

18. EXPRESSION OF *c-fos* AND NO-SYNTASE ACTIVITY IN MOTONEURONS AND INTERNEURONS OF THE RAT'S SPINAL CORD

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Introduction: The problem of the implementation of the accuracy and efficiency of motor skills is important in the producing of professional movements of any person, in sports, music, medicine, and particularly in post-stroke rehabilitation. Muscle proprioceptive impulses play an important role in the functioning of spinal motor centers. Excitable and inhibitory interneurons in dorsal and ventral horns of the spinal cord are important components of structures, which monitor physical activity. We have studied the expression of *c-fos* and NADPH-diaphorase-reactive neurons in the cervical spinal segments of rats.

Materials and Methods: Six male Wistar rats were examined. Operant motor activity was realized in the course of 12 everyday 30-min-long training sessions. After 2 hours of the last training, all experimental rats were intracardially perfused through the ascending aorta. Fos-immunoreactive neurons were visualized immunohistochemically in the C6/C7 spinal segments in rats trained for operant movements. Fos-immunoreactive nuclei were revealed with standard avidin-biotin-peroxidase method, which used polyclonal rabbits' antibodies directly against nuclear c - Fos protein. Histochemical labeling of neurons based on the detection of NADP•H – diaphorase.

Discussion results: There were registered small number of *fos*-immunoreactive nuclei in C6/C7 segments of spinal cord of animals. The designated neurons were found in different layers of the gray matter, but in the motor nuclei (layer 9) and in the lateral spinal nuclei (LSp) fos-immunoreactivity was registered in few number of cells. Cells containing c-Fos protein and NO-synthase are simultaneously identified as double staining neurons.

Conclusion: The results of research of spatial and quantitative characteristics distribution of motoneurons and interneurons that were activated in the cervical part of spinal cord of rats after repeated realizations of food extractive movements are presented in this work.

Key Words: *c-fos* expression, nitric oxide, spinal cord, operant reflex, rat

19. THE PROBLEM OF PRESERVATION OF CONFIDENTIALITY WHEN WORKING WITH TB PATIENTS

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Introduction: Medical secret is information that does not have the right to be disclosed by the medical workers and other persons in connection with the performance of their professional or official duties became known about the state of health, illness, and the fact of asking for medical advice, diagnosis, medical examination, inspection, and their results, intimate and family aspects of person's life, a medical secret is one of the main problems to solve this issue as tuberculosis prevention on the one hand, and preserving the privacy of personal life, his health, on the other. Because TB in Ukraine and in the world is common. About 1.8 million deaths from various forms of tuberculosis are stated annually in the world.

Purpose and Objectives: To review the legal framework to ensure confidentiality when working with TB patients, to identify issues and their solutions.

Materials and Methods: Legislative acts (the Constitution of Ukraine, laws of Ukraine on health protection, the criminal code of Ukraine, the Family code of Ukraine), statistics on the incidence of tuberculosis in Ukraine. Methods: comparative legal, statistical, forecasting and epistemological.

Results: It is prohibited to demand and serve at the place of work or study information about diagnosis and treatment of the patient. For unlawful disclosure of information by the current

legislation stipulates responsibility according to 145 of the criminal code of Ukraine. In the legislation of Ukraine is noted that responsibility for disclosure the information on the health status of the patient are not drawn: the brides and the parents of children up to 14 years, the legal representative, doctor's of SES, who revealed the secret with the purpose of elimination of employment and training of TB patients, the doctors, the disclosure of classified information at the request of persons engaged in the production investigator — prosecutor, court. When conducting tuberculosis chemoprophylaxis the contact persons to preserve patient confidentiality becomes almost impossible. According to the instructions of the Ministry of health order № 499 dated 28.10.2003 aid to TB patients, a group of people who are in contact with persons, who are contagious people are held chemoprophylaxis, vaccination of uninfected children with BCG.

Conclusion: Thus, the issue of preserving in secret the information about the diagnosis and course of the disease tuberculosis is complicated enough. So, trying to minimize the risk of disease is quite difficult to observe complete confidentiality. Current legislation does not ensure full observance of medical confidentiality.

Keywords: Medical secret, Tuberculosis

20. PATHOMORPHOLOGICAL SIGNS OF INTRAUTERINE INFECTION

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Introduction: Intrauterine infection (IUI) is characterized by high prevalence and diversity of morphological manifestations which appear in the biological system mother - placenta - fetus.

In this regard, the university not only can pose a serious threat to the normal development of pregnancy, but often bring harm to the health of pregnant women and the further implementation of reproductive function. High practical importance IUI led to growing interest to specialists on infectious diseases placenta, fetus and newborn.

Purpose and Objectives: The aim of our work is the analysis of recent literature data and the results of their own research (materials PDVinnitsa 2007 - 2011.) and identify the main morphogenetic mechanisms of IUI.

Results: Intrauterine infection is one of the most important problems of modern pediatrics. There are 4 main ways of placental infection: ascending, hematogenous, contact, descending. Ascending path leads to the development of inflammatory reactions in the tissues of the litter. Among the microorganisms that cause infections of the rising of the pregnant uterus and membranes have a wide range of opportunistic bacteria, including *E. coli*, fecal staphylococci, hemolytic streptococci group B, *Staphylococcus aureus*, gonococcus, *Corynebacterium*, *Campylobacter*, *Klebsiella*, *Pseudomonadaeruginosa*, mycoplasma, chlamydia and others. Also significant role is played by anaerobic bacteria, fungi of the genus *Candida* yeasts. A characteristic feature of ascending infection in pregnant women is a form of exudative inflammatory reaction (serous, purulent, fibrinous), a substantial role violation vaginal biocenosis and pathological conditions of the cervix. Hematogenous route of infection is most typical pathogens core group TORCH-infections, toxoplasmosis, rubella, cytomegalovirus, herpes simplex, and others. Thus the prevailing productive inflammation.

Downturn theoretically is an acceptable way to infections in pregnant women with areas of active inflammation in the ovaries and fallopian tubes (gonorrhea, mycoplasma, chlamydia).

Conclusion: Contact fetal infection may develop during birth when the newborn, placenta and membranes fruitful encounter with an infected birth canal contents. So, in newborns occur gonorrheal conjunctivitis, chlamydial and mycoplasma vulvovaginitis, herpetic and bacterial dermatitis. Existence single biological system mother-placenta-fetus is the basis for selection in the pathogenesis of IUI "parent", "postpartum" and "productive" stage.

Keywords: Intrauterine infection