About Acupuncture and Electroacupuncture

To the Editor:

I read carefully the outstanding article "Mechanisms of Acupuncture-Electroacupuncture on Persistent Pain" by Zhang *et al.*, ¹ published in this journal in February. It is very detailed and shows several mechanisms of action of acupuncture and electroacupuncture: peripheral, spinal, supraspinal, and central and also their relations with bioactive chemicals involved in attenuation or control of pain, such as opioids, serotonin, norepinephrine, amino acids, cytokines among others. The article is really a lesson in acupuncture.

However, being an acupuncturist doctor for the past 27 yr and very curious about the real difference between manual acupuncture and electroacupuncture, I feel obliged to disagree with the author's statement in page 489: "On the basis of that evidence, we hypothesize that electroacupuncture is superior to manual acupuncture..." although I understand that they do minimize the statement by complementing "... but further investigation is warranted to confirm this premise."

Most of the articles the author cited to confirm this statement do not really compare real manual acupuncture with real electroacupunture to hypothesize this fact. Only Schliessbach *et al.*² compared both procedures in 45 healthy volunteers to assess Pressure Pain Detection Thresholds. These authors state that electroacupuncture produces a higher Pressure Pain Detection Thresholds elevation than does manual acupuncture during needle application, but by the time of needle withdrawal, the two stimulation modalities no longer differ significantly.

In Berman *et al.*³ and Vas *et al.*,⁴ the authors compare electroacupunture *versus* nonpenetrating needles connected with a mock transelectrical stimulation. Sangdee *et al.*⁵ compare real electroacupuncture *versus* patch electrodes connected to dummy mode of stimulation (and not real manual acupuncture). Also, Mavrommatis *et al.*⁶ compared real electroacupuncture plus drug *versus* retractable needles and simulated electrostimulation plus drug *versus* drug alone.

When Zhang *et al.*¹ cite Scharf *et al.*⁷ as an example where manual acupuncture could not differ to sham, I must remember that "minimal acupuncture" and "non-classical points" are no longer examples of inert therapies, as observed by others.^{8,9}

So, regarding the importance of the article by Zhang *et al.*,¹ there is no answer, at the moment, for the question: "is electroacupuncture better than manual acupuncture"? There is a tendency, among modern acupuncturists, to consider this a truism, but there is no scientific evidence to back up this statement. More research is necessary, specially designed to respond that question.

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Competing Interests

The author declares no competing interests.

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In Reply:

We thank Dr. Silva for his comments on the relative effects of electroacupuncture and manual acupuncture. We agree that, while there is no conclusive evidence to show that electroacupuncture is superior to manual in pain management, scattered evidence suggests that the former might be superior to the latter. In a study² with 20 patients, electroacupuncture was superior to manual acupuncture in relieving pain in patients with tennis elbow. In Dr. Manheimer's³ meta-analysis of 16 trials of acupuncture