



## Notice of Independent Review Decision

**DATE OF REVIEW:**

05/17/2011

**IRO CASE #:**

**DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE**

Right sacroiliac (SI) injection.

**A DESCRIPTION OF THE QUALIFICATIONS FOR EACH PHYSICIAN OR OTHER HEALTH CARE PROVIDER WHO REVIEWED THE DECISION**

Doctor of Osteopathy, Board Certified Anesthesiologist, Specializing in Pain Management

**REVIEW OUTCOME**

Upon independent review the reviewer finds that the previous adverse determination/adverse determinations should be: **Upheld**

Provide a description of the review outcome that clearly states whether or not medical necessity exists for each of the health care services in dispute.

**The requested right sacroiliac (SI) injection is not medically necessary.**

**INFORMATION PROVIDED TO THE IRO FOR REVIEW**

**PATIENT CLINICAL HISTORY (SUMMARY):**

The injured individual is a male with date of injury xxxx. The individual injured his ankle and subsequently developed back pain due to a gait disturbance. He uses a cane. He had an IDET at L4-S1 followed by L4-S1 facet radiofrequency (RF). He then had two right SI injections, one on 03/28/2010 and the other on 04/27/2010. The first gave a week or so of relief as he was asking for another injection per the 04/09/2007 note; the second gave nothing. On exam he has multiple positive right SI maneuvers as he had in the past and the attending provider (AP) wants to repeat the injection to see if RF is reasonable.

**ANALYSIS AND EXPLANATION OF THE DECISION INCLUDE CLINICAL BASIS, FINDINGS AND CONCLUSIONS USED TO SUPPORT THE DECISION.**

While the injured individual has findings of right SI dysfunction on physical exam (PE), the x-ray showed no pathology and the injured individual had two of these injections in 2007. One helped for a short while (much less than five weeks), the other did not. It is therefore not reasonable to consider repeating an injection that never provided any sustained therapeutic response. If the argument is to do it as a pre SI RF protocol, that fails to meet ODG requirements as well since RF of the SI joint is considered an investigational/experimental procedure and not proven efficacious so it is not supported.

**A DESCRIPTION AND THE SOURCE OF THE SCREENING CRITERIA OR OTHER CLINICAL BASIS USED TO MAKE THE DECISION:****ODG- OFFICIAL DISABILITY GUIDELINES & TREATMENT GUIDELINES**

Official Disability Guidelines:

Recommended as an option if failed at least 4-6 weeks of aggressive conservative therapy as indicated below. Sacroiliac dysfunction is poorly defined and the diagnosis is often difficult to make due to the presence of other low back pathology (including spinal stenosis and facet arthropathy). The diagnosis is also difficult to make as pain symptoms may depend on the region of the SI joint that is involved (anterior, posterior, and/or extra-articular ligaments). Pain may radiate into the buttock, groin and entire ipsilateral lower limb, although if pain is present above L5, it is not thought to be from the SI joint.

Innervation: The anterior portion is thought to be innervated by the posterior rami of the L1-S2 roots and the posterior portion by the posterior rami of L4-S3. although the actual innervation remains unclear. Anterior innervation may also be supplied by the obturator nerve, superior gluteal nerve and/or lumbosacral trunk. (Vallejo, 2006) Other research supports innervation by the S1 and S2 sacral dorsal rami.

Etiology: includes degenerative joint disease, joint laxity, and trauma (such as a fall to the buttock). The main cause is SI joint disruption from significant pelvic trauma.

Diagnosis: Specific tests for motion palpation and pain provocation have been described for SI joint dysfunction: Cranial Shear Test; Extension Test; Flamingo Test; Fortin Finger Test; Gaenslen's Test; Gillet's Test (One Legged-Stork Test); Patrick's Test (FABER); Pelvic Compression Test; Pelvic Distraction Test; Pelvic Rock Test; Resisted Abduction Test (REAB); Sacroiliac Shear Test; Standing Flexion Test; Seated Flexion Test; Thigh Thrust Test (POSH). Imaging studies are not helpful. It has

been questioned as to whether SI joint blocks are the “diagnostic gold standard.” The block is felt to show low sensitivity, and discordance has been noted between two consecutive blocks (questioning validity). (Schwarzer, 1995) There is also concern that pain relief from diagnostic blocks may be confounded by infiltration of extra-articular ligaments, adjacent muscles, or sheaths of the nerve roots themselves. Sacral lateral branch injections have demonstrated a lack of diagnostic power and area not endorsed for this purpose. (Yin, 2003)

