

Sacroiliac (Intraarticular) Joint Injection

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Policy Statement

The injection procedure of the sacroiliac joint is medically necessary when an injection is given for diagnostic or therapeutic indications, such as injection of an anesthetic and/or steroid, to block the joint for immediate and potentially lasting pain relief. When therapeutic injections of the sacroiliac joint are performed, it would be expected that the record reflects noninvasive treatments (i.e., rest, physical therapy, NSAID's, etc.) have failed.

Purpose

This process document describes Optum* by OptumHealth Care Solutions, LLC methodology and requirements for the appropriate and safe application of sacroiliac injection.

Scope

All in and out of network programs where utilization review determinations are rendered. This policy also serves as a resource for peer-to-peer interactions in describing the position of Optum on the reporting of sacroiliac injection services.

^{*}Optum™ Physical Health ("Optum") includes OptumHealth Care Solutions, LLC; ACN Group IPA of New York, Inc.; ACN Group IPA of California, Inc. d/b/a OptumHealth Physical Health of California; Managed Physical Network, Inc.; and OrthoNet Holdings, Inc. which includes OrthoNet New York IPA, Inc., OrthoNet West, Inc., OrthoNet, LLC, OrthoNet of the South, Inc.



Definitions

Appropriateness:

*Optum's clinical criteria incorporate measures of function, range of motion, strength, pain, and other relevant factors (as described more fully below), which will be determined through utilization review that is based on the needs of the individual patient and the characteristics of the local delivery system.

A procedure will be determined to be appropriate for authorization for a patient based on his/her particular clinical history, current clinical status (including objective and subjective data) and the established nature of their diagnosed or presumed clinical condition(s).

Discharge criteria, where appropriate, will have been met [and as such no additional authorizations will be provided] when these measurements and key clinical information, taken as a whole, indicate the member is able to reasonably perform physical tasks related to self-care, home management, and basic activities of daily living, or has reached a plateau in making progress towards these goals. In some clinical circumstances a maintenance or periodic plan of treatment is considered appropriate and may be authorized in accordance with the specifics of the criteria herein.

Unless specifically covered by the member's benefit, covered treatment goals exclude return to sport, recreational or vocational activities. As part of the treatment plan, it is the responsibility of the treating practitioners to instruct the member in the early part of the treatment program, and certainly prior to discharge, in a comprehensive home activity and exercise program, and to set the expectation for the patient's responsibility to perform their exercise or self-care regimen between treatments (when a series is performed) and to maintain an appropriate, post-discharge exercise and self-care/activity regimen. These criteria are derived from recognized professional standards that may include those from the American Medical Association, the American Pain Society, American Academy of Orthopedic Surgeons, the North American Spine Society, the Centers for Medicare and Medicaid Services, the American Physical Therapy Association, and other recognized clinical organizations.

Background

The SI joints bear the weight of the trunk and as a result are subject to the development of strain and/or pain. Low back pain of SI joint origin is a difficult clinical diagnosis and often one of exclusion. Injection of local anesthetic or contrast material is a useful diagnostic test to determine if the SI joint is the pain source. If the cause of pain in the lower back has been determined to be the SI joint, one of the options of treatment is injecting steroids and/or anesthetic agent(s) into the joint. Therapeutic injections of the SI joint would not likely be performed unless other noninvasive treatments have failed.

Image guidance is crucial to identify the optimal site for access to the joint. Fluoroscopy is often the imaging method of choice. Once the specific anatomy is identified, the needle tip is placed in the caudal aspect of the joint and contrast material is injected. Contrast fills the joint, confirming accurate placement of the needle into the joint. Sacroiliac joint injection describes the injection of local anesthetic and or contrast for radiologic evaluation associated with SI joint arthrography and/or therapeutic injection of an anesthetic/steroid. Since fluoroscopy is the key to precision diagnostic injections and accurate therapeutic injections, sacroiliac joint injection may only be reported when imaging confirmation of intra-articular needle positioning has been performed. Alternatively, many practitioners choose to use CT guidance as the imaging method of choice to guide the needle and confirm intra-articular positioning. CT guidance provides a more complete assessment of posterior osteophytes that can block access to the joint;



additionally, because the SI joint is complex, the spatial information provided by CT can allow quicker, more accurate placement of the needle into the joint in more challenging cases. As such, some practitioners choose to use CT guidance on all patients. With CT guidance, injection of contrast into the joint is not necessary; injection of contrast could reduce the volume of medication that can be placed into the joint.

