Abstract   Smoking is one of general problems now a days. By information WHO, smoking is main factor of risk of cancer in the world. The research of smoking harm is progressing. But the problem is too complex. To solve it, we should carry out additional research.

Materials and methods 30 people participated in the experiment, which were randomly divided into 3 groups of 10 participants. The first group - 10 people, received transcranial stimulation of the brain with a direct current with the parameters indicated below. The second group - 10 people, received a placebo-stimulation. The third group - a control group of 10 people, did not receive stimulation. Stimulation of the brain was carried out with the following parameters: current-1.5 mA, duration - 20 minutes before the passage of tasks. Points of exposure F7-F8 in accordance with the International 10-20 system. At the end of the stimulation, the participants underwent two computer tests aimed at assessing the attention of cognitively healthy people. The Feature Match test is a task in which a user needs to quickly compare two images and determine their similarity. If the images are identical, the user clicks “Correct”, if not “Wrong”. The task requires focusing on simple figures. The complexity of the test automatically adapts to the results obtained. The Pitchblack test is a task in which it is necessary to simultaneously track the movement of several balls and determine the moment when they pass the central part of the target. The task allows to assess the ability of a person to concentrate his attention on several objects. To assess the reliability of the obtained results, the reliability criterion p <0.001 was used.

Results  Statistical analysis showed an improvement in attention, namely a reduction in the number of errors in the Pitchblack test in the stimulation group compared to the control group (p <0.001). However, there was no significant difference between active and placebo stimulation.

Conclusions  As a result of the study, we found a positive effect of transcranial stimulation of the brain with direct current on attention in healthy people (p <0.001). However, the effectiveness of active stimulation does not differ in its effectiveness with placebo. The obtained results testify to the necessity of carrying out additional studies with variations in the parameters of stimulation (time of exposure, current strength, as well as the moment of exposure before or during the time of passing the test tasks).

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