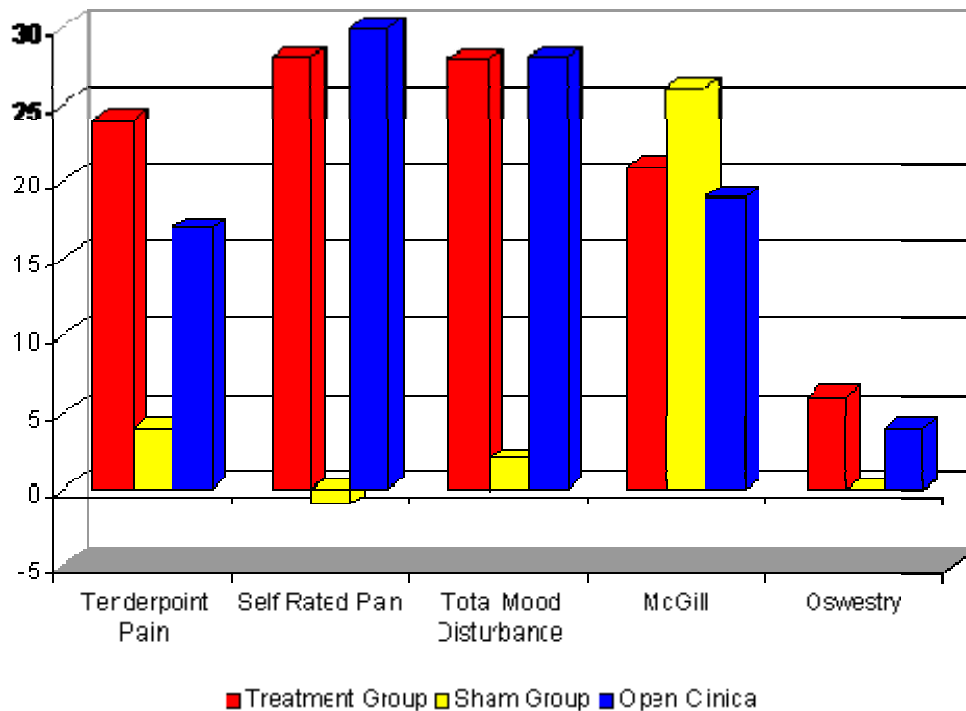


Cork, Randall C., Patrick Wood, Norbert Ming, Clifton Shepherd, James Eddy & Larry Price (2004). The effect of cranial electrotherapy stimulation (CES) on pain associated with fibromyalgia. *The Internet Journal of Anesthesiology* 8(2).

Subjective pain intensity was the primary measured variable in a double-blind crossover study examining the effect of cranial electrotherapy stimulation (CES) on the pain associated with fibromyalgia. 39 patients were randomly allocated to CES and 35 patients were allocated to a sham group. Pain Intensity, McGill Pain Score, tenderpoint score, profile of mood states, and Oswestry Score Measurements were taken at baseline and after three weeks. Three weeks after crossover of the sham group all measurements were repeated. Significant CES effects were identified, revealing an improvement in pain intensity ($p < 0.01$ compared to sham, $p < 0.001$ in sham group after crossover), McGill Score (not significant in initial 3 week trial, $p < 0.001$ in sham group after crossover), tenderpoint score ($p < 0.01$ compared to sham, $P < 0.001$ in sham group after crossover), and profile of mood states ($p < 0.01$ compare to sham, $p < 0.001$ in sham group after crossover). No significant effect was observed on Oswestry Score which is used to quantitative disability rather than as a functional assessment of pain, so one might reasonably conclude that longer follow-up would be necessary to see changes in this.

This study reveals that CES could play a significant role in the treatment of pain associated with fibromyalgia; however, the long-term effects on disability remain to be studied. The authors concluded that CES appears to be an effective, well-tolerated treatment for fibromyalgia. Those involved in the treatment of fibromyalgia should included it in their clinical armamentarium, given the demonstrated safety of this non-invasive modality.



Percent improvement of patients with fibromyalgia on selected outcome measures.