Transcutaneous acupuncture stimulation on ear vagus nerve for major depression

Depression presents a significant burden to both patients and society. The treatment of Major Depressive Disorder (MDD) is far from satisfactory. One treatment that has emerged is vagus nerve stimulation (VNS), a FDA approved physical treatment for depressive disorders. However, the application of this intervention has been limited by the involvement of surgery and potential side effects. The aim of this study is to explore the feasibility of stimulating the superficial branches of the vagus nerve to treat MDD. To investigate the effectiveness of transcutaneous auricular vagus nerve stimulation (taVNS) as a solo treatment for depression, the first cohort 91 patients only received taVNS for 12 weeks. In the second cohort 69 patients first received 4 weeks of sham taVNS, followed by 8 weeks of taVNS. All treatments were self-administered by the patients at home after they received training from the hospitals. The primary clinical outcome measurement was the 24-item Hamilton Depression Rating Scale measured at weeks 0, 4, 8 and 12. After four weeks of treatment, MDD patients in the taVNS group showed greater improvement than that of sham taVNS groups as indicated by both Hamilton score changes as well as rates of good responders. In addition, we also found that the clinical improvements continued until week 12. Our study demonstrated that taVNS is a promising, safe and cost-effective neuromodulation method for MDD treatment.

Biography

Pei-Jing Rong is a Professor of the Institute of Acupuncture and Moxibustion, China Academy of Chinese Medical Sciences. She received her Bachelor’s, Master and PhD degrees from Beijing University of Chinese Medicine and Hong Kong Baptist University, before she finished two-year Post doctoral visiting study at Faculty of Neurosciences in Los Angeles Biomedical Research Institute at Harbor-UCLA Medical Center. She has published more than 100 papers in reputed journals. She is one of the academic leaders in China Academy of Chinese Medical Sciences and the secretary general of Academic Committee for China Association of Acupuncture and Moxibustion.

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