

## Duchenne Muscular Dystrophy

Written by Bridget Redmond PT who is teaching about this at the Aquatic Therapy Symposium June 21 – 24 Sanibel Harbour Resort FL

Duchenne Muscular Dystrophy is one of nine types of muscular dystrophy disorders that cause progressive muscle weakness and degeneration of skeletal muscle during early childhood. Initial onset is between 3 to 5 years of age and first affects muscles of the hips / pelvic area, thighs, and shoulders and then progresses to the arms, legs and trunk. The progressive nature of Duchenne Muscular Dystrophy contributes to weakness, poor spinal alignment, difficulty with functional activity and decreasing ability to participate in daily age appropriate activities. Treatments for most Muscular Dystrophies target: improving quality of life, increasing mobility and balance skills, maintaining respiratory function and reducing weakness and muscle degeneration.

Research regarding treatment and maintenance of Duchenne Muscular Dystrophy has been conflicting in the past. However, advances in research have contributed to improved care and an increase in life expectancy. Previously, boys with Duchenne Muscular Dystrophy did not live much beyond their teen years. Today, survival into the early 30s is becoming more common and there are cases of men living into their 40s and 50s.

Recent research has concluded water exercise as a beneficial way to keep muscles toned without causing undue stress / strain or injury, prevent contractures of the joints and maximize joint range of motion and spinal alignment. Knowledge of the disease process, application and progression of exercise in the aquatic environment and awareness of indications and contraindications to progressive exercise is paramount to providing the most beneficial exercise experience for individuals with Duchenne Muscular Dystrophy.

“Duchenne Muscular Dystrophy” is for the benefit of the aquatic practitioner who works with, may work with, or is interested in expanding their knowledge base regarding this patient population. The topic is meant to bring in depth awareness to this specific patient population, briefly discuss other forms of Muscular Dystrophy and improve structuring of currently utilized treatment options to better benefit this population. This course will demonstrate how the unique properties of water can facilitate and challenge a patient with Duchenne Muscular Dystrophy. Current best evidence and practical application are integrated to provide the participant with justification and rationale for choosing aquatic therapy interventions.