



@physicaltherapyresearch

RAPID RESEARCH

March 2021

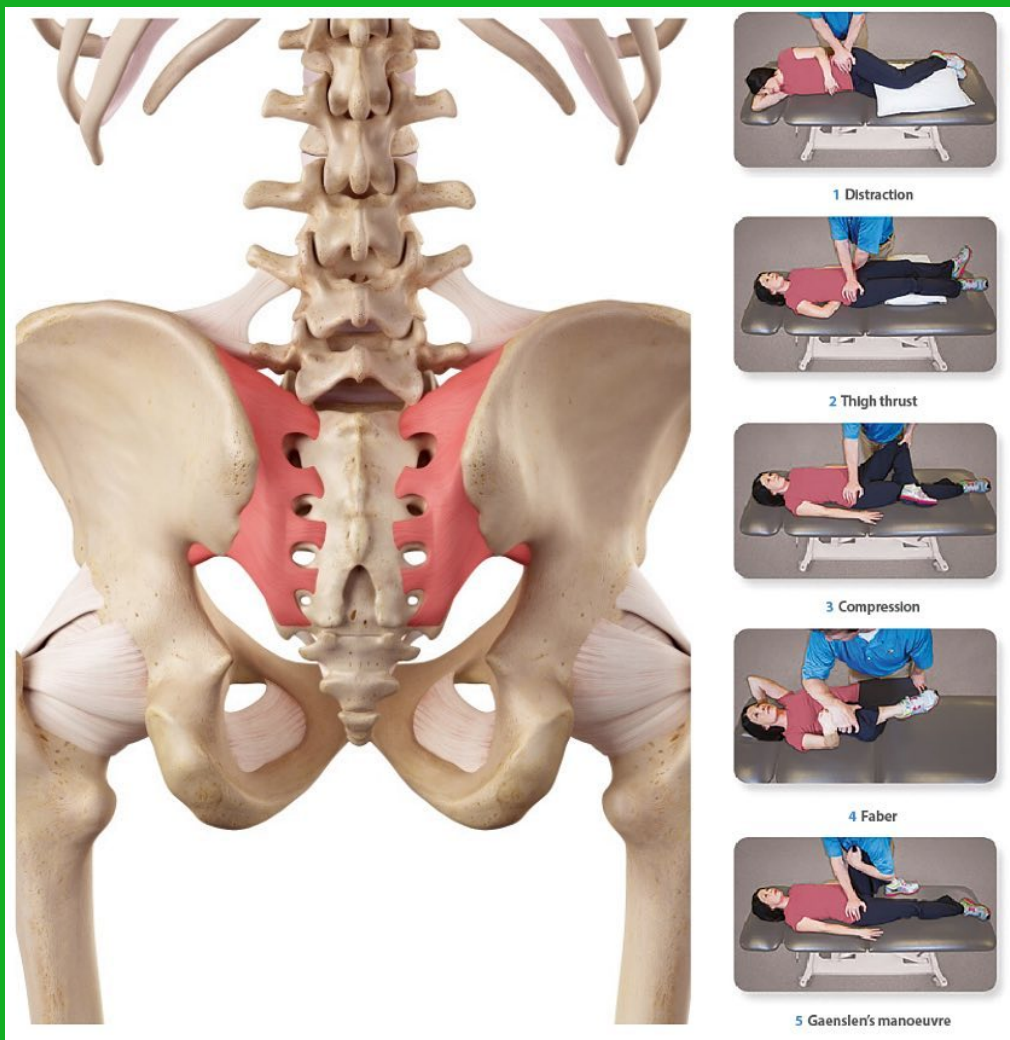
Inside This Week: Sacroiliac Joint (SIJ) Testing & Treatment

- ✓ Reliability of sacroiliac joint mobility tests.
- ✓ Can Straight Leg Elevation Accurately Rule Out Pelvic Injury?
- ✓ Steroid Injections for SIJ, Pain and Function Outcomes



RELIABILITY OF SACROILIAC JOINT MOBILITY TESTS

Klerx et al. conducted an up-to-date systematic review to verify whether recommendations regarding the clinical use of SIJ mobility tests should be revised.



KEY FINDINGS

Reliability of 8 SIJ mobility tests and one test cluster were reviewed. (Click-clack test, Standing flexion test, Seated flexion test, Gillet test, Prone knee flexion test, Heel-bank test, Abduction test, Thumb-PSIS test)

Gillet was the only test evaluated in more than one study.

Majority of individual tests showed slight to fair agreement in inter-tester reliability.

Compared to individual tests, the test cluster showed higher reliability, the highest in two positive tests.

There were no validity studies of sufficient methodological quality.

MAIN TAKEAWAYS

There is no new evidence for the validity of SIJ mobility tests when considering literature of at least fair methodological quality.

