

the pt/pilates connection

When a leading Pilates teacher trainer experiences a terrible accident, she gains a new respect for physical therapy and how it works with Pilates to allow patients to “return to life”

by S.D. Galliano

After thirty years of horseback riding, yoga, karate, jumping out of airplanes, shooting guns, walking across hot coals, hiking the Himalayas and mastering Pilates, I was ready for something else.

In 2009, I found my new passion: figure skating. The more I was on the ice, the more time I spent training off the ice, utilizing historical Pilates exercises I thought were developed for dancers but really looked, and were named after, specific ice skating moves that Joe Pilates developed for Olympic ice skaters in the 1940s: the One-Leg Arabesque variations (Spirals), the Spread Eagle, the Front Splits on the Reformer and the stretches on the Ladder Barrel.

The Pilates method would heed me well when I unheeded the advice of my coach and practiced without her, doing advanced movements at the local Culver City Ice Arena last summer. It only took one instant, a moment when I forgot I was skating on knives on ice, going too fast and feeling too emotional and too tired that I fell, badly. I broke my ankle in two places, dislocated my elbow, fractured the tibia plateau and tore the “triple” in my knee.

The first week in the hospital, I lay in the bed at the Brotman Medical Center in Culver City, my left side disabled, parts iced and elevated, tubed for oxygen and fluids, on a variety of medications, in a cast and a brace, torqued, twisted, sore and weepy.

A New York fanatic Pilates teacher called to say, “With what you know, you’ll be up in no time. Just think of Joe in the hospital and what he did!” She was trying to be inspiring. It was a nice try.

“Joe was not the patient, he was the orderly,” I told her, “and they didn’t give the prisoner mattresses with springs, either; they used wood and animal feathers!” Holding the phone was cutting off my IV, so I ended the call. I had lost a lot of my tolerance with my confidence.

From the hundreds of exercises with variations I have taught and practiced throughout my life, I



The relationship between physical therapy and Pilates is evolving and becoming more intertwined—which is great news for clients with injuries.

It took two surgeries, metal and cadaver ligament implants and seven months of physical therapy before I could walk again.

side by side: pilates and physical therapy

Vivian Eisenstadt, MAPT, OCS, of Los Angeles-based Prevent the Pain Physical Therapy, whose clinic also houses a complete Balanced Body studio, explains the differences between the two.

PILATES	PHYSICAL THERAPY
Teachers have clients.	Therapists have patients.
Long term; focuses on conditioning and maintenance of the body's general systems.	Short term; focuses on repair and rehab of a specific area of pain.
Movements have a flow and a rhythm, like gymnastics, which the method is based on.	PT on Pilates equipment is done much more slowly to focus on form and proper body mechanics.
You stop when there's pain.	You work through the pain.
Exercises incorporate full-range body movements.	Movements focus on specific measurements of joint movement (e.g. "the patient had 10 degrees when they had started and now they have 50 degrees.")
Teachers spot and support with their hands, but don't use a "hard touch" with clients.	Therapists do deep tissue manipulation.
Teachers have no standardized education and training can consist of anywhere from 100 to 600 hours.	PTs have a minimum educational requirement of a master's degree.
Teachers in the classical tradition work low repetitions to avoid muscle fatigue.	PTs do repetitions until muscle failure to restore strength and motion in weakened muscles and joints.

now could only do three Pilates exercises: the right Single-leg Circle, Single-Leg Stretch, and Single-Leg Straight. I did these to help prevent blood clots.

There was no frame of reference of what to do next or what would happen. I had no bearings. I had half a body.

The second week, the physical therapists arrived to teach me the new things you need to learn after you have had accidents: how to transfer from the bed to the toilet and the bed to the wheelchair or walker, and hop on one leg. This is where my training for skating was actually useful, since I had practiced balancing on one leg. The staff complimented me when I wasn't crying as actually the strongest person in the hospital.

But by the third week, all my strength was gone.

A German-born physical therapist removed the brace from my arm to start moving and massaging the swollen yellow, blue and purple tissues. I was still in shock and fear from my accident and wasn't sure she knew how much that hurt. "You must learn how to surrender," she informed me. "I know 100 percent what I am doing," she smiled. After a most exquisite ice massage, she turned as she was about to leave the room and said, "By the way, you're not sick, get out of bed!"

"Heil!" I responded as she left.

I'm not sure if it was because she was German like Joe Pilates or if there was a connection of physical therapy to Pilates, but her words triggered the remembrance of Joe's words from his obituary, "Depressed? Forget about it! Get to work!"

Getting myself up and into the wheelchair, I sat there. Now what? For hours, watching the large clock on the hospital wall, waiting for pain killers or meals or visitors, I tried to practice what I could do, breathing, beginning to count and extend the seconds of my inhalations and exhalations.

