Joao Eduardo de Araujo et al., Altern Integr Med 2016, 5:2(Suppl)
http://dx.doi.org/10.4172/2327-5162.C1.014

Unilateral and immediate stimulation of acupuncture points Xiaohai (SI8) and Jianwaishu (SI14) of the small intestine meridian increases electromyographic activity and strength in the ipsilateral and contralateral upper trapezius muscle

Joao Eduardo de Araujo, Leandro Laureano de Souza, Fernanda Avalone, Thaís Silva Muxcciaroni and **Fernanda Lopes Buiatti de Araujo**
University of São Paulo, Brazil

The main acupuncture meridians are divided into yin and yang functions. We showed in previous work that a yin meridian of the upper limb decreased electromyographic activity (RMS) and muscle strength (Kgf) ipsilateral and contralateral to the side of stimulation. In the present work, we tested the upper trapezius (UT) muscle response after stimulation of a yang meridian of the upper limb, the small intestine (SI). Attended of this study 38 healthy volunteers randomized into the following groups: acupuncture in the UT muscle (SI14), acupuncture distant of the UT muscle (SI8), without stimulation (CG) and sham (R3). An acupuncturist certificated by the Brazilian Society of Physical Therapists Acupuncturists performed the needle insertion. We used a sterile and disposable acupuncture needles (0.25 X 40 mm). The duration of stimulation was 20 minutes. Each volunteer received stimulation to the right upper limb. The evaluation occurred before 20 minutes (after) and 10 minutes after withdrawal of the needles. For ID8 and ID14, we observed an increase in the RMS activity on the right side of the UT muscle (ipsilateral) ($F3, 37=4.67$; $p<0.025$) at the 20 minutes evaluation. The most vigorous response occurred on the contralateral side (left side) since the effects are maintained for the 10 minutes after the withdrawal ($F3, 37=4.52$; $p<0.025$). Both groups showed an increase in the UT muscle strength at the 20 minutes evaluation ($F3, 37=3.41$; $p<0.025$). CG and R3 groups do not show any changes. Our data indicate that SI a yang meridian increases the UT muscle response.

Biography

Joao Eduardo de Araujo is Physiotherapist, Acupuncture Specialist, Associate Professor at the Department of Biomechanics, Medicine and Rehabilitation of the Ribeirão Preto Medical School. He is the Professor of the Undergraduate and Postgraduate Physical Therapy Program from University of São Paulo, Brazil.

araujoje@fmrp.usp.br

Notes: