



Abstract

SQUID MEG Study on the Auditory Primary Response induced by Acupuncture on TE5(Waiguan) · GB43(Xiashi)

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Using the 2-channel DROS SQUID (Korea Research Institute of Standards of Science, 1999), the present study was carried out to record changes elicited in the auditory cortex by acupuncture stimulus on right TE5(Waiguan) and GB43(Xiashi).

Needle-retention stimulation of TE5 and GB43 were done for acquiring the brain activities changed by acupuncture. Acupoint TE5 and GB43 is known to be effective for the treatment of ear-related disease, such as deafness and tinnitus, and to be suspected to be related to the auditory cortex.

Auditory evoked magnetic fields were recorded from the left hemisphere of five subjects, in response to contralateral ear stimulation by irregularly spaced 170msec long 1kHz tone bursts (Korea Research Institute of Standards of Science)

The result as follows :

1. The latency and amplitude of SQUID MEG responses at the human auditory cortex changed by needle-retention condition on TE5 were 4msec and 9.2fT, respectively, which were slower and smaller than those of no-acupuncture condition.
2. The latency and amplitude of SQUID MEG responses at the human auditory cortex changed by needle-retention condition on GB43 were 7.2msec and 1.6fT, respectively, which were slower and larger than those of no-acupuncture condition.
3. The latency of SQUID MEG responses at the human auditory cortex changed by needle-retention condition on GB43 condition was slower than that of TE5 acupuncture condition.