



**The International Research Congress  
on Integrative Medicine and Health (IRCIMH)**

**“Strengthening Research in Integrative Healthcare Around the World”**

**Hyatt Regency Miami, Florida, USA**

*May 13–16, 2014*

*Convened by the Consortium of Academic Health  
Centers for Integrative Medicine  
in Association with*

*The International Society for Complementary Medicine Research  
(ISCMR)*

PSTIM™, a percutaneously placed microchip-controlled pulsed neurotransmitter that provides electrical pulses to specific peripheral nerves in the ear. The purpose of this study was to examine the efficacy of PSTIM™ in reducing pain and improving function in patients with chemotherapy-induced peripheral neuropathy (CIPN).

**Methods:** We conducted a mixed-method retrospective chart review of patients receiving PSTIM™ for CIPN by an integrative oncologist. Charts between Jan/2012 and Nov/2013 were reviewed for a) demographic/clinical variables (e.g., number of PSTIM™ treatments); b) patient pain ratings pre-post PSTIM™ (0–10 scale); and c) functional outcomes (e.g., gait/balance). We used a paired-samples t-test to examine pain scores pre-post PSTIM™ treatment. A qualitative content analysis was used to examine pain and functional outcomes associated with PSTIM™ in those charts that did not have quantitative pain scores documented.

**Results:** Fifty-eight charts were reviewed. Eighteen patients had pre-post pain scores available for quantitative analyses (Mage=63 years; 67% female). Pain scores significantly decreased after PSTIM™ (Mpre=8.11 vs. Mpost=3.17;  $t=13.52$ ,  $p<.001$ ), regardless of number of PSTIM™ treatments ( $M=4.5$ ;  $SD=2.5$ ). Content analysis was conducted on the additional 40 charts, 8 of which were drop-outs (i.e., PSTIM™ device placed but no follow-up). Fifty-nine percent of patients with qualitative data ( $n=19$ ) reported significant improvements and 25% ( $n=8$ ) reported minimal improvements in pain following PSTIM™. Functional improvements, including improved gait, balance, and activities of daily living were reported often.

**Conclusion:** PSTIM™ was associated with significant improvements in pain, and significant functional improvements in patients with CIPN. Preliminary results suggest that PSTIM™ may be a useful non-pharmacologic treatment for patients with CIPN. Further controlled studies using prospective research designs and active control groups are warranted.

**Contact:** Wesley Baas, baaswy@mail.uc.edu

#### **P02.147 LB Analysis of Outpatient Acupuncture Treatments at a Major Cancer Center**

Kay Garcia (1), Lorenzo Cohen (1), Gabriel Lopez (1), Amy Spelman (1), Amica Onyemeh-Sea (1), Alejandro Chaoul (1), Kathrin Milbury (1), Qi Wei (1), Leslie Graham-Getty (1), Michael Spano (1), Richard Lee (1)

(1) MD Anderson Cancer Center, Houston, TX, USA

**Purpose:** The use of complementary and alternative therapies is increasing among cancer patients, but there is limited data about the impact of treatments, such as acupuncture, in the outpatient oncology clinical setting.

**Methods:** Patients who received acupuncture between June 2011 and December 2013 were asked to complete a modified Edmonton Symptom Assessment Scale (ESAS; 0–10 scale) before and after each visit. Additional subscales of the ESAS analyzed included Physical Distress (PHS; range 0–70) and Psychological Distress (PSS; range 0–30). Pre- and post-scores were examined using paired t-tests.

**Results:** A total of 3915 (664 initial; 3251 follow-up) acupuncture treatments were provided. The modified ESAS was completed for 2836 visits (72.4%). Of 641 patients (average 4.2 visits/patient) who reported a symptom score  $> 1$  on either pre- or post-ESAS, the highest rated symptoms prior to acupuncture

were: numbness 3.8 (+2.7), poor sleep 3.6 (+2.5), fatigue 3.4 (+2.4), dry mouth 3.4 (+2.7), pain 3.2 (+2.4), and appetite 3.1 (+2.7). Symptoms with the greatest reduction in scores from before to after treatment were: nausea (–1.3), fatigue (–1.3), anxiety (–1.2), pain (–1.1), numbness (–1.0), shortness of breath (–1.0), and sleep (–1.0), all with  $p$ -values  $<0.0001$ . There was a significant reduction from pre- to post-treatment in general well-being (–1.0) and in total symptom scores (mean [SD]: 29.2 [17.3] vs. 24.3 [15.1];  $p<0.0001$ ;  $N=508$ ). Both the PHS subscale (pain, fatigue, nausea, drowsiness, appetite, shortness of breath, and sleep total score) and the PSS subscale (anxiety, depression, and general well-being total score) demonstrated an improvement of 20%.

**Conclusion:** Patients receiving acupuncture at a major cancer center had multiple symptom complaints with the greatest improvement after treatment found for nausea, fatigue, anxiety, and pain. Improvement was also seen for numbness, shortness of breath, and poor sleep. Acupuncture had both physical and psychological benefit for patients in this population.

**Contact:** Kay Garcia, kaygarcia@mdanderson.org

#### **P02.148 LB A Pilot Study Examining the Feasibility of the MBSR(BC) Home-Based Approach via an iPad**

Cecile A. Lengacher (1), Sophia Ramesar (1), Richard R. Reich (2), Carly Paterson (1), Manolete Moscoso (1), Irina Carranza (1)

(1) University of South Florida - College of Nursing, Tampa, FL, USA

(2) Moffitt Cancer Center, Biostatistics, Tampa, FL, USA

**Purpose:** The purpose of this pilot study was to test the feasibility of Mindfulness-Based Stress Reduction for Breast Cancer (MBSR(BC)) Home-based approach through smart technology platform using an iPad.

**Methods:** A single group, pre-post design was implemented among female breast cancer (BC) patients (stages 0–III) who completed treatment. Data were collected at baseline and at week 6 on self-reported measures of psychological and physical symptoms and quality of life (QOL). The MBSR(BC) is a standardized stress-reducing intervention that combines sitting and walking meditation, body scan, and yoga adapted for BC survivors. The Home-based program was designed to deliver the weekly 2-hour sessions for 6 weeks on an iPad decreasing subject burden and allowing completion of the intervention at home. Participants received an orientation on use of the iPad, and recorded practice time in a daily diary.

**Results:** Of the 15 enrolled, the mean age was 58 and one participant was Black Non-Hispanic with the other 14 being White Non-Hispanic. Of the 13 who completed the study, there were significant differences and improvements from pre-MBSR(BC) to 6 weeks (post MBSR(BC)) in psychological and physical symptoms of depression, state anxiety, stress, fear of recurrence, sleep quality, fatigue and quality of life ( $p<.05$ ).

**Conclusion:** These results provide preliminary support that the Home-based MBSR(BC) program is feasible and acceptable, and had a clinical impact on decreasing psychological and physical symptoms. This program offered an alternative to the standard 6 week intervention by allowing for delivery flexibility at home while receiving the benefits of the MBSR(BC) program.

**Contact:** Carly Paterson, cpaterso@health.usf.edu