half to four million people are presently thought to be affected worldwide. There is a greater female preponderance, with the age range 25-60 years old being most affected.

A review of the current literature has concluded that alternative therapies such as may be provided by the PPTS has significant positive contributions to the long term care of multiple sclerosis patients.

# **Pathophysiology**

Nerves are enclosed in an insulation envelope called the myelin sheath. Response to environmental change due to inflammation or other factors may induce damage to the myelin sheath. Initially the body attempts to repair the damage by activating the immune system, with some success. If the volume response of the body to the offending agent is sufficient the damage is contained, a scar develops and body functions are restored.

Damage to the myelin sheath impairs the conduction of electrical signals in the encased nerve cells and axons within that myelin sheath.

Repeated failure of the body to overcome the effects of damage to the myelin sheath is the principal determinant in the disease initiation and progression. Progression of the disease is dictated by the extent of nerve cells and axonal destruction.

Infections, particularly with the Epstein-Barr virus have been shown to predispose to multiple sclerosis. Other infective agents are the rubella, measles and mumps viruses. Stress, by compromising the recuperation of the immune system may exacerbate multiple sclerosis.

# Clinical symptoms and signs

Multiple sclerosis is characterised by a complex presentation and progressive pattern of clinical signs. Involvement of the central nervous system, its specialised centers and the combinations of symptoms present a difficulty in achieving early diagnosis.

The majority of patients present with sensory defects in the early stages of the condition. This varies from impaired light touch perception to complete loss of sensation. Motor impairment manifest as weakness in the limbs, spasm, joint aches and severe limb pain. Visual impairment,

double vision, and complete blindness have been reported with multiple sclerosis. Swallowing difficulty, urinary incontinence and retention present when specific nerve cell and axonal damage occur in the specialised nerve centers. Cognitive impairment, mood swings, depression and chronic fatigue syndrome are the central manifestations of the condition.

## **Treatment**

Medical treatment of multiple sclerosis is confined to control of patient symptoms, as there is currently no cure for the condition. This implies the use of medications with the profound understanding that modification of the disease is the prime goal of therapy. Acute bouts of multiple sclerosis may necessitate several combinations of pharmaceutical agents. Patients have reported the complications associated with such medications as the principal reason for failure of compliance.

Alternative therapies (specifically massages) have recently been reported to be preferred by multiple sclerosis patients. Patients have reported alleviation of pain, improvement in functional scores and no side effects with the use of the Cyclo-ssage

### Current concepts of multiple sclerosis treatments with the Pro Personal Therapy System

The complexity of the medication regimens for multiple sclerosis and the side effects of such protracted treatment incites the need for "non-medicated no complication alternatives". Several literature reviews concludes that patients when compared to medications for pain relief prefer massage therapies. Improvement in pain control as evidenced by visual analogue and functional scores following PPTS sessions have been widely reported.

The pattern of cycloid vibration in the PPTS has been shown to enhance limb co-ordination and movement sequence. The repeated use of PPTS may induce electrical signal transduction in the demyelinating nerve zones of multiple sclerosis patients. Such current transductions may be protective to the myelin sheath and underlying nerve cell. It is also likely that reparative myelination will be simulated on a frequency utilisation response rate.

PPTS use has been shown to stimulate the immune system. This may be crucial in the acutely presenting multiple sclerosis patient when depression of the immune state enhances disease progression. The suppression of the inflammatory phase of the disease is an additional benefit of PPTS use.

Therapy sessions on the PPTS are devoid of complications. When motor functions are relatively preserved, the patient can engage in self-therapy on the PPTS relieving carer's and resources.