

PubMed

Display Settings: Abstract



Man Ther. 2007 Aug;12(3):209-18. Epub 2006 Aug 17.

Changes in pelvic floor and diaphragm kinematics and respiratory patterns in subjects with sacroiliac joint pain following a motor learning intervention: a case series.

O'Sullivan PB, Beales DJ.

Author information

Abstract

This study was a case series design. The objectives of the study were to investigate the ability of a motor learning intervention to change aberrant **pelvic floor** and diaphragm kinematics and respiratory patterns observed in subjects with sacroiliac joint pain (SIJP) during the active straight leg raise (ASLR) test. The ASLR test is a valid and reliable tool to assist in the assessment of load transference through the pelvis. Irregular respiratory patterns, decreased diaphragmatic excursion and descent of the **pelvic floor** have been reported in subjects with SIJP during this test. To date the ability to alter these patterns has not been determined. Respiratory patterns, kinematics of the diaphragm and **pelvic floor** during the ASLR test and the ability to consciously elevate the **pelvic floor** in conjunction with changes in pain and disability levels were assessed in nine subjects with a clinical diagnosis of SIJP. Each subject then undertook an individualized motor learning intervention. The initial variables were then reassessed. Results showed that abnormal kinematics of the diaphragm and **pelvic floor** during the ASLR improved following intervention. Respiratory patterns were also influenced in a positive manner. An inability to consciously elevate the **pelvic floor** pre-treatment was reversed. These changes were associated with improvement in pain and disability scores. This study provides preliminary evidence that aberrant motor control strategies in subjects with SIJP during the ASLR can be enhanced with a motor learning intervention. Positive changes in motor control were associated with improvements in pain and disability. Randomized controlled research is required to validate these results.

PMID: 16919496 [PubMed - indexed for MEDLINE]

Publication Types, MeSH Terms

LinkOut - more resources

PubMed Commons

[PubMed Commons home](#)

0 comments

