

A vision of acupuncture in western medicine

Volume 6 Issue 5 - 2017

Maria L SG Jorge

Department of Pharmacology, Federal University of Paraná, Brazil

Correspondence: Maria Lúcia SG Jorge, Department of Pharmacology, Federal University of Paraná (UFPR), IBRATE – Faculty of Technology, Brazil, Email mljorge@icloud.com

Received: April 30, 2017 | **Published:** May 01, 2017

Opinion

Traditional Chinese Medicine (TCM) arose around 400 BC, some experts believe that has its origins in Hippocratic theories that claim that health resides in the harmonious functioning of the body and relies on the balance of energies that are distributed between four humors.¹ It was consolidated through a kind of a descriptive observational study coordinated during the reign of the Yellow Emperor (Huang Di) of the Han Dynasty, 2697 AD to 2597 AD, who sent his physicians to compile the types of curative and preventive therapies, diagnosis and treatment which were adopted in China at that time, and elaborated, in the form of questions and answers, a practical guide on concepts and forms of application. It is the first written record of TCM - Huang Di Nei Jing or The Yellow Emperor book's.²

The history of Western Medicine also had in its foundations the Greek philosopher, Hippocrates who is considered the “father of modern medicine”. However, unlike Eastern Medicine, this science evolved in a technical-scientific, Cartesian way, from anatomy and physiology, investigating pathology as a form of impairment of the function of specific organs and systems.

The two sciences complement each other. While one face of medicine evaluates and treats the diseased organ, the biochemical and molecular changes of the system in which it is inserted, the other one observes holistically, identify the disease according to the characteristics of the patient, as an individual, and his/her insertion in the environment in which lives, the emotion and life style is part of the diagnostic context. The nature of this science, the TCM, its history and origin still demand many studies, scientific and epidemiological work, for this reason, numerous systematic reviews were made with the purpose of comparing acupuncture as a complementary treatment method in the treatment of pain.

The well-known manuscript performed in 2007 by the GERAC German Group - German Acupuncture Trials, studied a total of 1162 patients, aged 18-86years, who presented a chronic history of low back pain for a minimum period of eight years. This sample was divided into two groups of patients who received acupuncture treatment using TCM points or with a simulated form of acupuncture where the needle is not inserted and the points chosen are not considered acupoints. Finally, a group was treated with conventional techniques combining medications, physical therapy and physical exercises. After six months of treatment, the patients were evaluated according to the Von Korff chronic pain scale and the Hanover functional ability questionnaire, and the results indicated that 47.6% of the patients treated with acupuncture had satisfactory indices, as well as 44, 2% of patients treated with simulated acupuncture, and 27.4% of patients receiving conventional treatment. The authors considered that acupuncture can be a powerful alternative therapy for low back pain, especially due to the few side effects and contraindications it offers. This essay led the German Health Committee to approve the decision to place acupuncture for the treatment of chronic back pain as an insured benefit on an equal footing with conventional therapy.³

This work and 30 other high-quality randomized trials (RTC), without bias aspects, were evaluated in a systematic analysis involving approximately 18,000 patients performed in 2012 by an American team. The authors established that acupuncture provides relief to four types of chronic pain extensively studied. It was concluded that the studies showed that acupuncture presents superior results, both to the control without acupuncture, and simulated acupuncture. However, it is noteworthy that although the data confirm that acupuncture is more efficient than placebo, the statistical differences between the techniques is modest suggesting that there are additional factors to the needling contributing to the therapeutic effect.⁴

The argument that acupuncture efficiency involves several factors other than needle insertion and acupuncture has been the subject of several studies. A team of researchers from China studied brain imaging responses through Functional Magnetic Resonance (fMRI), different types of stimulation of a specific acupoint, left leg E36, and the acupuncture application process: manual, electro-acupuncture, and stimulation transcutaneous acupoint. It was observed the brain responses are different according to the type of stimulus, but insignificant whit the absence of stimulus.⁵ Following this idea, for a better understanding of the cerebral response to the needling, a multinational team systematically reviewed 149 studies, followed by meta-analysis of 34 published works on acupuncture analyzed by fMRI. They concluded that the technique can modulate cerebral activity in specific but not unique areas, deserving more detailed studies.⁶

Another important evaluation of acupuncture refers to its effect on the modulation of immunity, given the importance of controlling inflammation in analgesia. A systematic review, conducted within the main scientific databases, resulted in 67 relevant articles with experimental research and clinical trials involving humans or

animals on the action of acupuncture in the Immune System. Specific markers, such as immunoglobulins, interleukins, other cytokines, and cellularity were used as indicators of the immunomodulatory action of acupuncture. The results obtained allowed to conclude that there is positive stimulation in pathological cases of immune depression, and vice versa, in cases of inflammation and autoimmune diseases occurs suppression of the process.⁷

