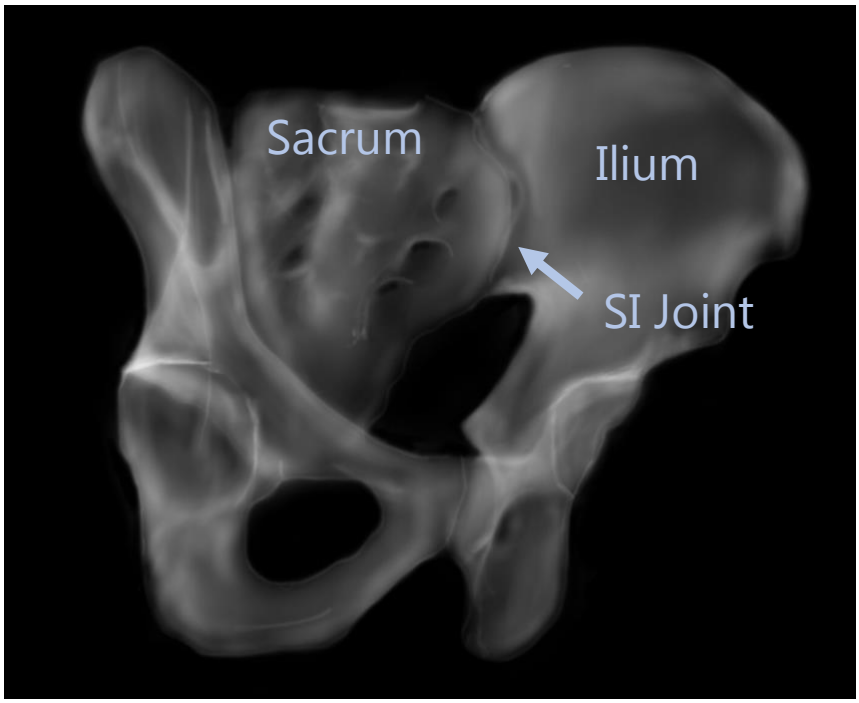
Sacroiliac Joint Dysfunction

Philip York MD
spinesurgerycolorado.com

What is the sacroiliac joint?

The sacroiliac joint (SI joint) is a complex joint that attaches the sacrum (at the base of the spine) to the ilium (the large pelvic bone). There are a number of strong ligaments and muscles that surround the joint and provide stability. The joint is generally very stable but there is a small amount of motion that occurs (up to 10° of rotation and up to 6mm of translation). There are a number of nerves from L2-S1 that provide branches into the joint with pain receptors known to exist within the capsular lining, the ligaments, and inside the joint itself providing a basis for pain originating from the joint.

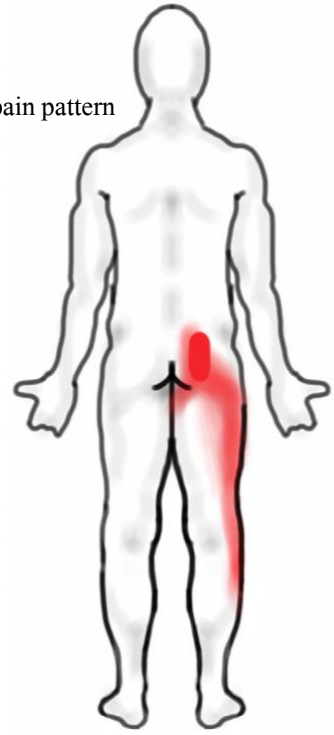


What are the symptoms of SI joint dysfunction?

SI joint dysfunction can be difficult to diagnose. Patients often present with complaints that overlap with low back pain and/or hip pain. Often, patients with SI joint dysfunction will report that they have pain with transitioning from sitting to standing or pain with sitting on hard surfaces or sitting in a low seat for a prolonged time. Often the pain is improved with lying down or with walking. Often the pain is localized to an area known as "Fortin's Area" (see image

Sacroiliac Joint Dysfunction

below to the right) which is often described as been a deep-seated pain within the buttock and often this pain originates in the low back and can extend down the leg but usually not past the knee.


Typical pain pattern

How do you diagnose SI joint dysfunction?

In addition to having symptoms that align with classical SI joint dysfunction symptoms, there are a number of physical exam tests that can help your physician determine if the SI joint may be the cause. While no one specific test can tell you with certainly, performing multiple exams helps the physician get a better idea of the source of the pain. When the symptoms and physical exam both suggest that the SI joint might be the cause, an injection is often the next step. This has the potential of being both diagnostic (ie. it confirms the SI joint as the cause of the pain) and therapeutic (ie. It can alleviate the pain for some time). If the injection alleviates between 50-70% or more of the pain even for a short time, then this confirms that at least some of the pain is coming from the joint.

What treatment options are there?

The first step in treating confirmed SI joint dysfunction is physical therapy. There are specific exercises that can help to reduce inflammation and strengthen the muscular stabilizers of the joint. Often injections can provide lasting relief of the pain and these may be repeated multiple times if the relief is long-lasting. There are a number of nother non-surgical treatments such as prolotherapy (injecting an irritant into the joint in hopes of promoting a process to stabilize the joint), rolphing (manual manipulation of the joint to realign and stabilize the joint), and radiofrequency ablations (probes used to burn the sensory nerves feeding the joint) that can be performed.

When is surgery recommended?

When injections have proven to alleviate at least 50-70% of the pain and other interventions have failed to adequately provide long-term relief of the discomfort, stabilization surgery (ie. SI joint fusion) might be offered. Numerous studies have suggested that this can provide improvement in pain and function, but only in carefully selected patients.

What are the risks of the surgery?

Generally speaking, the current technique for SI joint stabilization utilizes small incisions and has very low risks overall. These risks include infection, excessive bleeding, chronic pain, loosening of the implants inside the bone, and failure of the surgery to fully alleviate the pain.

What is the recovery like?

Crutches or a walker will be required for the first 6 weeks as you will be instructed no to put full weight on the side of the surgery until week 6. There will be specific therapy and range of motion guidelines that you should follow as the muscles and bones heal. You will be prescribed prescription pain pills for the first few weeks as you transition to over the counter

pain meds. The first couple of weeks can be relatively painful as the muscles recovery from the incision and surgical pain.

How should I prepare for my surgery?

The most important thing is to stay active leading up to surgery. Eat a healthy, well-balanced diet, keep up whatever cardiovascular exercise you can tolerate such as walking, biking, elliptical etc. If you are already taking prescription pain medications, you will likely be instructed to try to decrease your overall dose or stop them completely for at least 2 weeks prior to your date as this will help with your pain management following the surgery. If you take other prescription medications, blood thinner, or supplements you should receive specific instructions on which medications to stop taking and when to stop taking them before your surgery.

Most importantly, as much as your recovery is a physical experience, for many it is also a mental and emotional experience as well. You have to be prepared for some discomfort, for some hard work, and for some mental and emotional toughness as you begin your journey to recovery. It is a process, with highs and lows, excitement and frustration – but ultimately it is about buying into the part you play in your recovery and in you eventually achieving your specific goals for your spine, your health, and your overall well-being.

To find the scientific review co-authored by Dr. York regarding the diagnosis and management of SI joint dysfunction, go to https://pubmed.ncbi.nlm.nih.gov/29206793/

Current Concepts Review

Diagnosis and Management of Sacroiliac Joint Dysfunction