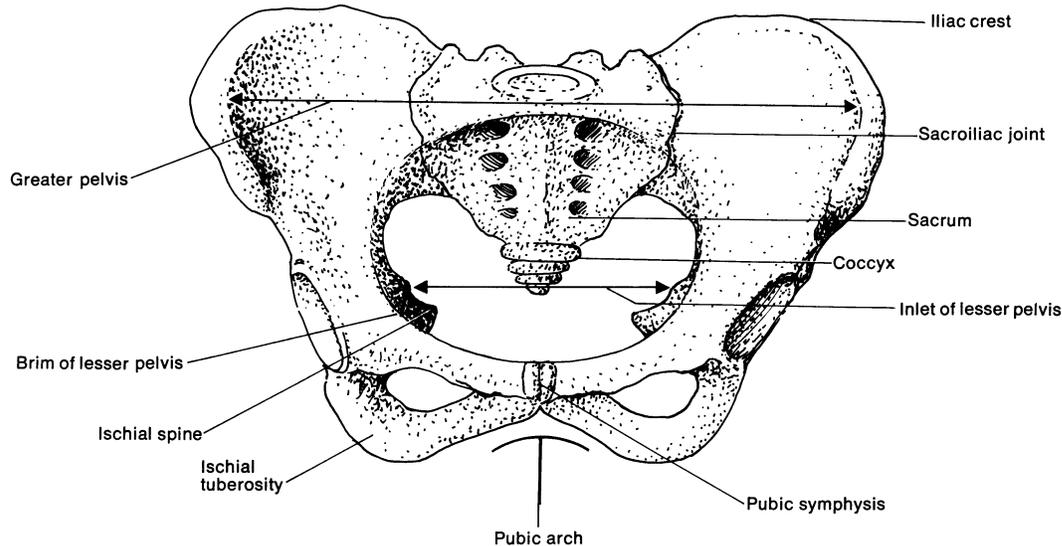


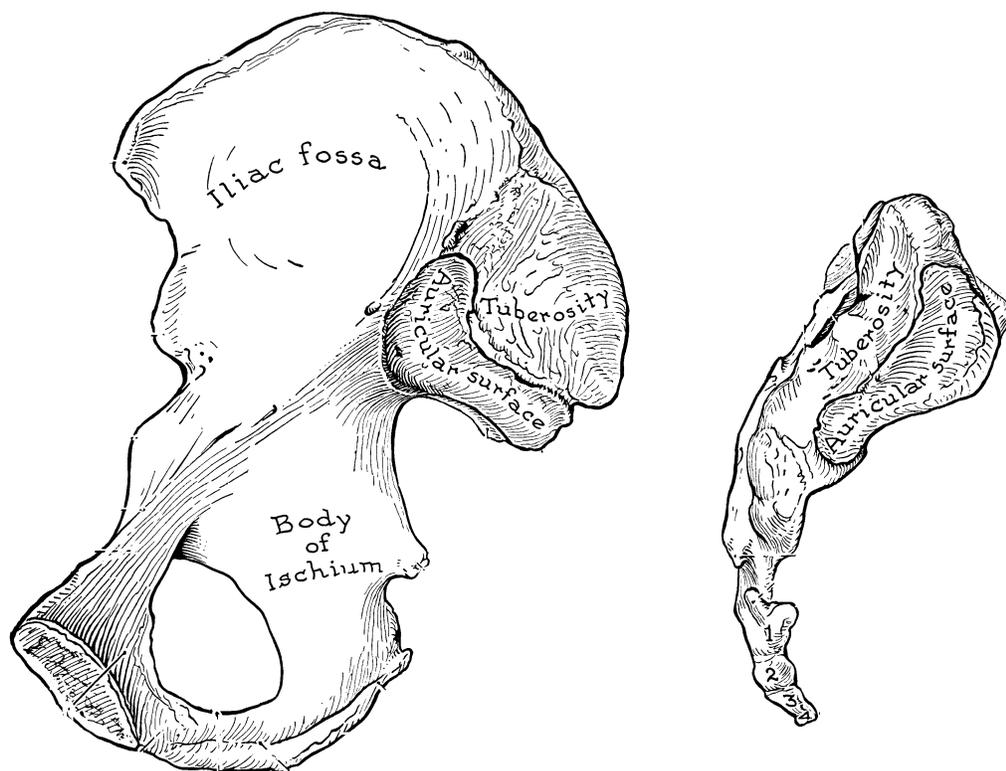
Sacro Iliac Joint Sprains

The sacroiliac joint(s) is an amazingly complex joint. It is formed by the sacrum and its connection or articulation to the iliac bones or pelvis. It is a compound joint, where the two joints can act at times as one joint or sometimes only as a right or left side. This is similar to the jaw or (TMJ) temporomandibular joint. Therefore usually when a sacroiliac joint is sprained (the ligament is "overstretched") it is said that the patient has a right and/or left sacroiliac joint sprain, though both sides are affected. Sometimes due to the inflammation, fluid will build up between the sacrum and iliac joint creating further separation. There are many nerve endings, called joint receptors or proprioceptors, that are extremely sensitive to weight distribution, so a relatively "mild" sacroiliac sprain can be very painful.



