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## **Neurotherapy for pain in veterans with trauma spectrum disorders**

***The Journal of Pain* 10:S18, 2009.**

**Nelson D, and Esty ML**

Trauma spectrum disorders (e.g., TBI, PTSD) in veterans returning from the Afghanistan and Iraq wars are frequently complicated by complaints of bodily pain, including headache. Recent developments in Neurotherapy suggest electromagnetic (EM) stimulation of brainwave (EEG) activity may be beneficial. The Flexyx Neurotherapy System (FNS) uses minute EM pulses to subliminally stimulate the EEG. As part of the outcome evaluation of a clinical trial of a novel adaptation of FNS for the treatment of

OEF/OIF veterans with mixed TBI/PTSD symptom presentations, notable improvements in pain have been observed. Six female and male participants who have undergone up to 25 individual FNS sessions have completed, among other measures, 0-10 pain rating scales at the beginning of each session. Results indicate a highly statistically significant linear trend for decreased pain ratings (beta = -.30; R<sup>2</sup> = .09, F[1,93] = 9.29, p = .003). For participants who indicated at the outset that headache was one of their most bothersome symptoms, improvement has typically occurred very early in the course of treatment. A larger sample within a randomized controlled clinical trial is needed to further substantiate these findings.

Nelson, DV, and Esty, ML. Neurotherapy for pain in veterans with trauma spectrum disorders. *The Journal of Pain* 10:S18, 2009.