



Intoduction. The frequency of development pregnancy pathology and diseases of newborns are growing rapidly. The dominants lifestyle in industrially developed countries is a sedentary lifestyle. But the obstetric aspect of the problem of hypokinesia is not studied enough.

Aim. To learn the somatometric features of newborns and organometric features of placenta in pregnant women with hypokinesia.

Methods and materials. There are 16 cases of delivery in CEHP «Kharkiv city maternity hospital №6» from the obstetrician-gynecologist`sDoroganova A.V. permission who has been making the research about the obstetric aspect of hypokinesia. The pregnant women with the physiological process of pregnancy composed the control group (Cgr.) – 7 women. Women with the determined hypokinetic lifestyle composed the main group (hypokinesia - HKgr.) – 9 women. The mass, lenth, mass-lenth index (MLI) of newborns, absolute and relative mass of placenta, index of placenta capillarization were analyzed.

Results. The average body mass, the average lenth and MLI of newborns in Cgr. and HKgr. are the same, but in HKgr. – with bigger amplitude of values than in Cgr. There was found that only in 2 cases from the HKgr. MLI matches to the control variations, in 3 cases – exceeds, in 4 cases – reduces. That is in pregnant`shypokinesia newborns have increased probability for development obesity or deficiency of fatty tissue. The tendency to an elevation of absolute and relative mass of placenta in HKgr. was revealed, so it is necessary the bigger placenta for the fetus formation of the same mass in HKgr. than in Cgr. The index of capillarization of placenta, which is reflected the proliferation`s degree of capillaries in terminal villi and the mass of placenta, in HKgr. is 50% lower than in Cgr: index of capillarization of placenta in HKgr. is 4.38 ± 1.32 conv. un., in Cgr. – 9.41 ± 1.42 conv. un., $p < 0.05$.

Conclusion. Hypokinetic lifestyle during pregnancy has an affect on somatometric indexes of newborns and leads to increase of childbirth`s probability with such symptoms as intrauterine obesity or intrauterine deficiency of fatty tissue. The proliferation`s degree of capillaries in terminal villi of placenta in the case of hypokinesia of pregnant is reduced, which is partly compensated by hypertrophy of placenta.

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MORPOHOLOGICAL PECULARITIES OF THE CEREBELLUM IN ACUTE CEREBRAL CIRCULATORY DISORDERS

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Introduction. Acute disorders of cerebral circulation is one of the most important medical and social problems. In Ukraine, annually diagnosed more than 130 thousand cases of acute disorders of cerebral circulation, mortality rate which is 30%. The most common forms of cerebrovascular disease are cerebral thrombosis (40% of cases) and cerebral embolism (30%), followed by cerebral hemorrhage (20%).The cerebellum is one of the most important functional structures of the central nervous system, not only provides a static and coordination, but also participates in vital body functions. Therefore, the study of the pathology of the cerebellum is an important area of modern morphological and clinical studies.

Aim - to determine the features of morphological of the cerebellum in acute cerebral circulatory disorders.



Materials and methods. Morphological study was conducted on 14 cerebellum of people who died from CVA, including 7 - of ischemic brain infarcts, 7 - from hemorrhagic strokes. The control group consisted of 10 cerebellum of people who died from causes unrelated to the pathology of the central nervous system. Was used histological method of study - coloring hematoxylin-eosin, Nissl staining method with subsequent morphometry and statistical analysis of the results. We measured the following parameters: the number of Purkinje cells on a sheet of gray matter, length ganglion cortical layer, the density of neurons and the average distance between neurons.

Results. In the control group the average number of Purkinje cells on a folium of gray matter was 16.77 , the average length ganglion layer of the folium - 3940.1 m , the average density of neurons – 4.35 neurons per 1 mm and the average distance between neurons - 266.2 microns. In the group with cerebral infarction average number of Purkinje on a folium of gray matter was 10.56 , which is less than the control group at 37.03 % , the average density of neurons - 2.65 neurons per 1 mm, which is less than the control group by 39.08 %; the average distance between neurons was 485.48 mm, which is more than the control group at 82.37 % . In the group with cerebral hemorrhage average number of Purkinje cells on a folium of gray matter was 11.35 , which is less than the control group at 32.41 %; the average density of neurons - 2.98 neurons per 1 mm, which is less than the control group at 31 49%;the average distance between neurons was 370.56 mm, which is more than the control group at 39.20 % .

Conclusion. Thus, showed a reduction in the number of neurons and for increasing the distance between the neurons of the cerebellum in patients with ischemic and hemorrhagic stroke with extracerebellar localization.

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HIGH LEVEL AFFECT OF PERINATAL HYPOXIA TO MYOCARDIUM OF NEWBORN RATS

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Introduction:Source of the most cardiovascular system pathology in elders starts from peri- and neonatal period. In recent years, much interest in state of cardiovascular pathologies are in newborns after undergoing through chronic and acute perinatal hypoxia. There were 21.4% chances of intrauterine hypoxia and asphyxia and around 11 newborns with the mass weight of 1000 gram were during child birth by the record of 2013 in Kharkov region. Fetal hypoxia leads to disruption of autonomic regulation of the coronary vessels, deterioration of energy metabolism with the sharp decrease of macroenergetic compounds formation in mitochondria of cardiomyocytes and cells of sinusoidal nodes.

Aim:Pro analyze affect of acute postnatal and chronic intrauterine hypoxia of heavy state on myocardium of newborn rats in an experiment.

Materials and methods:Experiment was done on Wistar rats with the formation of periodic hypobaric hypoxia conditions of high severity for pregnant females (little rats were in groups of chronic intrauterine hypoxia- gr. CIH) and disposable hypobaric hypoxia conditions for newborn rats (little rats were in groups of acute postnatal hypoxia – APH).Intact animals were in control group (gr. Cntrl). After taking little rats from experiment apex of heart was used to make micro-preparations and organize of histological and morphometric researches (microscope Axiostar plus-Zeiss).