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**Reference:** Licciardone, J. C., Gatchel, R. J., & Aryal, S. (2016). Recovery from Chronic Low Back Pain After Osteopathic Manipulative Treatment: A Randomized Controlled Trial. *The Journal of the American Osteopathic Association*, 116(3), 144.

**Introduction:** Low back pain is one of the largest reasons for disability in the United States, one of the greatest utilizers of our health care services, is responsible for an estimated 149 million missed work days each year, and is also one of the most common chief complaints seen in the emergency department. Whether acute or chronic, emergency physicians are asked to manage this condition on a daily basis, if not multiple times per shift. To complicate matters, it is usually very difficult to achieve adequate pain relief for complex reasons. Then add to it the current opioid abuse epidemic and the need to limit these drugs. Physicians need as many alternative options to treat this type of pain as possible. This article discusses a trial that assesses recovery after spinal manipulation using osteopathic manipulative treatment (OMT) in patients with low back pain.

**Methods:** This was a randomized double-blinded, sham-controlled trial. The treatment regimen was 6 OMT sessions over an 8-week period. Patients were randomly selected by computer to be part of real OMT procedures or sham OMT. Patients and members of the research staff were blinded to the treatment assignments. Each treatment session was 15 minutes long and performed by OMT trained providers. Outcomes were assessed at week 12 and were determined by two specific scoring systems. These were the 100-mm visual analog scale and the Roland-Morris Disability Questionnaire for back-specific functioning. The researchers calculated the risk ratio, numbers needed to treat, odds ratio, and confidence intervals using established techniques. Sensitivity analyses were then performed to determine the appropriate number of patients to exclude from the study due to meeting recovery criteria before going through any treatment.

**Results:** Of the original 1,161 patients assessed for eligibility, 433 ended up being included in the study. 51% were assigned to the OMT group and 49% to the sham OMT group. A total of 79% attended all six of the treatment sessions and the 12 week visit and were similar in each group. Even after adjustment for potential confounders, there was a large treatment effect for recovery with OMT with a clinically significant number needed to treat of 8.9. During the multivariate analyses, the researchers considered prescription and non-prescription drug use, age groups, intensity of the back pain, and found that there was an inverse relationship between intensity and recovery, and that medications did not make a difference. They also found that patients without comorbid depression had a better chance of recovering from their chronic low back pain with OMT methods.

**Limitations:** Potential limitations include how recovery is measured through the use of cumulative distribution functions. The trial was planned years before these analytical methods were developed. In addition, all intensities of back pain were initially included in the randomization and as a result, 110 patients ended up being excluded. Despite these however, the efficacy of OMT was still shown to be beneficial. Also, this study did not consider long-term outcomes past 12 weeks, which could lead to different results.

**Discussion/Conclusions:** This study showed that even 6 OMT sessions over an 8 week period provides significantly better outcomes than other commonly tried approaches. Since the increase in MRI, spinal injections, and spinal surgery have not improved patient outcomes or disability rates over the past 2 decades, it is both reasonable and advised to at least give a trial of OMT before using more invasive and costly options.

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