

Back Pain and the Benefits of Aqua Therapy

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Hydrotherapy has been used for hundreds of years to ease numerous painful ailments. Examples of hydrotherapy include spas, bathtubs, Roman tubs, whirlpools, and swimming pools. In a professional setting, the aquatic environment provides an excellent medium for rehabilitation of various diagnoses, including back pain. Symptoms can be alleviated in patients suffering from back pain after initiating an aquatic therapy program, either alone or as an adjunct to a land-based physical therapy program.

Aqua therapy has several advantages over a land-based program. The buoyancy and hydrostatic pressure of the water reduce joint impact forces, allowing for a less stressful environment on musculoskeletal tissue. Some ideal candidates are patients with osteoporosis, HNP, stenosis, osteoarthritis, as well as post-surgical patients. The natural properties of the water make movement less painful and easier to perform, providing a supportive and stable surrounding. Movement is decelerated, therefore increasing the patient's control with exercises. Balance, strength, range of motion, flexibility, coordination, and ambulation can improve quickly. Increased postural awareness occurs and body mechanics can be corrected. These improvements carry over well to land activities, and incorporate into functional situations rapidly. Water can also ease paraspinal muscle spasms and decrease muscle guarding, reducing pain in the patient and encouraging mobility and progression.

Aqua therapy is deemed a safe alternative to or an addition to a land-based rehabilitation program. The reduction of weight in water, which provides an anti-gravity effect, can prevent secondary injuries while allowing advancement and functional gains in the rehab protocol. Patient levels of exertion can be monitored sufficiently by using Borg's Rating of Perceived Exertion Scale (RPE).

An aqua therapy intervention program can be beneficial specifically with the treatment of back pain by promoting awareness of physical activity or motions with the patient. Patients with acute or chronic low back pain often lose their ability to move through normal range of motion that the spine permits (flexion, extension, rotation, lateral flexion). When submerged in water the range of motion is significantly improved thus retraining the neuromuscular system to override the abnormal or guarded postures and positions the patient has learned. Painful motions are now achieved with greater range and with less pain resulting in improved function outside the water environment. This perpetuates participation and compliance with the program designed to meet specific goals set, resulting in positive short and long term benefits and ultimately functional outcome.

References: Arch Phys Med Rehabil. 2003 Sep;84(9):1319-23. Ann Rheum Dis. 2003 Dec;62(12):1162-7. Disabil Rehabil. 2003 Nov 4;25(21):1219-23. www.aquaremedy.com