Treatment: There is limited research suggesting therapeutic blocks offer long-term effect. There should be evidence of a trial of aggressive conservative treatment (at least six weeks of a comprehensive exercise program, local icing, mobilization/manipulation and anti-inflammatories) as well as evidence of a clinical picture that is suggestive of sacroiliac injury and/or disease prior to a first SI joint block. If helpful, the blocks may be repeated; however, the frequency of these injections should be limited with attention placed on the comprehensive exercise program. (Forst, 2006) (Berthelot, 2006) (van der Wurff, 2006) (Laslett, 2005) (Zelle, 2005) (McKenzie-Brown 2005) (Pekkafahli, 2003) (Manchikanti, 2003) (Slipman, 2001) (Nelemans-Cochrane, 2000) See also Intra-articular steroid hip injection; & Sacroiliac joint radiofrequency neurotomy.

Recent research: A systematic review commissioned by the American Pain Society (APS) and conducted at the Oregon Evidence-Based Practice Center states that there is insufficient evidence to evaluate validity or utility of diagnostic sacroiliac joint block, and that there is insufficient evidence to adequately evaluate benefits of sacroiliac joint steroid injection. (Chou, 2009)

Criteria for the use of sacroiliac blocks:

1. The history and physical should suggest the diagnosis (with documentation of at least 3 positive exam findings as listed above).
2. Diagnostic evaluation must first address any other possible pain generators.
3. The patient has had and failed at least 4-6 weeks of aggressive conservative therapy including PT, home exercise and medication management.
4. Blocks are performed under fluoroscopy. (Hansen, 2003)
5. A positive diagnostic response is recorded as 80% for the duration of the local anesthetic. If the first block is not positive, a second diagnostic block is not performed.
6. If steroids are injected during the initial injection, the duration of pain relief should be at least 6 weeks with at least > 70% pain relief recorded for this period.
7. In the treatment or therapeutic phase (after the stabilization is completed), the suggested frequency for repeat blocks is 2 months or longer between each injection, provided that at least >70% pain relief is obtained for 6 weeks.
8. The block is not to be performed on the same day as a lumbar epidural steroid injection (ESI), transforaminal ESI, facet joint injection or medial branch block.
9. In the treatment or therapeutic phase, the interventional procedures should be repeated only as necessary judging by the medical necessity criteria, and these should be limited to a maximum of 4 times for local anesthetic and steroid blocks over a period of 1 year.

AND:

Sacroiliac joint radiofrequency neurotomy Not recommended. Multiple techniques are currently described: (1) a bipolar system using radiofrequency probes (Ferrante, 2001); (2) sensory stimulation-guided sacral lateral branch radiofrequency neurotomy (Yin, W 2003); (3) lateral branch blocks (nerve blocks of the L4-5 primary dorsal rami and S1-S3 lateral branches) (Cohen, 2005); & (4) pulsed radiofrequency denervation (PRFD) of the medial branch of L4, the posterior rami of L5

and lateral branches of S1 and S2. (Vallejo, 2006) This latter study applied the technique to patients with confirmatory block diagnosis of SI joint pain that did not have long-term relief from these diagnostic injections (22 patients). There was no explanation of why pulsed radiofrequency denervation was successful when other conservative treatment was not. A > 50% reduction in VAS score was found for 16 of these patients with a mean duration of relief of  $20 \pm 5.7$  weeks. The use of all of these techniques has been questioned, in part, due to the fact that the innervation of the SI joint remains unclear. There is also controversy over the correct technique for radiofrequency denervation. A recent review of this intervention in a journal sponsored by the American Society of Interventional Pain Physicians found that the evidence was limited for this procedure. (Hansen, 2007) See also Intra-articular steroid hip injection; & Sacroiliac joint blocks.

Recent research: A small RCT concluded that there was preliminary evidence that S1-S3 lateral branch radiofrequency denervation may provide intermediate-term pain relief and functional benefit in selected patients with suspected sacroiliac joint pain. One, 3, and 6 months after the procedure, 11 (79%), 9 (64%), and 8 (57%) radiofrequency-treated patients experienced pain relief of 50% or greater and significant functional improvement. In contrast, only 2 patients (14%) in the placebo group experienced significant improvement at their 1-month follow-up, and none experienced benefit 3 months after the procedure. However, one year after treatment, only 2 patients (14%) in the treatment group continued to demonstrate persistent pain relief. Larger studies are needed to confirm these results and to determine the optimal candidates and treatment parameters for this poorly understood disorder. (Cohen, 2008)