

important role. This may be caused as a result of the changes of hormonal status and phosphorus-calcium metabolism.

The list of references

1. Aksenov O.A., Osipova Z.A., Kurbatova G.P., Melnikova V.F. The methods to diagnose the intrauterine infection. – 1989, Bulletin № 39. – p.2
2. Gorikova I.A., Labzin V.I., Turusheva S.V. et al. The changes of anthropometric parameters in children with the intrauterine influenza B who often get ill with ARVI (ARD) during the first year of their life // X International scientific and practical teleconference. Urgent problems of the modern science. The materials of scientific collection. – Tomsk, 2013. – V.II, № 1. – P.76-77.

Vascular changes vertebrobasilar in chronic obstructive lung diseases

Grigorenko A.A., Buldakova I.A.

Amur State Medical Academy. Department of Pathological anatomy. Blagoveshchensk, Russia.

Summary: In chronic obstructive pulmonary disease is changing vessels vertebrobasilar as a thickening of the inner lining of arteries and secondary due to proliferation and hypertrophy of smooth muscle cells, increased collagen content, changes in the internal elastic membrane, manifested its thickening, thinning, destruction.

Key words: chronic obstructive pulmonary disease, blood vessels vertebrobasilar, morphology, thickness of the inner, middle lining of arteries, the thickness of the intima-media.

Chronic obstructive pulmonary disease is a crucial less widely and social problem and is considered the illness of the century (along with ischemic heart disease), due to the steady increase in morbidity, disability, mortality, and economic damage done to society [4]. The most frequent complication and poor prognosis of COPD is chronic pulmonary heart (CPH) [1]. Because of the numerous clinical manifestations in recent years have increasingly seen COPD as a systemic disease. Found that patients with COPD have the endothelial dysfunction (ED) and cerebral vascular main basins, characterized by significant and increasing prevalence of constrictor activity [2]. Severity of vascular disorders of cerebral blood flow, increases with the progression of the disease [3]. Remodeling cerebral arteries can lead to inadequate perfusion of the brain and the development and progression contribute encephalopathy.

Materials and methods: In order to study the morphology of vascular vertebrobasilar autopsy material studied 72 COPD patients who were divided into 3 groups according to the stage of development of the CPH. Group I consisted of 15 patients with COPD without CPH. Group II - 28 patients with COPD with CPH in the compensation stage. III In the third group of 29 patients with COPD decompensation CPH. The control group consisted of persons of corresponding sex and age, died from injuries and acute surgical pathology.

The object of the research were basilar, vertebral artery.

On microscopic examination, measured the thickness of the inner (intima) (mm), medium (media) of the shell (mm), the thickness of the intima - media (TIM) (m), as well as the ratio of the inner layer to the middle (I / M) (cond. unified the difference). Histological sections were stained with hematoxylin and eosin surveillance, calling genes and elastic fibers and picrofuchsin fukselinom, Van Gieson.

Results and discussion: In the test vessels at all stages of the CPH showed statistically significant relative to the control group and other investigations of the increase TIM with maximum performance in Group III.

Increase that occurred both through internal and tunica artery to a greater extent by internal, as evidenced dostovernoe increase I / M in all groups compared with the control. The thickness of the inner lining of arteries and the average was significantly increased compared to control in all groups and reached the maximum performance in Group III. Increasing the thickness of the inner and middle shells occurred due to hypertrophy and proliferation of smooth muscle cells, increasing the content of collagen.

The internal elastic membrane with areas of thickening and thinning, razvoloknetion and destruction.

Conclusions. Thus, it was found that the changes of the arteries begin at the early stages of the disease and increase as the disease progresses. The thickening and hardening of the blood vessels leads to increase its rigidity, change the functional activity, which in turn increases the risk of cardiovascular complications in these patients may lead to inadequate perfusion of the brain and contribute to the development and progression encephalopathy. It talks about the importance of early diagnosis and prevention of vascular disease in patients with COPD, which will improve the course and prognosis of the disease, as well as to improve the quality and duration of life of these patients.

References:

1. Weitzenblum E., Hirth C., Ducolone A. et al. Prognostic value of pulmonary artery pressure in chronic obstructive pulmonary disease. *Thorax* 1981; 36: 752-8.

2. Geltser BI, Brody T., V. Kotelnikov etc. The interrelationship between endothelial vasomotor effects of trunk and cerebral arteries in obstructive lung disease // *Russian Journal of Physiology them. I.M. Sechenov.* 2008.-T. 94, № 2. - P. 206-211.

3. Geltser BI, Brody T., V. Kotelnikov et al Endothelial dysfunction and cerebral arteries in patients with chronic obstructive pulmonary disease // *Bulletin of Experimental Biology and Medicine.* 2007. T. 144, № 12.-P. 613-617.

4. Tsoi AN, Lazareva NB "The modern view of the pharmacotherapy of chronic obstructive pulmonary disease." *Consilium medicum,* 2011, V.5, № 1.-P.3-9.

Cognitive and emotional components of the general adaptation syndrome of rats at short-term social isolation

Grigor'ev N.R., Li -Tingly, Cherbikova G.E.

Amur State Medical Academy, Ministry of Health. Russia, Blagoveshchensk,
Heilongjiang University of Chinese Medicine, Harbin, China. Happing street, 24.

Abstract. Adaptation is a process of functional and structural reconstruction of an organism in whole or its systems under the varieties environment or conditions social (zoo social) to optimization of its functions which result is adaptoneself completely. One of types of physiological adaptation is search activity or search behavior which is always closely connected to the higher functions of a brain and first of all with cognitive abilities.

There are 2 kinds of adaptation:

1. Biological, evolutionary it structural or slow which occupies a millennium, centuries, years, months. 2. Physiological, functional, behavioral or fast which occupies hours, minutes, seconds. Fast behavioral adaptation is a subject of our analysis of a modern state of a problem which is effected on the basis of two new sciences which have appeared in the end of the XX-th century - psychobiology, psychophysiology and some our researches within the limits of the given scientific problem in this direction for the last few years.