



The Evidence Based
CHIROPRACTOR

10 Essential Chiropractic Research Articles

■ **Safety of Chiropractic Manipulation of the
Cervical Spine**

A Prospective National Survey

Haymo W. Thiel, DC, PhD,* Jennifer E. Bolton, PhD,* Sharon Docherty, PhD,*
and Jane C. Portlock, PhD†

19,722 Patients
Over 50,000 Adjustments
0 Serious Adverse Events

■ **Risk of Vertebrobasilar Stroke and Chiropractic Care**
Results of a Population-Based Case-Control and Case-Crossover Study

J. David Cassidy, DC, PhD, DrMedSc,*†‡ Eleanor Boyle, PhD,* Pierre Côté, DC, PhD,*†‡§
Yaohua He, MD, PhD,* Sheilah Hogg-Johnson, PhD,†§ Frank L. Silver, MD, FRCPC,¶||
and Susan J. Bondy, PhD†

9 Year Study

“We found no evidence of excess risk of VBA stroke associated chiropractic care to primary care.”

**IMMEDIATE CHANGES IN NECK PAIN INTENSITY
AND WIDESPREAD PRESSURE PAIN SENSITIVITY IN
PATIENTS WITH BILATERAL CHRONIC
MECHANICAL NECK PAIN: A RANDOMIZED
CONTROLLED TRIAL OF THORACIC THRUST
MANIPULATION VS NON-THRUST MOBILIZATION**



Jaime Salom-Moreno, PT, PhD,^a Ricardo Ortega-Santiago, PT, PhD,^a Joshua Aland Cleland, PT, PhD,^b
Maria Palacios-Ceña, PT,^c Sebastian Truyols-Domínguez, PT, PhD,^d and César Fernández-de-las-Peñas, PT, PhD^a

“...individuals who received thoracic thrust manipulation experienced significantly greater reductions in neck pain as measured by the Numerical Pain Rating Scale at the 1-week follow up.”

“...the most likely hypotheses for spinal thrust manipulation to act through the stimulation of descending inhibitory mechanisms...”

**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,^a Serafin Leemann, DC,^b Marco Lechmann, BMed,^c
Christian W.A. Pfirmann, MD, MBA,^d Juerg Hodler, MD, MBA,^e and B. Kim Humphreys, DC, PhD^f

“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 of 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.”

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.”

