

Anti-relapse treatment of alcoholic patients by the method of transcranial interference cerebral therapy

Katorgin V.S.

(Institute of Reflexology of the Federal Scientific Clinical Experimental Center for Traditional Methods of Diagnostics and Treatment of the Ministry of Health RF, Moscow, Russia)

Since 1989, the author has developed and has been using for many years a fast and effective method of stopping the pathological craving for alcohol (PVA), which includes transcranial electrical stimulation with low-intensity currents, electropuncture vegetative resonance test (ART), and short-term suggestive psychotherapy while awake. The author's name of the treatment method - "Interference cerebral therapy" (ITC)

Over the years, the method has been tested on more than 8000 people who underwent a course of outpatient anti-alcohol treatment at the Center for Narcological and Psychotherapeutic Aid of the Main Directorate of Public Health in Moscow. Treatment by the ICT method was carried out using the "Stereodinator-728" apparatus of the "Siemens" company. The session was carried out once at the end of the course of treatment, as well as at repeated visits of patients in remission who complained about the actualization of their craving for alcohol. Since 1998, work has continued in the SPC of Traditional Medicine and Homeopathy of the Ministry of Health of the Russian Federation (now - "Institute of Reflexology of the FNCEC TMDL of the Ministry of Health of the Russian Federation"). In the final improved version, treatment sessions are carried out using the hardware and software complex "IMEDIS-EXPERT", with the ability to connect 1-2 autonomous devices of the "MINI-EXPERTDT" series to the system,

Technique of impacts: on the skin of the cranial vault, 2 temporal point active electrodes are fixed bilaterally, and 2 frontal electrodes are fixed along the midline. They are connected in parallel with a passive disc electrode, located above the spinous processes C7-D_{one} vertebrae. Two active clip electrodes are attached to the earlobes, connected in parallel with passive disk electrode at the vertex. A monopolar pulse current of 20-30 μ A is applied to the cranial point electrodes. The pulse repetition rates change exponentially from 1 to 120 Hz, and vice versa. A weak bipolar sinusoidal current with a fixed frequency of 6 Hz is supplied to the ear clip electrodes. Experimental studies have revealed interesting biological effects accompanying

transcranial electropunctural effects. Thus, it was found that pulsed currents supplied to the scalp induce synchronous oscillations of higher harmonics in the tissues in kilo- and megahertz frequency ranges. It is well known that such complex vibrations meet from the scalp and bones of the cranial vault much less resistance than just currents of low frequency (about 100 times). This is due to the high capacitive conductance, which increases significantly in proportion to the increase in the pulse repetition rate. The dielectric constant of the bone tissue and its dielectric polarization also sharply increase.

Any part of the body has a very heterogeneous structure, where tissues with

good and poor electrical conductivity are in a very complex relationship. The location of active and passive electrodes on the head is selected in such a way that currents of unequal frequencies and configurations (sinusoidal and pulsed), penetrating into the patient's brain through highly anisotropic tissue media, intersect at the base of the skull at a right (or close to right) angle, and excite interference oscillations. As a result of the summation, a new medium-frequency alternating current is formed, the amplitude values of which smoothly change from maximum to zero and back, forming the so-called "beating". The highest density of interference currents is concentrated in the basal structures of the brain and limbic-reticular subcortical formations responsible for

organization of motivational and emotional aspects of behavior and autonomic regulation.

Initially, during the treatment sessions, the measurement was carried out "Galvanic skin reaction" (GSR) on the surfaces of the palms, and since the mid-90s, diagnostics using the ART method has been used. Despite the apparent simplicity of the technique, the analysis of the dynamics of the patient's autonomic reactivity according to the change in the electrode skin impedance by the GSR method in the zones of the palms or at a representative acupuncture point turned out to be quite informative. In this case, the ART method has a certain advantage over the electroencephalography method, which is not possible during an ICT session due to external interference caused by electrical stimulation.