The sacroiliac joint also has a front (anterior) and back (posterior) aspect. The anterior part of the sacroiliac joint has a synovial membrane that allows for movement and is believed to aid in the circulation of cerebrospinal fluid in the lower back and spine. The posterior part of the sacroiliac joint has hyaline cartilage and is designed to be weight bearing, holding the whole weight of the body above the pelvis. Once below the sacroiliac joint the weight is able to be distributed between the two hips and legs, so bearing the whole weight of the body, the sacroiliac joint needs to be strong and stable.

There are various types of sprains of the sacroiliac joint from a mild sprain associated with prolonged sitting and maybe stretching in a "wrong" way. Oftentimes this type of condition will resolve itself in three to five office visits and with care will not return, unless re-traumatized.

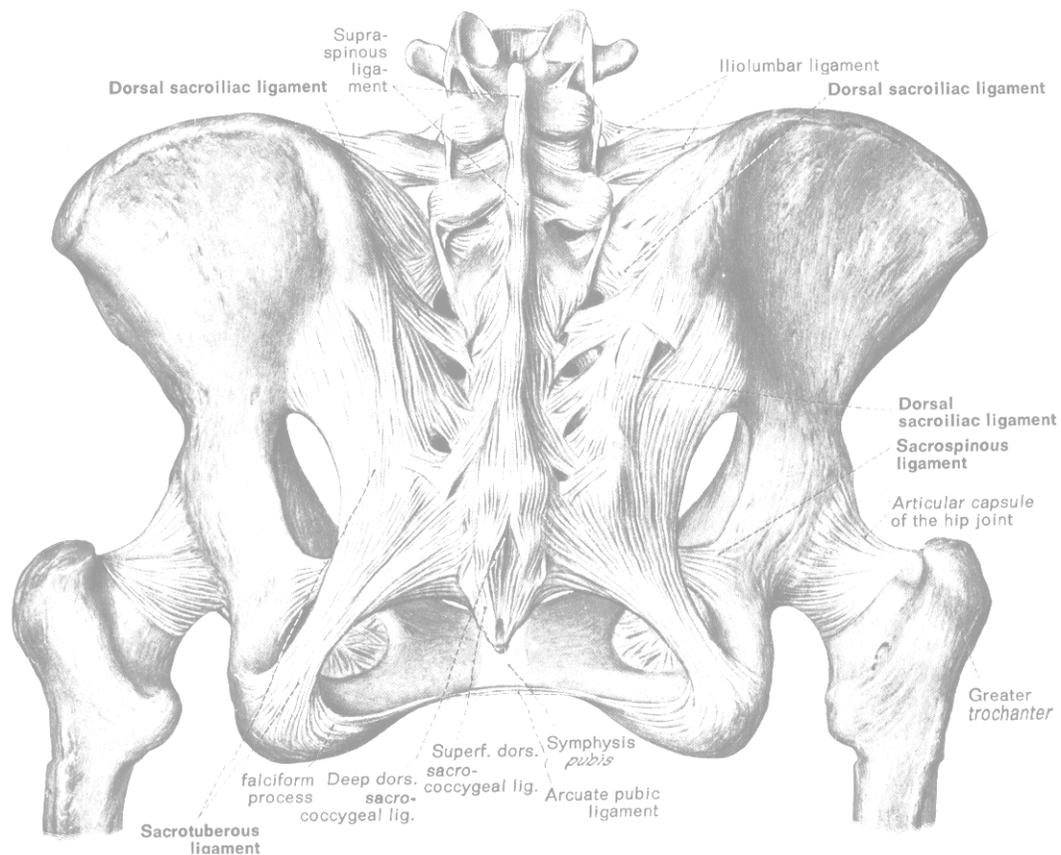


Moderate Sacroiliac Sprain

The posterior (or back portion) aspect (either right or left, or both sides) of the sacroiliac joint can sometimes become "dislodged". This can often occur when a mild type of sprain is ignored and as the joint instability continues, a moderate sacroiliac sprain can ensue. When this sacroiliac dislodgment occurs treatment will need to be pursued sometimes two to six weeks at varying intervals. The treatment will often involve home treatment of exercises, ice (15 minutes on and 15 minutes off) initially, frequently - two to eight times per day, and the use of a sacroiliac support belt. Sitting for longer than 20 - 30 minutes without getting up and moving around is prohibitive. Ironically sitting is more stressful on the sacroiliac joint than standing.

