

Static Symmetry Tests	Procedure	Criteria for Positive
PSIS symmetry standing ¹	Palpation of right and left PSIS with the patient standing	One PSIS judged to be higher than the other
ASIS symmetry standing ¹	Palpation of right and left ASIS with the patient standing	One ASIS judged to be higher than the other
Iliac crest symmetry standing ¹	Palpation of right and left iliac crest with the patient standing	One iliac crest judged to be higher than the other
Landmark symmetry standing ¹	Comparison of PSIS, ASIS, and iliac crest findings in standing	All landmarks are not level and all landmarks are not high on the same side
PSIS symmetry sitting ²	Palpation of right and left PSIS with the patient sitting	One PSIS judged to be higher than the other
Pubic tubercle symmetry supine ³	Palpation of the right and left tubercle with the patient supine	One pubic tubercle judged to be higher than the other
Ischial tuberosity symmetry in prone. ³	Palpation of the right and left ischial tuberosity with the patient prone	One ischial tuberosity judged to be higher than the other
Movement Symmetry Tests	Procedure	Criteria for Positive
Standing Flexion Test ^{2,4}	The patient is standing and the relative heights of the PSIS are assessed. The patient is asked to flex forward as far as possible, with the examiner continuing to palpate the PSIS.	A change in the relative relationship of the PSIS is found in the fully-flexed position.
Seated Flexion Test ^{1,2}	The patient is seated and the relative heights of the PSIS are judged. The patient is asked to bend forward as far as possible, with the examiner continuing to palpate the PSIS.	A change in the relative relationship of the PSIS is found in the fully-flexed position.
Long-Sitting Test ^{2,5}	The patient is supine with hips and knees extended. The examiner grasps around each ankle with the thumbs below the medial malleoli. A visual estimation of leg length is made. The patient is assisted to a long-sitting position, and the examiner re-examines the relative leg lengths.	A change in the relative position of medial malleoli occurs.
Prone Knee Bend Test ^{1,6}	The patient is prone. The relative leg lengths are assessed by looking at the heels. The examiner passively flexes the patient's knees to approximately 90°. The relative leg lengths are assessed again in this position.	A change in relative lengths occurs between the two positions.
Gillet Test ⁷	The patient is standing. The examiner	The PSIS fails to move

	places one thumb under the PSIS on the side being tested, with the other thumb over the S ₂ spinous process. The patient is instructed to stand on one leg and flex the other hip and knee, bringing the leg towards the chest.	posterior and inferior with respect to S ₂ .
Patrick's Test - Range of Motion ^{7,8}	The patient is placed in the test position by flexing, abducting and externally rotating the hip of the tested leg, placing the lateral malleolus on the knee of the opposite leg. Overpressure is applied to the medial aspect of the knee. The amount of motion available in the tested extremity is compared to the opposite side.	A difference in the ROM exists between the two sides.
Provocation Tests	Procedure	Criteria for Positive
Gaenslen's Test ^{7,9,10}	The patient is supine with both legs extended. The leg being tested is passively brought into full hip and knee flexion, while the opposite hip is maintained in an extended position. Overpressure is applied to the flexed extremity.	Pain is reproduced in either SI joint region with performance of the test.
Posterior Shear Test ⁷⁻⁹	The patient is supine. The hip is flexed to 90° and adducted. The examiner applies an axial force through the femur at different angles of hip adduction/abduction.	Buttock pain is produced.
Compression/Distractio Test ^{7,9}	The patient is supine. Pressure is applied first in a posterior and lateral direction (compression) on the ASIS simultaneously. Pressure is then applied in an anterior and medial direction on the ASIS (distraction).	Pain is reproduced in the SI joint region with either maneuver.
Patrick's test – Buttock pain ⁹	The patient's hip is flexed, abducted and externally rotated by placing the lateral malleolus on the knee of the opposite leg. Overpressure is applied to the medial aspect of the knee while the pelvis is stabilized.	Buttock or low back pain is produced.
Patrick's test – Groin pain ⁹	Same as above	Groin pain is produced.
Resisted Hip Abduction ⁸	The patient is supine with the hip in about 30° of abduction. The examiner pushes the leg medially to cause an	Buttock pain is produced.

	isometric contraction of the hip abductors.	
Sacral Sulcus Test ¹¹	The patient is prone. The examiner palpates with firm pressure in the region directly medial to the PSIS.	Pain is reproduced in the SI region
Sacral Thrust Test ⁹	The patient is prone. The examiner delivers an anteriorly directed thrust directly over the sacrum.	Pain is reproduced in the SI region

References

1. Delitto A, Erhard RE, Bowling RW. A treatment-based classification approach to low back syndrome: identifying and staging patients for conservative treatment. *Phys Ther.* 1995; 75(6):470-485.
2. Cibulka MT, Koldehoff R. Clinical usefulness of a cluster of sacroiliac joint tests in patients with and without low back pain. *J Orthop Sports Phys Ther.* 1999; 29(2):83-89.
3. Greenman PE. Osteopathic manipulation of the lumbar spine and pelvis. In: White A, Anderson A, editors. *Conservative Care of Low Back Pain.* Baltimore: Williams and Wilkins, 1991: 210-215.
4. Sutton SE. Postural imbalances: Examination and treatment utilizing flexion tests. *J Am Osteo Assoc.* 1978; 77:456-465.
5. Bemis T, Daniel M. Validation of the long-sitting test in subjects with iliosacral dysfunction. *J Orthop Sports Phys Ther.* 1987; 8:336-345.
6. Cibulka MT, Delitto A, Koldehoff RM. Changes in innominate tilt after manipulation of the sacroiliac joint in patients with low back pain. An experimental study. *Phys Ther.* 1988; 68(9):1359-1363.
7. Meijne W, van Neerbos K, Aufdemkampe G, van der WP. Intraexaminer and interexaminer reliability of the Gillet test. *J Manipulative Physiol Ther.* 1999; 22(1):4-9.

8. Broadhurst NA, Bond MJ. Pain provocation tests for the assessment of sacroiliac joint dysfunction. *J Spinal Disord.* 1998; 11(4):341-345.
9. Gibson T, Grahame R, Harkness J, Woo P, Blagrove P, Hills R. Controlled comparison of short-wave diathermy treatment with osteopathic treatment in non-specific low back pain. *Lancet.* 1985; 1(8440):1258-1261.
10. Maigne JY, Boulahdour H, Chatellier G. Value of quantitative radionuclide bone scanning in the diagnosis of sacroiliac joint syndrome in 32 patients with low back pain. *Eur Spine J.* 1998; 7(4):328-331.
11. Dreyfuss P, Michaelsen M, Pauza K, McLarty J, Bogduk N. The value of medical history and physical examination in diagnosing sacroiliac joint pain. *Spine.* 1996; 21(22):2594-2602.