Description

Limitations:

Local Anesthetic blocks of the Dorsal or Lateral Branch nerves to the sacroiliac joint is considered investigational and not medically necessary.

Sacro-iliac joint/nerve denervation procedures are considered investigational and not medically necessary.

Pulsed radiofrequency for denervation is considered investigational and not medically necessary.

Response to an intraarticular sacroiliac joint injection does not predict a successful outcome to Sacroiliac Joint fusion. Therefore, it cannot be authorized for this purpose.

Indications of Coverage:

At least 3 months of moderate to severe pain with functional impairment inadequately responsive to conservative care such as NSAIDS, acetaminophen, physical therapy.

Predominant lower axial spine pain that is not associated with radiculopathy or neurogenic claudication.

Clinical assessment that implicates the sacroiliac joint as the potential source of pain.

General Procedure Requirements:

Sacroiliac joint injections must be performed under fluoroscopic or CT guidance.

Appropriate use of SI joint injections

Diagnostic Sacroiliac Joint Injections:

Two diagnostic sacroiliac joint sessions (unilateral or bilateral) are allowed and may be performed at a minimum of one week apart.

No more than 4 therapeutic sacroiliac joint sessions per rolling calendar year (unilateral or bilateral) with a total relief and improvement of at least 50% for 10 weeks.

If, after the first intraarticular S-I joint injection, the patient experiences >80% relief of their primary axial pain, lasting a time period consistent with the local anesthetic used, the patient may undergo a second, confirmatory intraarticular S-I joint injection. Given the radiofrequency ablation to the dorsal or lateral branch nerves that supply the sacroiliac joint is considered experimental/investigational the diagnostic block of the dorsal or lateral branch nerves to the sacroiliac joint is not allowed. Since the intraarticular injection of the sacroiliac joint relies on the patient's perception of pain relief to establish the diagnosis, the patient must have sufficient pain immediately prior to the injection to be able to detect significant improvement following the injection. Additionally, provocative maneuvers or positions which normally exacerbate the axial pain must be determined before the diagnostic injection.



Therapeutic Sacroiliac Joint Injections:

When two diagnostic sacroiliac joint injections provide greater than 80% relief of the primary axial pain consistent with the expected physiological effects of the agents utilized, with the ability to perform previously painful movements consistent with the expected physiological effects of the local anesthetic utilized, then therapeutic sacroiliac joint injections may be considered.

Therapeutic sacroiliac joint injections involving the same joint will only be considered medically necessary if the patient experienced greater than 50% improvement of pain and improvement in patient specific ADLs for at least 10 weeks.

Repeat therapeutic sacroiliac joint injections to treat recurrent sacroiliac joint pain in a patient who has failed other conservative measures may be covered without repeating the diagnostic injections if the patient has experienced expected or prolonged pain relief with improvement in function for at least 10 weeks in the past following therapeutic sacroiliac joint injections.

Thermal Radiofrequency Neurotomy to Dorsal or Lateral Branch nerves to the Sacroiliac Joint: Sacroiliac joint/nerve denervation procedures are considered investigational and not medically necessary.

Non-appropriate Use of SI Joint Injections

Sacroiliac joint injections for the treatment of acute, non-recurrent low back pain (< 3 months duration) are not considered medically necessary

New onset radiculopathy precludes coverage of sacroiliac joint injections.

A maximum of four (4) sacroiliac joint injection sessions (unilateral or bilateral) may be performed per rolling calendar year.

Repeat therapeutic sacroiliac joint injections involving unilateral or bilateral joints will only be considered medically necessary when the patient had >50% improvement of pain and improvement in patient specific ADLs for at least 3 months.

Thermal or Non-thermal RF modalities including Pulsed RF to the dorsal or lateral nerve supply to the sacroiliac joint are not covered.

Some of the more common non-appropriate situations include when other types of injections are performed on the same date of service [or a day or two immediately before or after this date], including but not limited to, facet injections, sacroiliac joint injections, sympathetic blocked and/or trigger point injections.

