

Estimation of Human State by Electroencephalography

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Fig1. Estimation of Aging in the brain

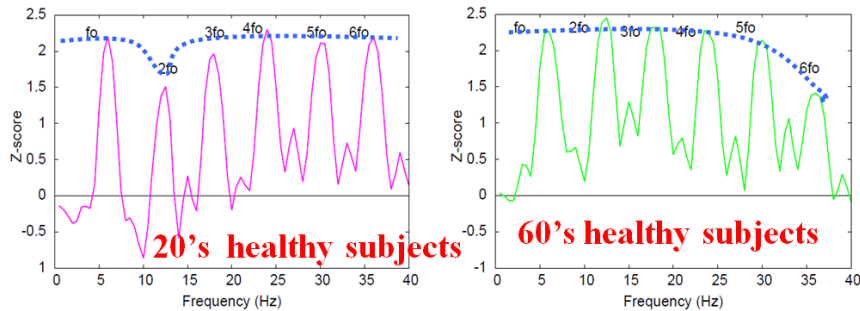
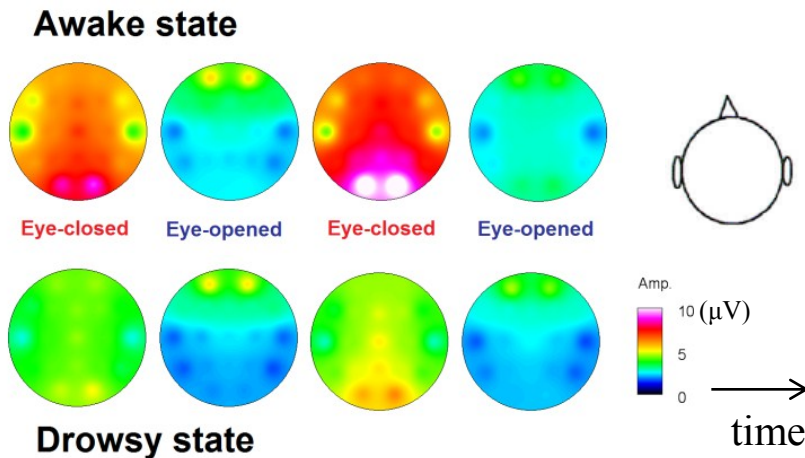


Fig.2 Evaluation of awake / drowsy



Content:

In our laboratory, we investigate change of electroencephalography (EEG) due to aging (Fig.1) and human state such as awake/drowsy (Fig.2) by analyzing EEG signals. In addition to this, we tackle with EEG analysis of response to sensory stimuli (visual, auditory, somatosensory, smell, taste), and try to quantify the evaluation in the brain by extracting the EEG components related to notice, judgment and recognition.

Explanation of figures:

Figure 1 shows the enhancement of suppression by 6Hz photic stimuli.

Positive and negative values in Z-score correspond to enhancement and suppression, respectively. Frequency characteristic depends on aging.

Figure 2 shows the amplitude distributions of alpha wave on the scalp in awake and drowsy states when subjects open and close their eyes repetitively .

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