

Helping Clients Understand Their Fascial Network

Anita Boser and David Lesondak

Anita Boser is a Certified Hellerwork® Practitioner. She graduated from the Institute of Structural Medicine in 2001. In 2007, she wrote and published "Relieve Stiffness and Feel Young Again with Undulation." Her personal practice is in Issaquah, WA, USA.

David Lesondak, CSISM, is a member of the Allied Health Professional Staff in the Department of Family and Community Medicine at the University of Pittsburgh Medical Center. He currently practices at UPMC's Center for Integrative Medicine and in private practice in the greater Pittsburgh area. A professional bodyworker since 1992, David graduated from Kinesis in 2003.

Can you imagine living in a house where you didn't know all the names of the rooms? Or maybe you do know the names, but aren't sure exactly where they are. Or how about knowing the names of all the rooms and where they're located, but not knowing what the furniture inside them is for?

Sadly, this is often the understanding most of our clients have about their bodies. The good news is that most people are truly hungry for more knowledge about what their bodies are and what they can do with them.

As Structural Integrators we are in a unique position to serve not only as therapists, but also educators. We have the opportunity to teach our clients about the reality of their bodies and correct misperceptions about the way they function. In doing so we can offer an opportunity to change and expand their awareness about what kind of healing may actually be possible for them. So how do we best communicate the essential concepts of fascia, tensegrity and connection in ways that are clear and memorable to our clients?

In this article we share some of our favorite metaphors and teaching tools from a variety of sources. Because mental and somatic experience is so varied, the more ways we have to communicate these concepts the more people we can reach and educate about the bodies they live in.

Fascia

The website for the Fascial Research Congress (www.fasciacongress.org) defines fascia as "the soft tissue component of the connective tissue system that permeates the human body. It

forms a whole-body continuous three-dimensional matrix of structural support." This is a great, concise definition but how can we make those two sentences come alive for our clients?

One way is with pictures. Not every anatomical atlas really gives fascia its due, but the *Wolf-Heidegger Atlas of Human Anatomy*¹ is unique. What's notable is that it features side by side illustrations that are virtually identical except one includes the deep investing fascia overlaying the traditional muscle picture. Any anatomy book will show the lumbodorsal fascia and IT bands and most also include cross sections that show the septums of the legs. Seeing these structures can help many clients understand that it's not all about muscles.

Another option: if you are a good imitator, you could try putting on your best Alec Guinness voice and paraphrase Obi-Wan Kenobi from the first "Star Wars" movie, circa 1977, and say: "The Fascia is what gives a person their shape and resiliency. It's a tissue field inherent in all living creatures. It surrounds our muscles, organs and bones. It also penetrates, separates yet binds the body together." Don't worry if you're not a good mimic, just convey the essence. It's also a nice segue to the older idea of the fascia as a full length body stocking. Encourage them to think of this matrix as one fascial garment with over 600 pockets, one for each muscle.

Clothing

One way to demonstrate this idea is pull the waistband of your pants toward your armpits. Call attention to the creases in adductor area and

groin and make the analogy between pain in the low back from wrinkles in connective tissue in the pelvic floor or the hips. Pull in one part of the fabric creates bunching in another, and vice versa.

Any woman, and even a few men, will understand the concept of pantyhose that don't go on right. When there's a twist in the ankle, no matter how much you try to reverse the curve, the rest of the leg will be distorted and the crotch will be bunched. So imagine walking in those distorted pantyhose for a day, a month or a year and imagine how much more distorted they and you would become.

Another effective way to illustrate this is to gather and grab the front of your shirt, pull it tightly forward and down and ask: "Can you see how if my fascia is restricted in the front I might start complaining about pain in my neck and shoulders?"

If you have the sense that the pantyhose metaphor is not going to connect with the client that's in front of you, try substituting a wetsuit. It's as if there is a wetsuit underneath our skin and the innermost layer of that wetsuit peels off to form the fascial envelope of each muscle yet it is all part of the same garment. Regardless of which metaphor we choose, it is still our task to tailor this garment so that it moves more freely and is able to better express the client who resides within.

Before we leave our clothing completely behind, do you have an old sweater lying around, especially one with holes in it? You can mend a hole with yarn to show how scar tissue is less organized and how it creates weakness in the surrounding tissue. Conversely, an unmelded hole can show how connective tissue cannot transfer force and the resulting compensations the body needs to make to move around the hole. You can also use the sweater to demonstrate one of Ida Rolf's classic examples of how a snag in the fabric can distort the entire garment.

This also becomes a good jumping-off point to talk about how it's all connected, in other words - tensegrity.

Tensegrity

Few clients understand the concept of tensegrity and therefore incorrectly assume that their bodies are constructed like a house. Some clients even feel like they are constructed like the Parthenon! While the house metaphor can occasionally be helpful (as will be explained below) one of the most transformative ideas we

can convey to our clients is tensegrity.

A fundamental part of tensegrity is synergy between components, where push and pull have a win-win relationship with each other. It is also where a change in one part affects the whole, like the snag in the sweater. In its simplest form it is the model wherein the bones are suspended in a tensional network of connective tissues, including ligaments, tendons and myofascia.