Technology/treatment is considered experimental/investigational or <u>NOT</u> medically necessary if it is not utilized in accordance with nationally recognized standards of medical practice and/or identified as safe, widely used, and generally accepted as effective for the proposed use as reported in nationally recognized peer-reviewed medical literature published in the English language,

It is not appropriate to use ultrasound guidance for needle placement for sacroiliac joint injections as this technology is considered experimental/investigational as it is not identified as widely used and generally accepted for the proposed use as reported in nationally recognized peer- reviewed medical literature published in the English language.

It is not necessary to use monitored anesthesia care (MAC) or other similar therapies for sacroiliac joint injections as standard medical practice consists of local anesthesia and, if needed, slight sedation.



The use of Sacroiliac joint injections may no longer be appropriate prior to the achievement of established goals in certain instances (these include but are not limited to):

- The patient or family (if relevant) declines to continue treatment.
- The patient is unable to continue to make progress towards goals secondary to medical or psychosocial complications.
- Objective clinical data demonstrates that the patient is not benefiting from skilled therapeutic intervention as evidenced by minimal or no significant measurable change in a reasonable time frame. This will be related to appropriate clinical measures that are patient and diagnosis specific.
- Following a reasonable period of appropriate therapeutic intervention, it is evident that a negative
 trend has occurred in some or all of the relevant objective functional data. Generally accepted
 standards of practice suggest that therapy be suspended at this time and appropriate medical reevaluation performed.
- The member is significantly non-adherent with their specific therapeutic protocol. This includes, but is not limited to:
 - Insufficient attendance at therapy sessions as outlined by the therapist's plan of care.
 - Not appropriately involved during treatment.
 - Non-compliance with therapist instructions related to:
 - i. Home exercise program.
 - ii. Activity and environmental modification to prevent re-injury or re-inflammation.
 - iii. Self-management of symptoms or acute episodes.

In addition to these general criteria, individual benefit plan contracts may vary. The member's specific contract language will govern all final determinations. Some common circumstances that are not eligible for benefit coverage under many plans include therapy to return to specific vocational and/or occupational activities.

Functional Outcomes

Improved functional outcomes are a key desired goal of these therapies. These outcomes will be affected by individual patient variables (age, anthropometric characteristics, and pre-morbid status) and the nature of the condition (previous history of injury or surgery to the affected region). Functional assessment will, therefore, be individually meaningful and measured, where relevant, using an appropriate, valid, and reliable assessment tool.

- a. Functional scales will be considered in utilization review, however, given the diverse nature of
 these scales, no arbitrary threshold can translate into an absolute endpoint for an episode of care.
 In general, regular, significant measurable changes should be seen in a reasonable time frame in
 relation to baseline performance.
- b. Given the above parameters describing pain, range of motion and function, some of the following activities may be demonstrated as applicable:
 - Basic ADLs such as positioning, mobility, self-maintenance tasks, communication
 - Instrumental ADLs such as home management, community living skills and occupational activities

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A reasonable return, safely, efficiently, and at a maximum level of independence (with or without assistive devices) to customary basic ADL, as well as general suitability for common work activities.

Coding Information

Note: The Current Procedural Terminology (CPT) codes listed in this policy may not be all inclusive and are for reference purposes only. The listing of a service code in this policy does not imply that the service described by the code is a covered or non-covered health service. Coverage is determined by the member's benefit document.

Code	Description
0775T	Arthrodesis, sacroiliac joint, percutaneous, with image guidance, includes placement of intra-articular implant(s) (e.g., bone allograft[s], synthetic device[s])
27096	Injection procedure for sacroiliac joint, anesthetic/steroid, with image guidance (fluoroscopy or CT) including arthrography when performed
27279	Arthrodesis, sacroiliac joint, percutaneous or minimally invasive (indirect visualization), with image guidance, includes obtaining bone graft when performed, and placement of transfixing
	device
27280	Arthrodesis, sacroiliac joint, open, includes obtaining bone graft, including instrumentation, when performed
64451	Injection(s), anesthetic agent(s) and/or steroid; nerves innervating the sacroiliac joint, with image guidance (i.e., fluoroscopy or computed tomography)
G0260	Injection procedure for sacroiliac joint; provision of anesthetic, steroid and/or other therapeutic agent, with or without arthrography

