



## COMPARATIVE DESCRIPTION OF MORPHOMETRIC PARAMETERS OF THE STOMACH DURING NORMAL AND BRAIN INJURY

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**Cost:** Nowadays, the problem of BMJ directly affects the quality of life of many people around the world. After BMJ, victims survive the acute phase of the disease and the resulting neurological complications, thanks to timely and effective modern neuroresuscitation and neurosurgical care. Thanks to advances in medicine, the severity of the injury in many cases does not determine the severity of complications and lethal consequences in patients. The fact that the immediate cause of death in the late stages of brain injuries is the pathological processes that develop in the internal organs caused by the injury shows that the solution of the problem needs to be studied not only in the framework of the injured brain, but also in the whole organism.

**The purpose of the study:** comparative study of morphometric parameters of stomach sections in normal and different periods of mild brain injury, development of correction methods.

**Research methods and methods:** An experimental scientific study was conducted on 200 adult white rats of both sexes weighing between 135 and 150 g. All white outbred rats were kept under normal vivarium conditions. Laboratory animals were kept in the vivarium of the Bukhara State Medical Institute. Rats were kept in special rooms (room temperature 20-24°C, humidity 60%, light 12 hours) according to the requirements for experimental animals.

### **Conclusions:**

1. Peculiarities of the stomach of sexually mature and healthy white rats during late postnatal ontogenesis: see the ratio of the width of the stomach parts to the greater curvature efficient  $h/l$  was determined. This ratio was found to be 0.5 at the level of the gastric fundus, 0.35 at the body level, and 0.25 at the pyloric level. Important microscopic parameters of the stomach: the thickness of the mucous membrane in the body  $325.44 \pm 15.1$  in the pyloric part of  $\pm 11.1$   $\mu\text{m}$  It was equal to  $5.9$   $\mu\text{m}$ . When studying TsYaNi, the number of nuclei at the intersection points of the ocular retina is on average  $3.9 \pm 0.18$ , and the average number of cytoplasms was  $13.3 \pm 1.01$ . In this case, the cytoplasm-nuclear ratio was equal to  $3.4 \pm 0.23$  on average.





2. A patent was obtained for a road traffic simulation device (Patent No. FAP 02271) to induce experimental BMEJ in non-white rats, and using a mild brain injury was called.

### References:

1. Alekseeva N.T., sovt. The role of cellular fibroblastic differentiation in the process of inflammation of the wound // Vestnik eksperimentalnoy i klinicheskoy hirurgii. T.5 – Voronezh. - 2012. -, No. 3. - .601–608
2. Aliev F.I. Pathogenetic role of the vagoinstular and enterinovy system and the formation of erosion of the stomach and dvenadtsatiperstnoy male pri sochetannyx cranio-mozgovyx trauma // Vistn. probl. biol. i med. — 2013. — T. 2, No. 1. — c. 73–76.
3. McCutcheon W., et al. (2016) A Model of Excitotoxic Brain Injury in Larval Zebrafish: Potential Application for High-Throughput Drug Evaluation to Treat Traumatic Brain Injury // Zebrafish. - 2016. - Vol. 13(3). p. 161–169. <https://doi.org/10.1089/zeb.2015.1188>
4. Mott TF, et al. Subacute to chronic mild traumatic brain injury // Am Fam. Physician. – 2012. - No. 86(11). - p. 1045-1051.
5. Mychasiuk R. A novel model of mild traumatic brain injury for juvenile rats // J. Visual. Exp. - 2014. - #94. - p. 201-207.
6. Ni, X., Tan, et al. A region-resolved mucosa proteome of the human stomach // Nat Commun – 2019. – p.1-11.
7. Peeters W., et al. Epidemiology of traumatic brain injury in Europe // Acta Neurochirurgica – 2015. – V. 157. – p. 1683–1696.
8. Rabinowitz AR, Levin HS Cognitive sequelae of traumatic brain injury // Psychiatr Clin North Am. – 2014. - No. 37(1). - R. 1–11.

