EFFECTS OF ELECTROMAGNETIC RADIATION ON THE EMOTIONAL STATE OF HUMAN

Sargsyan V.R., Sargsyan V.H.

L.A. Orbeli Institute of Physiology, National Academy of Sciences , Yerevan, Republic of Armenia

[sargsyan.vahram@gmail.com](mailto:sargsyan.vahram@gmail.com)

Study of the influence of physical factors on the emotional state of the man is most promising area of modern science. The studies were not invasive and conducted on 18 people of both sexes (25 to 40 years), who were divided into three groups. The effect of electromagnetic radiation of reasonably wide range of frequency fluctuations on the level of anxiety by mean of the high-voltage transformer was studied. Preliminary was evaluated the level of situational anxiety of all participants of the experiment by scale of Ch. D. Spielberger (adaptation of Yu.L. Hanin).

To assess the effect of the placebo, participants of the group **I** was not exposed to any electromagnetic radiation, but about 10 minutes they were near high-voltage transformer, putting palm of right hand on a plastic box of switched off device. They thought that they are under the influence of physical factor.

Participants of the group **II** underwent a similar procedure, but already with enabled device.

In participants of the group **III** investigated not only the impact of electromagnetic radiation from high-voltage transformer (like in group II). Between the generator of electromagnetic radiation and the human hand there was an information intermediary - a glass vial with phytopreparation (10-15 g small pieces of fruit Malus domestica).

After 10 minutes of physical therapy procedures all the participants of experiment again undergo the Spielberger test (on a scale of situational anxiety).

The average level of anxiety of the group I before influence of physical factor was - 42.8 points, after the impact - 40.0 points (a decrease of 6.6%).

The average index for group II before the influence was 44.2, after - 37.0 points (16.2% decreases).

The average index for group III before the influence was 32.4, after the procedure - 30.0 points (7.4% decrease).

Thus, was revealed that as a result of auto-suggestion in the first group of subjects situational anxiety level has dropped by only 6.6% compared to group II, where the influence of electromagnetic radiation has led to decrease of 16.2%. The difference in group III was 7.4%, indicating the inappropriate use of the above mentioned information moderator. It can be concluded that the use of electromagnetic radiation leads to significant decrease of situational anxiety.