References

Identified Reviews of Clinical Evidence

- A Cochrane systematic review (Niemisto et al., 2002, updated 2005) evaluated randomized controlled trials of radiofrequency denervation for musculoskeletal pain disorders and concluded that there is limited evidence that radiofrequency denervation offers short-term relief for chronic neck pain of zygapophyseal joint origin and for chronic crevice-brachial pain. The authors reported conflicting evidence on the short-term effect of denervation on pain and disability in patients with low back pain of zygapophyseal joint origin and that there is a need for further randomized controlled trials with larger patient samples and data on long-term outcomes.
- A technology assessment of percutaneous radiofrequency ablation for facet-mediated neck and back pain published in 2005 by the Institute for Clinical Systems Improvement (ICSI) concluded that the procedure is safe for patients correctly diagnosed with facet joint pain. Patients may experience pain relief within two to three weeks of the procedure, and pain relief may last for six to twelve months. The authors concluded that the scientific evidence to date does not permit a conclusion to be reached regarding the efficacy of radiofrequency ablation for lumbar facet joint pain.
- National Guideline Clearinghouse Website. American College of Occupational and Environmental Medicine (ACOEM). Occupational medicine practice guidelines: evaluation and management of common health problems and functional recovery in workers: low back disorders.



2007. The ACOEM evidence-based practice guidelines on low back disorders (2007) state that the evidence for radiofrequency denervation for presumed facet joint pain is poor. The authors were unable to estimate the net benefit of this procedure.

- Manchikanti L, Boswell M, Singh V, et al. Comprehensive evidence-based guidelines for
 interventional techniques in the management of chronic spinal pain. American Society of
 Interventional Pain Physicians (ASIPP). According to the ASIPP practice guidelines referenced above
 (Manchikanti, et al., 2009), evidence is level II-III (limited) for radiofrequency neurotomy for SI joint
 pain. There is insufficient evidence in the published medical literature to demonstrate the safety and
 efficacy of SI joint radiofrequency ablation (RFA)
- Centers for Medicare & Medicaid Services (CMS) Website. Local Coverage Determination (LCD) for Sacro-iliac Joint Injections (L31359). Available at: https://www.cms.gov.

Journal Articles:

- 1. **Ayden SM, Gharibo CG, Mehnert M, Stitik TP**. The role of radiofrequency ablation for sacroiliac joint pain: a meta-analysis. PM R. 2010; 2(9):842-851.
- 2. **Cohen S, Hurley R, Buckenmaier C**, et al. Randomized placebo-controlled study evaluating lateral branch radiofrequency denervation for sacroiliac joint pain. Anesthesiology 2008; 109(2):279-288.
- 3. **Muhlner S**. Review article: radiofrequency neurotomy for the treatment of sacroiliac joint syndrome. Curr Rev Musculoskelet Med. 2009; 2(1): 10–14.
- 4. **Chou R, Atlas SJ, Stanos SP, Rosenquist RW**. Nonsurgical interventional therapies for low back pain: a review of the evidence for an American Pain Society clinical practice guideline. Spine (Phila Pa 1976). 2009; 34(10):1078-1093.
- 5. **National Institute of Neurological Disorders and Stroke (NINDS) Website.** Low back pain fact sheet. Available at: http://www.ninds.nih.gov/disorders/backpain/backpain.htm.
- 6. **Niemisto L, Kalso E, Malmivaara A,** et al. Radiofrequency denervation for neck and back pain: a systematic review within the framework of the Cochrane Collaboration Back Review Group. Spine 2003; 28(16):1877-1888.
- 7. **Khan AM, Fanton GS.** Thermal energy in the knee. Techniques in knee surgery. 2004; 3(3):180-186.
- 8. **Levine MJ, Shaffer B.** Basic science applications of thermal energy in arthroscopic surgery. Sports Med Arthro Rev. 2005; 13(4):186-192.
- 9. Owens BD, Stickles BJ, Balikian P, Busconi BD. Prospective analysis of radiofrequency versus mechanical debridement of isolated patellar chondral lesions. Arthroscopy. 2002; 18(2):151-155.
- 10. **Sherk HH, Vangsness CT, Thabit G III, Jackson RW.** Electromagnetic surgical devices in orthopaedics. Lasers and radiofrequency. J Bone Joint Surg. 2002; 84-A (4):675-681.
- 11. **Tasto JP**, **Cummings J**, **Medlock V**, et al. Microtenotomy using a radiofrequency probe to treat lateral epicondylitis. Arthroscopy. 2005; 21(7):851-860.
- 12. Weil L Jr, Glover JP, Weil LS Sr. A new minimally invasive technique for treating plantar fasciosis using bipolar radiofrequency: a prospective analysis. Foot Ankle Spec. 2008; 1(1):13-18.



