

# Dr. Chestnut's Research Review

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March 2017

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## *Landmark Study at Combined Neurosurgical and Orthopedic Spine Center Shows Chiropractic Care Significantly Better than Drugs, Massage, and Physiotherapy*

**Bishop et al. (2010) The Chiropractic Hospital-based Interventions Research Outcomes 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. The Spine Journal (10): 1055-1064**

### **QUOTE BOARD:**

"This is the first reported randomized controlled trial comparing full clinical practice guideline-based treatment, including spinal manipulative therapy administered by chiropractors, to family physician-directed usual care in the treatment of patients with acute mechanical low back pain."

### **Conclusion:**

"Compared to family physician-directed usual care [prescription drugs from physicians, referral to physiotherapist and/or kinesiologist and/or massage therapist], full clinical practice guideline-based treatment including chiropractic spinal manipulative therapy is associated with significantly greater improvement in condition-specific functioning."

## **Dr. Chestnut's Scientific and Clinical Insights:**

### **Study Methodology/Description**

This was a prospective randomized controlled trial, a very high quality study design. There were however some issues with design that I feel are significant in that the results could have been even stronger in favor of chiropractic.

There was no placebo group for either arm of the study but this does not detract from the power of the study to validly compare the two intervention groups (clinical guidelines based care that includes chiropractic vs physician directed usual care (drugs, physiotherapy, kinesiology, massage therapy).

The clinical guidelines-based group received advice to go for a walk between 5 and 15 minutes (no data was reported on compliance), acetaminophen every 6-8 hours as required for 2-4 weeks (no data on compliance or total usage was provided), and a maximum 4 weeks of chiropractic lumbar adjustments/manipulations at a frequency of 2-3 times per week (no data on actual delivered frequency or duration of care was provided).

The physician-directed usual care group received care decided upon by the attending family physician; the physicians were given no direction other than to treat at their own discretion.

A major weakness of this study is that they did not provide data on actual care provided in the clinical based guidelines group and the parameters were quite loose. Why they chose to allow physicians to provide care or referred care for up to 16 weeks and only allow the clinical based guidelines group to provide care for 4 weeks I will NEVER UNDERSTAND. Why not provide care until symptoms resolved or function restored or until maximum therapeutic benefit etc.? Nor will I EVER UNDERSTAND why they did not choose to have a chiropractic only group. Why muddy the waters by combining unknown amounts of acetaminophen for 2-4 weeks with chiropractic care?

## Dr. Chestnut's Scientific and Clinical Insights:

### Study Results

"The primary outcome of interest involved the mean change in Roland Morris Disability Questionnaire (RDQ) score between groups at 16 weeks. As shown in table 4, condition specific improvement clearly favored the SC group [clinical based guideline group with Chiropractic care], with mean RDQ improvement scores of 2.7 in the SC group compared with only 0.1 in the UC group [usual physician directed care group]"

That is a 2700% greater improvement at 16 weeks for the group that received maximum 4 weeks of care including a maximum of 4 weeks of chiropractic care at 2-3 times per week compared to A FULL 16 WEEKS of opioids, NSAIDS, physiotherapy, massage therapy or care from a kinesiologist (78% of the UC group were still taking opioids at 16 weeks!!!). This is the MOST ASTONISHING DATA in the history of back pain research!!!

The evidence-based care group (Chiropractic Group) demonstrated significantly greater improvements in reported function through 6 months follow up. There were high rates of opioid use (80%) and passive modalities (60%) employed in the family physician "usual care" group, but much less aerobic exercise [8%] or spinal manipulation [6%].

### Conclusion

"The results of this study are conclusive: the chiropractic care group had significantly better results. And, since the chiropractic care group used no opioids, used significantly less drugs of any kind, and received 12 weeks fewer care, these significantly better results were achieved with less frequency and duration of care, less side-effects, and less expense!

The clinical importance is that the entire basis upon which education, practice guidelines, insurance coverage, and professional consensus (where it exists) have been based upon with respect to care recommendations is scientifically invalid and likely harmful to both patients and practitioners.

### Clinical Importance

16 weeks of usual physician directed care resulted in virtually NO IMPROVEMENT whereas 4 weeks of chiropractic care and advice to go for a walk (no data to prove they even did walk) and advice to take acetaminophen for up to 4 weeks if they needed it (no data to show if they took any or how much they took if they did) showed significant improvement. Remember, the physician directed care included acetaminophen/NSAIDS, and/or opioids and they got NO improvement so it can't be concluded that any of the improvements in the chiropractic group were from the addition of acetaminophen.

