

Helping to Relieve the Pain of Post-Surgical Breast Cancer with Myofascial/Craniosacral Techniques

By Aaron Dalton

NEW YORK CITY—Health practitioners can provide significant pain relief for post-surgical breast cancer patients by using a technique called myofascial release and craniosacral therapy. So said Meryle Richman, PT, MS, CST, owner of two physical therapy clinics in New York, speaking at a breast cancer rehabilitation seminar at Beth Israel Medical Center here.

The term “myofascia” consists of two parts, she noted: “myo,” which is Latin for muscles that make up the bulk of the body’s soft tissue; and “fascia,” for the connective tissue that covers every element of the body down to the cellular level. Ms. Richman describes the fascia as a sheath for the body’s muscle structure that, when functioning properly, acts as a shock absorber, supporting and enhancing postural balance and aiding in the circulation of venous and lymphatic fluids.

The bodily trauma inherent in breast cancer surgery has deleterious effects on the fascia, she said. “The fascia become thickened and shortened and exert tremendous pressure—up to 2,000 pounds per square inch—on pain-sensitive structures, squeezing muscles on the macro level and gripping nerves themselves on a micro level.”

In a cascade effect, she explained, traumatized and tightened fascia restrict blood flow, which in turn impairs proper cellular metabolism, respiration, and the elimination of waste products. Fibrous fascia also restrict lymphatic flow, which poses special danger to post-surgical breast cancer patients who are already at risk of lymphedema.

Even worse, tightness and pain from fascial restrictions in one part of the body can lead to fascia-related restriction and pain in other areas.

“The fascia is like a nylon stocking, and if you have a run in one part of the stocking, then other parts of the stocking start to run too,” Ms. Richman said.

For example, in the TRAM (transverse rectus abdominis muscle) flap procedure, the epidermis, dermis, and muscles are cut and rerouted to make new breast tissue.



As explained by Meryle Richman, PT, MS, CST, the techniques consist of a series of hand positions with the therapist applying pressure in opposite directions with each hand—so while one hand applies gentle pressure toward the head, the other applies pressure toward the feet, to release tension and soften the fascial tissues.

“As the tissues start to heal, they become tight and the long transverse scar from the procedure can become very thickened,” she noted. “The tissue restriction could cause a pulling sensation or a tightness in the chest and could possibly produce a forward head, as well as tightness in other parts of the body.”

Ms. Richman uses a pelvic-diaphragm myofascial release technique to soften the fascial tissue affected by the surgery and attempts to relieve tissue restriction and pain by returning the fascia to its loose and relaxed pre-traumatic state.

Light Touch

While some kinds of therapeutic massage would be too strong or heavy for the radiation-weakened skin and sore muscles of a patient who has undergone breast surgery, myofascial release involves a gentle technique that uses approximately five grams of pressure, Ms. Richman explained.

The therapist holds a particular stretch for 90 to 120 seconds, gently applying pressure in the area of restriction until sensing the release.

The concepts of myofascial release and craniosacral therapy are closely related, she noted.

The fascial system consists of three layers—superficial, deep, and deepest. Myofascial release works on the first two layers of fascia, while craniosacral therapy involves the deepest layer of fascia that surrounds the brain, the spinal cord down to the second sacral segment.

Somewhat counterintuitively, working on this deepest fascial layer via the craniosacral technique takes the lightest therapeutic touch—typically less than five grams of pressure.

Myofascial Release Techniques

To begin with, Ms. Richman said she examines her breast cancer patient for any postural abnormalities (for example, one shoulder higher than the other or a pelvis that can have torsion or rotation) or range-of-motion restrictions that might signify particular fascial problems on which to concentrate.

She then questions the patient about her medical history and current medications to make sure that the patient has no contraindications such as malignancy, open wounds, or obstructive edema.

If the patient has no contraindications, Ms. Richman can begin to apply the actual myofascial release techniques. These consist of a series of hand positions in which the therapist applies pressure in opposite directions with each hand—so while one hand applies gentle pressure toward the head, the other hand applies pressure toward the feet in order to release tension and soften the fascial tissues.

The therapist holds each position for a minimum of 90 to 120 seconds until feeling a “therapeutic pulse” or “fluttering” that signifies the sought-for fascial release.

The therapist then “takes up the slack” created by the release, maintains contact, and works toward further softening of the tissue.

Few Data

Unfortunately, there have been few research studies on the effectiveness of myofascial release and craniosacral therapy, perhaps due to the challenge of quantifying and recording the so-called therapeutic pulse, she said. This depends on interactivity between patient and therapist, as well as the individual subjective sensitivity of the therapist to identify patient “rhythms” by palpating specific “listening stations” on the patient’s body.

Consequently, some members of the medical community remain skeptical. Still, many physical therapists, osteopaths, massage therapists and other health professionals who have been practicing myofascial release and craniosacral therapy for decades claim strong success in achieving pain relief and range-of-motion recovery with both techniques.

Rachel West, DO, who uses myofascial and craniosacral techniques in her practice in Santa Monica, CA, says

that the techniques can be useful both pre- and post-surgery.

“Immediately after surgery, even in the days following surgery, gentle [myofascial or craniosacral techniques] may be performed on areas away from the lesion to stimulate healing and release tension built up due to the pain and the fear of surgery.

“The sooner a patient can start allowing the blood to flow to areas needing healing and the sooner a patient can start to reuse the muscles and nerves of damaged areas, the less likely it is that painful patterns will set in.”

Lessen, Not Eliminate Pain

Dr. West said she is also careful to manage patient expectations on the limits of myofascial and craniosacral techniques. She explains to her patients that the technique aims to lessen rather than completely eliminate their pain.

Complete pain elimination after so much tissue has been cut would be “a miracle,” she tells them. To complement the myofascial and craniosacral therapies, Dr. West suggests other alternative treatments such as gentle Iyengar yoga exercises (particularly breath work) under the guidance of an instructor.

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She even encourages patients to relax while lying backward over a simple wooden yoga block in order to traction the fascia and allow the fascia to open.

Ms. Richman said she also believes that various relaxation techniques, diaphragmatic breathing, postural awareness, gentle stretching combined with gradual cardiovascular exercise should all be part of the breast cancer rehabilitation regimen.

“Craniosacral and myofascial release therapy are part of an overall treatment program,” she said.

“If the patient doesn’t do anything and sits around all day miserably hurting and crying, then the body will tighten up and activate the sympathetic nervous system. This will make it hard for the therapist to achieve any improvements. That’s what you want to prevent.”

On the Cover:

From Scheumann DW. *The Balanced Body: A Guide to Deep Tissue and Neuromuscular Therapy*, 2nd Ed, 2002, Lippincott Williams & Wilkins.

