

Understanding the Sacroiliac Joint

Physical Therapy in Port Townsend for Lower Back

The sacroiliac joint (SIJ) formed by the sacrum wedged between the spine and the hip is the subject of ongoing controversy and debate. Some experts refuse to believe the sacroiliac joint is a true synovial joint that moves. They base this opinion on the fact that there is very little sacroiliac motion that can be detected or directly measured.

But most agree that not only does the sacroiliac joint move, it can generate pain that is felt in the low back or buttock area. Studies to that effect report between 14 and 40 per cent of all cases of back pain are really caused by a problem in the sacroiliac joint.

Like all synovial joints, the sacroiliac joint can be subjected to change over time. Along with aging comes osteoarthritis of the SI joint. Other causes of sacroiliac-induced pain include the presence of other low-back problems, spinal fusion surgery, pregnancy, infection, or tumors.

Diagnosis of problems affecting the sacroiliac joint can be extremely difficult. The current tools we have include the patient interview, physical examination, and imaging tests. During the exam, the physician tests motion, carries out palpation and provocative tests, and then orders appropriate imaging tests.

But these screening tests are very limited in what they can find so imaging studies (e.g., X-rays, CT, MRI) are often needed. Bone scanning can be done when the surgeon suspects tumors, inflammatory lesions, and other abnormalities. A newer scanning technique called the fire scan combines CT, SPECT, and bone scan technology to create a colorful image but studies have not been done yet to support this as a valid and reliable diagnostic tool.

Once the diagnosis has been made, it is often still considered a provisional diagnosis. This is more of a wait-and-see kind of diagnosis. If it gets better with treatment for the suspected cause, then it is assumed the correct diagnosis was made. For example, steroid injection into the sacroiliac joint (SIJ) that reduces or eliminates painful symptoms confirms the problem was coming from the SIJ.

Other conservative (nonoperative) care can include manual therapy provided by an osteopathic physician, chiropractor, or physical therapist. The use of muscle energy techniques, strain-counterstrain, and mobilization or manipulation of the joint are often used by these professionals.

When the sacroiliac joint is extremely painful and unstable despite conservative care, then surgery may be an option. The most common surgical procedures performed on the sacroiliac joint include cutting the nerve(s) to the joint and fusion of the joint (referred to as arthrodesis). But even with the surgical approach, there isn't enough evidence to point to one way to approach this problem over another.

In summary, the author of this article provides a review on the diagnosis and treatment of sacroiliac joint pain. He points out that there is no reference standard for making a clear or definite diagnosis of sacroiliac joint problems. Even with imaging studies and diagnostic injections, sacroiliac pathology can be hard to detect. Results of these test measures are often variable and unreliable.

In the end, the surgeon must take each patient on a case-by-case basis and conduct the examination one step at a time. Each diagnostic tool provides some information. The examiner must not lose sight of the big picture (the whole patient) when one finding is positive over another. Taken together, all the individual findings may eventually point to the sacroiliac joint as the cause of the painful symptoms.

Reference: John G. Stark. The Diagnosis and Treatment of Sacroiliac Joint Abnormalities. In Current Orthopaedic Practice. July/August 2010. Vol. 21. No. 4. Pp. 336-347.