

Diagnostic Algorithm for Sacroiliac Joint Pain

Patient Symptoms

1

Complaints

- Intolerance with sitting or lying
- Dull ache below L5, often unilateral
- Buttock pain, may radiate to thigh / groin
- Pain worse climbing stairs or hills

History/Risk Factors

- Fall, misstep, lifting, twisting, MVA
- Previous lumbar fusion
- Anatomic variations (e.g. leg inequality)
- Female, age 62,¹ Postpartum


SI Joint Dysfunction Suspected

2

Physical Examination

- General back pain exam to rule-out other diagnoses (e.g. McKenzie Examination², straight leg raise, lumbar MRI)
- Sacral sulcus tenderness on palpation and repeated pain pointing near the PSIS (Fortin Finger Test)

Provocative Tests³

 See reverse

- Tests: Compression, Thigh Thrust, FABER, Distraction and Gaenslen's. Valid if 3 or more tests are positive. At least one test should be compression or thigh thrust.

Checkpoint



Rule-outs and Red Flags

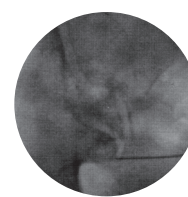
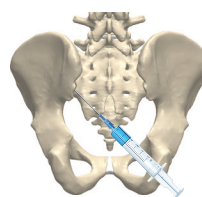
- Facet joint arthropathy
- Hip joint dysfunction
- Sciatica, disc disruption, stenosis
- Arthritis, spondylarthropathies
- Fractures (e.g. coccyx, insufficiency fractures)
- Bertolotti's syndrome
- Infections and tumors
- Enteric conditions (e.g. appendix, IBS)

SI Joint Dysfunction Presumed

3

Diagnostic SIJ Block⁴

- Fluoroscopic-guided, intra-articular injection
- Posterior-inferior approach
- 2.5ml max, includes 0.5ml contrast
- Repeat injection for confirmation, >75% relief



SI Joint Dysfunction Confirmed

4

Conservative Management (>6 months)

- Medications, braces, SI belts
- Orthotics (e.g. for leg inequality)
- Physical therapy, manual manipulation
- Therapeutic SI injections

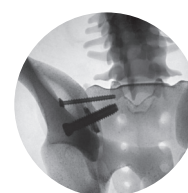
Disabling Pain

- With SI Joint Dysfunction confirmed, and at least 6 months conservative therapy, the patient may be a candidate for SI Joint surgery using the SImmetry® system.

Disabling Pain

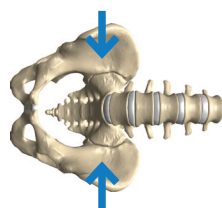
Surgical Arthrodesis

- The SImmetry® system allows for true arthrodesis of the sacroiliac joint.⁵

Provocative Tests for Sacroiliac Joint Pain

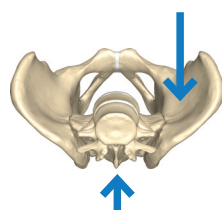
The following provocative tests have shown good diagnostic validity for sacroiliac pain if three or more tests are positive³. At least one test should be compression or thigh thrust. The tests are considered positive if they reproduce the patient's same pain.



Compression Test

This maneuver applies compression across the SI joints.

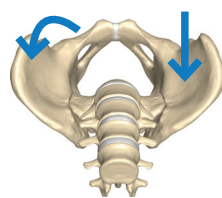
1. Patient is lying on their side with hips and knees flexed.
2. Apply a downward force to the patient's iliac crest.



Thigh Thrust Test

This maneuver applies a sliding/shearing to the SI joint.

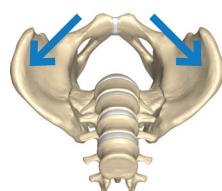
1. Patient is supine.
2. Consider placing a hand under the sacrum for support.
3. Apply a downward force to a vertically aligned femur.



FABER Test (Flexion Abduction External Rotation)

This maneuver applies a tension to the anterior aspects of the SI joints.

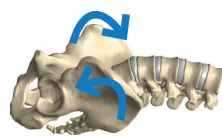
1. Patient is supine.
2. Place the patient's foot of the affected side on the opposite knee.
3. Place a hand on the opposite iliac crest.
4. Apply a downward abduction force to the patient's knee.



Distraction Test

This maneuver applies a tension to the anterior aspects of the SI joints.

1. Patient is supine.
2. Apply a cross-arm posteriorly directed force simultaneously to both ASIS.



Gaenslen's Test

This maneuver applies a counter-rotation/torsion to the SI joints.

1. Patient is supine.
2. One leg hangs off the exam table; the other is bent at the knee.
3. Apply an extension force to the hanging leg while simultaneously applying a flexion force to the bent leg.

1. DePalma, et al. Multivariable Analyses of the Relationships Between Age, Gender, and Body Mass Index and the Source of Chronic Low Back Pain. *Pain Medicine* 2012; 13: 498-506.
 2. Laslett, et al. Diagnosing painful sacroiliac joints: A validity study of a McKenzie evaluation and sacroiliac provocation tests. *Australian Journal of Physiotherapy* 2003 Vol. 49.
 3. Szadek KM, et al. Diagnostic validity of criteria for sacroiliac joint pain: a systematic review. *The Journal of Pain*. 2009; 10:354-D368.
 4. Bogduk N, ed. Sacroiliac Joint Blocks. In: *Practice Guidelines. Spinal Diagnostic & Treatment Procedures*. San Francisco: International Spine Intervention Society 2004: 66-85.
 5. Rx only. Please review the Instructions for Use for indications, contraindications, warnings and precautions.