

Diagnosis of Sacroiliac Joint Dysfunction by Palpation

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According to Joseph Fortin, DO, and Frank Falco, MD, by use of the "Fortin finger test," it is possible to make an accurate diagnosis of sacroiliac (SI) joint dysfunction.¹ The finger test was positive if it met the following criteria: the patient could localize the pain with one finger; the area pointed to was immediately inferomedial to the posterior superior iliac spine (PSIS) within one centimeter; the patient consistently pointed to the same area over at least two trials.

If the patient did not completely fulfill the above criteria, the Patrick test was used to stress the SI joint. The patients were asked to mentally picture where the pain was located, and to point to the pain area after rolling over on their side. Two testers independently selected the same 12 patients on the basis of the finger test criteria; one tester chose an additional four patients, after combining the Fortin finger test with the Patrick test.

What makes this test most interesting is that they used a provocation-positive injection into the SI joint. All 16 patients were injected on the symptomatic side identified by the finger test. Four of the 16 patients were injected bilaterally, but only the finger test sides exhibited the pain provocation. The injections were performed under image-intensifier control with arthrography. The area injected was shown by fluoroscopy to overlie the SI joint and was "unequivocally within the known sacroiliac pain referral zone." These zones were analyzed by Fortin et al. in a previous study.²

To exclude other sources of low back pain eight patients had provocation-negative lumbar disc and zygapophyseal joint injections at the L4 and L5 segments. Other subjects showed negative MRI or CAT scans. In a point of view critique of one of Fortin's papers² relating to the provocation technique, Richard Derby, MD, stated: "To show a diagnostic value of pain provocation during intra-articular injection, on at least two different visits the pain provocation first should be correlated with post-block anesthetic relief for the expected duration of the local anesthetic."

The authors quote a study which showed there is a low rate of false positive results with the sacroiliac joint provocative injection test.³ They admit that they did not determine whether patients without the positive finger test had SI problems, and quote Menne,⁴ who mentions six structures that attach within a 1.5 cm radius of the PSIS: the L5/S1 facet joint; sacrospinalis; L5/S1 intervertebral disk; gluteus maximus; SI joint; and the PSIS. The authors feel that the Fortin finger test zone is "discrete" enough to be related to known sacroiliac pain referral patterns, and should be combined with the Patrick test in determining whether the SI joint is involved.

References

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