The Benefits of Aquatic Physical Therapy for Patients with Multiple Sclerosis (MS)

Intro:
Aquatic therapy is a well-tolerated form of integrated exercise for individuals with multiple sclerosis that provides an appropriate therapeutic environment that can be used to augment rehabilitation of those individuals. The National Multiple Sclerosis Society and clinicians recommend aquatic exercise as a valuable adjunct to traditional treatment.

Why it Works:
The aquatic environment has broad rehabilitative potential, extending from the treatment of acute injuries through health maintenance in chronic diseases. Aquatic therapy provides an alternate therapeutic environment that allows for the use of traditional therapeutic approaches as well as new intervention strategies. Aquatic therapy allows earlier initiation of upright posture, active movements, and functional activities related to buoyancy and decreased gravitational forces.

The aquatic environment provides relaxing effects that can be used to reduce muscle tone/spasticity. Additionally, the water environment offers comfort to the concern of falling down, thus providing opportunity to practice balance with less fear of falling. These properties allow some individuals who are not able to maintain unsupported standing or unable to walk on land to be able to stand unsupported and walk in the water.

Several studies support that the aquatic environment provides a safe environment to be able to achieve these activities sooner than on land.

Benefits:
Aquatic physical therapy can improve:
- Flexibility and range of motion
- Muscle tone
- Cardiovascular endurance
- Muscular strength and endurance
- Mobility function – gait and balance
- Fatigue level
- Quality of life and well-being
**Water Temperature and MS:**
The unique property of water provides help to reduce body heat generated by exercises and thus maintaining core body temperature even during exercises. Maintaining core body temperature lower during exercises, allows individuals to exercise more with less chances of overheating. This allows individual to exercise to avoid overheating, fatigue and temporary worsening of symptoms.

Water temperatures of 80-84 degrees Fahrenheit are usually recommended for individuals with multiple sclerosis. Several studies have shown that aquatic therapy is helpful to address the issues of fatigue and heat sensitivity seen in most individuals with multiple sclerosis.

**Summary:**
Aquatic training holds promise as an effective treatment strategy to minimize detrimental effect and maximize function in persons with multiple sclerosis. Aquatic exercise is a safe and effective therapeutic option to augment the rehabilitation of individuals with multiple sclerosis.

**References:**
Salem Y, Scott A. Effectiveness of Aquatic Exercises on Mobility Function and Quality of Life in Individuals with Multiple Sclerosis: A Randomized Controlled Trial. International Journal of MS Care. 2014;16:88-89.
Hertz DA. Aquatic exercise programming for People with Multiple Sclerosis. MATERIALS FOR AQUATIC EXERCISE INSTRUCTORS. National Multiple Sclerosis Society.

Thank you!

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