

ABSTRACTS OF CURRENT LITERATURE

Brismee JM, Gipson D, Ivie D, Lopez A, Moore M, Matthijs O, Phelps V, Sawyer S, Sizer P. Interrater reliability of a passive physiological intervertebral motion test in the mid-thoracic spine. *J Manipulative Physiol Ther* 2006;29:368-373.

Objective: To examine the interrater reliability of a passive physiological intervertebral motion (PPIM) test of a mid-thoracic spine motion segment. **Methods:** Nineteen males and 22 females with a mean age of 22.7 years (range, 19-40 years) and no known spinal pathologies were tested independently by 3 certified manual therapy instructors. Investigators performed 3-dimensional segmental mobility testing at a preselected thoracic motion segment. Interrater reliability was assessed with Cohen's κ statistics, using 3 pairwise comparisons for determination of the direction of lateral flexion leading to the greatest amount of segmental rotation. **Results:** Percent agreement ranges were 63.4% to 82.5%, with κ scores ranging from 0.27 to 0.65. **Conclusion:** The PPIM testing demonstrated fair to substantial interrater reliability. A majority of females (91%) demonstrated greatest segmental PPIM motion in contralateral rotation with lateral flexion, whereas a majority of males (90%) demonstrated greatest segmental PPIM motion in ipsilateral rotation with lateral flexion. These findings are applicable to asymptomatic subjects of the same age category. Interrater reliability of 3-dimensional PPIM testing is fair to substantial for assessing passive segmental mobility of the mid-thoracic spine.

Nelson KE, Sergueef N, Glonek T. Recording the rate of the cranial rhythmic impulse. *J Am Osteopath Assoc* 2006 106:337-341.

The rate of the cranial rhythmic impulse can be obtained by both palpation and instrumentation. However, the literature has reported higher rates obtained by instrumentation compared with palpation. The cranial rhythmic impulse has been demonstrated to be syn-

chronous with the Traube-Hering oscillation, measured in blood flow velocity. The current study demonstrates that physicians tend to palpate the cranial rhythmic impulse and Traube-Hering oscillation in a 1:2 ratio. This finding provides an explanation for the difference between palpated and instrumentally recorded rates for the cranial rhythmic impulse.

Degenhardt BF, Kuchera ML. Osteopathic evaluation and manipulative treatment in reducing the morbidity of otitis media: A pilot study. *J Am Osteopath Assoc* 2006 106:327-334.

Objective: To study the effects of osteopathic manipulative treatment in routine pediatric care for children with recurrent acute otitis media. **Study Design:** Pilot cohort study with 1-year post-treatment follow-up. At follow-up, subjects' parents or legal guardians and their referring and/or family physicians were contacted to determine recurrence of otitis media since intervention. **Subjects:** A referred and volunteer sample of pediatric patients ranging in age from 7 months to 35 months with a history of recurrent otitis media (N=8). **Intervention:** For 3 weeks, all subjects received weekly osteopathic structural examinations and osteopathic manipulative treatment. This intervention was performed concurrently with traditional medical management. **Results:** Five (62.5%) subjects had no recurrence of symptoms. Of the three remaining subjects in this cohort, one had a bulging tympanic membrane, another had four episodes of otitis media, and the last underwent surgery after recurrence at 6 weeks post-treatment. Closer analysis of the post-treatment course of the last two subjects indicates that there may have been a clinically significant decrease in morbidity for a period of time after intervention. **Conclusion:** The present study indicates that osteopathic manipulative treatment may change the progression of recurrent otitis media, a finding that supports the need for additional research in this area.
