

PainTeq Procedure—Sacroiliac Joint Pain

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Research has suggested that sacroiliac joint pain is the cause of low back pain in up to 30% of patients (1). The sacroiliac joint (SIJ) is the joint that connects the sacrum (tailbone) and ileum (hipbone). The SIJ has a large nerve, the sciatic nerve, that travels through the joint and extends towards the buttocks. The role of the SIJ is to provide stability and act as a shock absorber for the spine and pelvis. The SIJ bears the load of the upper body when walking, sitting, standing or jumping, allowing for smoother energy transfer between the upper and lower body. SIJ dysfunction can present with symptoms similar to many other conditions and can coexist with other hip or lumbar spine conditions (2).

SIJ pain often begins when the SIJ becomes inflamed. There are many causes of SIJ inflammation, but the most common causes are hypermobility (too much movement at the joint) and hypomobility (too little movement at the joint). SIJ hypermobility causes pain because the ligaments surrounding the SIJ are too loose, causing excessive motion at the joint and irritation of the surrounding nerves (3). SIJ hypomobility causes pain because the sacrum (tailbone) and ileum (hip bone) rub against each other, resulting in inflammation and pain (4). Other causes of SIJ dysfunction include traumatic impact, ligament loosening due to pregnancy, abnormal walking gait, spine surgeries involving fusing vertebrae, osteoarthritis, and ankylosing spondylitis (5).

SIJ dysfunction typically causes one-sided low back pain that possibly extends into the leg and buttocks. SIJ pain is generally worsened with activity and can produce sharp pain while lifting the knee towards the chest (during uphill walking or while standing from a seated position). Some patients may complain of sciatica-like symptoms, such as leg burning, numbness or tingling (4, 5, 6).

Treatment options for SIJ dysfunction vary based on the severity and duration of symptoms and often include multiple methods of treatments for pain relief. Non-invasive treatment options include non-steroidal anti-inflammatory drugs (NSAIDs), rest from pain-provoking activities, physical therapy and manual medicine. For some patients, these non-invasive treatment options fail to produce sufficient pain relief. Fortunately, there are other treatment options for these SIJ dysfunction patients. Intra-articular steroid injections, radiofrequency ablation, and Painteq procedures are minimally invasive treatment options for such patients (7). There are also invasive surgical techniques available to treat SIJ dysfunction by fusing the joints, but these open surgeries may involve complications and prolonged recovery times when compared with minimally invasive treatment options (8). Although SIJ steroid injections can produce adequate symptom relief for many patients, steroid injections may not be suitable long-term treatment options for patients with chronic SI pain because repetitive steroid injections can cause weakening of nearby bone and connective tissue (9).

The Painteq procedure is a minimally invasive treatment option to combat SIJ pain, and in many cases, it is even able to eliminate chronic pain after a single treatment. The Painteq procedure is a single allograft implant that is inserted into the SIJ through a small incision. The

implant contains a demineralized bone matrix (DMB), which acts as a bone graft to stabilize the SIJ. The aim of the procedure is to stabilize and fuse the dysfunctional SIJ through a simple outpatient procedure performed under monitored anesthesia care (light sedation). Due to the minimally invasive nature of the Painteq procedure, patients typically experience significantly shorter recovery times and longer-term benefits than most traditional SI fusion surgeries (10). Unlike other minimally invasive treatment options for SIJ dysfunction, the Painteq procedure targets the root causes of SIJ pain and allows for long-term pain relief by providing patients with immediate joint stability.

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