Effect of Postural Restoration Program on Right Low Back and Sacroiliac Joint Pain

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Compliance Statement: The subject participating in the study willingly participated in the case report by giving verbal and written consent. Pt was given opportunity to ask questions and these were answered to the patient's satisfaction.

Abstract (Limited to 300 Words):

Abstract Background and Purpose: The theoretical approach of postural restoration hypothesizes and explores postural adaptations and asymmetrical muscle firing patterns that lead to compensatory movement patterns of the body resulting in joint and muscle pain. The purpose of this case report was to describe the physical therapy management of a patient with right sacroiliac joint and low back pain using a postural restoration approach.

Case Description: The patient was a 41 year-old woman with a one month history of right sacroiliac joint and low back pain affecting her ability to perform work activities of bending, lifting, and twisting, sitting in car rides without back pain, and walking 2 miles over uneven surfaces. The patient had limited trunk and hip rotation range of motion, increased lumbar lordosis, decreased gluteus maximus, hip adductors and rotator strength, a right pelvic rotation bias, and anteriorly elevated ribs. The patient was seen 6 times in therapy and interventions focused on unilateral strengthening and inhibition exercises for the pelvis, upper, and lower extremities, diaphragmatic breathing exercises to improve diaphragm position, and abdominal strengthening exercises.

Outcomes: The patient showed a significant decrease in pain (initial visit 10/10 at worse, final visit 1/10), a significant decrease in straight leg raise tightness (15° change on right, 18° change on left), a significant change in Global Rating of Change Score (30% overall, 80% in her right posterior hip), and finally improvements in muscle strength, ROM and posture. Conclusions: Significant changes were seen in pain, hamstring tightness, and Global Rating of Change Score. A postural restoration approach of strengthening and inhibition exercises may be beneficial in treating patients with sacroiliac joint and low back pain; however, future research needs to be conducted.