

## Lumbar Spine Efficacy Studies

1) **“United Kingdom Back Pain Exercise and Manipulation (UK BEAM) Randomised Trial: Effect of Physical Treatments for Back Pain in Primary Care.”** *British Medical Journal*. 2004;329: 1381.

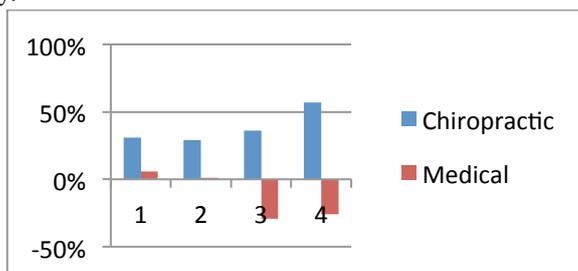
- Compared the effect of adding exercise classes, spinal manipulation or manipulation followed by exercise to ‘best care’ in general practice for 1334 patients consulting with lower back pain (best care included GP management using NSAIDS, analgesics and the Back Book)
- Manipulation and exercise provided the greatest response to care for un-resolving lower back pain and if time and cost are concerned, then manipulation provided a greater net benefit than exercise alone.

2) **“A Practice-Based Study of Patients with Acute and Chronic Low Back Pain Attending Primary Care and Chiropractic Physicians: Two Week to 48 Month Follow-Up.”** Mitchell Haas, Bruce Goldberg, Mikel Aickin, Bonnie Ganger and Michael Attwood. *Journal of Manipulative and Physiological Therapeutics*. 2004; 27: 160- 169.

- Compared treatments using a) prescription drugs, exercise plan, self-care advice and physical therapies or b) Spinal manipulation, physical therapies, exercise and self-care advice.
- The advantage in this large, long-term study was for chiropractic management over medical management for chronic lower back pain patients especially those with pain radiating below the knee. The greatest relief was seen at 3 months and acute patients enjoyed the greatest improvements in reducing moderate lower back pain.

3) **“Patient Characteristics, Practice Activities and One Month Outcomes for Chronic Recurrent Low Back Pain Treated by Chiropractors and Family Medicine Physicians: A Practice Based Feasibility Study.”** Joanne Nyiendo, Mitchell Haas and Peter Goodwin. *Journal of Manipulative and Physiological Therapeutics*. 2000; 23: 239- 245.

- Compared medical management (anti-inflammatories) of chronic lower back pain patients to chiropractic management (spinal manipulation and physical therapy modalities). Comparisons were made on the patients’ pain severity, functional disability, sensory and affective dimensions of pain quality.



- Percentage improvement:
- Patients with chronic recurrent lower back pain do better with Chiropractic manipulation than NSAIDS and as such were more satisfied patients.

4) **“A Randomised Trial Comparing Muscle Relaxants for Sub-Acute Low Back Pain.”** Kathryn T. Hoiriis, Bruce Pflieger, Frederic C. Mc Duffie et al. *Journal of Manipulative and Physiological Therapeutics*. 2004;27:388-398.

- This study compared three groups with different interventions applied over a two week period. Interventions included 1) Chiropractic Adjustments and Placebo Medicine, 2) muscle relaxants and sham adjustments and 3) placebo medicine and sham adjustments.
- This study concluded that Chiropractic Adjustments were more beneficial than placebo in reducing pain and more beneficial than placebo and muscle relaxants in reducing Global Impression of Severity Scale (GIS).

5) **“Efficacy for Preventive Spinal Manipulation for Chronic Lower Back Pain and Related Disabilities: A preliminary Study’.** Martin Descarreaux, Jean-Sebastian Blouin, Marc Drolet, Stanislis Papadimitriou and Norman Teasdale. *Journal of Manipulative and Physiological Therapeutics*. 2004;27:509-514.

- The majority of patients do not require preventative care. A strict treat and release therapeutic approach should be adhered to once the patient is better. The exceptions are those with permanent disabilities, severe injuries and chronic conditions. This study provides limited reference to utilise and support the need for continued care, through evidence based research.
- This study used two groups consisting of patients with chronic non-specific lower back pain. One group received follow-up treatment for 9 months after a 1 month intensive treatment period and the other group did not.
- Pain and disability were measured and the results showed that although the pain scores were maintained for both groups, the group that received maintenance care maintained their improved disability scores and the other group returned to their pre-treatment scores.

