

Aquatic Exercise: Opportunities for Lymphedema clients

Aquatic exercise offers exciting, valuable, therapeutic opportunities for treatment and long-term Lymphedema management. Unique properties of water including hydrostatic resistance and buoyancy offer physiological advantages to further Lymphedema care. Water's consistent resistance offers opportunity to improve strength and endurance to assist in therapeutic activity. One can easily monitor and adjust performance through monitoring activity level, frequency, duration and intensity. In addition, when you immerse the body in water, the buoyancy reduces biomechanical stress on joints, thereby offering opportunity to gradually improve mobility and enhance range of motion. Johansson, K. (2011) reported in a randomized study of upper extremity Lymphedema clients complaining of decreased shoulder active range of motion, that they demonstrated improvements in shoulder mobility after participating in a swimming and water aerobic exercise program.

Aquatic exercises and activities can be modified and adjusted to appropriately challenge the individual to meet the client's limitations, specific goals and objectives. An appropriate aquatic exercise program may help prepare the individual for a gradual return to other activities in their daily life including leisure, social or work pursuits.

One of the surprising benefits of hydrostatic pressure (water pressure) is the support provided for the area(s) of the body with Lymphedema. In general, Lymphedema clients can safely exercise in water without use of graduated compression garments.

Water also has a high binding affinity for heat, acting as a heat magnet. Anyone who completes aerobic exercise and increases their heart rate will likely perspire. The surrounding pool water efficiently absorbs your body heat created from your exercise and activities. This may reduce the risk of aggravating the Lymphedema. Typically, most regular public pools will be kept at 29-30 C, well below core body temperature. This temperature is appropriate for conduction of heat to work effectively. Unfortunately, hot tub water level temperatures have quite the opposite effect. As the water temperature is higher than core body temperature, it becomes increasingly difficult for your body to regulate heat. This environment may increase risk of flare-up of Lymphedema.

Water offers an opportunity to exercise both in a solitary or group setting. Client's can develop a personalized Lymphedema, aquatic program, or choose to integrate into a social outing. Aquatic exercise can be a terrific social activity, and may help to improve quality of life for our patients who value aquatic activity as part of their program. Tidhar (2011), reports findings suggesting integrating an aqua lymphatic program into self-management training may improve quality of life for many clients.

Water exercises are fun, but not for everyone! ANY exercise program, as part of a long-term Lymphedema care plan, must be enjoyable for you. Anyone interested in water exercise should be comfortable with basic swimming skills and being immersed in water. An individual with Lymphedema should consider consulting with your Lymphedema therapist prior to implementing an aquatic exercise program. They can help tailor a program to consider your medical and functional concerns to set appropriate treatment goals.

However, please keep in mind that one should always be cleared by their physician prior to starting any exercise program!

Aquatic exercise may be an invaluable tool for client's to help their treatment and long-term Lymphedema management.

References:

Johansson, K. A randomized study of the effect of swimming and water aerobic exercise on breast-cancer related arm lymphedema. Presented at the International Lymphoedema Framework conference, June 17, 2011. Toronto, Ontario.

Shier, Byron. (2005, Summer). Benefits of Aquatic Exercises with Lymphedema. Alberta Lymphedema Learning Association Newsletter, 2 (p.1-2).

Tidhar, D. Aqua Lymphatic Therapy (ALT) for Post-Surgical Lymphedema. Presented at the International Lymphoedema Framework conference, June 17, 2011. Toronto, Ontario.