

Interexaminer reliability of an anterior superior iliac spine compression test used to lateralize pelvic somatic dysfunction to the right side or not.

Kuchera ML, Casella F, Myers NE, Nelson J, Ferencz V.

Human Performance & Biomechanics Laboratory of the Department of Osteopathic Manipulative Medicine and Center for Chronic Disorders of Aging; Philadelphia College of Osteopathic Medicine, Philadelphia, PA, USA.

Abstract

BACKGROUND: Osteopathic physicians use a number of palpatory structural examinations to diagnose pelvic somatic dysfunction (SD). They may elect to use the Anterior Superior Iliac Spine (ASIS) Compression Test to lateralize the dysfunctional side. Accurate, reliable tests are crucial to neuromusculoskeletal diagnosis and this study employs the kappa (κ) analysis protocol recommended for assessing interexaminer reliability of manual medicine tests (published by the Fédération Internationale de Médecine Manuelle [FIMM]). κ -values ≥ 0.40 (moderate agreement) are considered to be acceptable for use in the clinical setting.

METHODS: This is a blinded single cohort inter-reliability study. 330 healthy volunteers were recruited from Philadelphia College of Osteopathic Medicine's student body and evaluated in succession by two DO/MS candidates. There were two phases to the study: an agreement period (standardizing exact performance and reporting criteria) and the testing phase. During the agreement period, examiners agreed to stand on the right side of each subject and to report the right ASIS compression test as "positive" or "negative". During testing each examiner was blinded to the other's diagnoses (reported to an independent recorder). Kappa (κ) values were calculated based on each examiner enrolling 20 subjects by their Compression Tests (10 positive and 10 negative each).

RESULTS: With the 40 designated subjects using the FIMM protocol, an overall $\kappa=0.425$ was obtained for the ASIS Compression test on the right.

CONCLUSIONS: In a healthy, non-back pain population, a right-sided ASIS Compression Test has moderate inter-examiner reliability for lateralization when performed and reported as agreed.