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# March 2018 Newsletter

Chronic Low Back Pain Studies: Manipulation and PulStar more effective than exercise and other physical therapy

     A major study published this month in *Spine* indicates spinal manipulation as used by chiropractors is more effective than mobilization for back disability, and that both are more effective than exercise and other types of physical therapy for the treatment of chronic low back pain.
     Another study Published in the *Journal of Novel Physiotherapies* confirmed our earlier preliminary findings that PulStar multiple impulse therapy is effective for chronic back and leg pain and disability.

Scientists reviewed and pooled data from 9 randomized trials--1,176 patients--who received either spinal manipulation, mobilization (i.e., a form of manipulation type thrusts that do not result in popping sounds or joint release), exercise, or physical therapy. The patients who had the traditional chiropractic-type spinal manipulation fared best in the study that appears in the current issue of Spine Journal.

        The study found a reduction in both chronic low back pain and disability in patients who received spinal manipulation instead of exercise or other physical therapy. In addition, patients who received mobilization saw reduction in chronic low back pain but not disability, compared with exercise and other physical therapy.

**With traditional chiropractic adjustment (spinal manipulation), patients report hearing popping and feeling a release. However, with PulStar computer assisted multiple impulse therapy, as shown above, patients reported improvement without the sound.**

*PulStar Multiple Impulse Therapy Effective for Chronic Low Back and Leg Pain*

We were honored to find that physical therapy scientists at the Medical University of Lodz in Poland had followed up on our preliminary investigations regarding the computer assisted PulStar device that we first reported over a decade ago. Writing in the November 2017 issue of the Journal of Novel Physiotherapies (an open access online journal) the physical therapy and medical scientists reported findings from a randomized clinical trial on 193 adults with chronic low back and leg pain.

     In their study, PulStar type mobilization (or multiple impulse therapy, MIT [used here at Leach Chiropractic]) was more effective than Saunders Traction in terms of both faster recovery and lower activities of daily living disability reported at 1, 3 and 6 months post therapy.

          A profound finding of the study, by Mariusz Pingot and co-workers, was that patients with chronic back and leg pain randomized to PulStar had disability reduced from about 50% to about 21% after just 5 procedures, whereas patients receiving Saunders traction took about 15 procedures to attain close to the same relief. Equally profound, improvement in chronic back and leg pain and disability was maintained even 5 months after the therapy was completed:

<https://www.omicsonline.org/open-access/multiple-impulse-therapy-and-saunders-lumbar-traction-methods-in-thetreatment-of-low-back-pain-a-randomized-controlled-trial-2165-7025-1000374.pdf>

Further Reading:

*Our original trial of PulStar reliability was conducted with a scientist at the Mississippi State University Ergonomics and Design Laboratory with Patrick Parker, MS, and I assisted the inventor and developer of PulStar, bioengineer Joseph Evans, Ph.D., and others with additional studies as well.*
1. My first report on use of PulStar in my office treating infants with colic appeared in 2002:
<https://www.ncbi.nlm.nih.gov/pubmed/11898019>

2. In 2002 I and others were honored to serve as co-authors in an original hypothesis proposed by Dr Evans:
<https://www.ncbi.nlm.nih.gov/pubmed/?term=minimum+energy+hypothesis+chiropractic>

3. Dr Paul Veal (Columbus, MS) and Patrick Parker, MS (MSU) were my co-authors in a study of the reliability of PulStar that appeared in 2003:
<https://www.ncbi.nlm.nih.gov/pubmed/14569215>

4. By 2016 Haladaj and Topol wrote in Ortop Traumatol Rehabil journal findings after 117 LBP patients were treated during 5 sessions with PulStar over a 2-week period, reporting reductions in pain [from VAS 6.04 pre to 3.38/10 post] that correlated significantly with reductions in PulStar detected spinal compliance [from 11.11 lb/F pre to 8.89 lb/F post] and surface electromyographic measures of muscle spasm [from 9.29 mV pre to 7.51 mV post]:
<https://www.ncbi.nlm.nih.gov/pubmed/28155833>

5. PulStar was recently first tested in an animal model by Reed and co-workers last year, who determined that muscle spindles were more profoundly influenced by PulStar MIT when compared with the older Activator mechanical force instrument:
<https://www.ncbi.nlm.nih.gov/pubmed/28633885>

If you are viewing a paper or hotmail copy of this newsletter, you may view the references associated with the hyperlinks by accessing our newsletters at [*www.drleach.com*](http://www.drleach.com) clicking on NEWSLETTERS, and then: *2018: Chronic Low Back Pain Studies: Manipulation and PulStar more effective than exercise and other physical therapy.*

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