МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ СУМСЬКИЙ ДЕРЖАВНИЙ УНІВЕРСИТЕТ КАФЕДРА ІНОЗЕМНИХ МОВ ЛІНГВІСТИЧНИЙ НАВЧАЛЬНО-МЕТОДИЧНИЙ ЦЕНТР

МАТЕРІАЛИ Х ВСЕУКРАЇНСЬКОЇ НАУКОВО-ПРАКТИЧНОЇ КОНФЕРЕНЦІЇ СТУДЕНТІВ, АСПІРАНТІВ ТА ВИКЛАДАЧІВ ЛІНГВІСТИЧНОГО НАВЧАЛЬНО-МЕТОДИЧНОГО ЦЕНТРУ КАФЕДРИ ІНОЗЕМНИХ МОВ

"WITH FOREIGN LANGUAGES TO MUTUAL UNDERSTANDING, BETTER TECHNOLOGIES AND ECOLOGICALLY SAFER ENVIRONMENT"

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MORPHOLOGICAL CHANGES OF STOMACH INFLUENCED BY GENERAL DEHYDRATION Hula V.I – Sumy State University, postgraduate, 2course S. Zolotova – E L Adviser

It is well known that the digestive system is very sensitive to a large number of different negative factors. In particular, frequent lesions in the stomach is exposed as its organ and the main reservoir of mechanical and chemical processing of food. It is necessary to say that the effect of dehydration of the stomach has not been adequately studied. The significant amount of water and electrolytes is deposited in the gastrointestinal tract and is involved in the exchange, circulating between blood and content of the digestive tract. That is why the aim of this thesis was to discover structural and morphological changes in stomach due to the total dehydration.

Firstly, to save water in the body the secretory activity is reduced by digestive glands. The mucous membrane of the stomach has a large number of glands that produce a secret for digestion. Under the influence of water deficiency changes in their morphological structure occur. Two groups of 10 mature animals were taken for the experiment. The first was a control group of intact rats, and the second group was subjected to total water deprivation. The results were evaluated on the 3-d, 6-th and 10-th day of the experiment. The fundal stomach department was taken as the test material.

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Secondly, it was investigated that under the influence of the general water deprivation the atrophic changes of mucosa and submucosa of stomach are observed. Such disruptions of the structure becomes more pronounced with an increasing severity of the impact of dehydration factor.

Thirdly, under the severe water deprivation the thinning of the lamina propria of gastric mucosa and submucosa was observed. In some areas the focal disruption of the normal structure of the gastric glands was found. The diameter of the parietal and chief cells is reduced, in some parts of the glands the normal structure of cells is completely lost and nuclei are missing or are in various stages of apoptosis. Furthermore, unequal filling of submucosal blood vessels was found. Thus, the arteries are gaping and empty of blood, veins are being moderately filled with blood. These signs indicate that the factor of total dehydration leads to atrophic changes of the structural elements of the stomach wall.

Finally, these data suggest that changes which occur during the development of exsicosis after exhaustion of compensatory mechanisms become pathogenic and may be predictors of new pathological changes of the structural elements of the stomach.