Sacroiliac Joint Dysfunction

The sacroiliac (SI) joints are true joints consisting of two irregular articulations covered by hyaline cartilage. They are generally very stable but weakest anteriorly. Sprains or strains of the SI joints can be caused by vigorous muscular activities such as leaning forward, lifting heavy objects, lifting against resistance, or sudden deceleration injuries. When lifting using the hamstring muscles, these joints are most susceptible to injury. Once injured patients will often ambulate with an antalgic gait favoring the affected side.

Acute joint pain can radiate into the hip, groin, back, thigh and even as far as the knee. Any type of hip or twisting movement will aggravate SI joint pain. Patients can also develop spasms of the low back and hamstring musculature. Straight leg raising may even be positive. Pain from the SI joints can often mimic facet joint pain (spondylosis). Compression tests are frequently painful and distraction tests often reveal a poorly mobile joint. Patients with SI joint pain frequently report that their pain is worse in the morning and lessens over the next several hours.

The diagnosis of SI joint pain can be made through clinical exam as well as with precision guided injection therapies. If clinically suspected an arthrogram of the joint can be performed to determine if the pain is reproduced (Figure 1).

Treatment of SI joint pain consists of physiotherapy, manipulation, injection therapies, and surgical intervention in the most severe cases. This practice has found a combination of chiropractic manipulation and injection of local anesthetic (.5% bupivicaine) combined with corticosteroids (triamcinolone) to be the most helpful. Other pain specialists have advocated the use of bipolar radiofrequency denervation (RF Rhizotomy). Controlled studies have not supported RF rhizotomy and its use is not employed in our practice at this time.

Fig 1. Right SI joint arthrogram