

ANATOMO-MORPHOLOGICAL INDICATIONS OF THE ADRENAL GLAND IN SIX-MONTH-OLD GRAND BREED RABBITS

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Annotation: In this article, the absolute parameters of the linear size and weight of the adrenal glands in the postpartum ontogenesis of rabbits of the white-gray giant breed are studied. Morphometric parameters of the adrenal glands of rabbits were analyzed for specific growth dynamics during postpartum development, on the basis of which data were presented.

Key words: Rabbit, gray giant, white giant, postnatal ontogeny, length, weight, growth rate, linear parameter, absolute index, absolute weight.

Kalit so'zlar: Quyon, kulrang velikan, oq velikan, postnatal ontogenez, uzunlik, og'irlik, o'sish koeffitsiyenti, chiziqli o'lcham, absolyut ko'rsatkich, absolyut og'irlik.

Аннотация: в данной статье изучены абсолютные показатели линейных размеров и веса надпочечников в послеродовом онтогенезе кроликов бело-серой великанской породы. Морфометрические показатели надпочечников кроликов были проанализированы на предмет специфической динамики роста в период послеродового развития, на основании чего были представлены данные.

Annotatsiya: ushbu maqolada oq va kulrang velikan zotiga mansub quyonlar postnatal ontogenezida buyrak usti bezlari chiziqli o'lchamlari va og'irliklarining absolyut ko'rsatkichlari o'rganilgan. Quyonlarni buyrak usti bezlarini morfometrik ko'rsatkichlari postnatal rivojlanishi davomida o'ziga xos o'sish dinamikasi bo'yicha ma'lumotlar tahlil qilinishi, shu asosida ma'lumotlar keltirilgan.

Ключевые слова: Кролик, серый великан, белый великан, постнатальный онтогенез, длина, масса, коэффициент роста, линейный параметр, абсолютный показатель, абсолютная масса.

Enter. Decision PQ-121 of the President of the Republic of Uzbekistan dated February 8, 2022. Further development of livestock industries, financial support of livestock farms, further increase of livestock feed base, as well as on the basis of the population's cooperation with large livestock farms and processors of livestock products (hereinafter - in the cooperative way) in order to organize the feeding of livestock in their homes and to meet the demand for livestock feed base: the attention to the field of rabbit breeding in our republic is increasing year by year. Rabbit farming is important in meeting the population's need for meat, skin and valuable fur. Rabbit meat is recommended as a dietary food that is quickly digested by the human body.

Allocation of subsidies and loans for the development of rabbit breeding, improvement of breeding works in accordance with the decision of President Sh. Mirziyoyev dated March 3, 2021 No. PQ-5017 "On additional measures for further state support of livestock industries", the tasks of organizing scientific-research works for the creation of a feed base, the wide introduction of innovative technologies developed in the field of breeding and processing of rabbit products are defined.

The scope of the topic: In order to develop rabbit farming. Adrenal glands are important for the growth and development of rabbits. Adrenal gland hormones participate in protein, fat and

carbohydrate metabolism in the rabbit's body, increase the body's resistance to disease, and lead to rapid healing of inflammation. and "cortisone" hormone produced by the adrenal gland of rabbits is responsible for adaptation, resistance and stress resistance of the body. Mineralocorticoid, glucocorticoid, androgen, estrogen and adrenaline, noradrenaline hormones produced by the cortex and medulla of the adrenal gland, which cause the occurrence of metabolic disorders in rabbits, are very important for the body in order to achieve high efficiency in rabbit breeding, increase the productivity of the field It is considered that the identification of anatomical and histological changes in the adrenal gland at different physiological stages of postnatal development is of great theoretical and scientific importance in the study of the biological characteristics of rabbits. This, in turn, takes into account the biological characteristics of rabbits, and their rational use creates a great opportunity for the development of rabbit breeding on a scientific basis.

The purpose of the study: In the postnatal ontogeny of rabbits, anatomo-histological characteristics and morphometric dimensions of the adrenal glands are determined. Therefore, we aimed to study anatomo-histological characteristics of adrenal glands during postnatal ontogeny of rabbits.

Scientific research works. It was held in the vivarium of the Samarkand State Veterinary Medicine, Animal Husbandry and Biotechnology University, veterinary clinic, (OPTA-TECH), (Pathomorphology) laboratories, farmers and private rabbit farms in our region.

The scientific experiment is carried out in 5 rabbits depending on the breed and age of the rabbits brought to the laboratory in the postnatal ontogeny of the adrenal glands.

Research object and research methods. As an object of inspections, the postnatal ontogeny of rabbits cared for in the vivarium of the Samarkand State University of Veterinary Medicine, Animal Husbandry and Biotechnology and in farmers' and private rabbit farms of the Samarkand region at 1-day, 18-day, 1-month, 2-month, 4-month, 6-month, 9-month, 12-month, 24-month, 36-month-old rabbits are being tested on adrenal glands. Based on the principle of "similar pairs" (I.P. Kondrakhin, 1980), 5 rabbits were divided into reference groups based on their breed and age, and their clinical status and herd syndromics were determined. Mucous membranes, skin and skin covering, condition of movement organs, heart rate and respiration rate in 1 minute, reaction to external influences are determined in rabbits by generally accepted clinical examination methods.

Clinically healthy and moderately obese rabbits are selected for sampling and scientific research is being carried out. The objects of the inspections are rabbits of different ages and breeds.

All digital data obtained as a result of scientific investigations were subjected to mathematical processing according to the method of YE.K. Merkureva.

In the postnatal ontogeny of rabbits of different breeds, the growth coefficient is used to determine the dynamics of changes in anatomo-histological characteristics of the adrenal glands depending on age. The growth factor was calculated by dividing the indicators of the adrenal glands of older rabbits by the corresponding indicators of younger rabbits, and the entire

examined period of postnatal ontogenesis was developed by K.B. Svechin $K = \frac{V_t}{V_0}$ (6) is

determined by the formula:

Mathematical-statistical analysis is performed using the Student's and Fisher's criteria in Microsoft excel spreadsheet.

Research results and their analysis. Mucous membranes, skin and skin covering, condition of movement organs, heart rate and respiration rate in 1 minute, reaction to external influences are determined in rabbits by generally accepted clinical examination methods.

For scientific research, 6-month-old, 5-year-old white and gray giant rabbits were selected, and their live weight was measured and averaged.

Table 1

Cursors	Day 1 White Giant	Day 1 Gray Giant
Live weight, kg	4182±57,59	3872±73,34

Note: Confidence level ($p \leq 0,05$)

The anatomo-morphological parameters of the adrenal glands were determined in the postnatal ontogeny of 6-month-old, 5-head white and gray giant rabbits selected for scientific research.

Table 2

Cursors	Day 1 White Giant		Day 1 Gray Giant	
	right	left	right	left
Weight, g	0,239±0,0024	0,251±0,0054	0,183±0,0024	0,212±0,0028
Length, cm	1,28±0,022	1,24±0,027	1,24±0,027	1,22±0,022
Width, cm	0,78±0,027	0,81±0,022	0,74±0,015	0,76±0,029
Thickness, cm	0,43±0,017	0,44±0,012	0,40±0,016	0,42±0,013

Note: Confidence level ($p \leq 0,05$)

Summary. The analysis of the obtained results showed that six-month-old white giant rabbits had higher morphometric indicators than six-month-old gray giant rabbits.

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