



Sacroiliac Pain (SI)

PIER DOCUMENT

PROBLEM:

Sacroiliac (SI) joint pain is a less common source of low back pain but has a higher incidence pregnant and post partum patients, as well as, after trauma.

The incidence of SI pain in patients with low back pain is 13% (9-26%)¹. The majority of patients will report buttock pain (94%), lower lumbar pain (72%), lower extremity pain (50%), and groin pain (14%)³.

In the past, the SI joint has been a difficult area to diagnose secondary to the lack of a gold standard diagnostic test and the diagnostic limitations of clinical testing involving static palpation and movement based tests.

These tests have been found positive in asymptomatic patients reducing their specificity for diagnosis².

A repeated motions examination of lumbar active range of motions movements is helpful in ruling in or out of lumbar spine involvement prior to SI pain provocation testing⁴. Patient's with (+) provocative testing who did not centralize with lumbar motions have a 80% post test probability of having SI pain (+ LR 6.97). Patient's with (-) provocation testing who did not centralize have a 5% post test probability of having SI pain (-LR 0.10)⁴.

INTERVENTIONS:

A multimodal treatment program is supported by the literature including joint mobilization/ manipulation, stabilization exercises, and taping or bracing.



INTERVENTIONS continued:

LASLETT ET AL. SI TESTING



FIG 1. The Distraction Test (testing right and left SIJ simultaneously).

Note: Vertically oriented pressure is applied to the anterior superior iliac spinous processes directed posteriorly, distracting the sacroiliac joint.



FIG 2. The Thigh Thrust Test (testing the right SIJ).

Note: The sacrum is fixated against the table with the left hand, and a vertically oriented force is applied through the line of the femur directed posteriorly, producing a posterior shearing force at the SIJ.



FIG 3. Gaenslen's Test (testing the right SIJ in posterior rotation and the left SIJ in anterior rotation).

Note: The pelvis is stressed with a torsion force by a superior/posterior force applied to the right knee and a posteriorly directed force applied to the left knee.

