

Health Insights Today

A SERVICE OF CLEVELAND CHIROPRACTIC COLLEGE

March/April 2010, Volume 3, Issue 2

Chiropractic Research Roundup

When reading reports on new research, it is important to remember that no single study should be seen as providing the whole truth. The following reports offer helpful clues but in most cases further research is needed before firm conclusions can be drawn.

Spinal Manipulation More Effective Than Back School or Physiotherapy for Chronic Low Back Pain at 12-month Follow-up

A randomized trial by researchers at an outpatient rehabilitation department in Italy involving 210 patients with chronic, nonspecific low back pain compared the effects of spinal manipulation, physiotherapy and back school. The participants were 210 patients (140 women and 70 men) with chronic, non-specific low back pain, average age 59. Back school and individual physiotherapy were scheduled as 15 1-hour-sessions for 3 weeks. Back school included group exercise and education/ergonomics. Individual physiotherapy included exercise, passive mobilization and soft-tissue treatment. Spinal manipulation included 4-6 20-minute sessions once-a-week.

Outcome measures were the Roland Morris Disability Questionnaire (scoring 0-24) and Pain Rating Scale (scoring 0-6), assessed at baseline, discharge, and at 3, 6, and 12 months. 205 patients completed the study. At discharge, disability score decreased by 3.7 +/- 4.1 for back school, 4.4 +/- 3.7 for individual physiotherapy, and 6.7 +/- 3.9 for manipulation. The pain score reduction was 0.9 +/- 1.1, 1.1 +/- 1.0, 1.0 +/- 1.1, respectively. At 12 months, disability score reduction was 4.2 +/- 4.8 for back school, 4.0 +/- 5.1 for individual physiotherapy, 5.9 +/- 4.6 for manipulation; pain score reduction was 0.7 +/- 1.2, 0.4 +/- 1.3, and 1.5 +/- 1.1, respectively. Spinal manipulation was associated with higher functional improvement and long-term pain relief than back school or individual physiotherapy, but received more further treatment at follow-ups; pain recurrences and drug intake were also reduced compared to back school or individual physiotherapy.

Cecchi F, Molino-Lova R, Chiti M, et al. Spinal manipulation compared with back school and with individually delivered physiotherapy for the treatment of chronic low back pain: a randomized trial with one-year follow-up. *Clin Rehabil.* Jan 2010;24(1):26-36.

Nonsurgical Approaches to Lumbar Disc Herniation, Radiculopathy Are Beneficial

Researchers followed patients with lumbar radiculopathy secondary to disk herniation treated after a diagnosis-based clinical decision rule. A prospective observational cohort study was conducted at a multidisciplinary, integrated clinic that includes chiropractic and physical therapy health care services. Data on 49 consecutive patients were collected at baseline, at the end of conservative, nonsurgical treatment and a mean of 14.5 months after cessation of treatment. Disability was measured using the Bournemouth Disability Questionnaire (BDQ) and pain using the Numerical Rating Scale for pain. Fear beliefs were measured with the Fear-Avoidance Beliefs Questionnaire (FABQ). Patients also self-rated improvement.

The mean duration of complaint was 60.5 weeks. Mean self-rated improvement at the end of treatment was 77.5%. Improvement was described as "good" or "excellent" in nearly 90% of patients. Mean percentage improvement on the BDQ was 60.4%. Numerical Rating Scale improved 4.1 points and FABQ improved 4.8 points. Clinically meaningful improvements in pain and disability were seen in 79% and 70% of patients, respectively. Mean number of visits was 13.2. After an average long-term follow-up of 14.5 months, mean self-rated improvement was 81.1%.

Health Insights Today

A SERVICE OF CLEVELAND CHIROPRACTIC COLLEGE

March/April 2010, Volume 3, Issue 2

Page 2

“Good” or “excellent” improvement was reported by 80% of patients. Mean percentage improvement in BDQ was 67.4%. Numerical Rating Scale improved 4.2 points and FABQ 4.5 points. Clinically meaningful improvements in pain and disability were seen in 79% and 73% of patients, respectively. The investigators concluded that conservative treatment based on the decision rule yielded favorable outcomes and that improvement appeared to be maintained over the long term.

Murphy DR, Hurwitz EL, McGovern EE. A nonsurgical approach to the management of patients with lumbar radiculopathy secondary to herniated disk: a prospective observational cohort study with follow-up. *J Manipulative Physiol Ther.* Nov-Dec 2009;32(9):723-733.