

Materials and methods. Acute toxic two-day hepatitis was reproduced by intragastric administration of 50% oil solution of carbon tetrachloride at a dose of 0.4 ml/100 g of body weight. Ginger aqueous solution at a dose of 80 mg/kg and referent agents metformin at a dose of 60 mg/kg and the collection Arfazetin at a dose of 16 ml/kg were administered intragastrically 7 days prior to the introduction of carbon tetrachloride, and then along with the model of acute hepatitis.

Results and discussion. The injury of the liver was characterized by a significant imbalance in the lipid peroxidation/antioxidant system, depletion of recovered glutathione and glycogen in the liver and expressed cytolysis of hepatocytes. Preventive-therapeutic regimen of Ginger administration eliminated toxic manifestations of carbon tetrachloride. Hyperenzymemia decreased statistically significant and content of TBC-reactants under the influence of Ginger. The level of reduced glutathione and glycogen in the liver homogenates statistically significant normalized to the level of intact animals. Under the action of metformin and Arfazetin, partial non-significant recovery of the studied blood and liver homogenates was observed. The content of TBC-reagents and reduced glutathione was fully normalized only in rats receiving Arfazetin, while metformin showed only a positive tendency to lowering of TBC-reagents.

Conclusions. Thus, the expressed hepatoprotective properties of IMB are established on the model of acute carbon tetrachloride hepatitis. Ginger predominated over reference agents metformin and Arfazetin in the ability to normalize indices of lipid peroxidation/antioxidant system, activity of liver aminotransferase and content of glycogen.

THE NEGATIVE EFFECT OF HEADPHONES ON THE HEARING OF YOUNG PEOPLE

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Introduction. Full or partial hearing loss is one of the most common chronic diseases in the world. In the United States, hearing loss is one of the most widespread among chronic diseases. Hearing loss is caused not only by trauma, inflammation, infection, but also the prolonged effect of loud sound or vibration. Today, headphones are an integral part of the majority of our planet's population and are especially popular among young people. In this regard, hearing suffers a constant stress, which may lead not only to the deterioration of the hearing function, but also to pathological changes. Therefore, the study of the effect of headphones on young people's hearing is actual.

The **aim** of our work was to study the effect of headphones and identify their possible side effect on students' hearing, as well as offer recommendations for their further exploitation.

Materials and methods. At the first stage of the survey was to conduct a questionnaire among students of the NUPh 1-2 course, who have been using headphones for more than a year. Further, 10 students were selected on the basis of the data of the questionnaire, who had complaints of hearing impairment due to the prolonged use of headphones. The condition of hearing functioning was carried out on students at the Kharkiv State Student Hospital. The study of hearing acuity was carried out using the methods of speech and tonal audiometry (instrument - Audiometer MA 31). According to the results of the study, we plotted a graph-audiometry, which indicated on a frequency range in which the student heard well.

Results and discussion. According to the results of the survey, it was found out that the majority of respondents (88 %) uses vacuum headphones (plug-ins) and listens to music for more than 2-3 hours per day for many years. At the same time, 10% of them complained about bad hearing, discomfort and decrease of concentration and attention, which arises immediately after using headphones.

The next step in our study was to explore the audiogram of the students in order to identify possible pathology. When we carried out a detailed collection of anamnesis, we saw that this group of students listens to music with headphones at a maximum volume more than 3 hours per day for 18 ± 3 months. Using audiometry method we found out that only 2 patients had hearing loss. At the same time, the scale of audiograms fell below 25 dB (normal hearing frequency) - there was a bone-air interval, i.e. they had pathology of hearing. In addition it was discovered, that these patients had been using vacuum headphones for more than 6 hours a day at a maximum volume for more than 2 years.

Conclusion. Based on the obtained data, we can predict possible audiogram changes of students

who already had complaints, but during the experiment there were no deviations, but they had described the first symptoms of the hearing deterioration, in their anamnesis (decrease of attention, memory and concentration, discomfort after the using of headphones).

It can be assumed that hearing impairment occurred due to the negative effect of the headphones among patients who had abnormal changes in the hearing.

In order to prevent hearing loss among students, a number of recommendations were developed regarding the use of different types of headphones.

SLEEP, ITS PATHOLOGY AND METHODS OF CORRECTION

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Introduction. Sleep is an integral part of the human daily cycle. As a biological phenomenon it occurs spontaneously and provides normalization of the activity of all systems of the human body. The destruction of sleep leads to a numerous negative consequences. That is why the studying of possibilities to correct these disorders is very actual question today.

Aim. The goal of study was observation of sleep classification, its pathological mechanism and the methods of its correction.

Materials and methods. The research was hold by the observation of scientific literary sources.

Results and discussion. Sleep is a special condition of the nervous system, which is characterized by the turning of the consciousness, inhibition of respiratory activity, metabolism and sensitivity of the body. According to the genesis, dream can be divided into natural and artificial types. The first one is characterized by spontaneity another arises under the influence of certain external stimuli. The variety of the irritants cause sleep division into narcotic, hypnotic and electrical sleep.

Narcotic dream is the result of the influence of chemicals, such as drugs, chloroform etc. on the human organism. Electrical sleeping arises as a result of the action of low-frequency current pulses on the departments of the central nervous system. Such process leads to the inhibition of CNS activity. The hypnotic sleep is a temporary state of consciousness, which is characterized by the strong attention focusing and changing of the self-control system. A special kind of sleeping is a pathological dream. The etiology of the last one is associated with a lack of cerebral blood circulation, which leads to the inhibition of the activity of vast brains areas. Such kind of dream can be divided into somnambulism and lethargy.

Somnambulism is characterized by movements of the body, speaking during the sleeping and walking that lasts unconsciously. It is a genetic symptom which can get worse during the stress period.

Lethargy is the state of the organism when the life functions are saved, but there is no consciousness. A slow heartbeating and breathing rate, high body temperature are the clinical signs of lethargy. This type of sleep may occur as a result of a long period of wakefulness, hysteria, overwork or as a clinical manifestation of some viral infections of the brain and non-specific reaction to medication.

In general, sleep is a physiological need. The goal of this process is a protective inhibition of the CNS activity and organism in general. The result of this is the repairing of vital functions of body.

But there is a big variety of factors that course destruction of sleeping process. The examples can be stress, physical and mental tiredness, genetic aspects, emotional instability etc.

There are three ways of sleeping destruction: the disruption in the process of falling asleep, the lack of dreams deepness and lasting and abnormal early awakening that prevents to the complete finishing of the sleep phases. There are two parts in the physiology of sleeping: non-REM sleep and REM sleep, that normally change each other. Organism needs both phases for normal functioning. Non-REM sleep is characterized by the recovery of energy stock of organism and activation of anabolic processes. The result of abbreviation of this phase is tiredness and decreasing of working capacity. REM sleep is responsible for normal memory and information processing. The situation, when this period is imperfect leads to the worsening of cognitive abilities, tiredness of the organism and depression.

The treatment of insomnia can be hold in several ways. One of the examples is cognitive-behavioral therapy which is used in the case of initial insomnia. This type of treatment is based on the establishing of special