FEATURES OF THE MORPHOLOGICAL STRUCTURE OF THE THYROID GLAND OF INTACT RATS DEPENDING ON THE PHENOTYPE OF ACETYLATION

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Abstract: *at intact animals for rounded hyperchromic nuclei of thyrocytes were characterized by basophilic staining and a homogeneous distribution of chromatin. The cytoplasm of normal thyrocytes is characterized by oxyphilic staining. In the cavity of the follicles, there is a colloid, which has both a cytoplasm of the thyrocytes, a pale oxyphilic staining with rare vacuoles of resorption. Interfollicular cells are found between the follicles. In the center of the gland were located follicles of medium size, and on the periphery are large. In all areas of the thyroid gland of intact animals, the follicles had distinct contours, a well-defined cavity, and uniform staining of the colloid.*
Keywords: *thyroid gland, laboratory animals, hypothyroidism, morphological structure, phenotype of acetylation.*

ОСОБЕННОСТИ МОРФОЛОГИЧЕСКОГО СТРОЕНИЯ ЩИТОВИДНОЙ ЖЕЛЕЗЫ ИНТАКТНЫХ КРЫС В ЗАВИСИМОСТИ ОТ ФЕНОТИПА АЦЕТИЛИРОВАНИЯ

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Аннотация: *у интактных животных для округлых гиперхромных ядер тироцитов было характерно базофильное окрашивание и гомогенное распределение хроматина. Для цитоплазмы нормальных тироцитов характерно оксифильное окрашивание. В полости фолликулов находится коллоид, имеющий, как и цитоплазма тироцитов, бледное оксифильное окрашивание с редкими вакуолями резорбции. Между фолликулами встречаются интерфолликулярные клетки. В центре железы располагались фолликулы средних размеров, а по периферии крупные. Во всех зонах щитовидной железы интактных животных фолликулы имели четкие контуры, хорошо различимую полость, и равномерное окрашивание коллоида.*
Ключевые слова: *щитовидная железа, лабораторные животные, гипотиреоз, морфологическое строение, фенотип ацетилирования.*

It is known that in a liver occur metabolic and in particular, transformational changes of thyroid hormones in an organism that can't also be dismissed [1, p. 1-23]. The functional disturbances of processes of deiodinating in a liver accompanying hypothyrosis on early terms during later period are expressed as morphological changes, in particular, in the form of diffuse small-drop fatty dystrophy and a necrosis of hepatocytes [2, p. 176].

During modeling of an experimental hypothyrosis morphological research of a thyroid gland [3, p. 74]. At the rats parted by means of the eliminative test for sulfadimezinum on phenotypes of acetylation modeled an experimental hypothyrosis, and then for the 3rd days, the 1st and 3rd weeks of the modeled pathology made a face of rats, excised pieces of organs the sizes of 1 cm2, fixed in 10% neutral formalinum and filled in paraffin according to Lloyd. From ready blocks prepared serial sections, painted a hematoxylin and eosine.

The thyroid gland at clinically healthy rats is covered with a connective tissue cover. The trabeculas presented by a quaggy connecting tissue divide a gland into separate lobes.

At intact animals of control Iαβ of group the thyroid gland consists of follicles of a rounded, oval and angular shape. Follicles have an appearance of the closed blisters covered by a single-layer cubic epithelium. Follicles are surrounded with network of circulatory capillaries. In an interfollicular zone small clumps of lymphoid cells sometimes are defined. Follicles of both a peripheric and central part of a thyroid gland contain a colloid.

Thyrocytes are located on a basal membrane, covering, thus, walls of follicles. At intact animals the basophilic staining and homogeneous distribution of a chromatin was characteristic of spherical hyperchromatic kernels of thyrocytes. The oxyphilic staining is characteristic of a cytoplasm of normal thyrocytes. In a cavity of follicles there is a colloid having as well as a cytoplasm of thyrocytes, a pale oxyphilic staining with infrequent vacuoles of a resorption.

Interfollicular cells are found between the follicles. In the center of the gland were located follicles of medium size, and on the periphery are large. In all areas of the thyroid gland of intact animals, the follicles had distinct contours, a well-defined cavity, and uniform staining of the colloid.

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