

## **News-Line for Physical Therapists & PT Assistants**

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### **Easing Pain with Myofascial Release**

John Barnes, a physical therapist originally from Pennsylvania, always enjoyed sports and competition, so he chose a career that would help other athletes maintain their physical health. Becoming a PT not only allowed him to follow his interest in athletics: it also led him to explore the role of the mind/body connection in healing. Pursuing a career that uses hand – on methods of healing was ideally suited to Barnes' interests and aptitudes – and it ultimately helped him to help himself.

Inspired to learn about myofascial release (MFR) after a debilitating injury, Barnes became a pioneer in this form of treatment. He has been presenting MFR seminars since the mid-1970s. Today, Barnes is the president and director of the Myofascial Release Treatment Centers and National Myofascial Release Seminars located in Paoli, PA, and Sedona, AZ.

Although Barnes had heard of MFR, he really did not know a lot about it when he entered PT school. He would not become an expert on MFR through the traditional avenues of reading textbooks or attending classes: instead, Barnes attained his knowledge after every traditional method of therapy and treatment failed to relieve his own severe chronic pain. "Just before I finished my PT training, I injured my back while I was weightlifting 300 pounds," Barnes explains. The mishap left him with a crushed disc at the L-5 level and damaged ligaments in his lower back, leaving the formerly strong, athletic PT student in constant pain. He could no longer be physically active or compete in sports. Although Barnes continued with PT school, graduating in 1960, and he continued exercise and physical therapy for his condition, he says he was usually worse off than the patients he treated as a young PT. By the time he turned 30, the former athlete had become someone who could barely lift anything without feeling agonizing pain. When he could no longer sit for even brief periods without terrible pain, he underwent spinal fusion surgery at L-5. The results were disappointing: "It helped the intensity of the pain," Barnes recalls, "but it left me with limited movement and function."

In spite of the pain that plagued his young adulthood, Barnes had plunged into his PT career shortly after graduation, landing a job as a staff PT in a general hospital. Although he enjoyed putting his education to good use, he disliked the fact that his wages were a mere \$2.00 per hour. When he won a promotion to chief PT at an affiliated hospital, Barnes was able to double his income by doing house calls.

Still, Barnes sought other ways to enhance his career prospects. In the early 1960s, not many healthcare facilities even had a PT department. Barnes starting approaching hospital administrators in effort to change this. His endeavors paid off over time, with Barnes opening and directing PT departments in over 30 hospitals, extended care facilities and private practices and overseeing more than 100 employees.

Despite his success in the PT field, however, Barnes was still gripped by pain. He noticed that although everything that he had learned during his PT training was helping the patients he treated, it did little or nothing to improve his own condition. He realized that the traditional training of physicians and PTs focused on symptoms, while paying little or no attention to their causes. Finally, out of desperation,

Barnes began experimenting: lying on his living room floor, he began applying pressure to painful areas on his body, noting that lighter pressure yielded better results.

“The sensations I was feeling went far beyond the origin and insertion of muscles, leading me to believe that there was more to it than muscles. That is when I realized it just might be the fascial system,” says Barnes. “As I started putting pressure into my tight areas, it started to help.” He found it necessary to hold the pressure for a sustained period without sliding his hands along his skin’s surface. “My pain was diminishing and my motion was returning. As I was treating myself, the sensations generated seemed to spread throughout my body like butter melting or taffy stretching,” recalls Barnes.

Almost ecstatic with the realization that this might mark an end to his years of pain, Barnes began an intensive study of the fascial system. He read everything he could find and attended relevant seminars to increase his knowledge of this mysterious body system.

Barnes learned that the theory behind myofascial release required an understanding of the fascial system (connective tissue). Fascia is very densely woven tissue, covering and interpenetrating every muscle, bone, nerve, artery and vein as well as all of the internal organs and the central nervous system (brain and spinal cord). Interestingly, the fascial system is actually a single structure that runs from head to foot without interruption. Connecting each part of the body to every other part, the fascia is not unlike the yarn in a sweater. Fascia plays an important role in the support of the body, since it surrounds and attaches to all structures. The body would not be stable enough to support sitting, standing, or walking without the constant pull of the fascial system. The body is like a tent, whose support poles (bones) cannot adequately hold up the tent without the constant tension of guide wires (fascia) to keep the structure upright with proper equilibrium.