Joe's instructions from *Return to Life* echoed off my four small walls: "Squeeze every atom of air from your lungs until they are almost as free of air as a vacuum."

In my long career I have trained dozens of licensed, physical therapists in Pilates. Before the accident, I could really only say four, flippant sentences to summarize the differences between the two: "After surgery you see them, after them you see us." "They like a locked knee, we like a bent knee." "They massage you, we move you." And "they use rubber, we use steel."

It took two surgeries, metal and cadaver ligament implants and seven months of physical therapy before I could walk again. By then, I had lost any haughty attitude and gained a much clearer understanding—and a much greater respect—for the process of rehabilitation and physical therapy.

parallel historical developments

Physical therapy practice in the United States began in the 1800s, focusing mainly on helping polio victims and soldiers who had been injured in wars, according to the 2003 article, *A History of*

- Pilates started showing up on physical
- therapists' radar in the early 1990s.

Physical Therapy in the United States by Marilyn Moffat, PhD, a professor of physical therapy at New York University. Starting in the 1960s, the scope of PTs' practice expanded, and they also began working with orthopedic, cardiovascular, cancer and AIDS patients, among others.

In World War I, Joseph Pilates was interned as an alien enemy by the British on the Isle of Man with 27,000 other civilian German, Turkish and Austrian prisoners. There he was an orderly in the compound's hospital hut, working with patients ranging from those suffering with tuberculosis to broken bones. It was there that Joe, trained as a gymnast and boxer, would expand his interest beyond himself and develop rehabilitation exercises that would not only strengthen the muscles and lungs, but focus the will to survive.

Joe emigrated to America in 1925, and continued to invent and patent apparatus and publish his exercise method, which he called "Contrology," to correct structural imbalances and deformities. He even created a wheelchair with springs for the polio victims who were among his varied clientele.

Both physical therapy and Pilates emphasize a positive mind and focused willpower during the body's healing foray through pain and disability to help strengthen and balance the body together.

the merging of physical therapy and pilates

Pilates started showing up on physical therapists' radar in the early 1990s. First, a few cutting-edge physical therapists and Pilates teachers began presenting about Pilates at PT conferences. The mass production of equipment, adapted for therapy with lighter springs, adjustable ropes, and higher beds, and the formalization of Pilates training courses also played a role in the integration of the two disciplines. Insurance companies also began recognizing the therapeutic benefits of Pilates and began reimbursing for sessions, which created a new revenue stream for the Pilates industry.

After the Pilates trademark was ruled generic, Pilates branched from the fitness and entertainment worlds into the physical therapy health profession throughout the United States, England and Australia, and in this century, to every corner of the globe.

how pilates and physical therapy complement each other

There are physical therapists who use Pilates equipment to reproduce their own exercises, some use modified Pilates exercises, some employ Pilates teachers to provide

complementary services and some become Pilates teachers.

"Mr. Pilates referred to his Method as 'health control,'" writes Alycea Ungaro, a Romana-certified Pilates teacher and physical therapist in New York, in her latest book, *15 Minute Everyday Pilates*. "As a physical therapist, I can attest to Pilates' rightful place in a therapeutic setting. What I find the most valuable is the way Pilates can straddle the fence between passive, assisted rehabilitation and active, self-guided rehabilitation. Concentration, which is key in Pilates, makes a tremendous difference in the healing process."

"When dealing with injured patients, it's the responsibility of the physical therapist to eliminate pain and identify the biomechanical flaws which are often associated with it," explains Robert Vecsi, MSPT, CSCS, of Vecsi Physical Therapy in New York. "Isolating the weakness or imbalance and re-educating the patients neuromuscular system so they can break faulty patterns associated with pain is essential to overcoming an injury. Once this is achieved, my patients are cleared for Pilates."

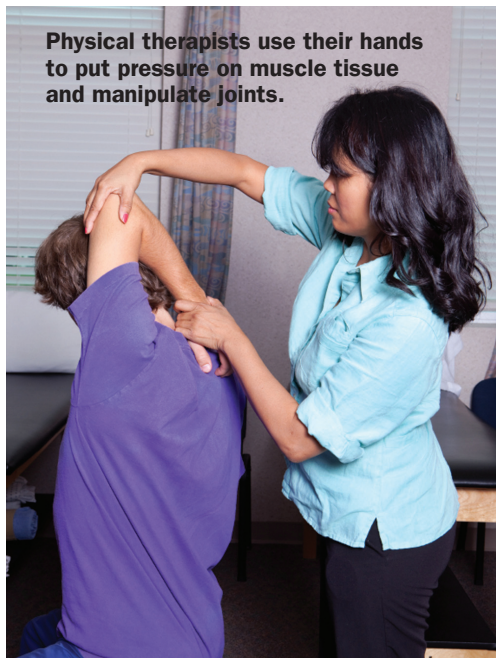
"Oftentimes a patient under my care can begin or resume a Pilates program if there's open communication between the therapist and instructor so the patient/client can maintain an active lifestyle while resting an injured body part," Vecsi continues. "The therapist can advise which movements to avoid and which are encouraged. But collaboration and communication are essential."

