

1. Examine the frequency of Sacroiliac joint obliquity in acute low back pain patients.

SACROILIAC JOINT DYSFUNCTION IN ACUTE LOW BACK PAIN PATIENTS

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Introduction: The role and degree of involvement of sacroiliac joint (SIJ) dysfunction in acute low back pain (ALBP) patients is controversial and often overlooked by clinicians. Prior research has indicated that a vertical difference of greater than 2mm from the iliac crest to the sacral ala is indicative of pelvic loosening and possible SIJ hypermobility. The purpose of this study was to investigate the relationship of pelvic-sacral obliquities and low back pain.

Methodology: 20 ALBP patients were randomly selected and examined by a physician, underwent lumbar and pelvic radiographs, and then received a physical therapy back/SIJ evaluation (Hesch Method). Data collected included examination of the lumbar spine and pelvic radiographs including alignment and height differences of the iliac crest-sacral ala (ISA), obturator foramina (OB), and symphysis pubis (SP). In addition, any sclerotic joint changes were recorded.

Results: Analysis of the data revealed that 65% of ALBP subjects demonstrated greater than 2mm of ISA difference. 65% demonstrated SP differences which were significant for possible SIJ hypermobility. 50% of subjects demonstrated bony sclerotic changes along the joint lines.

Discussion: Our research indicates that acute low back pain patients demonstrated either pelvic loosening (ISA height differences) and/or SIJ hypermobility. All subjects possessed normal lumbar spine radiographs. However, it was noted that 90% of the positive ilio-sacral patients demonstrated L4-S1 joint dysfunction which is often associated with SIJ dysfunction.

Future Studies should investigate the possible sacroiliac joint dysfunction in acute low back pain patients on a larger scale, compare pelvic and sacral joint mobility to radiological findings, and investigate radiological findings pre and post physical therapy treatment.