Static magnetic field, tens and acupuncture reduces pain perception and increase VB21 point electric impedance

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Studies have shown that acupuncture points have improved electrical conductivity when compared with non-acupuncture points. This study aimed to analyze in the pre and post-treatment the electrical impedance and pain in patients with bilateral pain in the region of the Gallbladder 21 (GB21) point. To this end, 75 patients were randomized (19-54 years old) and treated in three different groups (n=25): Transcutaneous electrical stimulation at a frequency of 4 Hz (TENS), acupuncture with needles 0.25x30mm (AC), and static magnetic field using Ferrite circular magnets with magnetic power of 550 Gauss (MF). All groups were treated bilaterally in VB21 point for 20 minutes. For the evaluation, we used the Visual Analog Scale of Pain (VAS) and an ammeter for electrical impedance. The results show a significant difference in the pre and post-treatment for reduction of pain in TENS (t=5.51; P<0.0001), AC (t=4.16, P<0.0001) and MF (t = 4.26, P<0.0001), and an increase in electrical impedance in TENS at the right (t=3.67, P<0.0005) and left (t=3.53; P<0.005), AC at the right (t = 3.16, P<0.005) and left (t=3.08, P<0.005), and MF at the right (t=4.75, P<0.0001) and left (t=4.84, P<0.0001). The three treatment techniques are effective in reducing pain and improvement of the electrical impedance of the GB21 point bilaterally.

Biography
De Araujo J E 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 the University of São Paulo, Brazil.

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