covered phenomenon of intraorganic cachexy during tumoral growth is a reliable sign of stable carcinogenesis in thyroid gland and it can be used in practical morphology for system analysis and for diagnostic of stable carcinogenesis in the human organism. Further exploration of this occurrence permitted to develop several variants of pathomorphological changes of follicular epithelium during tumoral growth in thyroid gland. Gradual changes from normal thyrocite structure to different grades of atrophic cachexy are described. Also was observed another variant of cachexy, in which follicular thyrocites has increased their sizes due to swelling, also we observed cytoplasm grain appearance and increasing eosinophilia of follicular ephitelium. These signs verify oncocytic transformation of follicular thyrocites. Classic oncocytic cachexy is observed during desquamation of follicular thyrocites into follicular lumen. These cells are described as independent cell population – Kulish's cells. In other words, without adequate nutrition from capillaries thyrocytes within follicular lumen gradually increase their sizes, their cytoplasm gain grain and eosinophilic. After that desquamated cells abruptly swell, increase and become oncocytes, that is they repeat all stages of so called Askinasi (Hurtle, B-) cells morphogenesis. This algorithm of cell changing within the follicular lumen becomes the main argument in statement: there is no such independent cell population as Askinasi (Hurtle, B-) cells in human thyroid gland. They represent variant of morphological transformation of follicular thyrocites during insufficiency of thyroid gland parenchyma vascularization.

Hence, for the first time symptoms of stable carcinogenesis in human thyroid gland are discovered in the form of peritumoral parenchyma cachexy.

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IMMUNOHISTOCHEMICAL ARGUMENTATION OF BLOOD VESSELS ROTATION AND OF DOUBLE-ORIGINS OF ENDOTHELIUM DURING ADAPTIVE MORPHOGENESIS

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Discovering of such important phenomenin as blood vessels rotation require all-round argumentation. One of the contemporary diagnostic methods in morphology is the immunohistochemical diagnostic method. For immunohistochemical diagnostic we used paraffin blocks of pathologicaly changed human thyroid glands from archive materials of Dnipropetrovsk Regional Pathologyanatomical Bureau.

Taking into account the postulate about pathogenesis of most organ's diseases (including thyroid gland), that in their basis lays vascularization incufficiency – the main target of our work was aimed to the methods of estimating and discovering exactly blood vessels on the specimens. For this aim we used the most common and specific imunohistochemical marker for endothelium – CD-34. This marker constantly and for certain stained endothelium of perifollicular heamocapillares. According to discovered earlier phenomenon of blood vessel's rotation (Fedchenko N., 2007), which plays the key role in regeneration of large vessel's and especially their endothelium, it was important to explore this phenomenon by imunohistochemistry methods. Under usage of stromal component's marker – Vimentin-11 – was discovered active accumulation of the marker not only in the classic stromal components, but also (which is especially important) in the large vessel's endothelium. Arguments of epithelial origins of endothelial cells are given in the literature – and so endothelium shouldn't accumulate stromal marker (Vimentin-11). In the other experiment, in which we used imunohistochemical marker for thyreoglobulin (Tg) for follicular thyrocites identification, we also observed accumulation of this marker (Tg) by large vessel's endothelium. To explain this phenomenon by using present paradigm is impossible. According to the earlier observed occurrence of insertion of follicular thyrocites into large vessels of thyroid gland (Fedchenko N., 2007) and described mechanism of follicular regeneration of the endothelium, expression of Tg by endothelial cells is an imunohistochemical confirmation of this assertion. Thus, there are two mechanisms of regeneration of large vessels and their endothelial cells in the thyroid gland, which carried out due to blood vessel's rotation. The first one is carried out by insertion stroma's components into blood vessel's structure and endothelial cells. The second mechanism of regeneration starts when stromal regenerative component has exhausted, and parenchymal (follicular components) begin to penetrate into blood vessel's structure. Due to our findings of blood vessel's rotation phenomenon in other organs (lungs, uterus, ovaries, kidneys, spleen and others), the occurrence of double (triple or even more) expression of imunohistochemical markers by endothelial cells also should be observed in these organs. Stromal component's imunohistochemical marker should be the same for endothelial cells in all organs, otherwise, parenchymal imunohistochemical marker would be specific for every different location of endothelial cells in different organs. The imunohistochemical heterogeneity of endothelial cells reflects the dominant mechanism of large vessel's regeneration. Within normal functioning endothelial cells will express mainly CD-34. If regenerative and morphogenetic processes become very intensive – endothelial cells will express stroma's marker – Vimentin-11. If regenerative resources of srtoma exhaust and regenerative mechanism begins to include parenchymal components, then endothelial cells of large blood vessels begin to express organ-specific imunohistochemical markers.