Severe Sacroiliac Sprain

Sometimes if the injury is severe, and/or the condition is ignored long enough, or the onset is very gradual -- but a movement is sudden, then a severe sacroiliac joint sprain can occur. This type can be long lasting, sometimes lasting for years without relief. Sometimes they will just be "not so bad" that the condition can go untreated and it gradually worsens. Sometimes this will lead to lumbar disc problems because of the instability of the ligaments connecting from the sacroiliac joint to the lumbar vertebra just above, called the iliolumbar ligaments. There can be radiating thigh pain or pain just localizing to the pelvis in specific regions such as around the sacroiliac joint, the lumbosacral region, the hips, and sometimes along the inguinal ligament (groin region).



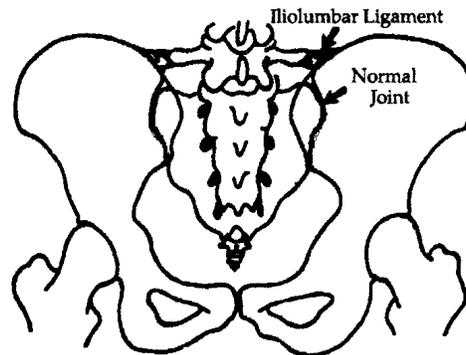
Lumbar Disc Involvement

The severe sacroiliac joint sprains will need care similar to a moderate sprain but sometimes also needs care for a traumatized disc, which in serious situations can be herniated. Initial stages of treatment for sacroiliac joint sprains with disc involvement entail initial treatment primarily for the disc, usually involving disc decompression techniques. Other procedures are specifically performed with low force and no rapid movements, which attempt to "recapture" a herniated disc or reduce inflammation on any irritated nerves.

With a severe sacroiliac sprain, with disc involvement, it is essential that the rehabilitation does not aggravate the presenting condition, so exercises need to involve gentle movements that do not hurt. This is not the time to work through the pain, but to let the pain be your guide. Paradoxically, you will need to exercise (usually light walking) but too much can reduce your ability to recover quickly. Bed rest alone has been shown to slow recovery from low back injuries. Remember that when you have an injury it will heal, along with the scar tissue, in whatever position the bones, ligaments, fascia and muscles are in. Oftentimes the best time to create long term healing is as the scar tissue is forming, the first one to two weeks following injury. With proper treatment the connective tissue can heal in a balanced position, limiting the possibility of re-injury.

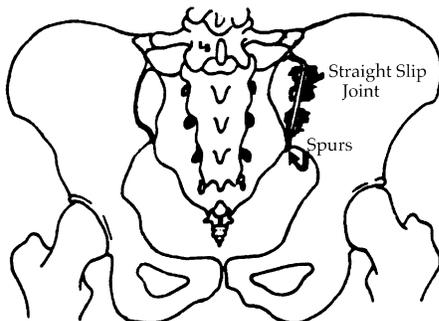
Chronic Sacroiliac Sprains

We are all different and our "insides" and its structures, such as its bones illustrate this. When we try to understand the human bodies we take a generalization of what we figure most of our bodies look like. Though we are similar, there are differences that need to be addressed in order to understand why one person might have a chronic sacroiliac sprain and another might not.

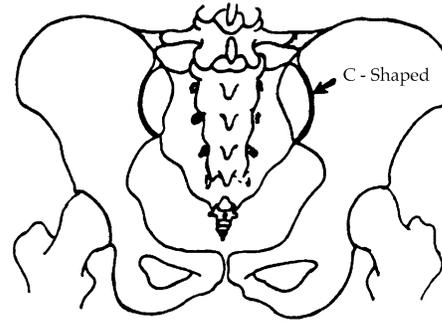


1. Normal Sacroiliac Joint

While not commonly needed sometimes an x-ray of the sacroiliac joint may be taken when a condition becomes chronic or re-occurring. Though there can be different sacroiliac joint variations, the following three variations illustrate why some joints might be re-injured more easily than others. The first figure (#1) is a "normal" sacroiliac joint and has a "S" or reversed "S" shape. This joint usually responds well to treatment and due to its stable architecture, with care and caution, recovery from injury can be long lasting.



