

Myofascial Release: The “Missing Link” in Your Treatment

by John F. Barnes, PT

The New England Journal of Medicine reported a study on the volume of people and amount of money spent on traditional therapy and medicine vs. alternative therapy. The stunning news was that as much money was spent (over thirteen billion dollars last year) on alternative therapy as was with traditional therapy and medicine. The study also demonstrated that people were willing to pay cash for alternative therapy that produced the results that they needed and that this trend continues to grow daily.

I have had the opportunity of training over 50,000 therapists in my Myofascial Release Approach and the demand for information on Myofascial Release is growing exponentially.

Myofascial Release techniques are utilized in a wide range of settings and diagnoses; pain, movement restriction, spasm, spasticity, neurological dysfunction, ie, cerebral palsy, head and birth injury, CVA's, scoliosis, menstrual and pelvic pain and dysfunction, headaches, temporomandibular pain and dysfunction, geriatrics, sports injuries, pediatrics, chronic fatigue syndrome, fibromyalgia, traumatic and surgical scarring, acute and chronic pain.

Therapists tired of working in “assembly line” atmospheres, focused on quick symptomatic treatment, and who are overloaded with burdensome paper work are joining facilities and private practices that focus on Myofascial Release.

WHAT IS HAPPENING?

The health professions had ignored the importance of an entire physiological system, the fascial system that profoundly influences all other structures and systems of the body. This glaring omission had severely affected our effectiveness and the lasting quality of our efforts. Including Myofascial Release into our current evaluatory and treatment regimes allows us to provide a more comprehensive Approach to our patients that is safe, cost efficient and consistently effective.

Fascial restrictions can exert tremendous tensile forces on the neuromuscular-skeletal and other pain sensitive structures. This enormous pressure (more than 2,000 pounds per square inch) can create the very symptoms that we have so long been trying to eliminate. This knowledge frees us from only trying to relieve symptoms and gives us the tools we need to find and eradicate the cause and effect (symptoms) relationship for a permanent resolution of our patient’s complex problems.

Myofascial Restrictions can produce enormous pressures on pain sensitive structures.

THE ANATOMY AND PHYSIOLOGY OF FASCIA

Fascia is a tough connective tissue which spreads throughout the body in a three dimensional web from head to foot without interruption. The fascia surrounds every muscle, bone, nerve, blood vessel and organ of the body, all the way down to the cellular level. Therefore, malfunction of the fascial system due to trauma, posture, or inflammation can create a binding down of the fascia, resulting in abnormal pressure on nerves, muscles, bones, or organs. This can create pain or malfunction throughout the body, sometimes with bizarre side effects and seemingly unrelated symptoms, not always following dermatomal zones. It is thought that an extremely high percentage of people suffering with pain and/or lack of motion may be having fascial problems; but most go undiagnosed, as the

importance of fascia is just now being recognized. All of the standard tests, such as x-rays, myelograms, CAT scans, electromyography, etc., do not show the fascial restrictions.

The fascia can be broken down into three divisions: superficial fascia lies directly below the dermis; deep fascia surrounding and infusing with muscle, bone, nerves, blood vessels and organs of the body all the way down to the cellular level, and deepest fascia within the dura of the cranial sacral system.

Fascia at the cellular level creates the interstitial spaces and has extremely important functions of support, protection, separation, cellular respiration, nutrition, elimination, metabolism, fluid and lymphatic flow. In other words, it is the immediate environment of every cell of the body. This means that any trauma or malfunction of the fascia can set up the environment for poor cellular efficiency, necrosis, disease, pain and dysfunction throughout the body.

Other important factors concerning fascia are:

- It supports and stabilizes thus enhancing the postural balance of the body.
- It is vitally involved in all aspects of motion and acts as a shock absorber.
- It aids in circulatory economy, especially in venous and lymphatic fluids.
- Fascial change will often precede chronic tissue congestion.
- Such chronic passive congestion creates the formation of fibrous tissue, which then proceeds to increase hydrogen ion concentration of articular periarticular structures.
- Fascia is a major area of inflammatory processes.
- Fluid and infectious processes often travel along fascial planes.

The central nervous system is surrounded by fascial tissue (dura mater) which attaches to the inside of the cranium, the foramen magnum and at the second sacral segment. Dysfunction in these tissues can have profound and widespread neurological effects.

Myofascial Pain and Dysfunction by Janet Travell, M.D, beautifully illustrates that there is a myofascial element; for every muscle of the body is surrounded by a smooth fascial sheath, every muscular fascicle is surrounded by fascia, every fibril is surrounded by fascia, and every micro-fibril down to the cellular level is surrounded by fascia that can exert pressures of over 2,000 pounds per square inch. Therefore, it is the fascia that can ultimately determine the length and function of its muscular component.

We must be clear that medicine, modalities, muscle energy techniques, mobilization/ manipulation, massage and flexibility and exercise programs do not alter the powerful fascial restrictions that occur in a high percentage of our patients. These restrictions are only altered via Myofascial Release.

