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## **Auriculotherapy, small intestine, and heart systemic acupuncture point selectively change the motor response in the upper and lower limbs of the healthy subjects using surface electromyography and computerized baropodometry**

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**Experiment1:** 32 healthy participants randomized into the groups: Small Intestine (SI) 14 point, SI8 point, Control, and Kidney 3 point.

**Experiment2:** 52 participants randomized into the groups: Heart (H) 3 point, H4 point, control, and bladder 60 point. In both experiments (I and II), the evaluation was the root mean square (RMS) activity and muscle strength.

**Experiment3:** 40 volunteers randomized into the groups: auriculotherapy needle stimulation in the coxofemoral, knee, and ankle points or control group. We analyzed the contact area (CA) and the peak pressure (PP) in both feet at baseline, 20 and 25 minutes after the baseline. The RMS increased on the right side in the Upper Trapezius muscle for the SI8 and SI14 groups ( $F_{3,37}=4.67$ ) at the 20-minute evaluation. The most vigorous response occurred on the contralateral side because the effects were maintained for 5 minutes after withdrawal ( $F_{3,37}=4.52$ ). Both groups showed an increase in the muscle strength at the 20-minute evaluation ( $F_{3,37}=3.41$ ). The RMS was reduced on the contralateral side to the H4 group 20 minutes after of the needles withdraw ( $F_{3,48}=3.25$ ). Ipsilateral and contralateral stimulation in the H4 group reduced the muscle strength 5 minutes and 10 minutes after withdrawal ( $F_{3,48}=5.82$ ). Auriculotherapy points showed an increase in CA ( $F:6.49$ ) and a decrease in PP ( $F:3.11$ ) at 20 and 25 minutes, when compared to C. The PP decreased is only for the right LL at 20 and 25 minutes ( $F:6.45$ ). Our data indicate that SI yang meridian increases the muscle response, while the H Yin meridian decreases the muscle response. The auriculotherapy points were able to modify the ipsilateral lower limb weight discharge on the same side of the stimulated auricular pavilion.

### **Biography**

João Eduardo De Araujo has completed his PhD from Ribeirão Preto Philosophy School of the University of São Paulo (USP). He is Associate Professor in the Health Sciences Department of the Medical School of the USP. He has published more than 30 papers in reputed journals and is the Chair of the Brazilian Society of the physiotherapist's acupuncturists in São Paulo State.

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### **Notes:**