

EVERYTHING Is Connected: What is Visceral Manipulation and How Does it Relate to the Pelvic Floor?

In Female Pelvic Pain, Male Pelvic Pain by Nicole Davis

November 21, 2018

By: Nicole Davis

Remember our earlier post on fascia? Simply put, fascia is a continuous sheath of connective tissues that lines everything in our body – the organs, bones, muscles, blood vessels, nerves etc. Healthy fascia is fluid and mobile. It allows everything in the body to slide and glide promoting healthy and balanced movement. Restrictions in fascia can impact the mobility of any of our internal structures and can consequently lead to dysfunction – including the pelvic floor. In this post, we'll tangent from the fascia discussion a bit and focus on how motion of your organs a.k.a. the viscera are important in maintaining overall health and provide a few examples on how this may relate to potential pelvic floor dysfunctions.

We are familiar with the concept that our bodies need movement to be healthy. This same principle applies to every structure in the body including the viscera. Our organs have two types of physiologic motion, mobility and motility. Mobility refers to movement of the viscera in response to an external force. This force can be voluntary, such as when you are performing a pelvic floor contraction or involuntary, like the contraction of your diaphragm with respiration. Motility on the other hand refers to the intrinsic motion of the viscera. This is a little bit trickier to understand at first and even the father of visceral manipulation, Jean-Pierre Barral, DO (meet him here) has difficulties scientifically explaining this phenomenon. The embryological theory of visceral motility states that each organ traces the path of embryological development and migration and that this motion is inscribed in the viscera. Basically, the viscera has an innate motion. When there are restrictions or modifications in the motions of the viscera this can create changes in the organ itself and/or to any of its related structures. Because of the viscera's fascial and ligamentous attachments, impaired motion can create tension at its origin or elsewhere along the body - remember, everything is connected. What impacts visceral motion? Inflammation. The tissues within the viscera lose their normal mobility when they become inflamed. The natural healing process of our bodies involves local disruption of normal tissue fibers that are eventually replaced with less elastic tissue fibers. What can create tissue inflammation? Many things! Infections, direct trauma, surgery, repetitive movement, diet, environmental toxins, emotional stress and so on.

Let's use surgery, a Cesarean section, as an example. A C-section requires cutting through the abdominal fascia to access the uterus. The connective tissue or scar tissue that replaces this incision is less elastic than the tissue that was previously there. Early on postpartum, the C-section scar may be sensitive which may encourage the mother to move in a flexed trunk position. At first this may not seem problematic but could lead to a cascade of dysfunctions in the future. If we extrapolate Woff's law to the fascia, the body will continue to lay down less elastic connective tissue in areas of tension. This flexed trunk position overtime could create weakness and decrease support of the abdominal muscle and back extensors leading to back pain. It could also potentially create myofascial trigger points in the adjacent muscles that refer to areas such as the clitoris or urethra. And what about the nearby viscera? This restriction in motion could impact the bladder or bowels leading to symptoms of urinary urgency, incontinence and constipation. Stephanie explains this well in her prior blog, C-Section Scar: Problems and Solutions, and also offers suggestions for managment (hint, pelvic floor physical therapy can help!). Mobilizing the C-section scar tissue is a great first step. This helps realign the scar tissue in a more organized fashion. But what if the motion of the viscera are affected?

This brings me to our topic of interest: visceral manipulation. Visceral manipulation is a type of manual therapy technique that is used to help initiate and restore inherent organ movement by increasing proprioceptive communication within the body. The two main overarching themes of these technique are that they are (1) gentle and (2) specifically placed. The idea of visceral manipulation is to facilitate and encourage normal movement of the organs. Visceral manipulation helps the organs "remember" this by activating reflexes within the nervous system. The intricacies of visceral

manipulation techniques are beyond the reach of this blog, however, there are various organizations that offer educational courses that you as a provider can access. These include The Barral Institute, Herman and Wallace, and the Institute of Physical Art. If you're a patient, you are welcome to "Find a Practitioner" via The Barral Institute. Note: this database only reflects providers who have learned visceral manipulation through The Barral Institute.

Let's jump back to our C-section example and assume the movement of the terminal portion of the large intestines, the sigmoid colon, is involved. The sigmoid colon articulates directly with a number of structures in the body: sigmoid mesocolon, jejunoileum loops, iliac fascia, Toldt's fascia, external iliac vessels, left sacral plexus, left ureter, left piriformis, psoas muscles, bladder, uterus, obturator nerve, ovary and ductus deferens (in males). It's okay if you don't know what some of these structures are, the point is, the sigmoid colon connects to a lot of things! So what could this altered motion of the sigmoid colon mean for the body? Well, given its relationship to these structures, it could display symptoms in the viscera (such as the bowels themselves, the bladder, the uterus, etc.); it could display vascular symptoms (i.e. varicose veins); and/or it could display musculoskeletal symptoms (i.e. low back pain, sciatica, lower extremity joint pain). Does this mean that that annoying and stubborn left-sided sciatica may be coming from you large intestines? Possibly!

I can understand that at first glance this may sound absurd. Unfortunately, it is difficult to perform the gold-standard randomized controlled trials with visceral manipulation. Fortunately, there are hundreds of thousands of positive case studies and reports. Take a look at one such examplepresented by Romona Horton, MPT, with Herman and Wallace. Though we can't assess the motion of the bladder in a still picture, you can see the difference in the shape and size of the bladder between the before and after sonograms.

Visceral manipulation is another tool in the toolbox for the physical therapist and other educated providers but can provide great returns. As Romona mentions in her case study, she used other techniques to address comorbid somatic dysfunctions in the lumbopelvis such as working on the motor control of the patient's core stabilizers and treatment of dyspareunia (pain with intercourse). At PHRC we can also help with these and would be happy to see you! Check out "Our Services" to see some of the conditions we treat.

REFERENCES:

Barral, Jean-Pierre, and Pierre Mercier. Visceral Manipulation. Revised ed., Eastland Press, 2005.