

# INNER CIRCLE INSIGHTS

## What's the Pelvis Got to Do with It? Part 1: "Head, Shoulders, Knees, and Toes."



These are words many of us are familiar with, most likely having sung as a child or perhaps with a child in effort to teach the parts of the body. This adage is never truer than in the world of physical therapy. If you are fortunate enough, you may have even heard a physical therapist use it to explain why they want you to do a hamstring stretch to help your back pain. In our center, connecting the head and shoulders to the knees and toes, is the mighty pelvis. Despite its central location and powerful role in the body, most patients still ask the question, "What does the pelvis have to do with my insert body part here pain?" The answer is, "Quite a bit actually."

If we stop to think about it, the pelvis is the keystone of the body connecting the upper and lower halves. It has an exceptionally large role - it is right there in front of us and so often ignored - as all our motion is driven through the pelvis. Even more important is the three-dimensional web of connective tissue known as fascia within the body. Fascia, consisting of elastic fibers, collagenous fibers and an extracellular matrix, weaves throughout the entire body. It has incredible tensile strength giving the body shape and support. The pelvic fascia supports the weight of the entire body as everything arises from it. It connects the spine as each vertebra sits on the one below it, beginning at the sacrum and extending up through the lumbar, thoracic, and cervical regions with the skull at the top. Our ribcage, shoulders and arms connect through the thoracic region. The support of body weight through the hips, thighs, knees, ankles, and feet begins with the pelvis and its fascia. This "fascial pelvis" is our powerhouse, our core and drives all mobility. The word core is used so widely throughout the health and fitness world and is, usually incorrectly, associated with just our abdominal area and our low back. The fascia and muscle connections that extend beyond that region from the pelvis are overlooked. We hear the word core, even sacrum or pelvis at times, and think abdominal exercises in some form. While strength is required through those areas, it goes beyond just crunches, planks and Pilates.

A compensatory shift in our pelvis can occur, which in turn shifts the way the pelvis supports the body. This shift can be anteriorly (forward), posteriorly (backward), an upslip (towards the ribcage), or an inward or outward flare (turned towards or away from the navel). These shifts occur as the fascia and muscle that attaches to the pelvis from areas throughout the legs, hips, spine, abdomen and ribcage become restricted and tight. The rest of the body must compensate for that shift, however small. As our body develops areas that become restricted or tight, bound down and unable to perform their jobs easily, it causes other areas to become elongated or overstretched which creates another form of weakness, not allowing those areas to perform their jobs easily. A compensation occurs, meaning another area makes up for the restricted area or overstretched area. Our body is now working harder to do a job it is meant to do effortlessly.

We can think of it the way we think of the wheel alignment of a car. The car will drive straight when its wheels are aligned properly. As the car is driven, the angle of the wheels can shift, perhaps because of an accident or hitting a large pothole. Regardless of cause, the angle of the wheels will affect the tires, causing them to wear more quickly and in an abnormal pattern. It can also cause the steering wheel to pull requiring greater effort by the driver to keep it centered on the road. We don't necessarily notice the changes that occur in our bodies as a result of pelvic imbalance when it first occurs. We can continue about our daily lives, maybe only feeling a little tightness here and there. In time, these restricted areas become stronger, more restricted and pull harder onto the other areas of the body. The overstretched areas become more stretched and weaker. The compensation patterns our body has developed become stronger. As the compensation patterns become stronger and weakness increases, pain and dysfunction increase. It can no longer be ignored.



An imbalance in the pelvis can be caused by: direct trauma, such as a fall, in which we land on our buttocks or hips; athletic injuries; or it can be the result of an ankle sprain, knee or hip injury - one incurred in the past that caused a change in gait pattern and subsequent compensations that followed. For women, it can be caused directly by pregnancy and childbirth. It is more common, however, that imbalances in pelvic symmetry are caused by long term, repetitive activities that cause microtraumas throughout the body. Repetitive activities which slowly build up restrictions and weaknesses leading to pelvic asymmetry. Shifting all your body weight to one side or the other, walking, running and even positions used each day at work

are some examples. In women, it can be caused by inflammatory processes that occur monthly with the menstrual cycle or inflammatory conditions such as endometriosis and polycystic ovarian syndrome (PCOS). Inflammation that occurs with infections or diseases in both men and women can also be a cause.

In most cases it is a combination of trauma, repetitive motions and inflammation leading to fascial restrictions that cause imbalances in the pelvis and the symptoms one feels. These fascial restrictions need to be addressed as the primary part of the healing process if one wants long term improvement and return to function. If our base of support is in a state of imbalance, then the rest of our body will be imbalanced. Any strengthening that we attempt will strengthen the compensation patterns we have developed instead of correcting them. This can only lead to increases in fascial restrictions throughout the body, weaknesses and more compensations. It is the fascial restrictions that ultimately need to change for healing to occur regardless of what diagnosis or injury we decide to give the symptoms.

The road to healing is multifaceted and unique to each person, regardless of what appears on an MRI or what diagnosis one receives. Manual therapy techniques such as massage, muscle energy, strain/counterstrain, joint mobilization, along with stretching and strengthening should be a part of the healing process, but they are limited because they do not address the deeper layers of fascial restriction. Restrictions within the fascial system are powerful, creating increased pressure throughout our body and on pain sensitive structures. Myofascial Release (MFR) as developed by John F. Barnes, in which sustained gentle pressure is held on restricted areas for a prolonged period, allows the deeper layers of tissue to open and heal. It is a key component to achieving long term lasting pain relief and a return to daily activity.



Inner Circle Physical Therapy & Myofascial Release Center can provide a physical therapy experience like no other. Our therapists are all highly trained and experienced in the JFB Myofascial Release Approach. The focus is on you as a whole and what we can do to help you return to your pain free, active lifestyle from the minute you walk through the door. An in-depth evaluation will be done to assess pain, mobility, posture, imbalance, and fascial restrictions. Utilizing JFBMFR, we look to change the fascial restrictions, restoring tissue to its optimal state. We look to address any imbalances that may arise from the pelvis regardless of whether your symptoms are leg pain, jaw pain or somewhere in between. Our therapists understand that without a stable base of support, we cannot expect balance and true strength throughout the rest of body. In addition, we utilize other manual therapy techniques, modalities and a therapeutic exercise program designed to correct imbalances, working to change compensatory patterns and restore true strength. If you are ready to get back to a better you, Inner Circle is here to help you reach your goals.

*In the second part of this series, we will explore what the pelvis has to do with the lower body and the issues that many of us develop as a result.*

Professionally Yours,

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*"The Natural Force Within Each of Us is the Greatest Healer of Disease"*

*-Hippocrates*