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The effect of foot reflexotherapy on the dynamics of cortical oscillatory waves in healthy humans: An EEG study

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Highlights

- Effect of foot reflexotherapy on EEG waves is described
- Foot reflexotherapy activated frontal cortex in healthy humans
- Foot reflexotherapy increased beta and gamma waves
- Beta and gamma EEG waves can serve as measures of functional activation of the cortex

ABSTRACT

Background: Foot reflexotherapy is a noninvasive complementary therapy that has gained considerable application in several fields of human endeavor. The therapy is used to relieve the symptoms of several ailments. For instance, foot reflexotherapy when applied to the cortical areas of the left or right foot relieves pain and stress. However, the electrophysiological mechanisms of the effect of foot reflexotherapy on cortical activity are not completely understood. While it has been shown that foot reflexotherapy exert positive effects on brain functions, little is known about the effects of this therapy on cortical activities as recorded with electroencephalogram (EEG) in healthy humans. Cortical activity is widely investigated with EEG, a noninvasive recording that is used to study brain activity in different functional states and conditions.

Aim: The aim of this study was to investigate the effect of foot reflexotherapy on EEG rhythms in healthy humans.

Material and methods: EEG recording before and after reflexological therapy was carried out in seven healthy right-handed males who volunteered for the study.