Results: The median frequency (MF) and fatigue index (FI) of the stimulation group recovered faster than those of the non-stimulation group. Also, the peak torques of both groups were not restored until after 20 minutes. However, the regained peak torque of the stimulation group was higher than that of the non-stimulation group.

Conclusions: We confirmed that the proposed combined stimulus system using a non-invasive method of PEMFs and LEDs had positive effects in the treatment of musculoskeletal disorders.

Key Words: pulsed electromagnetic fields (PEMFs); light-emitting diode therapy (LEDT); muscle fatigue; acupoint; trigger point; EMG

doi:10.1016/j.jams.2011.11.008


Review of Stimulating Technologies of Acupuncture Points in Patients
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Abstract

Objectives: We have examined and analyzed patients regarding acupuncture point stimulating methods in order to understand the stimulation technology and research trends for acupuncture points.

Methods: We searched and analyzed a total of 135 on-line database (DB)-based patients undergoing treatment prior to Dec. 2010.

Results: Non-invasive methods are used more than invasive methods. Electric stimulation is used more than any other method, such as magnetic, ionic, laser, light, ultrasonic, water, far IR or thermal stimulation. The numbers of cases that were rejected during screening, were waived before screening, or failed to renew registrational status outnumbered those that were registered and maintained.

Conclusions: These data suggest that we need to move away from using a one-sided method such as a non-invasive and electrical method. Thus, follow-up service is recommended.

Key Words: meridian; acupuncture point; patent; patent analysis

doi:10.1016/j.jams.2011.11.009


Acupuncture for Chronic Fatigue Syndrome and Idiopathic Chronic Fatigue: a Protocol for a Pilot Randomized Controlled Trial
Jung-Eun Kim, Kyung-Won Kang, Tae-Hun Kim, So-Yong Jung, Ae-Ran Kim, Mi-Suk Shin, Hyo-Ju Park, Kwon-Eui Hong, Sun-Mi Choi

Abstract

Objectives: Our aim is to evaluate the feasibility of massive clinical research and to make a basic analysis of the efficacy and the safety of acupuncture treatment for chronic fatigue syndrome and idiopathic chronic fatigue.

Methods: This study is a protocol for a pilot randomized controlled trial. It was developed through literature searches and discussions among researchers.

Results: Forty participants each will be allocated to the acupuncture group and the wait-list group. Participants allocated to acupuncture group will be treated three times per week for a total of 12 sessions over four weeks. Eight points (GV20; bilateral GB20, BL11, BL13, BL15, BL18, BL20, BL23) have been selected for the acupuncture group. Participants in the wait-list group will not receive acupuncture treatment during the study period, and follow-up will be made in the 5th and 9th weeks after random allocation. Then, the same acupuncture treatment as that performed on the acupuncture group will be used for the wait-list group. The Fatigue Severity Scale, a short form of the Stress Response Inventory, the Beck Depression Inventory, and the Insomnia Severity Index will be used as outcome variables to evaluate the efficacy of acupuncture. Safety will be assessed at every visit.

Conclusions: The trial based on this study will be performed. The results of the trial will provide a basis for the efficacy and safety of acupuncture treatment for chronic fatigue syndrome and idiopathic chronic fatigue.

Key Words: acupuncture; chronic fatigue; pilot trial

doi:10.1016/j.jams.2011.11.010