

ABSTRACT BOOK



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BIOMEDICAL SCIENCES







fall variants, mechanisms and the causes of numerous and polymorphous lesions. So far, many aspects of this problem remain undisclosed.

Materials and methods. The material for the research was 21 cases of a lethal fall from different heights to water in 2008-2015. At the same time archival materials of the Kharkov Regional Bureau of Forensic Medical Examination and regional forensic medical examination offices of other regions of Ukraine were used; Different literary sources. The following methods of research were used in the work: registration method; Mathematical-statistical method; Morphological method; Forensic medical method. The approximate rate of fall of the body at the surface of the water was calculated from the well-known formula, where h is the height of incidence, g-9.81 m / sec². The height of the fall was taken from the materials of the case.

Results of research. The analysis of the conducted studies showed that 95.2% of the injuries prevailed among the victims, more than half of the injuries occurred at the age of 20-50 years (72%). Among the circumstances of the occurrence of trauma, an independent jump from the bridge took place in most of the observations (57.1% of observations), jump from the rock-5 observations (23.8% of cases), parachute drop in water-4 cases (19%).

Conclusions. 1. Trauma from falling from a height of water is infrequent and is quite difficult for forensic medical assessment. 2. When conducting forensic diagnostics and determining the cause of death, it is first of all necessary to focus on primary contact lesions, which are quite characteristic, allow to reveal the mechanism of falling and to conduct differential diagnostics with other types of trauma. 3. In the genesis of death, the mechanism of the formation of injuries in the fall, the leading role is played by the posture of the body at the moment of contact with water. 4. The appearance of craniocerebral trauma and pain shock at the time of the fall can lead to loss of consciousness and subsequent drowning. 5. An integrated approach, which includes a thorough examination of all case of the accident, a thorough description and evaluation of all injuries, will allow us to establish the cause of death and the mechanism of damage in sufficient detail.

Bezverbniy V., Shishkina S., Mydlovets V., Shevchenko I., Karnaukh E. FEATURES OF THE DRUGS FOR TREATMENT OF AMYOTROPIC LATERAL SCLEROSIS

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Introduction. ALS is one of the most widespread neuromuscular diseases all over the world. which affects people of all and ethnic races groups. Materials and Methods. Mostly, people between their 40s and 60s suffer amyotrophic lateral sclerosis (ALS). But there is evidence when the disease strikes younger or older people. At the same time, men are more likely to develop ALS than women. "Familial ALS" (when the disease is inherited by people from their parents) is mentioned only in 5-10% of all the cases. Genetic factors cause it. Among them, approximately 1 of 10 cases is connected with the mutation in gene SOD1 as this enzyme is responsible for of

free





radicals.

Results. FDA has approved only one medication used to treat ALS. It is Riluzole (Rilutek). It is used to reduce the influence of glutamic acid on the work of motor neurons through intensification of other glutamic transporters. Moreover, it is considered that the medication fulfils another neuroprotective activity through blocking sodium and calcium channels, inhibition of protein kinase C and activation of NMDA (N-methyl, D-aspartate) of antagonism of receptors. Clinical trials in people with ALS showed that riluzole prolongs survival for a few months, and those who have bulbar form of the disease and take riluzole can survive even longer. Apart from this, it is necessary to start treating with Rilutek before applying mechanical ventilation. It should be emphasize that this medication does not revitalize the functions of motor neurons as the destruction of their activity has already happened. It is also important to mention that patients taking riluzole should have their liver skrinned constantly as 10% of the sick who take this medication have their liver damagedor experience other side effects. The medication KHC- 760704 is being on clinical trials in people with ALS. It is enantiomer of pramipexole, which is used to treat Parkinson disease and restless leg syndrome. This medication has almost no affect on dopamine receptors and the period of its application is unlimited as pramixole has very strong dopamine energetic features.

Olexozime (TRO19622) is being tested at phase three of chemical trials in the framework of MitoTarget. The molecules of the medication, which have cholesterollike structure, have strong neuroprotective features, thus they must be very effectivein treatment as they are like a cocktail of three neurotrophic which stimulate the work of motor neurons naturally. Clinical trials, which take place nowadays, are oriented to the testing of effectiveness, safety, tolerance and its level in blood in patients with ALS. Yet, scientists must find out whether taking two capsules a day prolongs life and patients relieves the symptoms of with ALS. New discovery of RNA-interference in the long term can help to treat ALS. Corporation Cytrx sponsored the ALS research with RNA-interference. It is the technology of turning the genes off, which was directed to the mutated SOD1. Because of the disorder in the system of trophic support of neurons while suffering ALS the use of existing medications having neuroprotective, neurotrophic and neuroplastic activity is of great interest. Cerebrolysin is a neurotrophic medication, which is made up of approximately 25% low-molecular biologically active peptides and free amino acids, which are able to penetrate through hematoencephalic barrier and show neurotrophic activity as for the neurons of peripheral and central nervous system. Cerebrolysin are as following: neurotrophic stimulation, The main effects of neuroprotection, neuroimmunologic and metabolic regulation. It is well-known that such an influence of Cerebrolysin on the metabolism is specific only for the nervous system. Cerebrolysin can protect neurons from two common mechanisms of damage excitotoxicity and oxidative stress. Their participation in pathogenesis of neurodegenerative diseases, as well as in ALS, is noticed by the majority of researches. It is assumed that such effects of Cerebrolysin realize due to its ability to stop the formation of free radicals and the presence of peptidergic agonists of presynaptic GABA-B-receptors in the medication. It is possible that selective activation of these receptors reduces the supply of calcium ions through the voltage-dependent canals to





the cells, resulting in the decrease of output of excitative amino acids from the presynaptic terminals and the suppression of synaptic transmission. Perhaps, peptidergic agonist of GABA-B-receptors works with another component which activates presynaptic adenosine A1-receptors. At the same time, the action of Cerebrolysin on the adenosine A1-receptors is most likely to be not direct but with the release of free endogenous agonist, adenosine, which is responsible for inhibition of synaptic transmission, and also due to the decrease of glutamate inhibition from the presynaptic terminals with the subsequent decrease of calcium ions supply to the neuron. Simultaneous activation of presynaptic adenosine and GABA-B-receptors with effective way glutamate inhibition control. Cerebrolysin can be an of Conclusion. Thus Riluzole can be named the first step in treating ALS as scientists all over the world hope that progress in medicine and development of new technologies will make it possible to develop new medications in the nearest future and the quantity of people suffering ALS will decrease fundamentally. Thereby, nowadays the only medication consisting of a balanced compound of fragments of neurotrophic factors is Cerebrolysin. Anyway, there no methods of ALS treatment with proved effectiveness, but there is a hope that soon new knowledge of aetiology, pathogenesis of the disease and progress in pharmaceutical field and the field of biotechnology will allow to develop and launch effective medications for treating amyotrophic lateral sclerosis in clinical practice.

Chibuzor V., Zinchuk A. STUDYING VIOLATIONS OF THE RIGHTS OF PEOPLE WITH DISABILITIES

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Introduction. Recently World Health Organization (WHO) stated "A global human rights emergency in mental health", this is very common in the society today. All over the world people with mental disabilities experience a wide range of human rights violations. In many countries people do not have access to basic mental health care and treatment they require. In others, the absence of community based mental health care means the only care available is in psychiatric institutions which are associated with gross human rights violations including inhuman and degrading treatment and living conditions. Hence research was done to compare persons with psychiatric illness and their caregivers' perceptions regarding the human rights status of people with mental illness in the community according to National Institute of Mental Health and Neuroscience (NIMHANS) in India.

Materials and methods. The method involved a descriptive design was carried out among randomly selected asymptomatic psychiatric patients and their caregivers (N=200) at a tertiary care center. Data was collected through face-to-face interview, using a structured questionnaire. Researchers used a random number table to recruit potential subjects who received an initial assessment by a psychiatrist using the Clinical