6)

## **SYMPTOMATIC MAGNETIC RESONANCE IMAGING—CONFIRMED LUMBAR DISK HERNIATION PATIENTS: A COMPARATIVE EFFECTIVENESS PROSPECTIVE OBSERVATIONAL STUDY OF 2 AGE- AND SEX-MATCHED COHORTS TREATED WITH EITHER HIGH-VELOCITY, LOW-AMPLITUDE SPINAL MANIPULATIVE THERAPY OR IMAGING-GUIDED LUMBAR NERVE ROOT INJECTIONS**

Cynthia K. Peterson, DC, MMed, Ed,<sup>a</sup> Serafin Leemann, DC,<sup>b</sup> Marco Lechmann, BMed,<sup>c</sup> Christian W.A. Pfirrmann, MD, MBA,<sup>d</sup> Juerg Hodler, MD, MBA,<sup>e</sup> and B. Kim Humphreys, DC, PhD<sup>f</sup>

JMPT, 2013. “A systematic review of the literature done the next year concluded that spinal manipulation is a very safe and cost effective option to treat lumbar disc herniation”. Both the treatment groups had significant decreases in their NRS scores

at 1 month with a 60% reduction for the Spinal Manipulative Therapy cohort and a 53% reduction for the nerve root injection group”.

7)

Eur Spine J (2006) 15: 1070–1082  
DOI 10.1007/s00586-005-0021-8

ORIGINAL ARTICLE

Maruti Ram Gudavalli  
Jerrilyn A. Cambron  
Marion McGregor  
James Jedlicka  
Michael Keenum  
Alexander J. Ghanayem  
Avinash G. Patwardhan

## A randomized clinical trial and subgroup analysis to compare flexion–distraction with active exercise for chronic low back pain

“...subjects randomly allocated to the flexion-distraction group had significantly greater relief from pain than those allocated to the exercise program”.

“.. a greater decrease in VAS among patients with radiculopathy should be expected for the flexion-distraction group where changes in disc pressure may be most important.”

8)

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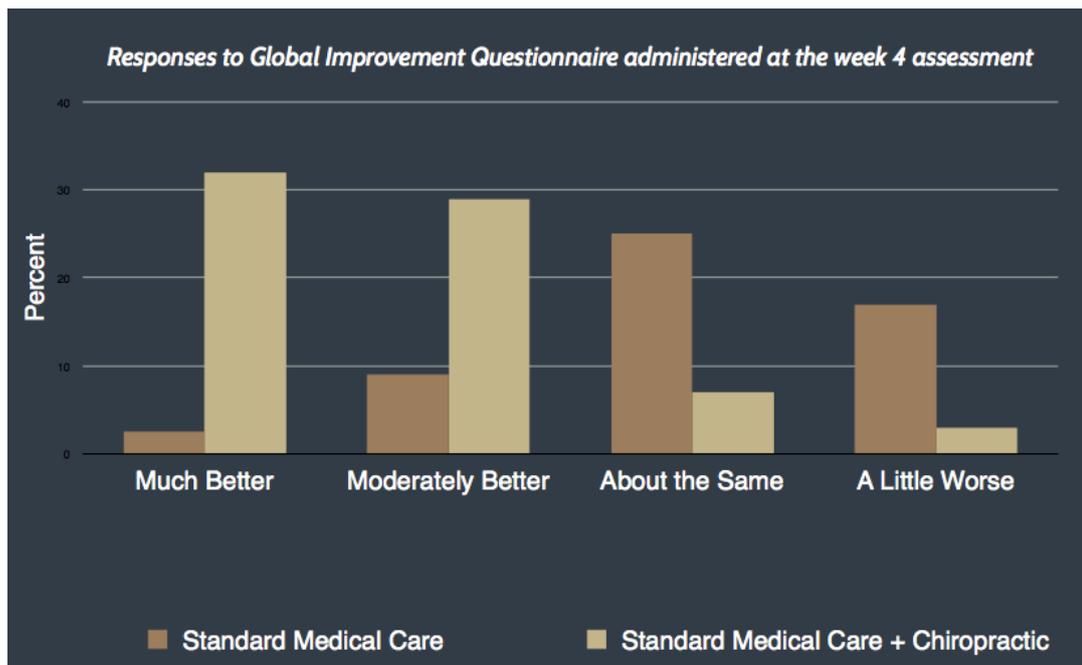
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RANDOMIZED TRIAL

## Adding Chiropractic Manipulative Therapy to Standard Medical Care for Patients With Acute Low Back Pain

*Results of a Pragmatic Randomized Comparative Effectiveness Study*

Christine M. Goertz, DC, PhD,\* Cynthia R. Long, PhD,\* Maria A. Hondras, DC, MPH,\* Richard Petri, MD,† Roxana Delgado, MS,‡ Dana J. Lawrence, DC, MMedEd, MA,§ Edward F. Owens, Jr, MS, DC,¶ and William C. Meeker, DC, MPH||



“There was a statistically and clinically significant benefit to those patients receiving chiropractic manipulative treatment”.

