Pilates and Breast Cancer

by Suzanne C. Martin PT, DPT, CPI

Breast cancer is currently the most widely diagnosed cancer in women in both the United States and Europe. This sobering fact impacts us all, not just as therapists and Pilates instructors serving others, but also is likely to hit close to home. My first exposure to breast cancer was as a work-study student at the Breast Screening Center in Oakland in the 1970s while a student at Mills College. Little did I think this exposure would help me cope when my own mother developed the disease. She later passed away from cancer after the cancer had metastasized into her bones at the age of 82, having lived quite a number of years in remission. In fact, breast cancer is now considered a chronic condition; many women will be diagnosed, but go on to live past the initial diagnosis and treatment.

"Don’t worry; we fix."

My mother’s experience was not unlike that of Eve Gentry, professional New York modern dancer and protégé of Joseph Pilates. Eve was, according to Gentry historian Michelle Larsson, “devastated” when she received the diagnosis in 1955 and underwent, like my mother, a full radical mastectomy, which removed the entire pectoralis major. One thing Eve had was the push of rehabilitation from Joseph Pilates. Pilates’ reported response upon hearing the news was, “Don’t worry; we fix.”

Watching vintage footage of Eve’s work out one year post-mastectomy is nothing less than amazing. I was lucky enough to study with her just before she died in the early 1990s and can attest to her vitality up to the end. Certainly not all of our clients will be world-class athletes like Eve, but as we all know, the versatility of the Pilates Method, its principles, concepts and equipment, makes rehabilitation possible for everyone.

Just recently while teaching my breast cancer rehabilitation course in Los Angeles, an attending therapist revealed she had had a double mastectomy. The therapist was unfamiliar with the Pilates Method and Eve Gentry, yet was completely enthralled as she watched the vintage footage. It was great confirmation as we went through the weekend course material, concepts and exercises that the Method indeed works extremely well for those recovering from both the physical and psychological effects of medical intervention.
Breast cancer for women is a double insult. Not only is it a life and death issue, it can threaten gender identity. The intimate environment of Pilates can bring a person into full healing so that a survivor can truly go on to thrive in life.

Benefits of Pilates + Cardiovascular Training

How lucky we are that times have changed since Eve’s and my mother’s time. I remember Eve stating that maybe exercise may “stir up the metabolism,” and so to be cautious with those diagnosed with cancer. Now research, especially on the effects of arm use in Dragon boat trials on lymphedema development, reassures us that most people can safely, and should, participate in exercise. Further research shows that a mild to moderate cardio program helps to avoid future cardiovascular side effects if chemotherapy is involved in treatment. The American College of Sports Medicine advocates 90 minutes of aerobic activity in a moderate target heart rate range per week. Bouts of even 10 minutes for those affected by fatigue can create beneficial effects. Adding a moderate cardio program to a Pilates regimen creates a full restoration program.

Pilates excels in the postural re-education and muscle-balancing necessary to recover from other side effects of breast cancer treatment. It can help alleviate pain from operative procedures, restore joint mobility and tissue integrity, as well as provide a safe progression to regain lost strength. Most importantly, goals should involve returning to activities of daily living that make life meaningful. In Eve’s case, it was returning to perform on-stage, for my mother, it was as a doting grandmother who traveled to see her large family. For the therapist attending my weekend course, it was re-gaining her ability to run marathons.

Early Physical Therapy

Ideally, physical therapy can be initiated pre-operatively to assess parameters such as upper extremity range, strength and lymphatic fluid level. Pre-operative observation and inspection can provide a comparative guide for detecting post-procedure tissue changes. Physical therapy postoperative treatment can begin within 2 weeks, but abdominal procedures may take a healing waiting period of 6-10 weeks before safe intervention can take place. Cosmetic reconstruction procedures are often dovetailed with oncological surgical procedures; the oncological surgeon removes the diseased breast tissue, then the cosmetic surgeon performs the reconstruction (or not) that the client desires. One side effect of all cancer treatment modalities, surgery, chemotherapy and radiation, can be sensory alteration. The neck, chest, arms and hands are highly sensitive, with a large amount of sensory brain representation. By using the Pilates therapeutic concept of dissociation of the involved body area, you can begin rehabilitative treatment, posture re-education and balancing sooner. The versatility of Pilates devices enables you to expedite flexibility, strength and core stability training without using trunk flexion or stressing healing areas. Early manual therapeutic assistance from a physical therapist can enhance optimal cosmetic outcomes and ensure that patients meet range-of-motion goals.

Post-rehabilitation

However, patients can still make gains years after surgery. Cording, in which fascial adhesions build up within retained lymphatic vessels, may occur and cause pain and restriction for years after treatment. The burning effect of radiation may continue 3 weeks after treatment stops and fibrotic tissue changes often continue indefinitely, causing pain and restriction long after initial treatment is concluded. Pilates is very effective in this post-rehabilitative period as long as ‘First do no harm’ is observed, going slowly to break up restricted tissues.

Patients who undergo surgery or radiation run a lifetime risk of developing lymphedema. Lymphedema occurs when superficial lymphatic vessels are disrupted or deeper lymph nodes in areas such as the axillae, femoral triangles and deep abdomen are dissected. It’s generally associated with an affected arm due to breast cancer treatment. Risk factors include increased overheating during endurance aerobic activities, hot weather or using a hot tub.

Lymphedema prevention and detection education can be assimilated into Pilates sessions. I teach clients detection signs, such as observing puffy skin between the fingers when holding the handgrips or foot bar of the Reformer. Pilates
also fosters prevention strategies, since pacing can be tailored to minimize edema by accentuating a stepped progression. In addition, emphasis on structured diaphragmatic breathing promotes the return of lymphatic fluid to the heart.

Progression is a key element in postoperative restoration work, which may be complicated or delayed by interacting medical interventions. Clients may be on estrogen-depleting medications for years, causing bone density issues for both the pre-and post-menopausal sets. Other medications may cause joint pain, especially in those with hypermobile joints. Pilates provides creative solutions in progression by its assistive as well as resistive nature of the Pilates apparatus.

In this step-wise rehabilitation way, Pilates also can help avoid the injuries that often develop down the line after initial treatment is over. The ability for multiple progression levels and posture re-education also help avoid shoulder impingement, rotator cuff injuries and frozen shoulder, common clinical complaints from medical interventions necessary to control the disease. The personal contact offered in a Pilates environment can truly bring a client full spectrum from not only surviving the disease and its treatments to truly thriving with a meaningful life.