

## **Craniosacral Therapy Benefits People with Chronic Neck Pain**

By Jerrilyn Cambron, DC, PhD

Approximately 30 percent of the population will experience neck pain in any given year. Half of these cases will resolve quickly with or without treatment. However, the other 50 percent will continue experiencing pain or will have recurrent symptoms. Common scientifically based treatments for neck pain include epidural corticosteroid injections, exercise, facet joint radiofrequency denervation, muscle relaxants, and surgery. Even though these treatments may be beneficial, many also involve potentially serious side effects. Fortunately, new research focuses on less invasive treatments such as craniosacral therapy.

### **CRANIOSACRAL VS. SHAM**

In a recent clinical trial, 54 chronic neck-pain subjects were randomized to receive eight weekly treatments of either craniosacral therapy or light-touch sham (placebo) treatments and were followed for three months.<sup>2</sup> Subjects were recruited through specialist and primary care offices and public advertisements. Subjects were included if they were 18–65 years old, had chronic nonspecific neck pain for two months or more with at least moderate pain intensity (45 out of 100 mm on a visual analog scale), and were not familiar with craniosacral therapy. Subjects were excluded if they had neck pain due to degenerative diseases (disc prolapse, scoliosis), inflammatory diseases (arthritis, spondylitis), neoplasms of the spine, neurological diseases (multiple sclerosis, neuropathy), or physical trauma (operation at the cervical spine, whiplash). Subjects with severe comorbid somatic and psychiatric disorders were also excluded, along with subjects taking prescription pain medications or receiving invasive or manipulative treatment. Eligible subjects were randomly assigned to either an active treatment or a placebo control group and were not informed of group assignment. Researchers who assessed subject outcomes and analyzed the data were also blind to each subject's treatment group in order to reduce bias. All subjects attended eight weekly sessions lasting 45 minutes each. During each visit, subjects in both groups received an initial craniosacral examination by one of four licensed physiotherapists. These clinicians all had advanced craniosacral qualifications and an average of six years of clinical practice. The craniosacral (active) treatment group included 27 subjects and the treatment used light touch on the head and back in order to "release restrictions of the cranium and spine down to the pelvis and sacrum using standardized application of gentle fascial traction, release, and unwinding techniques in accordance with the respective palpated restrictions." The sham treatment included 27 subjects and the procedure used light touch to standardized anatomic areas, which differed from the active treatment areas. The depth of touch in the sham protocol was equal to that in the craniosacral treatment. The main outcome measure used to assess change in neck pain was the visual analog scale, which asked about pain over the past week on a 0–100 scale, with 100 being the worst amount of pain. Secondary outcome measures included anxiety, body awareness, depression, functional disability, health-related quality of life, pain acceptance, pain on movement, pressure pain sensitivity, safety, stress perception, the patient's global impression of improvement, and wellbeing.

## THE RESULTS

The results demonstrated the group receiving craniosacral therapy had a significantly greater decrease in pain compared to the sham group at week 8 and at week 20. The craniosacral group changed from an average pain score of 64 (out of 100) at baseline to a score of 32 at week 8 and 32 at week 20. In comparison, the sham group changed from an average pain score of 64 at baseline to 54 at week 8 and 49 at week 20. The difference between the groups at week 8 was 21 points, favoring craniosacral treatment. At week 20, the group difference was 17 points, again favoring craniosacral treatment. Viewed in a different manner, at week 8, 74 percent of those treated with craniosacral therapy showed at least a minimal clinically important difference in pain intensity (at least 20 percent pain reduction), whereas only 41 percent of the sham patients experienced this. In terms of substantial clinical improvement (at least 50 percent pain reduction) at week 8, the craniosacral group demonstrated improvement in 44 percent of the subjects, whereas only 15 percent of the subjects in the sham group demonstrated improvement. At week 20, the craniosacral group reached 78 percent with minimal clinically important difference and 48 percent with substantial clinical improvement. There were no adverse events during this clinical trial. Compared to the sham group, the group receiving craniosacral treatment also had significant changes at weeks 8 and 20 in terms of functional disability, pain on movement, physical quality of life, and the patient's global impression of improvement. Body awareness and pressure pain sensitivity were significantly improved only at week 8, and anxiety was significantly improved only at week 20. As with any clinical trial, there are study limitations. First, we do not know if the treatments rendered by the clinicians are similar to treatments by craniosacral therapists in the field, especially because clinicians have different levels of skill and because this form of care is so individualized to the patient. Second, the neck pain was nonspecific, without an actual diagnosis, so we cannot truly define what type of neck pain responds best to this form of care. Finally, a longer follow-up would be beneficial to determine the continued effects of this treatment on neck pain over time. Overall, this study demonstrates craniosacral treatment may be beneficial for people with neck pain. Be sure to work with your clients and other members of their health-care team to determine what treatment is right for them.

Notes 1. Steven P. Cohen, "Epidemiology, Diagnosis, and Treatment of Neck Pain," *Mayo Clinic Proceedings* 90, no. 2 (February 2015): 284–99, doi:10.1016/j.mayocp.2014.09.008. 2. H. Haller et al., "Craniosacral Therapy for the Treatment of Chronic Neck Pain: A Randomized Sham-Controlled Trial," *The Clinical Journal of Pain* (September 3, 2015). Jerrilyn Cambron, DC, PhD, MPH, LMT, is an educator at the National University of Health Sciences and president of the Massage Therapy Foundation. Contact her at [jcambron@nuhs.edu](mailto:jcambron@nuhs.edu).