

The irradiation of magnetic field exposure time 90, 180 and 270 min relations clotting time and recalcification time not constitute a «Generalized Golden Section». Consequently, the system of coagulants in this case tends to a stable equilibrium state and is far from the norm. The value obtained for the exposure time 270 min, coincides with the «antinode» 0,741, which indicates the presence of active disease process.

Thus, the presence of «generalized golden sections» in the relationship between the clotting time of blood and recalcification time, points to the tendency of the system coagulants to sustainable equilibrium in the case of EHF EMR exposure and the magnetic field with shielding shungite and irradiated EHF EMR with increasing exposure time (180 and 270 min).

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**EFFECT OF CONCENTRATION
ULTRALOW 1,5-BENZODIAZEPINONA-2
ON THE PAIN THRESHOLD IN RATS
INTOXICATED WITH THEIR ORGANISM
CADMIUM CHLORIDE**

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Certain substances benzodiazepine are found to retain their specific effect in the range of ultralow concentrations (ULC) from 10–14 to 10–12 M without the side effects. Moreover, the magnitude and direction of their action depends from the dose of the substance as well as the functional state of the organism. For example, increasing the concentration of heavy metals in the body significantly alters its response to the effects of various pharmaceuticals. The aim of this work was to study the effect of 1,5-benzodiazepinon-2 (1,5-BDA) at the ULC on the pain threshold in rats against the background of cadmium chloride intoxication. The investigations were carried out on 70 white outbred male rats weighing between 230–250 grams. Control group of rats was injected with saline. Three groups of rats were injected during seven days intraperitoneally by cadmium chloride at a dose of 1 mg/kg, modulating accumulation of the metal in the organism tissues. Then these three groups and three groups of rats without intoxication were administered 0,2 ml of 1,5-BDA at concentrations 10–12, 10–13, 10–14 M. Analgesic effects were detected in the test «electrical stimulation», where the threshold of pain (TP) was determined. The results of the experiments were calculated statisti-

cally using Mann-Whitney U test. Under the action of 1,5-BDA at concentrations 10–12, 10–13, 10–14 M TP increased by 54, 48, 71 % ($p \leq 0,05$), respectively, compared with the control, that is evidence of the presence analgesic effect of 1,5-BDA at the ULC. The intoxication of the cadmium chloride resulted decreasing pain sensitivity (TP increased only by 45%), against the background of cadmium chloride intoxication the introduction 1,5-BDA increase even greater TP at all tested doses: by 169, 173 and 222% ($p \leq 0,01$) in comparison with the control. Also BP of these groups increased in comparison with the effect of the cadmium chloride by 124, 128 and 177% ($p \leq 0,01$) respectively. Thus, we have found that 1,5-BDA had analgesic effect at the ULC and dose-dependent analgesic effect was even more pronounced against the background of cadmium chloride intoxication.

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**HOW TO GIVE UP SMOKING ON YOUR
OWN PIECES OF ADVICE TO SMOKERS
AND SURROUNDING PEOPLE NEW
METHODS OF STRUGGLE AGAINST
SMOKING**

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Smoking is one of the major risk factors of cardiovascular and oncological diseases, it continues to cause irreparable harm to human health. The fact that smoking shortens life is undeniable, and it is now recognized by the majority of researchers.

Despite a lot of achievements in the fight against smoking, it is not so simple to overcome this habit. According to the data of the Institute of Cardiology of the Tomsk Scientific Centre of the Russian Academy of Medical Sciences, smoking prevalence for men constitutes 70% among women – 8%. These high figures point, on the one hand, to the cultural and social level and, on the other hand, the lack of effectiveness of existing ways to combat smoking.

This is partly due to the fact that anti-smoking techniques such as acupuncture and its varieties, psychotherapy, the use of drugs (unfortunately, not always accessible to the population) are not without side effects and often require a lot of time as well as repeated cumbersome courses of treatment.

The proposed way to combat smoking is addressed directly to a smoker; it is harmless and aimed at providing positive motivation, reinforcing the negative personal attitude of the person to smoking. It always clearly defines the position of the surrounding people.