



Pilates Moves for Prevention

Rehab applications abound with the Pilates method.

By Greg Thompson

The number of total-hip replacements in the United States routinely hovers around 200,000 per year and that number is expected to go up. The opportunity is there, but rehab can be tricky with patients often exhibiting multiple limitations beyond the ones created by surgery.

Kirsten Albrecht, PT, MS, CPI, has built a solid referral network among local orthopedists who appreciate her innovative Pilates-based approach to a variety of challenges, including hip rehab. The concepts and equipment may be foreign to most patients, but that unfamiliarity can generate interest and even enhance mental focus.

For hip patients, the guided use of Pilates' spring-based equipment can facilitate movements that otherwise would be too difficult. "When a total hip replacement patient is lying on her back on our trapeze table, her feet are in straps with springs attached that allow her to start bicycling movements or circular movements," said Albrecht, owner of Physical Therapy & Pilates Restoration LLC, Cheshire, CT. "It's a great way of getting the post-surgical hip joint moving in pain-free ranges. Patients would not be able to perform some active movements with their legs in the air without the springs."

On other pieces of equipment such as the Reformer, patients lay down while Albrecht adds springs to the machine, a process that gradually boosts weight bearing and resistance to the extremities. She starts with light springs to allow the patient to move into a movement such as a leg press, but with little stress to the lower-extremity joints. As tolerated, spring resistance is added to simulate the stresses of performing the exercise in standing. "In some cases, we add spring resistance to allow the equipment to assist a movement," added Albrecht, "This can allow us to get mobility back a little quicker than with some other traditional exercises."

For hip patients who need better range of motion in all planes, Pilates offers exercises for virtually every hip movement. "It depends which equipment you're on," said Albrecht. "Some exercise would work into flexion, abduction, circular movements and extension as needed. What may be different from other machinery is you can hit into every range of motion, and all planes, especially with the hip."

Roberta Wein, PT, CPI, founder and director of PT and Pilates in New York City, also worked with a patient who was experiencing a lot of hip pain. Instead of a hip replacement, the woman had a labral tear that made her Argentine tango dance lessons painful and virtually impossible. Wein worked with the dancer on alignment issues and hip-stabilization exercises using the Pilates "magic circle."

"Utilizing the Reformer, she was able to learn how to place her pelvis properly," explained Wein. "With Pilates, you can really feel the connection between your feet, knees and hips."

Working with the 'electric chair' and single-leg exercises, she really felt the connection from her hip to her feet, and the stabilization of her hips, in ways she has been able to translate to her dancing. Now even her normal posture has a lengthened lumbar spine. She now knows how to transfer her weight



without irritating her hip."

Activating the Core

Lori Rubenstein, DPT, PT, MAppSc, CYT, treated a patient with severely restricted neural tension—a case so painful that even driving aggravated lower-back pain. The discomfort stemmed from the 40- to 50-degree leg raise depending on the particular car seat.

"Any time her leg would be raised like that it would bother her," said Dr. Rubenstein, founder of Mosaic Physical Therapy in Los Angeles. "Using the Reformer with her legs in straps, we were able to strengthen her core and glide her nerves with no symptoms of straight-leg raise and no nerve pain at all."

Additional treatment increased the woman's mobility, ultimately allowing her to drive and do activities without lower-back pain or nerve symptoms.

"When she tried the standard physical therapy nerve-mobilization exercises, everything bothered her back," related Dr. Rubenstein. "The Pilates techniques increased her awareness and ability to activate her core-stabilizing muscles and that's why she was able to progress faster. In the past, she had been through physical therapy and had been given hamstring stretches that were aggravating her sciatica. A lot of PTs don't differentiate hamstring from sciatic nerve and in the past other PTs had advised her to stretch the sciatic nerve, which made her a lot worse. Pilates was the first thing she had ever done where she was able to get the nerve gliding without pain, while improving her flexibility."

Healthy or Hurt?

Albrecht and another full-time, Pilates-trained therapist treat patients who come in under a doctor's referral or via direct access. About 80 percent of their Pilates work is rehab-based, with modalities and manual techniques freely used as needed.

"Each of our patients performs exercise on Pilates equipment in our facility, but we usually give them home exercises to perform without the equipment that may be Pilates-based or more traditional," explained Albrecht. "The other 20 percent are people coming in for wellness, which would include taking a Pilates mat or Reformer class at our clinic."

Those who come in strictly for wellness are often past patients who need continued strengthening. Most are beyond the point where insurance would cover rehab, so they might take a wellness class for the fitness benefits of Pilates.

Wein applies methods to a variety of patients as part of therapy and exercise. "They feel the difference it makes in their body working with me versus going to generic exercise," she said. "It is safer for them and tailored to their needs. They feel elongated and a lot of people end up continuing forever."

Wein offers Pilates to anyone, not just patients. "After they are discharged as a patient, a lot of people become Pilates clients," she explained. "They might pay for a single session or buy a package. You must have a scheduled appointment, because part of the method is having an instructor work with you one-on-one or one-on-two. The teacher's words and rhythms are important and the equipment can be dangerous if you don't know what you are doing."

ALSO NEW THIS UPDATE

- [Rehabbing Running Injuries With Pilates](#)
- [Pilates and Wellness: Moves For All Ages](#)
- [Pilates Practice](#)
- [More Pilates Resources For PTs](#)

According to Rubenstein, Pilates is great for healthy people who want to strengthen, tone and look good without bulking up. It also improves posture and body awareness.

"A lot of people do it primarily for fitness, but we use it a lot for rehab," she said. "It's so useful in rehab because you can use it for high-level athletes or people in their 90s. It's adaptable. A common misconception is people think they can't do it because it's too hard or they're going to get hurt. But you can make it so easy. For patients who have to be lying down, they can get really strong lying on their back. You can do it in so many different positions. It was created for soldiers lying in bed with injuries."

Preparing for Pilates

Opinions abound as to what constitutes "real" Pilates and its proper application. At NY-based PT and Pilates, Wein offers private, duo or trio sessions in a fully equipped Pilates Gym with traditional Pilates apparatus (an investment of about \$25,000).

"We are all classically trained in the method as passed down by Joseph Pilates," said Wein. "Pilates is not a trademark and that is really a shame in many ways, because now just about anybody can create any kind of Pilates adaptation they see fit and call it Pilates. The method gets watered down as people make adaptations to it."

Albrecht received her Pilates instruction through an independent educational group, with her one-year training program earning her a certification under the group's rehab track. "There's not too many of us combining our PT businesses with Pilates," said Albrecht. "Those of us doing it just came to realize that if you can follow the principals of Joseph Pilates within the framework of rehab, it's a great way to look at somebody's movement and have that person exercise."

Dr. Rubenstein opted for a Pilates certification geared heavily toward rehab, a move she believes has allowed her to effectively combine manual therapy with Pilates. "If Joseph Pilates were here today, he would have evolved his own system," stated Dr. Rubenstein. "He would not be doing it the way he did it back then. I would recommend going to one of the rehab-based Pilates training courses, because it is geared more toward physical therapy, and you won't have to go through things you already know, such as anatomy."

Greg Thompson is a freelance writer in Fort Collins, CO.

[Copyright ©2014](#) Merion Matters

2900 Horizon Drive, King of Prussia, PA 19406 • 800-355-5627

Publishers of ADVANCE Newsmagazines

www.advancweb.com