A Global View of the Fascial-Pelvis

John F. Barnes, P.T., responds:

Assessing someone lying on a table gives us some information about someone lying on a table, but very little about the individual standing. It is like looking at two separate human beings. When a person is standing, gravity's influence creates a totally different biomechanical situation. A massage therapist might be adept at balancing a client's pelvis with massage and other techniques, but what many miss is that the moment the client moves off the treatment table, gravity exerts force, the powerful myofascial system pulls the body back into dysfunction and the problems return.

Instead of saying that the fascia surrounds every structure, it is more accurate to say everything lies within and is controlled by the fascia. It is as though the body is a candle with seashells embedded within it. If one heats the candle, softening the wax, then twists it, the twist will affect the position of all the shells. The body is similar: The osseous structures and all other structures of the body should float in a gelatinous sea of fascia. A fascial restriction in the lower extremity, for example, will produce imbalances that create a whole-body, quantum effect.

It is important to analyze the client's total structure standing, lying down and moving.

For example, a discrepancy in the balance of the pelvis of an eighth of an inch can be significant. Evaluate by checking the level of the anterior superior iliac spines with the client standing and supine.

Then, with the client standing, place your thumbs on the posterior superior iliac spines and ask the client to bend forward slowly. The thumb that moves first at the end of the range usually indicates the side of the restricted sacroiliac joint. The sacrum and ilium should move independently of each other; therefore, the side on which the thumb moved the farthest is the one where the sacrum and the ilium are restricted, forcing them to move together.

We note that the client's right ilium is torsioned anteriorly and the left ilium is relatively torsioned posteriorly.

This has functionally lengthened the right lower extremity and functionally shortened the left lower extremity, which transmits unbalanced shock throughout the whole structure with each step. It's as if the person is walking with one foot on the sidewalk and one down off the curb.

It has been estimated that each heel strike is the equivalent force of a car hitting a brick wall at 55 miles per hour. Now imagine the imbalance in these forces that occurs with a long leg and a short leg. With each step, this micro-trauma forces the myofascial system, the body's shock absorber, to compensate and tighten.

This imbalance and torsioning of the pelvis, the foundation and balance point of our entire structure, forces the pubic symphysis to shear. The gluteus musculature, piriformis and hip rotators are then forced to try to add the stability that is not being provided by the osseous and ligamenteous structures of the pelvis.

The piriformis on the left will tend to tighten, placing an abnormal pull on the sacrum and

externally rotating the left lower extremity. This tightness of the piriformis creates local pain and referred pain down the leg due to excessive pressure on the sciatic nerve, which passes through or just under these myofascial structures.

The shearing of the pubic symphysis destabilizes the area. The powerful muscles of the lower extremities no longer have a firm foundation to pull against, causing weakness, incoordination, poor endurance, pain and excessive expenditure of energy to perform the activities of walking, running, lifting, squatting, jumping and standing.

Shearing of the pubic symphysis also torques the pelvic floor, compressing and twisting the structures that pass through the area. Torsioning of the pelvis also torques the fascia that surrounds every nerve, blood vessel, duct and organ that lies within the pelvic bowl.

This can cause lumbosacral, sacroiliac and pelvic pain. The enormous pressure from these fascicle restrictions can also cause menstrual pain and dysfunction and elimination problems.

Torsioning of the pelvis unlevels the sacral base, which is the foundation of the spine and central nervous system, and creates an uneven pull of the iliolumbar ligaments. The iliolumbar ligaments attach to the spinous processes of lumbar 3, 4 and 5, and to the crests of the ilia. Because of the leg-length discrepancy, with each step the client takes, the unlevel ilia pull on the iliolumbar ligaments, which in turn pull the lower lumbar vertebrae into a rotoscoliosis.

This side-bending and rotation of the lumbar vertebrae cause a wedging effect of the hard, osseous structures, which forces the disks out of alignment. They bulge against nerves, producing local and radicular pain in the lower extremities and protective spasm of the erector spinae, quadratus lumborum, psoas, and abdominal and oblique musculature.

There is a kinetic chain effect in the facet joints, with each uneven step corkscrewing its way up the spine. The myofascial system, in its attempt to stabilize the body in this state of disequilibrium, begins to produce pressure on pain-sensitive structures, causing spasm, fatigue, ischemia and pain. Anteriorly, the abdominals and the psoas tighten in their attempt to stabilize a very unstable situation.

The psoas attaches firmly and thickly into each lumbar vertebrae and has muscular slips that go into each lumbar disk. The myofascial tightness and spasm that occur pull the vertebrae too close together, compressing the disk and creating an external pull on the disk.

Frequently, surgically removing the disk is treating a symptom; this is why there are so many failed surgeries. Certainly, if the intervertebral disk is destroyed, there is no option but to remove it; however, this is rarely the case.

Myofascial release should first be aimed at balancing the pelvis. This creates a stable foundation for the spine, removing the wedging effect of the osseous structures. This could help long-standing back and pelvic pain and dysfunction and prevent unnecessary surgery by addressing the cause of the problem, the all-pervasive fascial system.

Throughout the session, remember it is important to analyze the client's total structure standing, lying down and moving.

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