

Fall 2012

Specialized Rehabilitation: Skilled Aquatic Therapy Can Help Your Patients!



Upper Perk Physical Therapy is at the forefront of aquatic therapy in the Upper Perkiomen Valley. Through the unique properties of the aquatic environment, we can position the patient in various depths of immersion controlling the desired amount of weight bearing. When including various established therapeutic interventions, including stretching, strengthening, joint mobilization, balance, gait training and endurance training, the combination allows for the successful rehabilitation plan for populations including pediatric, orthopedic, neurological, and cardiopulmonary patients.¹ In a recent study published in JOSPT² researchers examined safe ways for athletes, in specific runners to gain a competitive edge and maintain fitness after injury. In water at hip level loading forces on their joints are decreased by nearly 40%, and running in water at chest level decreased the forces by almost 50%. Forces on the weight bearing joints during running on land typically are greater with faster running speeds. However, these forces did not increase with speed in water. The ability of the water to decrease the forces was similar for both women and men. These exercises are most effectively performed in the shallow water environment. Within the deep water environment, vertical traction positively influences gains in spinal heights, decreased pain intensity, and centralization response as compared to land-based interventions³. Our water temperature is maintained between 26°C and 28°C, which maximizes exercise efficiency, increasing stroke volume of the heart, and decreasing heart rate. The emphasis of cardiovascular/aerobic exercise in a controlled environment allows for all patient populations to safely make gains in physical rehabilitation for an eventual transition from aquatic to land based interventions.

In summary, the evidence clearly shows that skilled aquatic physical therapy can help your patients not only control pain but also increase their strength, endurance and balance.

Thank you for thinking of Upper Perk Physical Therapy & Sports Rehab Inc. for your patients in the need of skilled physical therapy.

1. Kisner and Colby: Aquatic exercise. Therapeutic Exercise 5th Edition. F.A. Davis Company. 2007; 9:273-294.

2. J Orthop Sports Phys Ther 2012;42(5):445. doi:10.2519/jospt.2012.0504

3. Simmerman SM, Sizer PS, Dedrick GS, Apte GG, Brismée JM. Immediate Changes in Spinal Height and Pain After Aquatic Vertical Traction in Patients With Persistent Low Back Symptoms: A Crossover Clinical Trial. PM&R 2011;3(5):447-457

2767 Geryville Pike
Pennsburg, PA 18073
Tel. (215) 679 0105
Fax. (215) 679 0722

...I could barely stand without losing my balance. I have lost my coordination as well as my confidence in walking..doing the aquatic exercises was the best for me. Within weeks I regained my self-confidence in walking, also the discomfort with movements of my right leg disappeared...In a brief time I was able to practice dance steps. I was surprised with the immediate results. The warm water is soothing and helped me manage pain and swelling. I highly recommend Aquatic Therapy at Upper Perk Physical Therapy & Sports Rehab to anyone who needs rehabilitation due to physical injuries or illness. - MM