### Dr. Chestnut's MAIN CLINICAL GEM

This study shows two main things. One, that physician-directed usual care does not qualify as evidence-based and two, that it is highly ineffective. In fact, **16 weeks** of usual care from physicians that includes unlimited drugs, referral for physiotherapy, referral for massage therapy, or referral for care from a kinesiologist is 2700% less effective than **4 weeks** of evidence-based care that includes chiropractic and advice to go for a walk. The NSAIDS or acetaminophen cannot logically be viewed as a contributing factor to this increased benefit because both groups had advice to take NSAIDS or acetaminophen. In fact, the physician-directed usual care group had access to NSAIDS or acetaminophen for the entire 16 weeks and the chiropractic group for only 2-4 weeks.

### Dr. Chestnut's Commentary

This study has enormous implications for clinical practice. First, this study completely contradicts the new American College of Physicians guidelines which, importantly, completely ignore current evidence-based guidelines and fail to make any reference to this study or many others that support it. The truth is that current clinical practice guidelines make it clear that chiropractic has stronger evidence than any other intervention option and is, by far, the single most evidence-based, most effective, and most cost-effective non-drug option for patients with neurobiomechanical and/or neuromuscular spinal health issues.

As the authors of this study point out, "Current clinical practice guidelines (CPGs) for the treatment of acute low back pain (AM-LBP) have been derived from independent systematic reviews carried out on an international scale. Their recommendations have been shown to be highly consistent and based on sound scientific evidence rather than on consensus [unlike the new ACP guidelines!]. The knowledge translation of these guidelines to primary health-care providers has, to date, been unimpressive. Multiple studies have demonstrated a poor correlation between what primary health-care providers think is an effective treatment and what has actually been shown to be an effective treatment." "Study care patients were also advised to avoid guideline-discordant treatments, including muscle relaxant and opioid-class medications, passive physiotherapy modalities, bed rest, and "special" back exercise programs (e.g., "core stability" or extension exercises)."

In other words, medical doctors, and sadly many chiropractors, have no clue what represents evidence-based care that has been shown to be effective and most recommend care that has clearly been shown to be ineffective. No wonder! Look at what is taught at chiropractic colleges! How many of you actually use evidence-based intervention protocols? PLEASE, check out one of our evidence-based patient outcome protocols seminars!! We have made it easy, we have created evidence-based protocols that get the best possible patient outcomes and build the best possible practices. Yes, you can build the practice of your dreams by being evidence-based!

Look what the ACP guidelines that just came out contain in terms of doctor education - complete unscientific, biased, ignorant misinformation. They are panicking because the data is clear, they are USELESS, their drugs are USELESS and HARMFUL, the physiotherapy they refer patients to is USELESS, NONE OF IT is evidence-based and chiropractic is, by far, the most evidence-based option. The opioid crisis is forcing them to recommend non-drug interventions but they just can't admit that chiropractic is the most evidence-based and represents best practices. It is criminal. I will be exposing the bias and lack of validity of the new ACP guidelines in a white paper soon and will post it on facebook.

"As is shown in Fig 2, none of the UC patients received treatment with a guideline-concordant score greater than 4 of 7, whereas 77% had a score of 2 of 7 or less. By definition, all patients in the SC group received treatment with a guideline concordant score of 7 of 7." At the primary follow-up point of 16 weeks, 78% of patients in the UC group were still taking narcotic analgesic medications on either a daily or as needed basis. Only 6% of patients in the UC group had received chiropractic spinal manipulative therapy."

Yes, you read that correctly, 77% of patients treated at the direction of a physician had an evidence-based care congruency or guideline-concordant score of 2 out of 7. Only 6% of patients treated by physicians were referred to a chiropractor (the most evidence-based option) and 78% of patients treated by physicians were still taking opioids at the end of the study period! Further, 61% of patients were referred for guideline discordant, proven ineffective passive physiotherapy. So, what this study clearly exposed is that the MDs won't refer for chiropractic but they will refer for physiotherapy that has shown to be ineffective and addictive narcotics that have shown to be both ineffective and dangerous.

This study also showed that, due to this unscientific bias, physician-directed care was 2700% less effective than chiropractic care. Incredulous!

This is not a stand-alone study by any means. Another study that was mysteriously missing from the new ACP guidelines was that conducted by Cifuentes et al. in 2011 which I will review next month. Here are a couple of quotes from that article: "Those cases treated by chiropractors had less use of opioids and fewer surgeries." "In addition, people who were mostly treated by chiropractors had, on average, less expensive medical services and shorter initial periods of disability than cases treated by physiotherapists and medical physicians."