

RESULTS OF THE ANALYSIS OF MORPHOLOGICAL CHANGES IN THE STOMACH DURING THE ACUTE PERIOD OF SPINAL BRAIN INJURY

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Abstract: *This thesis presents data on morphological changes in the stomach of research group rats during the acute period of spinal cord injury .*

Key words: *ischemia, hypoxia, erosion, hemorrhage, dystrophy, necrosis.*

The incidence of spinal cord injury due to vertebral fractures ranges from 3.6 to 195.4 per million population worldwide (Dulaev A.K. et al., 2018; Marino RJ et al., 2020; Rau Y. et al., 2022). Almost 50.0% of spinal cord injuries (SCIs) are combined and combined injuries, which complicates diagnosis and treatment (Andreeva T.M., Ogryzko E.V., 2017; Tolkachev V.S. et al., 2018; Lobzin S.V. et al., 2019).

Secondary complications following traumatic injury, not only at the site of mechanical injury due to spinal cord injury, but also in internal organs, especially in the digestive system, especially the stomach, deserve attention and require further in-depth study and research.

Materials and methods: 10 white male and female rats were recruited for the study. In the study, spinal cord injury was induced in white male rats using a specially developed model using the “fall from a height” method.

morphological structures of adrenal glands at different levels (organ, tissue and cell level) in white rats of different ages learned. Statistical (methodological) data were used to process the research results .

RESULTS AND DISCUSSION: During the acute period of spinal cord injury in 3-month-old white rats, the following data were obtained: macroscopically, it can be seen that the stomach of the 3-month-old white rats of the research group is an odd organ and is located in the upper part of the abdomen. In the process of macroscopic analysis of the stomach Hyperemia (redness) was observed in the gastric mucosa . This condition can be observed as a deep red color due to the expansion and dilation of the blood vessels in the gastric mucosa. In addition, it was found that the gastric wall thickened and the natural folds on the mucosa became smooth and shiny. When examined from the outside, we can see that the gastric wall relaxed and expanded due to the disruption of innervation. As a result, the stomach contracts and cannot expel its contents into the intestines, which leads to the accumulation of a large amount of food debris and fluid in the stomach and the development of secondary complications. As a result of excessive distension and swelling of the stomach, we can witness that its internal relief has become almost flat.

The results of histological examination showed that the following pathomorphological changes begin in the mucous membrane of the stomach during the acute and acute periods after the spinal cord injury:

Acute microcirculatory and dystrophic changes occur in the stomach wall during the acute period of spinal cord injury . Morphometric indicators during this period mainly reflect the processes of ischemia (blood deficiency) and swelling (edema) (Table 1).

Table 1

Morphological changes in the stomach during the acute period of spinal cord injury

Index	Status	Change percentage
Shilli floor thickness	It will decrease.	-25%

Submucosal layer	thickens (swells)	+100%
Veins diameter	Expands	+120%
Inflammation cells	It increases.	+150%

Thus , histologically , the spinal cord of the experimental group was injured Pathomorphological changes in the mucous and submucous layers of the stomach wall of 3- month-old white rats were especially evident in the early stages of traumatic injury.

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