



Presentation Abstract

Session: G-29-Neuromuscular Disorders

Saturday, Jun 05, 2010, 9:00 AM -11:00 AM

Presentation: 1081 - **Effects of Class IV Laser Therapy on Disease Impact and Function in Women with Fibromyalgia**

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Abstract: It has been shown that 91% of individuals with Fibromyalgia (FM) use some form of alternative medicine compared to 42% of the general population. One modality that may show promise in helping to reduce the pain and impact of FM is laser therapy (LT). **PURPOSE:** The purpose of the present study was to evaluate the effects of Class IV Infrared LT on pain, FM impact, and function in women diagnosed with FM. **METHODS:** Thirty-nine women (52 ± 11 yr; mean \pm SD) clinically diagnosed with FM participated. All women were evaluated before and after treatment for number and sensitivity of the active tender points, completed the FM Impact Questionnaire (FIQ), and were measured for function using the continuous scale physical functional performance (CS-PFP) test. Women were randomly assigned to one of two treatment groups, LT ($n = 21$) or sham heat therapy (SHT) group ($n = 18$). Both groups received treatment twice a week for four weeks. Treatment consisted of application of LT or SHT over eight standardized points located across the neck, shoulders and low back. Treatment was blinded to women and was administered by a Chiropractic physician for eight minutes. Repeated measures ANOVA were used to evaluate data. All significance was accepted at $p < 0.05$. **RESULTS:** There was a significant interaction effect for upper body flexibility (UBF) measured by the CS-PFP. LT significantly improved UBF (70.6 ± 16.8 to 78.4 ± 12.5 units) compared to SHT (77.3 ± 11.8 to 76.7 ± 10.7 units). There were no other differences in functionality or pain between LT and SHT. Although there was no interaction effect for the measure of FM impact measured by the FIQ, there was a time effect. FM impact significantly improved from pre to post treatment in LT (63.1 ± 20.4 to 56.7 ± 17.8 units) while there was no change in the SHT (56.9 ± 10.6 to 55.1 ± 11.5 units). **CONCLUSION:** This study provides evidence that LT may be a modality to help women with FM improve their upper body range of motion which may ultimately decrease the impact of FM.

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