

**The influence of EM radiation of modern device on the brain based on the example of a mobile phone**

**Научный руководитель – !? !? !?**

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Annotation. On the basis of the Department of Neurology, Neurosurgery and Medical Genetics of the Stavropol State Medical University was conducted the research using the electroencephalography technique on the effect of EM on the human brain.

Keywords: electromagnetic waves, mobile phone, electroencephalography, brain potentials.

Relevance of work. Electromagnetic waves are everywhere around a person. In addition to the natural background of EM radiation, which the planet Earth possesses, we are confronted with EM fields of modern instruments, which are an integral part of our life[4]. However, most people do not even think about the problem of their influence on the human body.

Purpose of the research. To find out and demonstrate the influence of EM radiation on the brain based on the example of a mobile phone iPhone 5s using electroencephalography.

Materials and methods. The research was conducted using a mobile phone iPhone 5s and an electroencephalograph. The three groups of subjects were used during the work.

Results of the research. In the course of the work, the Electroencephalography - technique of recording the potentials of the brain was used[1,2]. It allowed to conduct a fairly accurate analysis of the subject's brain functional state and to display his reaction under the influence of such an irritant as the EM wave. As a result of the research, a correlation between the effect of EM radiation from a mobile phone and changes in the bioelectrical activity of the brain was found. The subjects were divided into 3 groups. The first group used a mobile phone in the talk mode for at least three hours a day, the second group also accessed the Internet for at least three hours, and the third group did not use the mobile device, but was close with the switched mobile phone. The results of this work have been arranged and presented in tabular form with explanations.

Conclusions. We can not underestimate the problem of EM radiation's influence on the human body. In the middle of the 20th century scientists proposed a general term - "radio wave illness". According to several researchers, the symptoms of this disease have spread to a third of the population of the entire globe. The main changes in the EM waves influence are the changes in the nervous system, the functional activity of the brain often becomes pathological[3].

**Источники и литература**

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