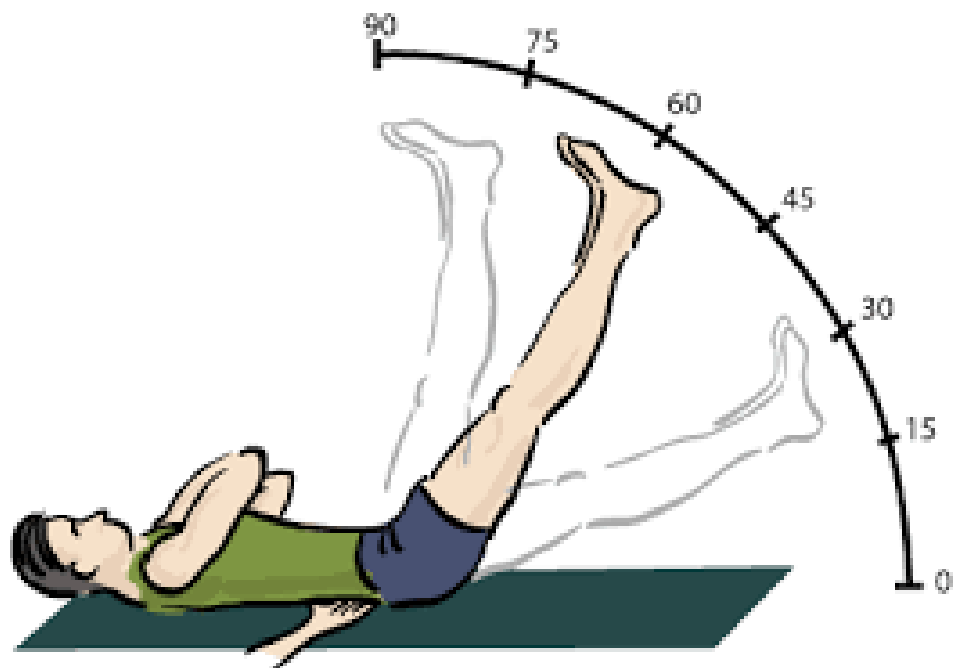
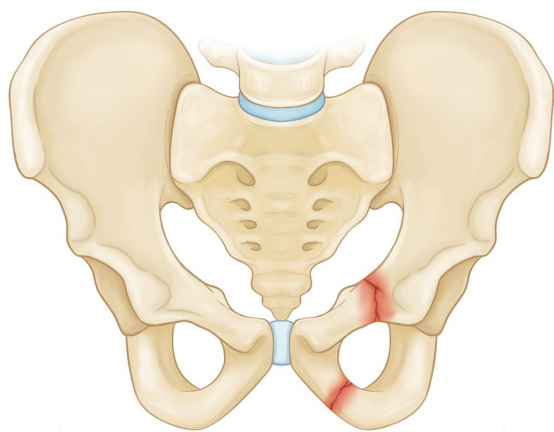
Only low quality and conflicting evidence for inter-rater reliability exists.

Reliability of individual SIJ mobility tests and test clusters is questionable or uncertain at best.

The use of SIJ mobility tests in clinical practice is problematic.

CAN STRAIGHT LEG ELEVATION ACCURATELY RULE OUT PELVIC INJURY?

This research investigated whether the ability to actively and painlessly straight leg raise during the primary survey rules out significant pelvic trauma.



KEY FINDINGS

328 patients included.

118 (36%) were either unable to SLR, or had pain on SLR.

35 had pelvic fractures, of these,

32 were either unable to straight leg raise, or had pain on doing so.

Sensitivity of **91.43%**

Negative predictive value of **98.57%**

The 3 participants with a pelvic fracture who could straight leg raise with no pain, all had a Glasgow Coma Score of less than 15.

MAIN TAKEAWAYS

In trauma patients presenting with a GCS of 15, painless SLR may be used as a screening tool to avoid routine pelvis x-ray.

