

A.U.Gadjieva

Samarkand state medical
institute, Republic of
Uzbekistan

Key words:

postnatal ontogenesis,
intrapericardial part of
cranial vena cava,
ethanol.

Received: 14.11.2014

Accepted: 20.12.2014

UDC 616.145-616.89-008.441.13.591.8

**THE HISTOGENESIS OF CRANIAL CAVA
VEINS UNDER INFLUENCE OF ETHANOL**

ABSTRACT. Background. The structural changes in veins are influenced by a variety of chemicals, including ethanol. Effect of ethanol is primarily manifested in violation of structures of blood vessels and heart. **Objective.** To detect changes of morphological and functional features of intrapericardial division of the cranial venae cavae in 132 rats aged 1-30 days when exposed to ethanol. **Methods.** 60 rats received milk with ethanol in lactation period from females which were intraperitoneally injected 40° ethanol in a dose of 8 ml/kg from 2 to 22 day. 72 intact rats were used as controls. **Results.** As a result of the experiment reduction of the wall thickness of intrapericardial part of the cranial venae cavae and violation of their growth were observed. **Conclusion.** Admission of ethanol with maternal milk results in the thickening of the collagen and elastic fibers, destruction of reticular fibers, muscle cells and endothelial cells.

© **A.U.Gadjieva, 2014**

✉ **madinafirst@mail.ru**

Citation:

Gadjieva AU. [The histogenesis of cranial cava veins under influence of ethanol]. *Morphologia*. 2014;8(4):12-6. Russian.

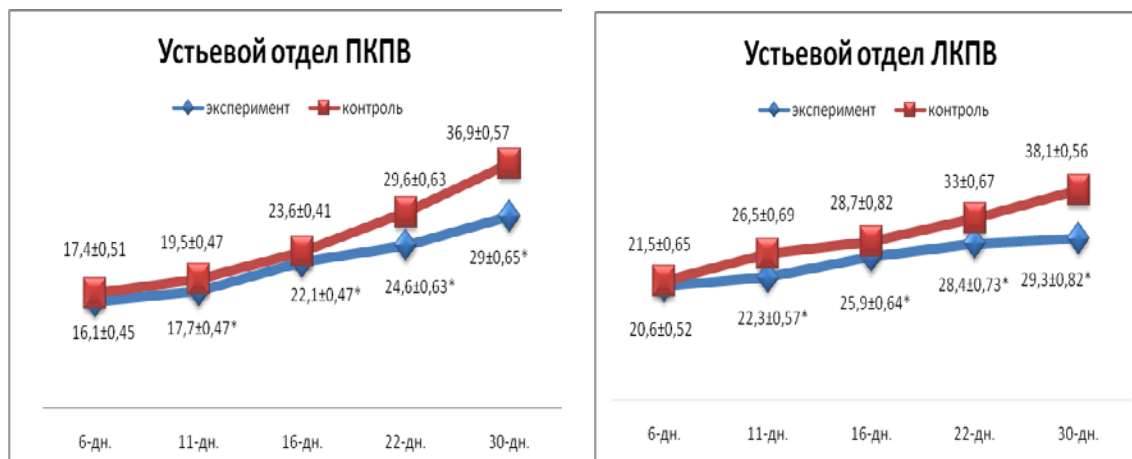


Fig.1. Wall thickness in the intrapericardial division of the left and right cranial venae cavae in control and experiment (µm). * - P<0,05 in comparing the two groups.

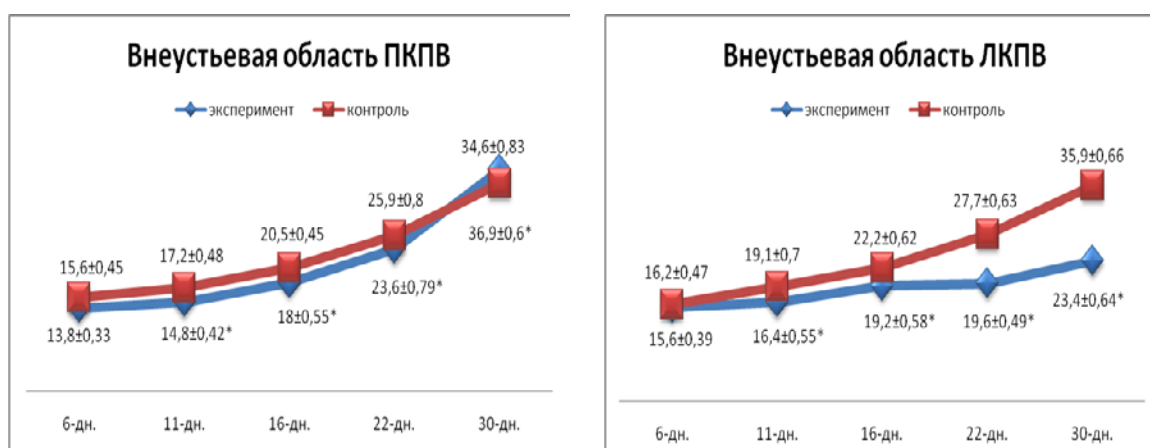


Fig. 2. Wall thickness in the extrapericardial division of the left and right cranial venae cavae in control and experiment (µm). * - P<0,05 in comparing the two groups.

References:

1. Shevchenko YuL, Stoiko YuM, Lytkina MI. [Fundamentals of clinical phlebology]. Moscow: Meditsina; 2005. 312 p. Russian.
2. Porsukov EA. [On the question of morphological diagnosis of alcoholic heart disease]. Sudebno-meditsinskaia ékspertiza. 2009;(6):21-4. Russian.
3. Steinweg DL, Worth H. Alcoholism: the keys to the CAGE. Am J Med. 1993 May;94(5):520-3. PMID: 8498397.
4. Solonskiĭ AV, Logvinov SV, Ketepova NA. [Development of brain vessels in human embryos and fetuses subjected to prenatal exposure to alcohol]. Morfologiya. 2007;131(2):63-6. Russian. PMID: 17583012.

5. Crachun GP, Pischenko EE, Razygraeva NL, Petrovina IA, Kushnir RKh. [Functional histomorphology of intertissue changes of brain vascular wall in alcoholic disease]. In: [Abstracts of the 10th International medical conference for students and young scientists]. Hyst. 2013;15:270. Russian.

6. Al'fonsova EV. [Functional morphology of conjunctive tissue stroma of spleen in the age aspect]. Adv Gerontol. 2012;25(3):415-21. Russian. PMID: 23289216.

7. Gadjieva AU. [Morphological changes in the wellhead of the cranial vena cava of rats in postnatal ontogenesis under the influence of ethanol]. In: [Modern medicine: current issues]: collection of articles based on 33 international scientific-practical conference. Novosibirsk; 2014. Issue 7. p. 63-9. Russian.

8. Ocheretina RIu, Mkrтчan OZ, Stogov MV. [Morphometric parameters of hepatic lobule vessels in mice during the restorative period after leg injury]. Morfologiya. 2012;141(2):32-4. Russian. PMID: 22913135.