

The role of sacroiliac joint dysfunction in the genesis of low back pain: The obvious is not always right

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SI Joint Key Points:

- It is common for pain from the SI joint to mimic discogenic or radicular low back pain.
- Many patients go on to receive lumbar fusion instead of SI joint fusion, so SI joint disease should be strongly considered in differential diagnosis of low back pain.
- Estimation of prevalence of SI joint dysfunction, using fluoroscopic infiltration as the basis of diagnosis, ranges from 13 to 30%. The prevalence is even higher after failed back surgery, reaching about 63%.
- The incidence of SI joint dysfunction in patients with low back pain and discopathy on CT or MRI scans, appears to be higher than previously described.

Background:

It is common practice to link lower back pain with protruding discs. Because pain caused by sacroiliac joint dysfunction can mimic discogenic or radicular low back pain, orthopedics often assume that the diagnosis of SI joint dysfunction is frequently overlooked.

Low back pain is second to common cold as a cause of primary care office visits in the USA. Approximately 90% of adults have experienced back pain at some point of time in their lives. In any 12-month period, 7% of adults will consult for this complaint.

Purpose:

To assess the incidence of SI joint dysfunction in patients with lower back pain and positive disc findings on CT scan or MRI, but without claudication or objective neurological deficits.

Methods:

From January – July 2003, 200 patients were referred for the first time for epidural steroid injection due to low back pain. 50 patients with low back pain and disc herniation with positive pain provocation tests for SI joint dysfunction were submitted to fluoroscopic diagnostic SI joint infiltration.

35 patients reported low back pain began after a trauma (in 28 a road accident and in 7 a work accident) and 10 after lifting a load. In the remaining patients the cause was unknown.

Results:

Mean baseline VAS pain score was 7.8 ± 1.77 (range 5-10). 30 minutes after infiltration, the mean VAS score was 1.3 ± 1.76 (with average deviation from mean = 1.30). 46 patients had a VAS score ranging from 0-3, 8 weeks after the fluoroscopic guided infiltration.

Conclusion:

SI joint dysfunction should be considered strongly in the differential diagnosis of low back pain in this group of patients. Although patient follow-up was 3 months some conclusions can be drawn from these findings: (1) the incidence of SI joint dysfunction in patients with low back pain and discopathy on CT or MRI scans and without neurological deficits appears to be higher than previously described, (2) pain in the SI joint dysfunction can radiate towards the calf and foot mimicking radicular pain, (3) fluoroscopy guided SI joint infiltration leads to significant pain reduction.