15. J Orthop Sports Phys Ther. 1997 Sep;26(3):155-67.

A three-paradigm treatment model using soft tissue mobilization and guided movement-awareness techniques for a patient with chronic low back pain: a case study.

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It is not uncommon for physical therapists to report difficulty in treating certain subjects with chronic idiopathic low back pain. The purpose of this case study is to present a three-paradigm model of intervention that may be adapted to the treatment of such cases. The model consists of: 1) relaxation paradigm, consisting of pain modulation procedures; 2) corrective paradigm, involving manual techniques and exercise to correct specific faulty biomechanical alignment(s) eg., pelvic asymmetry); and 3) integrative paradigm, utilizing guided movement/mobilization techniques for improving the subject's overall pattern of posture and movement. The case study of a young adult with chronic low back pain correlated with unilateral innominate bone rotation is presented to illustrate the three-paradigm approach. Over six sessions, the subject received a corrective (sessions 1-3) and an integrative treatment protocol (sessions 4-6) consisting of Rolf's method of soft tissue mobilization and Alexander's system of guided movement-awareness techniques. Before and after each session and after a 4-week follow-up, the subject was assessed for sacroiliac joint pain using a compression technique, anterior rotation of the innominate bones, pelvic angle in the standing position, and vagal tone as determined from heart rate variability. The therapist's visual analysis of sit-to-stand movement and the subject's self-reports of pain were noted. A corrective paradigm protocol of soft tissue mobilization and exercise was unsuccessful in eliminating the subject's assessed anterior rotation of the innominate bone and associated low back pain for more than 1-2 days posttreatment. Only after the implementation of a third paradigm movement/mobilization protocol did the subject begin to exhibit sustained improvement through a 4-week follow-up. Interpretations of the results, appropriate selection of corrective and integrative protocols, and physiological mechanisms are discussed.

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