## CYTOMORPHOLOGICAL FEATURES OF PARATHYROID GLANDS AT HYPERPARATHYROIDISM

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Introduction. Studies on the analysis of the vital signs of cytomorphological parathyroid glands in patients with hyperparathyroidism (HPT) are rare.

AIM. To study the cellular and structural features of parathyroid glands at HPT.

METHODS. The study included 52 patients with primary, secondary and tertiary HPT. The analysis of 84 tissue fragments parathyroid glands obtained by fine-needle aspiration biopsy under the control of ultrasonography of the front of the neck. Used color azure-eosin by Pappenheim' method and examination under microscope.

RESULTS. Most samples (81%) contained epithelial cells in sufficient quantity for cytological analysis. Established a heterogeneous population of cells of the glandular epithelium parathyroid glands. Dominated by the major dark paratirocytes — small polygonal shape with a diameter of 5–8 microns mononuclear cells with a narrow rim of cytoplasm of light basophil's

stains that were located in small groups, single-layer recovery, multi-papillary structures. Less often (73%) were found larger main light paratirocytes 9-25 microns in diameter, round or polygonal shape and abundant clear cytoplasm. In some preparations (13%) were identified with large centrally located nucleus and the presence of near-nuclear enlightenment "stamped" cells. Oxyphilous paratirocytes were found in 8% of cytograms, arranged singly or in groups and had oxyphilous granules in the cytoplasm. In half of the samples was determined by a colloid-like extracellular secretion. Also determined dark polymorphic granules in the cytoplasm of epithelial cells and extracellular secretions. In secondary HPT in the tissue parathyroid glands more prevalent cytological signs of degenerative processes. Cytological features of parathyroid tissue clearly contrasted with those of the thyroid gland.

CONCLUSION. By cytomorphological criteria hyperplasia and functional activity parathyroid glands at HPT include: 1. cell population heterogeneity glandular 2. expression of cell-cell contacts in clusters paratirocytes 3. Availability dark polymorphic granules in the cytoplasm of epithelial cells and extracellular secretions. Cytological verification hyperplasia and high functional activity parathyroid glands enhances topical diagnosis at HPT.

## THE ETIOLOGY OF OPPORTUNISTIC INFECTIONS IN PATIENTS WITH NON-HODGKIN'S LYMPHOMAS

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Objective: To study the etiological characteristics of opportunistic infections in patients with non-Hodgkin's lymphomas.

MATERIAL AND METHODS: We investigated 109 patients with non-Hodgkin lymphoma treated in the hematology hospital during the period 2006–2010. Conducted microbiological testing of biological ma-

terials of patients, followed by isolation and identification of a pure culture of the pathogen through the test systems and methods of ELISA and PCR.

RESULTS: In the analysis of the etiologic spectrum of different localization OI non-Hodgkin's lymphoma was found the following: respiratory tract infections in patients NHL basis etiologic spectrum of bacterial infections were H. influenzae (62,9%), M. pneumoniae (51,6%), Streptococcus (30,6%). Of fungal infections dominated by representatives of the genus Candida (21,0%, of which C. albicans — 11,4%), while Aspergillus verified in 8.0% of patients. The greatest