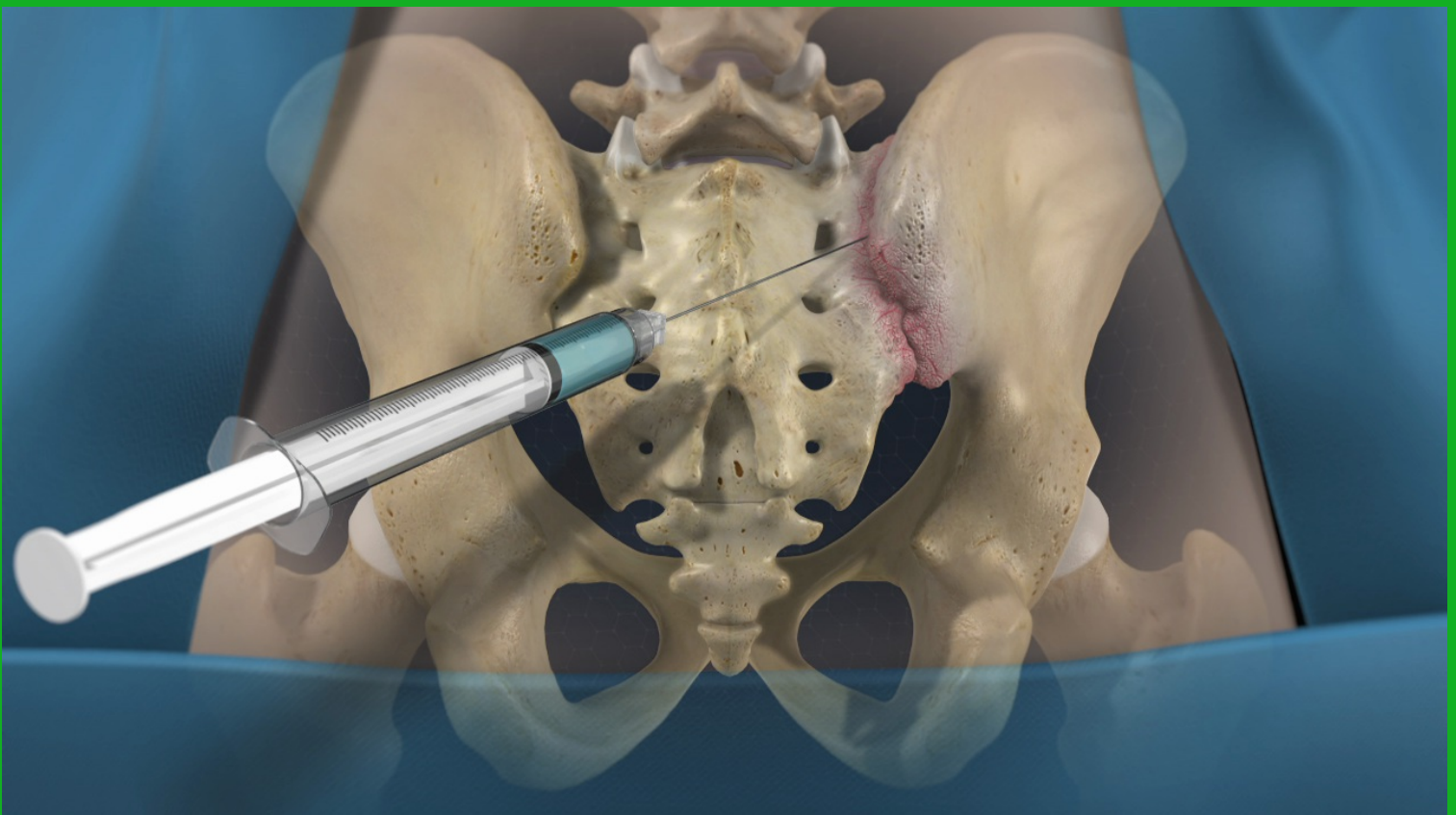
This rule cannot be applied to patients with a GCS <15, or have received opiates.

Painless straight leg raise in the alert trauma patient would:
Exclude major pelvic fracture quickly.

The pelvis x-ray may be at least delayed until clinical assessment of the pelvis through axial loading and mobilization is possible.

STEROID INJECTIONS FOR SIJ 6 MONTH OUTCOMES

This research evaluated sacroiliac joint (SIJ) injection outcomes with local anesthetic and corticosteroid.



KEY FINDINGS

Outcome measures at **2-4 weeks and 6 months** included:
Pain scale (0-10) and Oswestry Disability Index (ODI).

Overall group outcomes at **2-4 weeks** and similar at **6 months**:

>2 Pain reduction [58%]

>50% Pain reduction [32.4%]

>30% ODI improvement [38.2%]

Outcomes stratified based on pre-injection **did not reveal significant differences** at either time point.

With 100% post-injection anesthetic response, 50% Pain reduction was demonstrated still at 2-4 weeks.

True Positive/Negative 6 month outcomes:

50% Pain reduction and 30% ODI improvement.

An increased injection response was observed with stratification of patients more likely to have true SIJ pain (true positive).

MAIN TAKEAWAYS

SIJ steroid injection based on referral clinical diagnosis is unlikely to demonstrate true injection efficacy.

More specific SIJ Injection selection criteria are warranted.

GIVE US YOUR FEEDBACK!

MEMBERS

We are on a mission to make research more accessible, easier to interpret, and quicker to implement.

Help us by giving 1 minute of your time to leave feedback for us.

We would greatly appreciate any feedback you have, as it helps us continually improve!

[Leave Review](#)