Acupuncture has also been indicated as an important non-pharmacological resource in a number of circumstances, such as reducing the side effects of breast cancer therapy,⁸ associated with a diet, in the treatment of obesity,⁹ improving the quality of Life of the individual with chronic obstructive pulmonary disease (COPD).¹⁰

Although the TCM exists for as long as Western science, only from the twentieth century has it started to receive the attention of the scientific community. Thus, there are still many questions raised about how it works in the body, what possible interactions with biotechnology, pharmacology and other therapeutic methods. Several articles discuss the similarity of results between needling and needle insertion simulation, controls that show signs although the points are different from those indicated in the TCM,^{3,4,11} and the impossibility of preventing the acupuncturist from knowing the type of application and making a double-blind study. Systematic reviews from randomized clinical trials reinforce that most studies are numerically unsatisfactory, making it impossible to definitively conclude on the efficacy of treatment compared to placebo.¹²⁻¹⁴

Modern Medicine is abundant in diagnostic technology, scientific rationality, research and development that reach from nanotechnology to psychology and neuroscience, and only in the last decades of the history of this science, the study of the relationship between the individual and the environment in which he lives, his relation with their own bodies and society, were given due prominence. On the other hand, patients of chronic, metabolic, psychiatric, neurological and autoimmune diseases seek therapies to integrate the physical aspect of the disease and the quality of life of the individual. This longing, rather than justifying that the general population has quickly incorporated acupuncture¹ as a form of treatment, provides tools for medical science to broaden its efforts in enhancing and understanding acupuncture.

Acknowledgments

None.

Conflicts of interest

Author declares there are no conflicts of interest.

Funding

None.

References

1. Helman CG, Cultura Saúde, Doença, Porto Alegre. 2003..
2. <http://www.wdl.org/pt/item/3044/>
3. Haake M, Müller HH, Schade-Brittinger C, et al. German Acupuncture Trials (GERAC) for Chronic Low Back Pain. *Arch Intern Med.* 2007;167(17):1892–1898.
4. Vickers AJ, Cronin AM, Maschino AC, et al. Acupuncture for Chronic Pain. *Arch Intern Med.* 2012;172(19):1444–1453.
5. Jiang Y, Wang H, Liu Z, et al. Manipulation of and Sustained Effects on the Human Brain Induced by Different Modalities of Acupuncture: An fMRI Study. *PLoS One.* 2013;2013:8(6):e66815.
6. Huang W, Pach D, Napadow V, et al. Characterizing Acupuncture Stimuli Using Brain Imaging with fMRI – A Systematic Review and Meta-Analysis of the Literature. *PLoS One.* 2012;7(4):e32960.
7. Silvério-Lopes S, Mota MPG. Acupuncture in Modulation of Immunity. In: *Acupuncture in Modern Medicine.* In Tech. 2013.
8. Liao GS, Apaya MK, Shyur LF. Herbal Medicine and Acupuncture for Breast Cancer Palliative Care and Adjuvant Therapy. *Evid Based Complement Alternat Med.* 2013;2013:437948.
9. Abdi H, Zhao B, Darbandi M, et al. The Effects of Body Acupuncture on Obesity: Anthropometric Parameters, Lipid Profile, and Inflammatory and Immunologic Markers. *TSWJ.* 2012;2012:603539.
10. Suzuki M, Muro S, Ando Y, et al. Randomized, Placebo-Controlled Trial of Acupuncture in Patients with Chronic Obstructive Pulmonary Disease (COPD). *Arch Intern Med.* 2012;172(11):878–886.
11. Cherkin DC, Sherman KJ, Avins AL, et al. A Randomized Trial Comparing Acupuncture, Simulated Acupuncture, and Usual Care for Chronic Low Back Pain. *Arch Intern Med.* 2009;169(9):858–866.
12. Suarez-Almazor ME, Looney C, Liu YF, et al. A Randomized Controlled Trial of Acupuncture for Osteoarthritis of the Knee: Effects of Patient-Provider Communication. *Arthritis Care Res (Hoboken).* 2010;62(9):1229–1236.
13. Urruela MA, Suarez-Almazor ME. Acupuncture in the Treatment of Rheumatic Diseases. *Curr Rheumatol Rep.* 2012;14(6):589–597.
14. Kim JI, Choi JY, Lee, et al. Acupuncture for the treatment of tinnitus: a systematic review of randomized clinical trials. *BMC Complement Altern Med.* 2012;12:97.