The physical interaction between Pilates teachers and their clients, and physical therapists and their patients, is quite different. "Pilates teachers are trained to spot and support with their hands, but they are not supposed to use a hard touch with clients," explains Vivian Eisenstadt, MAPT, OCS, chief orthopedic specialist and owner of Prevent The Pain Therapy in Los Angeles. "Physical therapists are trained do deep tissue manipulation. I literally grab the patients' arms and pull their pecs in a way that is ripping the muscle enough to make a difference, a sometimes very painful moment while avoiding dislocating their shoulder. Then I put them on the Cadillac and hold their shoulders back with both of my hands, not giving them the opportunity to use their pectorals so they can



Pilates teachers should spot clients, but avoid using a "hard touch" on them.

“It’s a big misconception that Pilates teachers should diagnose or fix serious problems.”



Physical therapists use their hands to put pressure on muscle tissue and manipulate joints.

find their serratus muscles.”

Cristina Gabor, a PT and Pilates teacher who founded Orthosport Physical Therapy in Culver City, CA, began doing Pilates in 2004 to keep her back strong for the physical demands of treating, lifting and moving patients. “I thought, *My God, this would be amazing for people who have a bad back,*” says Gabor. “As I kept

doing it, I wondered, *How come we were not doing this?*” Now her whole team of therapists and aides are trained in Pilates therapy exercises. The patients start on the Cadillac as a treatment station using easy resistance bands, then progress to light springs.

“We are using the [Pilates] tool with every patient,” adds Gabor. “It’s a win for us because it’s exciting and it’s active, which we’re trying to promote versus getting a massage and just lying in the room. It’s also exciting because patients like it and they can carry it on, and it’s exciting because it’s financially rewarding.”

Which brings up the issue of billing. “Insurance companies won’t automatically reimburse for Pilates,” says Gabor. “We have to justify why using Pilates is important. If, for example, you have knee surgery, you really should do all your activities in a non-weight bearing position. With Pilates, you lie down when you exercise, so you increase your strength and your range of motion without being on your knees. The documentation has to be appropriate as well.”

Adding Pilates to a rehab regimen can also keep patients engaged. “Physical therapy exercises are not fun, they are boring and people will not continue them in time,” says Michael Garrett, a UK-trained physiotherapist and owner of Physioworks in Nantucket, MA, who is completing his PhD in physical therapy at Boston University. Now he is expanding his wellness center to include a Gratz Pilates studio and hiring Pilates teachers.

“I like the Pilates teachers. They are creative and have fun with the work,” Garrett adds. “When there is a multi-disciplinary team, we might not use the same language but there are many ways to solve a problem that benefits the high-performing athletes.”

the limits of pilates

But “it’s a big misconception that Pilates teachers should diagnose or fix serious problems,” warns Roberta Wein, PT, a physical therapist and Romana-certified Pilates teacher and founder of PT and Pilates in New York.

For example, someone with shoulder pain may actually have a cardiovascular problem or even lymphoma, explains Brent Anderson, PhD, a physical therapist and founder of Polestar Pilates in Miami. “I need to know that they’ve seen their doctor and that they have been cleared because [those diseases are] outside my scope.”

“We want to be everything to everybody,” he continues, “but the truth is, no one can be everything to everybody. If we have best interest of clients in mind, there are times we will forsake our ego and refer them out because we do not have the skill set” (to diagnose the problem).

“A lot of people come to us because they have been injured by Pilates instructors—they’ve been pushed or given exercises that are not correct for them,” says Wein. She agrees that Pilates teachers “should refer [injured clients] to the appropriate people for an X-ray or MRI.”

my return to life

My physical therapists taught me to use wheelchairs, walkers, canes and transfer benches. They pushed me and, yet, at the same time held me back, guiding me, realistically, about what to expect through the long process. They listened and they lectured, giving not only homework, but a new understanding of the relationship between healing and time. Sympathy you can get anywhere, help is hard to find.

They helped me.

Seven months after my accident I am just able to return to the Reformer and do my basic Footwork and the baby Armchair. The doctors have drilled and stapled my bones and ligaments together; the physical therapists have massaged, ultra sounded, electrified and supported my joints, tendons and muscles, and now, with Pilates, I am ready to pick up some speed and, as commanded by Joe Pilates: “Return to Life!”

ps

Siri Dharma Galliano is a Romana-certified Pilates teacher trainer and owner of Live Art Pilates Studio in West Los Angeles. To learn more about her Pilates Intensive seminar, check out her website, liveartpilates.com.