

*The Effects of Low Intensity and Low Frequency Electromagnetic Fields on
Acupuncture Response and Immune Function*

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2006

Abstract

Exposure to low frequency and low intensities of electromagnetic fields at an average may have an effect on immune function and electrodermal response of the skin. This study involved investigating the effects of .3mT at 7-8 Hz applied to the ST36 acupuncture points on 10 subjects for 30 minutes. An additional group of 10 subjects received topical application of a ferrofluid exposed to the same electro-magnetic field for a duration of 2 hours at acupuncture points ST36, and GV14. The last 10 subjects received sham exposure. All subjects received pre- and post-tests of the total blood cell counts, white cell differentiation, and electrodermal measurements by the Apparatus for Meridian Identification (AMI). For the purpose of analysis the change scores were calculated for each subject by taking pre-test scores and subtracting them from post-test scores on each variable. These data were analyzed by one-way analysis of variance and post-hoc *t* test ($p < .05$). No significant difference was found between the control group and imprinted ferrofluid group, and the direct exposure group. Between the control group and imprinted ferrofluid group, directionality was found within the autonomic nervous and immune response of the stomach meridian identified by the AMI, and an increase in the number of leukocytes. Directionality was also found between the control group and the direct exposure group with an increase in the overall energy within the meridians, and the percentage of lymphocytes present. These results suggest EMF fields influence immune function and meridian response.