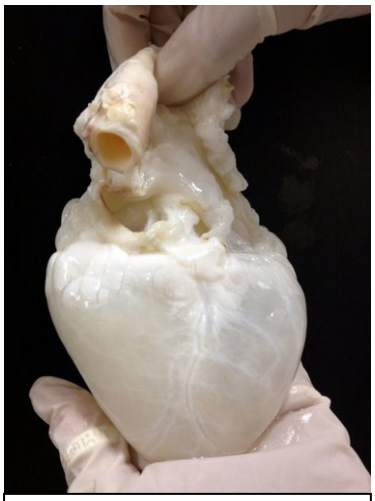
INNER CIRCLE INSIGHTS

Fascia: "What can we do about it". Part 3 of 3

Part one of this series revealed the massive amount of research that has been performed on the fascial system of the human body as well as the misunderstanding of this tissue within the current medical community. Part two continued with this investigation by delving into the fascinating world of the endoscopic filming of the fascial system, in vivo, by Dr. Jean-Claude Guimberteau. This final part of our series will explain how the John F Barnes' Myofascial Release Approach utilizes the principles revealed by the research to treat somatic dysfunction.

Over six decades of research have demonstrated that the body exists in a state of complete integration through the fascial web; nothing happens in the body that is not reflected globally. Just as the foundation of a house affects the pitch of the roof, the levelness of the pelvis affects the function of the shoulder complex. Taking this concept even further, research has also shown that the fascial web is inexorably involved in cellular function as well; even to the point of DNA transcription and gene expression[1]. Unfortunately, traditional medicine, therapy and fitness programs have been unable to truly approach the body as a whole; due to the linear, mechanistic view of the body as a collection of parts. Much like attempting to understand Einstein's revelations of the integration of space and time using only Newtonian classical mechanics; over 60 years of research and clinical practice have served to show this model of the human body to be incomplete and flawed. The more complete model would be closer to an idea of a "fascial being", as the fascial system creates, connects and is the organism that we see in the mirror every morning. To reiterate, with illustration, if every structure of the body were removed except the fascial system; we would retain the same shape[3].



A "ghost heart"; a heart that has been stripped of every structure and cell that is not specifically fascia. As is seen, it retains the exact form of a heart, in every detail.

When trauma and inflammation occurs, fascia loses its flexibility; the gelatinous ground substance begins to solidify, akin to pouring glue into the spaces between cells. This is the phenomenon of phase transition discussed in Part One, known as thixotropy[2]. A person can easily see why we begin to feel "stiff" in the morning and why the elderly seem as if they are turning into stone. Whether it be a fall, motor vehicle accident, surgery, loss of strength, overuse injury, habitual poor posture or our catalogue of personal, emotional traumas and stresses; these traumas have a cumulative effect; causing the fascia to tighten around these traumatized regions and, thereby, create chronically inflamed tissue; resulting in pain, loss of function and a host of other, varied symptoms. Additionally, due to it being an uninterrupted tissue, restrictions within the "fascial web" begin to affect the entire body; as easily as a pull in a sweater creates a drag throughout the garment, affecting the organism systemically. Further, through the phenomenon of mechanotransduction, this solidified ground substance of the fascial system now directly affects cellular functioning as well – down to the actions of DNA transcription and gene expression.

Research has shown fascial tissue capable of tensile strength of over 2,000 pounds per square inch[5]. One can imagine the potential of these fascial restrictions to exert enormous pressures on the body's structures. Given this information, we can understand how the symptoms of intense and widespread pain and cognitive impairment can be produced; how chronic pain, fibromyalgia and chronic fatigue syndrome can manifest; how scoliosis, ADHD, respiratory and heart function can be affected. New research points to the effects that the viscosity of the ground substance has on the incidence and remission of certain cancers, as well[4]. In essence, the body is being placed in an ever-shrinking "straightjacket" that places crushing pressure on every system, structure and cell in the body.

The subsequent development of the *John F. Barnes Myofascial Release Approach* (JFB-MFR) over the past 40 years creates a therapeutic model to address this often-times overlooked component to functional limitation, injury and pain. Myofascial Release, or MFR as it is often termed, utilizes the gentle pressure of a skilled therapists hands for an extended stretch into restrictions within the fascial system. This essential time element is, arguably, the most important element that separates MFR from all other manual modalities and allows the long-lasting structural and physiological changes that have escaped traditional therapies.

