

Abstract View

BOLD SIGNAL CHANGES OF THE VISUAL CORTEX ON STIMULATION OF THE VISION-RELATED ACUPOINTS

G. Li^{1,2*}; R.T.F. Cheung¹; Q.Y. Ma²; E.S. Yang²

1. *Dept of Medicine, The University of Hong Kong, Hong Kong, Hong Kong*

2. *The Jockey Club MRI Engineering Centre, The University of Hong Kong, Hong Kong, Hong Kong*

We verified Cho and his colleagues' acupoints using conventional acupuncture and electro-acupuncture. Acupuncture was performed with two different techniques - conventional and electro-acupuncture. Functional MR imaging (fMRI) was performed using a 1.5 T MR scanner with standard scan parameters in 13 healthy volunteers. The 30-second activation period was alternated by 30-second rest period. First, the fMRI was performed with visual activation using light-emitting diodes (LED) flashing with a frequency of 8 Hz. The fMRI was then repeated with conventional acupuncture and electro-acupuncture at the following acupoints (BL60, BL 65, BL 66 and BL 67) located in the lateral aspect of the foot. The activated pixels in the visual cortex created by visual activation correlate well with those created by both conventional acupuncture and electro-acupuncture Fig. 1. The results obtained by conventional acupuncture stimulation have relatively more neural responses due to other types of stimulation rather than visual activation. The neural responses obtained by electro-acupuncture at 2 Hz was found to be stronger than those obtained by electro-acupuncture at 64 Hz. The greatest difficulty encountered by the researchers is that only 25 to 30% of the subjects undergoing acupuncture renders expected neural response.

Supported by: The Hong Kong Jockey Club Charities Trust and The Hong Kong University Foundation.

Citation:

G. Li, R.T.F. Cheung, Q.Y. Ma, E.S. Yang. BOLD SIGNAL CHANGES OF THE VISUAL CORTEX ON STIMULATION OF THE VISION-RELATED ACUPOINTS Program No. 658.2. 2002 *Abstract Viewer/Itinerary Planner*. Washington, DC: Society for Neuroscience, 2002. Online.