Anatomical tensegrity, or biotensegrity, models are excellent educational tools. They are available through www.intensiondesigns.com. They range in price from \$125 for a basic pelvis model to \$2,000 for a full body. In addition to showing the complexity of relationships between parts to clients, these models also help the practitioner model the three-dimensional workings inside our clients.

If you're on a budget you can also demonstrate tensegrity in simpler fashion. Have a client place a wooden dowel on end to see if it will stand up. Its balance will be shaky at best. Next, put a pillowcase over the dowel and use tension on either side to keep the dowel standing. If your client holds one side of the pillowcase and you hold the other, you can play with how changes in force from one side require adjustments on the other side, or throughout the whole structure, in order to keep the dowel standing.

Also ask your clients to consider a spider web and how the change of surface tension of a landing fly transmits the strain throughout the web and ultimately to the spider. In a similar way the connective tissue serves as a conduit of communication throughout the whole musculoskeletal body (and perhaps beyond). For example, contraction of the vastus lateralis immediately informs the fascia lata, which, through its tensional matrix, coordinates the movement between all muscles of the thigh². Ultimately, that message of tension will reach the brain, which like the spider, will then react to the stimuli and respond. Hopefully by calling their friendly, neighborhood Structural Integrator and making an appointment!

There are times when the "built like a house" metaphor comes in handy – this can work especially well when you're trying to explain your obsession with your client's feet and their perception is that their problem is in the upper body. One way to explain this is that it's like that crack on the wall in the second story of your house. You keep patching it, and slowly over time

it keeps coming back. So maybe you need to look at what's going on in the foundation of your house in order to truly solve the problem. In your body's case your feet are that foundation.

You are What You Do

Feet—and all other parts of the body—develop their unique structure based on how they are used. In other words: Wolff's Law³ rules. This is often contrary to the common belief that a pain or sensation is something that just comes out of nowhere. How often do you hear, "I don't know what I did, but the pain was suddenly there," or variations on that theme?

To demonstrate how form is based on function, open an orange for your client to show how each layer conforms to its purpose. The outer skin is dense for protection. Each septum allows separate individual sections to develop and move independently. The juice is contained by sacs, and connective fibers run throughout. All these components work together to form an orange in exactly the shape you have in front of you.

All the parts and pieces of your client do the same thing. If the primary purpose of an upper back is to counteract hunching over a computer all day, it will slowly develop a bracing structure that resists bending, and soon this lack of motion will result in other compensations and so forth until one day when the pain "suddenly" arrives.

Challenging the Mechanistic View of the World

From the steam engine to the laptop computer, we place a high value on machines. Source after source refers to the human body as "the ultimate machine". This view has become so pervasive that most people tend to think of themselves as being composed of a very clever collection of components.

While the scientific achievements that have

led to such things as artificial hips, knees and even hearts are truly remarkable, they also can reinforce this kind of assembly line way of thinking. While it has been both necessary and useful to study the body in parts, we often forget to put the parts back together in order to look at how they function as a whole. Just as no "part" functions in isolation, no "part" dysfunctions in isolation either. It could even be argued that the very thinking of ourselves as machines is responsible for creating some of the rigidity and stiffness that seems to plague our postmodern society

We need to remember that we are organic. A way to demonstrate this concept is by making a batch of gelatin. Put one bowl in the refrigerator for a month to let it dry out and become just like unhealthy, sticky and dense connective tissue.

Now make a fresh batch, so you can show your clients both at the same time. They'll be able to feel the stickiness that binds their tissues together to restrict movement and then visualize the juiciness of healthy tissue. Along with that can come an understanding of the nature of transformation, not from short muscles to long muscles, but from dehydrated and inert to alive and organic.

This is only the beginning. New research and information is being added to our collective knowledge regularly, such as the groundbreaking photography of the French hand surgeon Dr. J. C. Guimberteau⁴ that shows how the fibers of living connective tissue remodel themselves moment to moment based on the surrounding structure's tension. No doubt practitioners will continue to remold and adapt our analogies accordingly.

In the meantime, we welcome your participation in the conversation. There are two ways to reach us. One is fascialconnections@gmail.com, or visit www.fascialconnections.blogspot.com.

Endnotes

¹ The Wolf-Heidegger Atlas of Human Anatomy covers the body in two volumes and is available in limited quantities.

² Willem J. Fourie, Nat. Dipl. P.T., "Fascia lata: Merely a thigh stocking, or a coordinator of complex thigh muscular activity" presentation at the 2007 Fascia Research Congress.

³ Wolff's Law, developed by German anatomist Julius Wolff in the 19th century, states that bone remodels itself to adapt to the stresses placed on it.

⁴ Dr. Guimberteau's website is <http://www.guimberteau-jc-md.com:80/en/>. His DVD "*Strolling Under the Skin*" is available through <http://www.anatomytrains.com/store/cat/dvds/39> for \$60 or http://www.somatics.de/strolling_under_skin.pdf for 45€.