New Craniosacral Therapy Research—This Duck Doesn’t Quack Anymore

By Chris Centeno
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We MDs can be arrogant idiots at times, but that often hides that we don’t know what we don’t know. Case in point is our attitude toward alternative medicine. As an example, I can remember my medical-school education as being very antichiropractic. In addition, practicing close to one of the alternative-medicine capitals of the world, in Boulder, Colorado, I’ve seen it all and have become open to most. However, one of the treatments I couldn’t get my arms around was craniosacral therapy. Now new craniosacral therapy research shows that this therapy works for neck pain. So rather than being a cocky MD who doesn’t know what he doesn’t know about alternative medicine, I thought we’d dig into this therapy and new study this morning.

What Is Craniosacral Therapy?

The idea behind craniosacral therapy is that there’s fluid that circulates around the spinal cord (CSF, or cerebrospinal fluid) and that a trained therapist can manipulate the flow of that fluid. This healing art was perfected by John Upledger in the 1970s. So basically someone gets ahold of your head and uses pressure on the plates of the skull to help pump CSF around your spinal cord and nerve roots.
Craniosacral therapy has caught much flack through the years for having little craniosacral therapy research. The Wikipedia page on the therapy, for example, says that “available scientific evidence does not support claims that craniosacral therapy helps in treating…disease”.\(^1\) CST has been characterized as pseudoscience\(^3\) and its practice has been called quackery.\(^4\)

However, there’s been a Renaissance, of sorts, in the last decade in MRI imaging that for the first time lets us observe how the CSF moves. The animated GIF below (CSF flow cine study) is one of those images that uses very advanced physics to show how the CSF (the pulsing dark stuff) flows around the spinal cord, and, in fact, in this case it is blocked a bit at approximately the C5 level (arrow).

Hence, when I saw this new craniosacral therapy research, I wasn’t that surprised. I had seen these CSF flow studies at medical conferences and knew that they opened up a whole new world of study in how certain diseases, like Alzheimer’s, multiple sclerosis, and certain pain conditions, may be linked to blockages in this flow. Why? The CSF is both the cooling system and waste removal for the brain, spinal cord, and nerve roots.

### The New Study on Craniosacral Therapy

The new research was published in May of this year on 54 blinded patients who were randomized to get either real craniosacral therapy (CST) or a sham procedure with light touch (i.e., the practitioner made no attempt to pump the fluid around). The first thing to note is that one reason why we don’t have more high-level studies on alternative-treatment methods is that they are really hard to “blind.” This means that the hallmark of the highest-level study is that the patient doesn’t know what he or she is getting—the real treatment or a placebo. That’s always been easy for drugs—you just substitute a sugar pill—but for hands-on treatments, it can be tough because, at the very least, the person applying the treatment knows whether
he or she is giving the real therapy or the fake one. The good news is that the authors went out of their way to try and keep the patients truly blinded to which therapy they received, even going as far as telling the patients that they were testing two different methods of CST.

The results? CST improved neck pain more than the sham treatment. In addition, physical function was also improved for the CST group. In essence, CST seemed to work well to help neck pain in this small, randomized, controlled placebo trial.

How could this therapy work now that we have some craniosacral therapy research? While we arrogant MDs have written volumes on why CST can’t work, new information may have thrown egg on all of our faces. For example, we know that injecting saline into a spinal disc or around swollen nerves seems to work as well as injecting medication. While this therapy has been considered a placebo, it may well not be. The saline may be washing away nasty inflammation chemicals from around an irritated spinal nerve. How these chemicals cause pain is much better understood now than it was even a decade ago. Combine that with our newfound ability to image the CSF and I wouldn’t be surprised if someone does a study showing that CST can alter the flow of that critical waste-removal system. Hence, a CST therapist may be enhancing the ability of the body to naturally wash away these pain-causing chemicals (called inflammatory cytokines).

The upshot? I frankly love that high-level studies are showing that CST works and that common surgeries, like knee surgery and low-back fusion, can’t pass a placebo test. How many orthopedic surgeons who have scoffed at their silly patients for wasting their money on worthless therapies like CST now need to apologize? Even I, who have become more and more open to alternative therapies, need to give a hat tip to the CST practitioners, as I also couldn’t get my head completely wrapped around this one. So the next time one of my patients tells me about the relief he or she gets with CST, I’ll be sure to swallow some pride and say, “Wow, that’s awesome!”

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