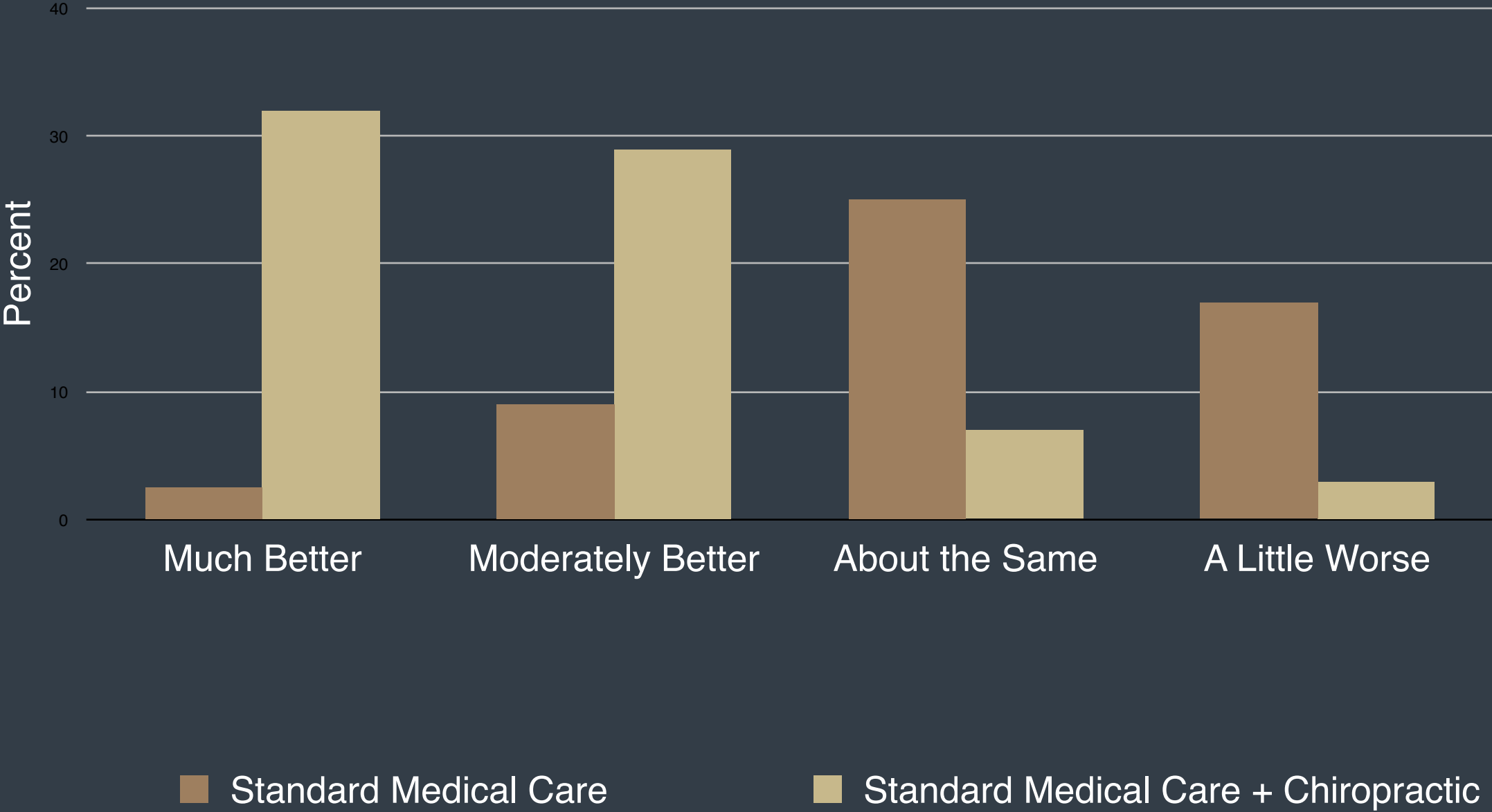
RANDOMIZED TRIAL

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||

Responses to Global Improvement Questionnaire administered at the week 4 assessment



“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 improvement as pain completely gone, much better, or moderately better, compared with 17% in the SMC group.”



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^{a,b,*}, Jeffrey A. Quon, DC, PhD, FCCSC^c,
Charles G. Fisher, MD, MHSc, FRCSC^{a,b}, Marcel F.S. Dvorak, MD, FRCSC^{a,b}

^aInternational Collaboration on Repair Discoveries (ICORD), 6110-818 West 10th Ave., University of British Columbia, Vancouver, British Columbia, Canada V5Z 1M9

^bCombined 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

^cSchool of Population and Public Health, Faculty of Medicine, University of British Columbia, Vancouver, British Columbia, Canada V6T 1Z3

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2010 Outstanding Paper: Medical and
Interventional Science

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 6 months follow up.”

“The results of this study demonstrated that in 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...”

“highly guideline
discordant”