2. Straight "Slip" Sacroiliac Joint



3. "C - Shaped" Sacroiliac Joint

The number's "2 & 3" can be relatively unstable sacroiliac joints. The "straight slip" joint can stabilize, but a jarring movement, like jumping down from a height on one leg, can re-injure the joint easily. The "c - curve" joint is the most unstable and this can be found on one side or sometimes on both sides of the joint, making stabilization of the joint(s) difficult. Though the following instructions are important for a "normal" joint that gets sprained, they are especially essential for "straight slip" and "c - curved" sacroiliac joints due to their instability. The exercises to be discussed will be needed to be performed well beyond when the sacroiliac joint appears to be without symptoms.

With disc conditions a lumbosacral support belt might be needed in the initial acute stage, though when the disc(s) are stable more commonly a sacroiliac support belt may be indicated. Ice (**NO HEAT!!!**) will be needed, and often times ice has been describes as a "good friend". The ice can be used 15 minutes each hour or 15 minutes on and than 15 minutes off, in the acute stages. Longer than 15 - 20 minutes of continued ice is actually not helpful since is optimal to use it only in intervals. Please always place cloth between your skin and the ice so to reduce the possibility of creating an "ice burn". As the joint stabilizes ice might still be necessary 2- 3 times a day, because the joint can be repeatedly traumatized by even a simply activity such as sitting.

" Ice is my good friend "

Exercise will usually begin with light walking, maybe just around the block for two or three times a day, increasing to maybe one time around the block each hour. As improvement continues then begin increasing to one to two miles a day over a very gradual period of time. Always stop before tiring or having any pain. The correct feeling is a sense of "that was practically nothing" or "that really wasn't exercise,..was that all?".

Leg / Hip Extension Sacroiliac Joint Exercises

As the sacroiliac joint stabilizes in its acute phase, hip extension exercises are used to encourage strengthening of the joint tissues, ligament and cartilage. Usually the muscles are strong but appear to be weak when the joint is traumatized. The exercise involves gentle lifting of the straight leg (knee unbent) while on your stomach. If there is low back discomfort sometimes a pillow under the stomach or lower abdomen will help. The lifting is performed specifically to stimulate the muscles around the sacroiliac joint, but at the same time not to re-traumatize the joint. The goal is to increase blood flow over the sacroiliac joint to facilitate ligament repair. The legs are kept near to the midline of the body, making sure while lifting not to turn the foot or leg outwards. During lifting an attempt is made to keep the hip on the surface (e.g., bed, floor, table, etc.) and not lift the hip -- just the leg, elevating the leg for a count of two and then alternating legs.



Usually a patient with a severe sacroiliac joint sprain will start, if they are able to perform the exercise without pain, with three sets of three leg lifts while on their stomach, with a 30-60 seconds break between each set. After a few days if the exercise feels easy, then it is increased to three sets of five, and as that feels easier, after a few days it is increased to three sets of seven. When you can reach three sets of ten and without pain, then you continue at this level without increasing for three to six months (especially with chronic sprains). Never do this exercise to any point of pain or exhaustion. If this occurs stop and the next time reduce your amount of repetition. I have found that more is not better, nor does it help in the first few months to use ankle weights (it sometime worsens the condition).

For a comprehensive guide to this exercise please see:

[<http://www.drcharlesblum.com/Patient%20Information/Prone%20Leg%20Lifts.pdf>]

With a severe or moderate sprain of the sacroiliac joint the healing time can vary but some cases will involve long term care. Initially the treatment will be here at the office, but after the first few weeks, the majority of the care will be in your hands. You will need to use the ice, support belt, exercise caution when sitting (initially no more that 20-30 minutes without getting up) and lifting, as well as perform your exercises with regularity. Initially the aerobic activities will be mostly light walking, but can graduate to longer walks and uphill, but only gradually (over weeks) and always doing less than what you think you can. As walking becomes pain free and even helpful, swimming, elipical, and bicycling can be slowly instituted as greater stability of the sacroiliac joint occurs.

There can be more complexity with rehabilitation which may involved co-treatment with medical doctors, Pilates trainers, and other allied healthcare practitioners. As your body progresses we will work together to figure out what is best for your body specifically.

Take care of your sacroiliac joint, let it heal, help it heal and it will happily last you a lifetime.

In you have any questions please do not hesitate to contact me to help clarify any instructions.

Thank You and Stay Healthy,

Charles

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