

Sacroiliac Joint Fusion - Single Service

Clinical Guidelines for Medical Necessity Review

Version: 2

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Important Notices

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Guideline Information:

Specialty Area: Diseases & Disorders of the Musculoskeletal System (M00-M99)

Guideline Name: Sacroiliac Joint Fusion (Single Service)

Literature review current through: 12/14/2023

Document last updated: 4/25/2024

Type: $[\underline{\mathbf{X}}]$ Adult (18+ yo) | $[\underline{\mathbf{X}}]$ Pediatric (0-17yo)

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Medical Necessity Criteria

Service: Sacroiliac Joint Fusion

General Guidelines

- Units, Frequency, & Duration: None.
- Criteria for Subsequent Requests: None.
- **Recommended Clinical Approach:** SI joint fusion may be appropriate for patients with low back pain originating from the SI joint that does not improve with non-operative treatment.¹
- Exclusions: Lumbar spinal fusion is addressed in a separate policy.

Medical Necessity Criteria

Indications

- → Sacroiliac Joint Fusion is considered appropriate if ALL of the following are TRUE:²⁻⁴
 - Moderate to severe pain with functional impairment and pain that persists; AND
 - ◆ Failure of conservative management for greater than 6 months, including **ALL** of the following:
 - Oral steroid or anti-inflammatory medication; AND
 - Physical therapy; AND
 - Image-guided SI joint injection resulting in ALL of the following:
 - Greater than or equal to 75% reduction of pain for the expected duration of the anesthetic used on two separate occasions; AND
 - Ability to perform previously painful maneuvers; AND
 - At least one intra-articular SI joint corticosteroid injection;
 AND
 - ◆ The patient has a positive response to 3 or more provocative tests including **ANY** of the following:
 - Distraction test; OR
 - Compression test; OR
 - Thigh thrust test; OR
 - Gaenslen's test; OR
 - FABER maneuver/Patrick's sign; OR
 - Posterior provocation test; AND

- Imaging studies of the SI joint (radiographs, MRI, or CT) that exclude the presence of ANY of the following:
 - Destructive lesions (e.g., tumor, infection); OR
 - Fracture; OR
 - Traumatic SIJ instability; OR
 - Inflammatory arthropathy that would not be properly addressed by percutaneous SIJ fusion; AND
- Imaging of the pelvis (anteroposterior [AP] plain radiograph) to rule out concomitant hip pathology; AND
- ◆ Imaging of the lumbar spine (CT or MRI) to rule out neural compression or other degenerative conditions that can be causing the low back or buttock pain.

Non-Indications

- → Sacroiliac Joint Fusion is not considered appropriate if ANY of the following is TRUE:³
 - Presence of systemic arthropathy (e.g., ankylosing spondylitis or rheumatoid arthritis); OR
 - Presence of generalized pain behavior (e.g., somatoform disorder) or generalized pain disorder (e.g., fibromyalgia); OR
 - ◆ Presence of infection at the surgical site; **OR**
 - Presence of tumor; OR
 - Use of a device that does not transfix the SI joint (PainTEQ's LinQ SI Joint Stabilization procedure)

Level of Care Criteria

Outpatient.

Procedure Codes (HCPCS/CPT)

HCPCS/CPT Code	Code Description
0809Т	Arthrodesis, sacroiliac joint, percutaneous or minimally invasive (indirect visualization), with image guidance, placement of transfixing device(s) and intraarticular implant(s), including allograft or synthetic device(s)
20999	Unlisted procedure, musculoskeletal system, general
22848	Pelvic fixation (attachment of caudal end of instrumentation to pelvic bony structures) other than sacrum (List separately in addition to code for primary procedure)

HCPCS/CPT Code	Code Description
27278	Arthrodesis, sacroiliac joint, percutaneous, with image guidance, including placement of intra-articular implant(s) (e.g. bone allograft[s], synthetic device[s]), without placement of transfixing device.
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 and placement of transfixing device

Medical Evidence

Shamrock et al. (2019) performed a systematic review on the safety profile of percutaneous minimally invasive sacroiliac (SI) joint fusion. Of the 720 patients, 99 (13.75%) underwent bilateral SI joint arthrodesis, including 819 fused SI joints. Surgical wound infection and drainage was a complication in 11% of patients. The revision rate was low (2.56%).⁵

Polly et al. (2016) report the two-year outcomes from a randomized control trial (RCT) of 148 patients who received minimally invasive SI joint fusion or non-surgical management for SI joint dysfunction. At two-year follow-up, those assigned to the fusion group reported clinical improvement (83%) or substantial benefit (82.0%) of the visual analog score (VAS). Conversely, these percentages were lower among non-surgical treatment patients (68.2% and 65.9%, respectively). Adverse events were minimal; three patients in the fusion group required revision surgery before a two-year follow-up.⁶

Zaidi et al. (2015) reviewed the surgical and clinical efficacy of SI joint fusion. A total of 430 patients were identified in five consecutive case series, eight retrospective studies, and three prospective cohort studies. Open surgery was performed in 131 patients, and 299 required minimally invasive surgery (MIS) for SI joint fusion. Follow-up was 60 months for open surgery and 21 months for MIS. The most common indication for 257 patients who underwent surgical treatment was SI joint degeneration/arthrosis (59.8%), SI joint dysfunction (18.4%), post-partum instability (7.2%), post-traumatic (6.5%), idiopathic (5.8%), pathological fractures (1.4%), and HLA-B27+/ rheumatoid arthritis (0.9%). Overall, rates of satisfaction were excellent, with noted improvements in pain, function, and quality of life.²

National and Professional Organization

The North American Spine Society (NASS) published a coverage policy recommendation for *Minimally Invasive Sacroiliac Joint Fusion*, which supports coverage for treating SI joint pain for low back pain. Studies show that the procedure is relatively safe – estimated blood loss is low, as are the rates of infection, complications, and the need for revision surgery.³

The ISASS also published a similar policy statement for *Minimally Invasive* Sacroiliac Joint Fusion, which states support for the procedure.⁴

References

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- 7. Zaidi HA, Montoure AJ, Dickman CA. Surgical and clinical efficacy of sacroiliac joint fusion: A systematic review of the literature. J Neurosurg Spine. 2015 Jul;23(1):59-66. doi: 10.3171/2014.10.SPINE14516. PMID: 25840040.

Clinical Guideline Revision History/Information

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