In the modern modification of the ICT method, testing of functional changes in the central nervous system is carried out using ART with an additional connection of an electromagnetic inductor, as a distant pulse probe. It is fixed in the center of the cranial vault and performs the function of indicating the results of electropuncture therapy. Since the bones of the skull are absolutely permeable to electromagnetic fields (EMF), from time to time electromagnetic signals of low intensity (10–20 μT) are supplied to the brain through the EMF inductor. In accordance with a predetermined program of comprehensive testing of brain rhythms, automatically the reference induction oscillations are switched on and off in the scanning mode of "frequency search". At the moment of coincidence of external (from the device) and internal (in the neural structures of the brain) oscillations in the central nervous system, the effect arises "Paramagnetic resonance" and in the functional system of acupuncture meridians, a nonspecific resonant response is excited in the form of the so-called "Phase transition" which is manifested by a sharp drop in the cutaneous impedance in "Reproducible point" when measured by the ART method. Having determined which of the reference frequency induction modes of the MINI-EXPERT-DT device, the resonant response was obtained, we can control the treatment process at all its stages, as well as judge the effectiveness of the effect.

Of course, in everyday therapeutic practice, we do not often connect the diagnostic module. From a technical point of view, the procedure is extremely difficult, it distracts the doctor's attention from the main task - carrying out suggestive suggestions and therefore requires an assistant to be involved in the work. With a sufficiently long experience of work, it is possible to quite accurately determine

moments of the patient's transition to an altered state of consciousness and back, using only intuition

The proposed working hypothesis for the mechanism of action of ICT, is based on the knowledge in areas neurophysiology, psychiatry, magnetobiology and reflexology of rapia, as well as on clinical and psychopathological observations and experiments.

Presumably, most treated patients after a certain latency period, not exceeding 600 seconds from the onset of ICT, desynchronization of the electrical activity of the brain occurs and inhibition of the ascending reticulocortical activating system, which is confirmed by the resonance response during ART (the first moment "Phase transition"). From this moment, a special parabolic state arises, associated with a change in the psychophysiological functioning of the limbic system and other structures involved. As practice has shown, at this time, the primary mechanisms of imprinting are activated, and the patient's subconsciousness becomes available to "reprogramming". It is aimed at suppressing the dominant pathological affect and changing the formed stereotypes of behavior that predetermine periodic exacerbations of PVA.

During the session, the patient gives the impression of a "detached", focused, deep-seated person, but is able to adequately respond to external stimuli and answer questions. The period of desynchronization of neural activity usually lasts no more than 900 seconds, and then there is a repeated moment "phase transition", when normal electrical activity of the brain is restored and the coherence of neural impulses increases. This moment is also tested using an EMF inductor using the ART method.

Long-term observations have shown that it is this short period of time between these two "Points of phase transition", it is most favorable for carrying out suggestive verbal suggestions aimed at forming the patient's confidence in the need for prolonged abstinence from drinking alcohol. The ICT method in combination with suggestive influences in patients who are, for the most part, in an altered state of consciousness, allows the attending physician to eliminate all components of PVA without resorting to the techniques of "induction of hypnotic trance". The explanation for such a phenomenon of firm consolidation of suggestive programs is that during the period of phase desynchronization and inhibition of the patient's brain activity, "Moment of special imprint vulnerability". At this point, verbal imperative suggestions are rigidly imprinted in the neural mechanisms of long-term memory. Long-term follow-up observations of the state of patients in remission, the stories of the patients themselves and their relatives, convinced us that the main factor contributing to a radical change in their lifestyle was the reduction of the pathological craving for alcohol. The experience of prolonged sobriety, as a rule, leads people to the need to reassess their basic life values, which further reinforces their positive changes in the motivational sphere.

It must be admitted that the hypothesis of a possible mechanism of action of the ICT method proposed here needs experimental verification and

explanation. Unfortunately, from a technical point of view, such a test is currently absolutely unfeasible in Russia, since it requires the use of modern highly sensitive diagnostic equipment available in most economically developed countries. It should also be noted that hardware and software systems for conducting

electropuncture diagnostics and therapy, developed and produced by the Moscow Center "IMEDIS", are superior to any foreign counterparts in all respects.

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