Massage (including deep tissue), joint mobilization/manipulation, muscle energy, therapeutic exercise, heat and/or cold, ultrasound, electrical stimulation, strain/counterstrain and all other tools are effective, but only in addressing the elastic (stretchy) component of fascia. This is analogous to stretching a rubber band; it will snap back given time. Through the utilization of compression and stretch into the restrictions for extended periods of time, MFR allows us to address the gelatinous ground substance; thereby affecting permanent change within the system. Research has shown us that the fascia is a piezoelectric (*peezo-electric*) tissue[4]. This term means that when compressed, or stretched, the fascia creates a

bioelectric charge/flow. This flow of our body's energy/communication system begins a cascade of feedback mechanisms that allow phase transition (thixotropy) within the tissue – allowing the ground substance to go from solid back to gel, akin to ice changing back to water. Using our previous example, this would change the size of the rubber band, thereby reducing the need to add additional stretch to the system to mimic an increase in room, as well as naturally decreasing the inflammatory response.

Through a thorough evaluation at Inner Circle, a skilled JFB-MFR practitioner can assess areas of fascial restriction throughout the body. This is achieved through a complete patient history, body-wide postural assessment, hands-on assessment of the tone and texture of the tissue, range of motion, muscle testing and the subjective complaints of pain and/or loss of function. At this point, the therapist can begin to utilize the myriad MFR techniques to address these areas of restriction.

Utilizing the gentle pressure described above, these areas of restriction can release and the tissues return to their natural, fluid state. With the excessive pressure in the system released, the body's own self- correcting mechanism can begin to allow the chronic inflammation to finally resolve. This allows for a healthier pattern of movement and function to emerge. At this point, therapeutic exercise and traditional modalities become much more effective and assist in reinforcing this healthier state; so as not to allow the body to return to the familiar, yet dysfunctional, patterns.

People often wonder what to expect with MFR. While there are no "cookie-cutter" answers; as we are unique, our healing will be unique; there are some commonalities. The therapist will utilize varying techniques and pressures to engage the fascial restriction. This stretch will be held until the tissue begins to release and, following the tissue three- dimensionally, engage the next layer of restriction. This is where the time element separates MFR from all other interventions. As the developer of MFR, John Barnes, has stated many times, "we must stop hurrying our healthcare".

During this time, the patient can experience a variety of sensations – tenderness, tingling, heaviness, lightness, burning and/or sharpness, to name a few. While these sensations may hurt, they will never injure you. As discussed previously, the tissue is stuck in a state of chronic inflammation. Think of your forearm; you could slap it, blow on it, run it under warm water – no tenderness or pain would be produced. However, if your forearm was sunburned (inflamed), you would not want someone to even brush against it for fear of it hurting! The structures placed under pressure by restrictions within the fascia are stuck in a state of being "sunburned" or inflamed. This drastically alters our perception of sensation within the regions. Until the pressure is released, the body is unable to resolve the inflammatory response. Additionally, due to the uninterrupted nature of the fascial system, these sensations are not relegated to the area being treated. During treatment, sensations may arise in other areas of the body; it is important to keep the therapist informed of these sensations, as this is the body uncovering connections to deeper layers of restriction.

Finally, the patient may experience increased soreness after treatment; this is incredibly valuable. The current status quo in the body is obviously dysfunctional, as treatment is being sought. Change, often referred to as chaos by MFR practitioners, must be introduced into the system to interrupt the constant feedback loop that perpetuates the status quo. Only through ending the status quo can a new way of being and moving manifest itself – for a powerboat to move forward, it must make some waves.

With the utilization of Myofascial Release into our training regiments and treatment options at Inner Circle, the potential for authentic healing becomes a reality. The causes for pain and loss of function are brought to the forefront and treated, relieving the symptomatic complaints that make up our varied diagnoses. We finally have a treatment model that treats the patient as a whole being, allowing for a return to an active and pain-free lifestyle.

Professionally yours,
David Noonan, BA, PTA

For an appointment please call (215) 860-3623
"The Natural Force Within Each of Us
is the Greatest Healer of Disease" – Hippocrates

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