In its normal healthy state, the fascia is relaxed and wavy in configuration. It can stretch and move without restriction. When afflicted with physical trauma, scarring, or inflammation, however, the fascia loses its pliability. It becomes tight and restrictive, a source of tension to the rest of the body. Falls, whiplash injuries, surgeries or even habitual poor posture and repetitive stress injuries have cumulative effects. Traumatized fascia can exert excessive pressure that produces pain or decreased range of motion, can affect flexibility and stability, and can even hamper our ability to cope with strain and stress.

“It has been estimated that when trauma or an inflammatory process occurs, the myofascial system can exert tensile forces of up to approximately 2,000 pounds per square inch” says Barnes. “This kind of excessive pressure exerted upon pain-sensitive structures produces the symptoms that the vast majority of our patients present with every day,” he explains. “This is also coupled with the confusion that myofascial restrictions do not show up in any of the standard testing, so it has been misdiagnosed for a long period of time.”

“We are all fascial beings,” notes Barnes. “A gelatinous energetic fascial being with specialized structures embedded. The fascia controls all of the other structures and systems of our body and basic physiologic functions of our being, all the way down to the cellular level. Therapists were trained to look at it as packing material. The traditional physical therapy releases the fascia, but that only lasts two or three days. They do not get into the ground substance.”

One feature of MFR that attracted Barnes was the power of touch as a diagnostic tool. “Most therapists are not taught via touch; they rely too much on machines for this. We had to find the fascial system

through touch because it does not show up on the standard testing, resulting in [myofascial problems] being missed completely or misdiagnosed,” he says. “This is why we teach the therapists to feel with their hands where the restrictions lie, and when they release, they give us an uncanny accuracy and effectiveness.”

Although myofascial release treatment has been around for many years, and the older treatments were well-intentioned, Barnes says that they were also aggressive, painful and mechanical, and tended to activate the mind/body’s protective mechanisms, in turn inducing extra stress and rendering areas of treatment even less pliable. As Barnes began to understand the fascial system, he realized that the techniques taught at the seminars he attended were very different from the principles he had discovered while working on himself. This may be because the soft tissue mobilization techniques of MFR developed up to that point in time were based on cadaver studies.

Barnes’ response was to adapt the “old” form of myofascial release treatment to the needs of living bodies instead of cadavers. He did this by applying the techniques that helped relieve his own pain and stiffness to the treatment of his patients. Barnes emphasizes gentle sustained pressure, rather than the aggressive, often-painful manipulations he considers hallmarks of the old form of treatment.

Not everyone in the PT field has agreed with Barnes’ approach to MFR, however. “I was attacked by defenders of the status quo. There seemed to be a mindset by some in the physical therapy profession who were hesitant to consider new ideas and techniques,” recalls Barnes. “There will always be skeptics out there, but we will still be here to treat those in need.”

The MFR treatment that Barnes specializes in is meant to complement conventional treatments offered by physicians and therapists. Acceptance of his approach has grown to the point that Barnes has trained more than 50,000 therapists (nearly one quarter of the physical therapy professionals in the U.S.) and physicians.

Barnes also applies his techniques to veterinary care. To him, this fundamental principle still applies when treating animals: “The body language talks to you: listen to it.” His veterinary clients are professional athletes that he helps back to the track. “I have been treating racehorses for a number of years, with great success. I treated these horses by applying release principles, and every horse I have treated is now back racing. Many are shattering records.”

The demand for myofascial release grew to include patients from all over the world at the Paoli, PA, center in suburban Philadelphia. This led to the opening of Barnes’ new myofascial release treatment center in Sedona, AZ, called Therapy on the Rocks. “We had so many people traveling [to PA] from the West Coast,” says Barnes of his decision to open the new center, “but when you have back, neck and other body pain, you know that is a challenge.”

Barnes has come a long way from his days of chronic pain to have MFR treatment facilities on both sides of the U.S. His greatest reward, however, has been seeing “the lights go on” in countless fellow therapists’ eyes when they feel the releases under their hands and realize the power that they possess to help others heal.

John F. Barnes, PT, graduated from the University of Pennsylvania in 1960 and is licensed in PA, AZ, NJ, DE, CO, and HI. He sits on the council of advisors of the American Back Society; is editorial advisor of the Journal of Bodywork and Movement Therapies; and is a member of the American Physical Therapy

Association. Barnes lectures internationally, presenting the “John F. Barnes Myofascial Release Approach” seminar series and “Advances in Spinal Diagnosis and Treatment for the 21st Century” for the American Back Society. He was named one of the most influential persons in the therapeutic profession in the last century by *Massage Magazine’s* nationally featured article, “Stars of the Century,” and was a featured speaker presenting his Myofascial Release Approach at the American Back Society’s meeting, where the theme was “The Most Important Advances in Health Care this Century.”

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