Myofascial Release is a whole body “hands-on” Approach to the evaluation and treatment of the human structure. The therapist is taught to evaluate the fascial system through visual analysis of the human frame threedimensionally in space, by palpating the tissue texture and various fascial layers and observing the symmetry, rate, quality, and intensity of strength of the craniosacral rhythm. Proper Myofascial Release requires ongoing reevaluation, including the above procedures and observance of vaso-motor responses and their location as they occur after a particular fascial restriction has been released. This provides instantaneous and very accurate information enabling the therapist to proceed

intelligently and logically from one treatment session to the next, to the ultimate resolution of the patient's dysfunction.

When the therapist has determined where the fascial restrictions lie, he or she will apply gentle pressure into the direction of the restriction.

At first the elastic component of the fascia will release, and at some point in time the collagenous barrier will be engaged. This barrier cannot be forced (it is too strong). One waits with gentle pressure, and as the collagenous aspect releases, the therapist follows the motion of the tissue, barrier upon barrier until freedom is felt.

The development of one's tactile and proprioceptive senses enhances the "feel" necessary for the successful completion of these techniques. We were all born with this ability to feel the releases and the direction in which the tissue seems to move from barrier to barrier. When we first learn Myofascial Release, we can perform these effective techniques mechanically and with a little practice allows us to rediscover the "feel" and move to a higher level of achievement.

It is felt that each time we experience a trauma, undergo an inflammatory process, or suffer from poor postures over time that the fascial system becomes restricted. These restrictions act like the concentric layers of an onion. These adaptive layers slowly tighten until we begin to lose our physiologic adaptive capacity (our margin of error). Therefore, we slowly tighten, losing our flexibility and spontaneity of motion, setting us up for trauma, pain or restriction of motion. These powerful restrictions begin to pull us out of our three-dimensional orientation with gravity. The goal of Myofascial Release is to help return the individual's physiological adaptive capacity by increasing space and mobility and restoring three-dimensional balance and returning the structure to as close as potentially possible to its vertical orientation with gravity. This equilibrium allows the individual's selfcorrecting mechanisms to come into play and alleviate symptoms and restore proper function.

A comprehensive treatment program should also include appropriate modalities, exercise and flexibility programs, movement awareness facilitation techniques, instruction in body mechanics, mobilization and muscle energy techniques, nutritional advice, biofeedback and/ or psychological counseling. A therapist can easily learn the concept and techniques of Myofascial Release and no prior knowledge of mobilization or manipulation is necessary. However, Myofascial Release should be combined with muscle energy, mobilization and manipulation for those skilled at these important procedures, since it is usually fascial restrictions that created the osseous restrictions in the first place.

So, again, we are discussing an Approach that, when combined with the valuable skills we now possess, acts as a facilitator and intensifier of treatment for more consistent effectiveness and results for our patients.

This is a total Approach incorporating a physiological system, that when included with traditional therapy, acts as a catalyst yielding impressive, clinically reproducible results.

A NEW ERA

Physical therapists of the near future will function quite differently from those of the past. Building on and respecting the foundation developed by various health professions, they will treat the whole person intellectually, emotionally, and structurally. They will have a wide variety of techniques with which to

help others, thanks to continuing advances in scientific technology. With highly developed sensitivity and creativity, they will be able to interact with the patient intelligently and humanely, on an individual level and as part of an interdisciplinary team.

The therapist skilled in Myofascial Release is concerned with releasing and reorganizing the body's fascial restrictions mechanically and reorganizing the neuromuscular system. The reorganization occurs by supplying the central nervous system with new information (awareness) that allows for change and improved potential and consciousness.

It is important for those providing treatment to realize that the body is a repository of information. The body can be used as a biofeedback system for the master therapists' finely trained, sensitive hands. It can then be used as a handle or lever to provide access to emotions and belief systems and allow for structural and biomechanical change.

Mastery means not only achieving a certain level of skill but is also an attitude. Masters are fully aware of what they are doing. They understand the importance of touch as an expression of acceptance, nourishment, and a form of biofeedback to glean information from patients' mind-body awareness. Their touch should be applied with focused awareness and conscious purpose. The focus should be fluid, moving from tight narrow (logical, analytical thought) to open, feeling everything at once without thought or effort (intuition, insight).

Tell your patients not to view the cause of their dysfunction as a defeat but rather to see it as a lesson. By looking for the positive, they can see its value, learn from it, and allow themselves to heal. Help them to understand that one of the best lessons is that they may not be able to change the circumstances of their life, but they can change their reaction to their circumstance, they can move from being passive, helpless recipients to active participants. This important change in perspective creates a partnership between you and your patients where you can help them help themselves.

Thus, mastery is teaching through example. The master therapist is real, calm, nonjudgemental, intelligent, sensitive, strong yet flexible, supportive, compassionate, empathetic, and joyful.

Reference: Please refer to John F. Barnes book the **Search for Excellence**

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