Dynamic Chiropractic

SOFT TISSUE / TRIGGER POINTS

SI Joint Back in the News

Warren Hammer, MS, DC, DABCO

All chiropractors have had patients who have responded positively to a sacroiliac adjustment. It is obvious to us that the SI joint is the source of pain in many back problems. The latest issue of Spine[1] had an interesting article attempting to define the referral pattern of sacroiliac involvement.

One of the problems in diagnosing a SI source of pain is that the joint gets its innervation from branches originating from the posterior primary ramus of L4, L5 and S1 with some additional branches from S2, and even at times S3[2], so the SI pain could be considered to be from tissues surrounding the SI joint. Therefore SI pain may be referred from adjoining facets, soft tissue injury, discs or ligaments. Based on friction experiments, Vleeming et al.,[3] stated that under abnormal loading of the SI joints with its ridges and depressions it's theoretically possible that a SI joint can be forced into a new position where the ridge and depression are no longer complementary, and that such an abnormal joint position could be regarded as a blocked joint.

The authors of the recent Spine article[1] chose 10 subjects who had no previous history of low back pain. They were attempting to prove that the SI joint could be a pain generator in a predictable distribution. They injected contrast material into the inferior aspect of the SI joint under fluroscopy to avoid surrounding structures that may also cause pain. Immediately after the injection the patients were examined for hypesthesia and pain. Interestingly they were able to take complete arthrograms of every patient proving that, although there is usually expected sclerosis and fusion of the SI in adults, the arthrograms "provided strong evidence of the existence of a true diarthrodial synovial joint into adulthood." All of the subjects described pain in an area approximately 3 x 10 cm just inferior to the posterior superior iliac spine. Some of the subjects also described the pain radiating to the medial buttock or to the superior lateral thigh. Although they did not find an exact distribution of SI pain referral, the most significant area that all the subjects described was just inferior to the posterior sacroiliac spine. The authors stated that while many low back syndromes are related to more than one structure this particular location of SI joint pain may be used as an aid in diagnosis.

References

1. Fortin JD, Dwyer AP, West S, Pier J: Sacroiliac Joint. Pain Referral Maps Applying a New Injection/Arthrography technique Part I: Asymptomatic volunteers. Spine 19:1475-1482, 1994.

2. Kirkaldy-Willis WH. Managing Low Back Pain, Second Edition, New York: Churchill Livingstone, 1988: p 42.

3. Vleeming A, Volkers ACW, Snijders J, Stoeckart R. Relation Between Form and Function in the

Sacroiliac Joint Part II: Biomechanical Aspects. Spine 15:133-135, 1990.

Warren Hammer, MS, DC, DABCO
Norwalk, Connecticut

Editor's Note: Dr. Hammer will be conducting his next Subluxation Myopathology (SM) seminars October 29-30 in Philadelphia, Pennsylvania, and November 5-6 in Raleigh, North Carolina. To register call 1-800-359-2289.

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