- 13. Manchikanti L, Boswell MV, Singh V, Benyamin RM, Fellows B, Abdi S, Buenaventura RM, et al. Comprehensive evidence-based guidelines for interventional techniques in the management of chronic spinal pain. Pain Physician. 2009 Jul-Aug;12(4):699-802.
- 14. **The ASIPP guideline referenced above (Manchicanti, et al., 2009)** concluded that, based on the available literature and evidence, no recommendation could be provided for SI joint injections.
- 15. Hansen H, Manchikanti L, Simopoulos TT, Christo PJ, Gupta S, Smith HS, Hameed H, Cohen SP. A systematic evaluation of the therapeutic effectiveness of sacroiliac joint interventions. Pain Physician. 2012 May;15(3): E247-78.
- 16. **Hansen HC, McKenzie-Brown AM, Cohen SP**, et al. Sacroiliac joint interventions: A systematic review. Pain Physician. 2007; 10(1):165-184.
- 17. **Cohen SP, Hurley RW, Buckenmaier CC** 3rd, et al. Randomized placebo-controlled study evaluating lateral branch radiofrequency denervation for sacroiliac joint pain. Anesthesiology. 2008; 109(2):279-288.
- 18. Swezey RL. The sacroiliac joint. Nothing is sacred. Phys Med Rehabil Clin N Am. 1998; 9(2):515-519, x.
- 19. **Falco FJ.** Lumbar spine injection procedures in the management of low back pain. Occup Med. 1998; 13(1):121-149.
- 20. **Wittenberg RH, Steffen R, Ludwig J.** [Injection treatment of non-radicular lumbalgia] Orthopade. 1997; 26(6):544-552.
- 21. **Maugars Y, Mathis C, Berthelot JM**, et al. Assessment of the efficacy of sacroiliac corticosteroid injections in spondylarthropathies: A double-blind study. Br J Rheumatol. 1996; 35(8):767-770.
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28. National Institute for Health and Clinical Excellence (NICE) Website. Low back pain: early management of persistent non-specific low back pain. May 2009. Available at: http://www.nice.org.uk.

Published Technology Assessments

- ECRI Institute. Health Technology Assessment Information Service (HTAIS) Evidence Report. Radiofrequency Ablation for Chronic Spinal Pain Published: 04/07/2010
- 2. ECRI Institute. Hotline Response. Radiofrequency Neuroablation for Low Back Pain. July 2010.
- 3. **Hayes, Winifred S.** Directory Report. Radiofrequency ablation for sacroiliac joint pain. August 21, 2012.
- 4. **Hayes, Winifred S.** Health Technology Brief. Cooled radiofrequency denervation of the sacroiliac joint (Pain Management Synergy System, Baylis Medical Co. Inc.) for treatment of chronic low back pain. August 23, 2012. Available at: http://www.hayesinc.org.

Policy History/Revision Information

Date	Action/Description
4/27/2023	Quality Improvement Committee approved activation of the policy

Contact Information

Please forward any commentary or feedback on Optum utilization management policies to: phpolicy_inquiry@optum.com with the word "Policy" in the subject line.

The services described in Optum* by OptumHealth Care Solutions, LLC policies are subject to the terms, conditions and limitations of the Member's contract or certificate. Optum reserves the right, in its sole discretion, to modify policies as necessary without prior written notice unless otherwise required by Optum's administrative procedures.

Certain internal policies may not be applicable to self-funded members and certain insured products. Refer to the member's Summary Plan Description (SPD) or Certificate of Coverage (COC) to determine whether coverage is provided or if there are any exclusions or benefit limitations applicable to any of these policies. If there is a difference between any policy and the member's SPD or COC, the member's SPD or COC will govern.

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