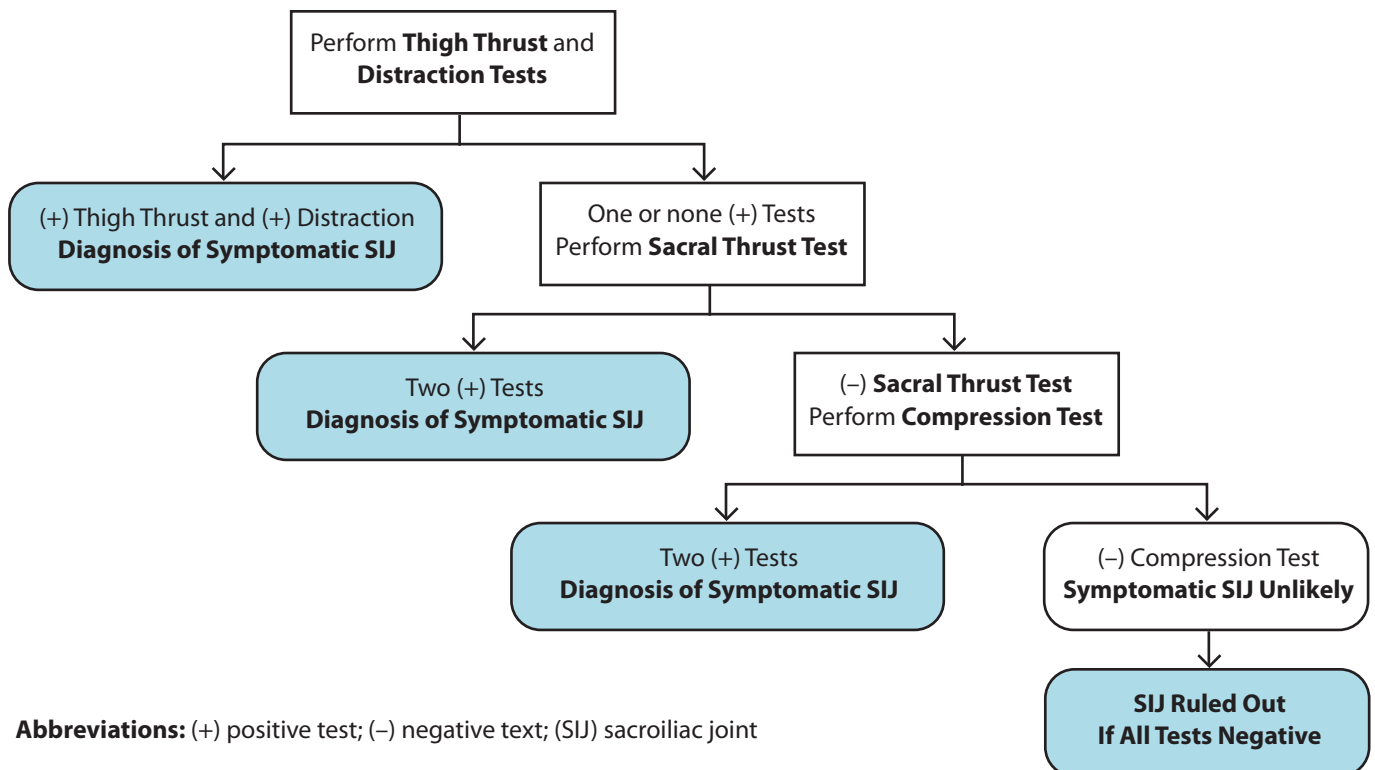


FIG 4. The Compression Test (testing right and left SIJ).



FIG 5. The Sacral Thrust Test (testing right and left SIJ simultaneously).

Note: A vertically directed force is applied to the midline of the sacrum at the apex of the curve of the sacrum, directed anteriorly, producing a posterior shearing force at the SIJs with the sacrum rotated.

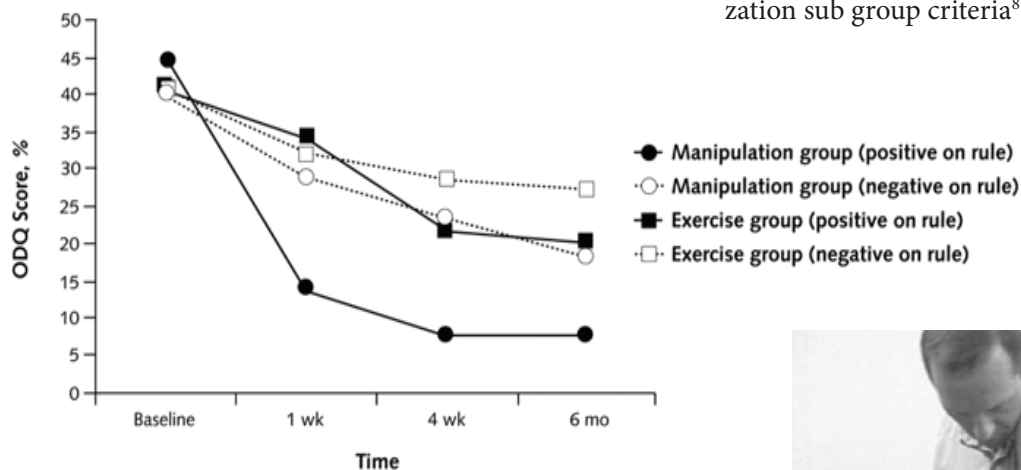


Abbreviations: (+) positive test; (-) negative test; (SIJ) sacroiliac joint

EVIDENCE:

Tullberg et al. showed the reduction in short term pain and movement, but not a change in bony landmarks on CT scan, after spinal manipulation in patients with SI pain⁴.

Positive short and long term outcomes on both pain and disability have been observed using spinal manipulation for a sub group of patients with low back pain^{5,6}.



In a randomized controlled trial of spinal stabilization training compared to usual medical management, Hides et al. reported reduced recurrence (30% vs. 84%) and future medical care (42% vs. 15%) in the stabilization group. The risk of recurrence for the medical management group remained high up to 3 years⁷. There does not seem to be an greater effect of local versus global stabilization training among patients who meet the spinal stabilization sub group criteria⁸.



REFER:

Patient's with low back pain, pelvic pain, and groin pain with suspected SI joint pain should be referred to Physical Therapy.

Patient's will benefit from early manual therapy and exercise interventions to reduce short and long term pain and disability.

References

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