“73% of participants in the SMC plus CMT group rated their global improvements as pain completely gone, much better, or moderately better, compared with 17% in the SMC group”.

9)



The Spine Journal 10 (2010) 1055–1064



2010 Outstanding Paper: Medical and Interventional Science

**The Chiropractic Hospital-based Interventions Research Outcomes (CHIRO) Study: a randomized controlled trial on the effectiveness of clinical practice guidelines in the medical and chiropractic management of patients with acute mechanical low back pain**

Paul B. Bishop, DC, MD, PhD<sup>a,b,\*</sup>, Jeffrey A. Quon, DC, PhD, FCCSC<sup>c</sup>, Charles G. Fisher, MD, MHSc, FRCSC<sup>a,b</sup>, Marcel F.S. Dvorak, MD, FRCSC<sup>a,b</sup>

<sup>a</sup>International Collaboration on Repair Discoveries (ICORD), 6110-818 West 10th Ave., University of British Columbia, Vancouver, British Columbia, Canada V5Z 1M9

<sup>b</sup>Combined Neurosurgical and Orthopaedic Spine Program, Division of Spine, Department of Orthopaedics, Vancouver Hospital and Health Sciences Centre, University of British Columbia, Vancouver, British Columbia, Canada V5Z 1M9

<sup>c</sup>School of Population and Public Health, Faculty of Medicine, University of British Columbia, Vancouver, British Columbia, Canada V6T 1Z3

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Usual Care	Evidence Based Care
Physical Therapy	Chiropractic Manipulation
Narcotic Analgesics	Exercise
NSAID's	NSAID's
Reassurance	Reassurance

“the evidence-based care group demonstrated significantly greater improvements in reported function through six months follow up”.

“The results of this study demonstrated that the equivalent groups of patients with Acute low back pain of less than 4 weeks duration, carefully controlled and comprehensive clinical practice guideline based care was associated with greater improvement...”

This study follows two previous studies conducted by our group that demonstrated that treatments commonly recommended by primary care physicians are often highly guideline discordant, and other studies have demonstrated that PCP's are highly resistant to changing their patterns of practice for managing patients...”

10)

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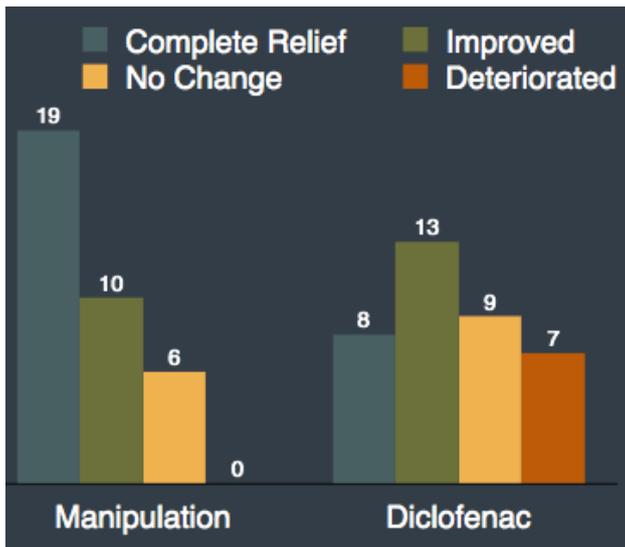
SPINE Volume 38, Number 7, pp 540-548  
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RANDOMIZED TRIAL

## Spinal High-Velocity Low Amplitude Manipulation in Acute Nonspecific Low Back Pain

*A Double-Blinded Randomized Controlled Trial in Comparison With Diclofenac and Placebo*

Wolfgang J. von Heymann, Dr. Med,\* Patrick Schloemer, Dipl. Math,† Juergen Timm, Dr. RER, NAT, PhD,† and Bernd Muehlbauer, Dr. Med\*



“This is the first time that spinal manipulation was investigated in a double-blinded randomised controlled design showing clear superiority compared with placebo and NSAID”.

“HVLA manipulation can be recommended for the therapy of acute non-specific LBP”.

“Final evaluation showed manipulation being significantly better than NSAID and clinically superior to placebo”.

11)



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RANDOMIZED TRIAL

## Does Maintained Spinal Manipulation Therapy for Chronic Nonspecific Low Back Pain Result in Better Long-Term Outcome?

Mohammed K. Senna, MD, and Shereen A. Machaly, MD

“Non specific LBP represents about 85% of LBP patients seen in primary care. About 10% will go on to develop chronic disabling LBP”.

“This study confirms previous reports showing that spinal manipulation is an effective modality in chronic non-specific LBP especially for short term effects.”

“...as patients did benefit from the maintenance treatments, we believe that periodic patient visits permit proper evaluation, detection and early treatment of an emerging problem, thus preventing future episodes of LBP”.