

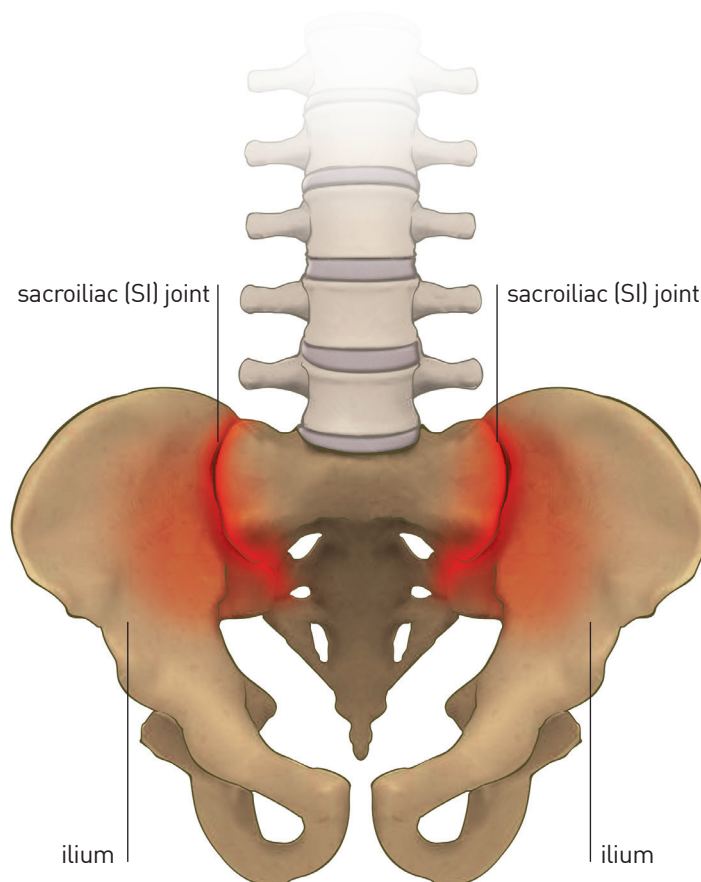
Sacroiliac Joint Pain (also commonly called SI Joint Pain)

Overview

The sacroiliac (SI) joints are formed by the connection of the sacrum and the right and left iliac bones. The sacrum is the triangular-shaped bone in the lower portion of the spine, below the lumbar spine. While most of the bones (*vertebrae*) of the spine are mobile, the sacrum is made up of fused vertebrae that do not move. The iliac bones are the two large bones that make up the pelvis. As a result, the SI joints connect the spine to the pelvis. The sacrum and the iliac bones (*ileum*) are held together by a collection of strong ligaments.

There is relatively little motion at the SI joints. There are normally less than 4 degrees of rotation and 2mm of translation at these joints. Most of the motion in the area of the pelvis occurs either at the hips or the lumbar spine. These joints need to support the entire weight of the upper body when we are erect, which places a large amount of stress across them. This can lead to wearing of the cartilage of the SI joints and eventually, arthritis.

There are many different terms for sacroiliac joint problems, including SI joint dysfunction, SI joint syndrome, SI joint strain and SI joint inflammation. Each of these terms refers to a condition that causes pain to the SI joints due to a variety of possible causes.



Causes & Symptoms

The most common symptom of SI joint dysfunction is pain. Patients often experience pain in the lower back, buttocks or the back of the hips. Pain may also be present in the groin and thighs. In many cases, it can be difficult to determine the exact source of the pain. Your physician can perform specific tests to help isolate the source of the pain. The pain is typically worse with standing and walking and improved when lying down. Inflammation and arthritis in the SI joint can also cause stiffness and a burning sensation in the pelvis.

As with most other joints in the body, the SI joints have a cartilage layer covering the bone. The cartilage allows for some movement and acts as a shock absorber between the bones. When this cartilage is damaged or worn away, the bones begin to rub on each other, and degenerative arthritis (osteoarthritis) occurs. This is the most common cause of SI joint dysfunction. Degenerative arthritis occurs commonly in the SI joints, just like other weight-bearing joints of the body.

Other common causes of sacroiliac joint dysfunction:

- Another common cause of SI joint dysfunction is pregnancy. During pregnancy, hormones are released in the woman's body that allows ligaments to relax. This prepares the body for childbirth. Relaxation of the ligaments holding the SI joints together allows for increased motion in the SI joints and can lead to increased stresses and abnormal wear. The additional weight and walking patterns (*altered gait*) associated with pregnancy also places additional stress on the SI joints.
- Any condition that alters the normal walking pattern places increased stress on the SI joints. This could include a *leg length discrepancy* (one leg longer than the other), or pain in the hip, knee, ankle or foot. Patients with severe pain in the lower extremity often develop problems with either the lower back (lumbar spine) or SI joints. In most cases if the underlying problem is treated, the associated lumbar spine or SI joint dysfunction will also improve.

Diagnosis

A careful evaluation of your medical history and physical examination will help your Spine Center provider determine if there are any underlying disorders that could be causing pain. The examination can include various tests to help isolate the source(s) of the pain. Often, X-rays or CT or MRI scan, which produce more detailed images, might be utilized to review areas of the joints and bones.

Treatment

In many cases, injections can help in the accurate diagnosis of SI joint pain as well as a treatment option. These injections are performed with the aid of an X-ray machine in an outpatient procedure office. These injections provide pain relief and help to identify the direct source areas of pain. Oral non-steroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen or naproxen are often prescribed. They serve as analgesics (pain relievers) and as anti-inflammatory (to decrease inflammation). In some cases oral steroids (such as *prednisone*) are provided for short periods of time to treat inflammation.