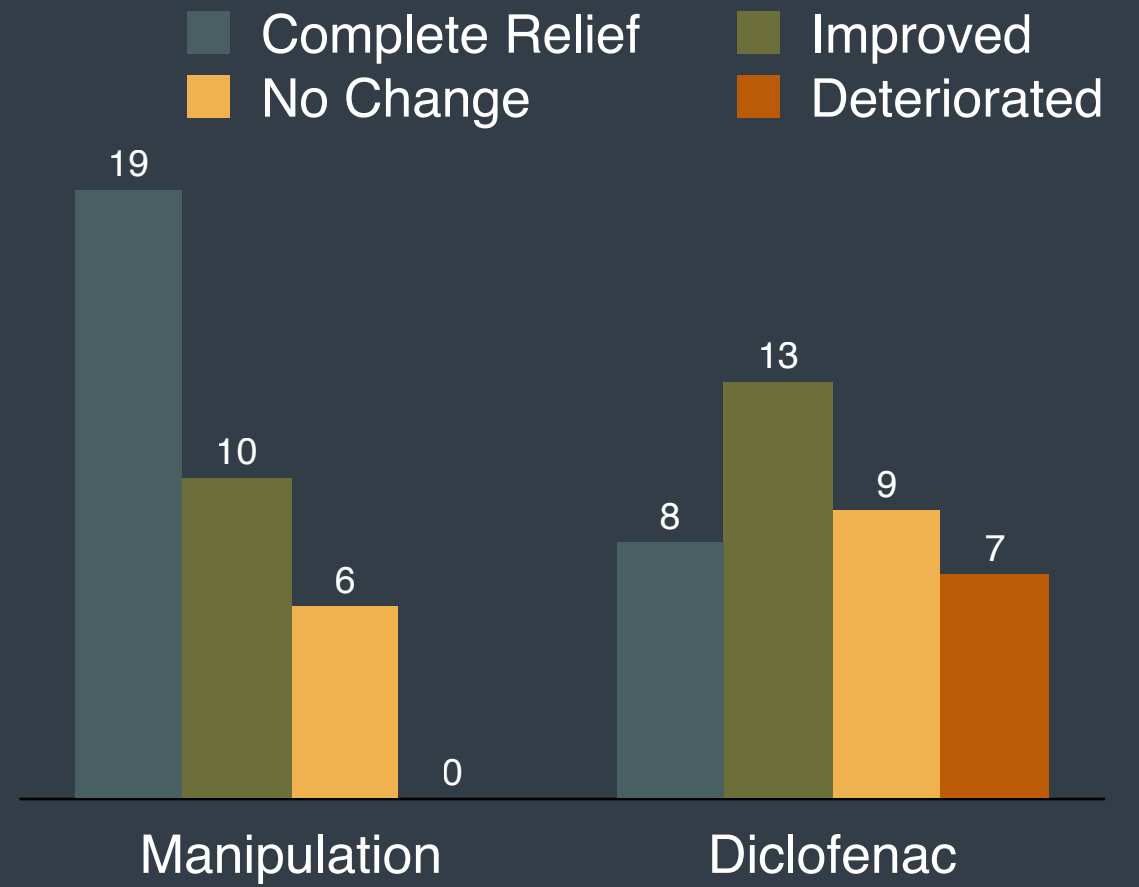
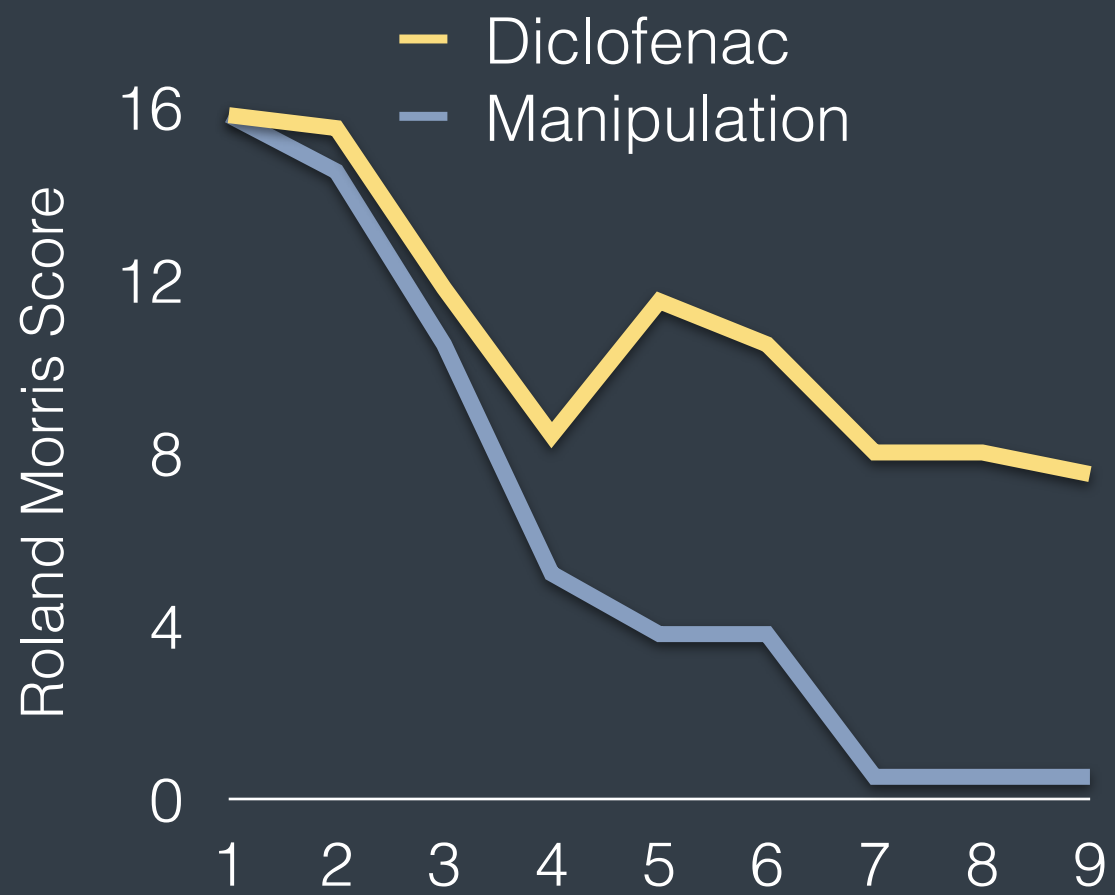
“highly resistant to
change”

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 randomized controlled design showing clear superiority compared with placebo and NSAID.”

“HVLA manipulation can be recommended for the therapy of acute nonspecific LBP.”

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

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

“Nonspecific 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 the SM is an effective modality in chronic nonspecific 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.”

Referral patterns and attitudes of Primary Care Physicians towards chiropractors

Barry R Greene*¹, Monica Smith², Veerasathpurush Allareddy¹ and Mitchell Haas³

Address: ¹Department of Health Management and Policy, College of Public Health, The University of Iowa, Iowa City, Iowa, USA, ²Palmer Center for Chiropractic Research, Davenport, Iowa, USA and ³Western States Chiropractic College, Portland, Oregon, USA

Email: Barry R Greene* - barry-greene@uiowa.edu; Monica Smith - monica.smith@palmer.edu; Veerasathpurush Allareddy - vallared@mail.public-health.uiowa.edu; Mitchell Haas - mhaas@wschiro.edu

* Corresponding author

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85%

reported patients inquired about
chiropractic

75%

patients request a chiropractic referral

25%

PCP referred to a chiropractor

11%

PCP initiates formal referral to
chiropractor

4 Key Attributes of Collaborative Care

Communication

Defined Scope of Practice

Service Delivery

Patient-Centered Care