The level of IgG H.pylori in the control group was 0,54±0,05 U/ml, and an esophagogastroduodenoscopy shows only the hyperemia and bulbit.

The level of IgG H.pylori in patients of the 2-nd group was $4,5\pm0,51$ U/ml, at the same time the esophagogastroduodenoscopy also shows the hyperemia and bulbit.

But in the 3-rd group the level of IgG Hp was $4,46\pm0,43$ U/ml, at the same time the

esophagogastroduodenoscopy shows the erosive and ulceral defects of the gastroduodenal area in 57,1 cases.

Conclusions. The results of experiment show that chronic obstructive pulmonary disease plays the main role in the development of erosive and ulcerous defects and peptic ulceration.

LECTIN RECEPTORS IN STRUCTURAL COMPONENTS OF PARATHYROID GLANDS DURING THE HYPERPLASIA AND NEOPLASTIC CHANGES

O. Dzhura, A. Yashchenko, O. Smolkova

Department of Histology, Cytology & Emryology, Danylo Halytsky Lviv National Medical University, Lviv, Ukraine, <u>olga d11@ukr.net</u>

Key words: lectins, glycoconjugates, parathyroid gland, hyperplasia, tumor processes.

Different origin stress factors lead to the adaptation, compensation or development of the disease depending on their activity. Plasma membrane glycoconjugates play an important role in the reflection of intracellular transformation processes and intercellular cooperation on the development of benign and malignant changes. Its specificity and level of expression reflects the peculiarities of division and maintenance of lectin receptors, which bind with different carbohydrate determinants. The aim of the work was the study of lectin receptors' cytotopography in structural components of parathyroid glands (PTG) on the development of tumor processes. Research was conducted on the bioptatic material of humans aged from 25 to 76 years with hyperplasia (7), adenomas (3) and cancer (1) of PTG, which has been taken during operative treatment on a thyroid gland (TG) or PTG, and on autopsy material of PTG (20) in a norm, which has been taken during the current pathomorphological section according to the basic principles and standards of bioethics in medical research and publishing. The paraplast histological sections with the thickness of 6-7 µm was stained by hematoxylin-eosin for general morphological characteristics. For the detection of glycoconjugates in order to conduct lectinohistochemical reactions the set of lectins was used: Wheat germ lectin (WGA), Peanut lectin (PNA), Ricinus communis agglutinin (RCA), Concanavalin A (Con A), Laburnum

anagyroides lectin (LABA), Sambucus nigra lectin (SNA). The WGA, LABA, RCA lectins showed the homogeneous binding with PTG parenchyma in norm and at the pathology. The expression of PNA and Con A lectin receptors increase in the perinuclear zone and on the surface of plasmalemma of parenchymal cells during the development of PTG hyperplasia. The similar expression was manifested with PNA lectin in the parenchymal cells in separate parathyroid lobules that may be evidence of the tumor progression of adenomas. The detected peculiarity was the formation of large masses of colloid in parenchyma with intense accumulation of WGA lectin receptors (NAcDGlc-specific) and reduction SNA-related sialospecific receptors in structural components of parenchymal cells. Process of malignization is accompanied by the redistribution of PNA lectin receptors from the surface of plasmalemma inside the cells which concentrated in a perinuclear area and subsequent tumor progression correlates with reduction of receptors of this lectin in tumor cells. High expression of lectin PNA is observed in the vascular wall, while it can't be observed in a norm. In the process of malignization the carbohydrate type of tunica intima of blood vessels changes with accumulation of BDGal-specific receptors. It predetermines the loss of intercellular contacts of tumors cells, their invasion in a vascular bed with subsequent possibility of spreading in other organs and tissues.