HISTOTOPOGRAPHY OF THE PROSTATE GLAND IN THE RABBIT

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Resume: This article describes the features of the histologic structure of the prostate gland in rabbits. In rabbits, the prostate gland is quite developed and has a good alveolar structure. The stroma consists of connective and smooth muscle tissue, elastic fibers are few, located in the capsule and in the circumference of glandular elements and vessels.

Key words: rabbit, prostate gland, hematoxylin-eosin, Van-Gizon, elastic fibers, stroma, argyrophilic fibers.

ГИСТОТОПОГРАФИЯ ПРЕДСТАТЕЛЬНОЙ ЖЕЛЕЗЫ У КРОЛИК

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Резюме: В статье описан особенностей гистологическая строение предстательной железы у кроликов. У кроликов предстательная железа достаточно развита и имеет хорошую альвеолярного строения. Строма состоит из соединительной и гладкой мышечной ткани, эластические волокна немногочисленны, расположенные в капсуле и в окружности железистых элементов и сосудов.

Ключевые слова: кролик, предстательной железы, гематоксилин-эозином, по Ван-Гизону, эластические волокна, строма, аргирофильные волокна.

QUYONLARDA PROSTATA BEZINING GISTOTOPOGRAFIYASI

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Annotatsiya: Maqolada quyonlarda prostata bezining gistologik tuzilishining xususiyatlari o`rganilgan. Quyonlarda prostata bezi yetarli darajada rivojlangan va yaxshi alveolyar tuzilishga ega. Stroma biriktiruvchi va silliq mushak to'qimalaridan iborat bo'lib, elastik tolalar oz sonli bo'lib, kapsulada va bez elementlari va tomirlari atrofida joylashgan.

Kalit so'zlar: quyon, prostata bezi, gematoksilin va eozin, Van Gison, elastik tolalar, stroma, argirofil tolalar.

Introduction. To date, there are no detailed comparative anatomical data on the histomorphology of the prostate gland in rabbits. Literature reviews of the last 10 years allow to understand the anatomy and histologic structure of the prostate gland in rabbits useful for experimental medicine and development of new methods of treatment.

Aim and objectives of the study. To study the questions of histologic structure of prostate glands in rabbits.

Materials and methods of research. The aim of the present work was a more detailed study of the prostate glands in rabbits. Prostate glands of sexually mature animals of 10 rabbits were used for the study. The material was fixed in 12% neutral formalin. Sections were prepared on a freezing microtome. They were impregnated according to the method of Bilshovsky-Gros, Rasskazova and Campos. Sections were stained with hematoxylin-eosin to reveal the general structure and stained by Van-Gizon for elastic fibers. For detection of argyrophilic fibers - Donskoy.

Results of the study. In rabbits the prostate gland is sufficiently developed and has a good noticeable lobularity, the lobules are comparatively large, of alveolar structure. The terminal secretory sections and ducts have wide but irregular lumen. The epithelium lining them is cylindrical, in some places forming outgrowths. In the lumen of some there is amorphous secretion with visible granularity. The stroma consists of connective and smooth muscle tissue, elastic fibers are few, thin, located in the capsule and in the circumference of glandular elements and vessels. Well-developed interlobular connective tissue, from which inside the lobules are thin layers surrounding the end secretory sections and ducts. The capsule, consisting of connective and muscular tissue, in which layers of transverse striated muscles are noticeable, is well expressed. In the circumference of the capsule there are many vessels and large nerve bundles. Argyrophilic fibers are well developed. The inner and outer argyrophilic membranes consist of thin and thick argyrophilic fibers. A coarsely and finely-looped network of argyrophilic fibers is seen in the stroma. Nerve elements are observed in considerable quantity, especially in the periphery of the organ. They are represented by bundles of nodes, there are individual nerve fibers of different thickness, sometimes varicosely dilated twisted and straight. In places, dividing, they form bush-like receptors, ending on the cells of the stroma or on the cells of the epithelium. In the stroma are found

Conclusions: Our studies allow us to draw the following conclusions.

The prostate gland in rabbits is well developed and has clearly expressed parenchyma and stroma. The gland has a distinct lobular structure. Parenchyma reaches a large development, does not have a pronounced lobular structure and is characterized by small secretory sections and excretory ducts. The stroma is less developed in comparison with the parenchyma of the gland. In the parenchyma the end secretory sections and ducts are very small. Along with a pronounced lobular structure, there are large terminal secretory

sections and ducts lined with high cylindrical epithelium forming papillary outgrowths.

In the prostate gland, especially in the rabbit, an abundance of nerve elements is noted. They are numerous and varied, represented by nerve trunks, rays and a variety of free and encapsulated receptor endings.

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