

The soothing effects of water are no secret. Dating back to the ancient empires of the Romans, Greeks, Turks and Chinese, water therapy has been used to relieve pain, relax the body and create a feeling of well-being.

Today, water therapy is one of the methods physical therapists use to help their patients regain strength and movement. A physical therapist targets the large-muscle groups with range-of-motion and strength-building exercises for those who have difficulty with movement, balance, mobility or coordination – including stroke patients who are weak on one side.

Getting a Lift

Getting into a pool of water can give a stroke survivor a power boost. Because of water's natural buoyancy, a person with weak muscles on one side of the body can stand with much less effort in water than on dry land, providing a safer environment for those who have difficulty with physical rehabilitation activities on land.

"You put them in the water, then all of a sudden, with less effective weight, they are more buoyant and they can stand up with much less power. That way you actually get some people who might not be able to walk yet on land to the point where they can walk while they are in the pool," said Jason Greenberg, M.D., assistant professor of neurology at Wake Forest University Baptist Medical Center in Winston-Salem, N.C., the location of the J. Paul Sticht Center on Aging and Rehabilitation.

Other Advantages

According to Dr. Greenberg, the sense of balance is different in the pool, and that can work to a person's advantage.

A person's movement during exercise creates resistance against the water. This strengthens muscle groups without the need for weights. At the same time, adding the water's buoyancy to its resistance puts less stress on the joints than doing the same activities outside the water, important for those with arthritis or other joint problems.

The temperature in a hydrotherapy pool also plays a role in helping stroke patients get the most out of rehab. "The water temperature in our pool here at the Sticht Center is 90 degrees," says Peggy Cromer, a recreation therapist. "We have found that temperature to be comfortable, and it gives us good response from our stroke patients as we work with them, as far as being able to get good mobility and movement with them."



Making a Splash

by Mike Mills

Even for those who don't have arthritis or other joint problems, the warm water helps them move more freely as they do the exercises directed by their therapists.

Besides building strength and mobility in muscles, water exercise carries a cardiovascular benefit for stroke survivors. Even if survivors are not specifically focusing on the problems they have from their stroke, they benefit from the exercise because it increases their cardiovascular fitness.

Finding a Water Therapy Program

Hydrotherapy programs are more likely found in rehabilitation centers and outpatient clinics than in regular hospitals. Ellen Harrington-Kane, assistant vice president, medical rehabilitation, for the Easter Seals National Office says Easter Seals provides medical rehabilitation services in more than 200 locations across the United States. "Some of those locations have warm-water therapy pools," Harrington-Kane says. "People can contact Easter Seals to see if aquatic therapy is offered in their location." (Find your nearest Easter Seals location by visiting www.easterseals.com or calling toll-free 1-800-221-6827.)

When prescribed therapy sessions end, stroke survivors who want to continue water exercise on their own should be able to find facilities and programs by following Dr. Greenberg's suggestions:

- First, look to your physical therapist to point you in the right direction.
- "Second, in the absence of your own therapist," Dr. Greenberg says, "you could still go into a pool exercise program, as long as the person leading it understands the limitations you have."

Your local YMCA, YWCA or other community center may offer aquatic fitness/therapy classes. (Visit www.ymca.net or www.ywca.org to find locations and programs near you.)

Is Water Therapy for Everyone?

"Water therapy usually can be considered only after a patient has made progress with other therapy," says physical therapist James Caputo of Austin-Caputo Physical Therapy in Winston-Salem. But he says that whether water therapy is good for a patient depends on a number of factors:

- the patient's mobility in the upper and lower extremities
- whether cognitive ability is affected
- whether the patient is afraid of water
- whether the particular pool is accessible

"It depends on where that patient is [developmentally]," Caputo says. "Each person has to be individually assessed to determine whether or not they are a candidate to get into the pool."

Regardless of whether water therapy is recommended, Caputo believes that an exercise program following prescribed therapy is a must for continued improvement. **SE**