

Sacroiliac joint pain: the Thigh thrust (P4) test

The patient. A 45-year-old has had persistent pain in one buttock, below the belt line, for six months. She points to the back of the pelvis as the worst spot.

Starting chance. For this exercise, assume a 25% chance of sacroiliac joint pain before testing. This is a teaching assumption, not a published figure.

Question. Could the sacroiliac joint be the source? What does the thigh thrust test tell you?

Teaching case: Answer

The test. Supine, hip flexed to about 90° and knee relaxed. One hand under the sacrum; push steadily back along the line of the femur. Positive: The patient's familiar buttock or posterior pelvic pain.

Why this test. The library rates this test as 'best used to rule out' for sacroiliac joint pain. Sensitivity 88%, specificity 69%; LR+ 2.8, LR– 0.17.

Result	Likelihood ratio	Chance after the test
Positive	2.8	about 48%
Negative	0.17	about 5%

Take-home point. The negative result is the stronger one: it brings the chance down from 25% to about 5%. A positive result lifts it to about 48%, which is not enough to confirm the condition on its own.

Figures: Laslett M, Aprill CN, McDonald B, Young SB. Diagnosis of sacroiliac joint pain: validity of individual provocation tests and composites of tests. *Man Ther.* 2005;10(3):207-218. They describe the patients in that study, not every patient. Worked with odds: starting odds × likelihood ratio = odds after the test.