

## **FEATURES OF POSTNATAL ONTOGENESIS IN ANIMAL TISSUES**

**Yokubov Muzaffar Alijonovich**  
Teacher of Fergana State University

### **ABSTRACT**

*Sheep sizes and morphometric changes in different physiological stages of their development were studied. It was found that the morphometric changes of the ovaries change during the development of animals and have different characteristics depending on the animal breed. Based on the obtained data, it was observed that the development in postnatal ontogeny is different.*

**Keywords:** *Sheep, morphometric, postnatal ontogeny, animals, different*

### **HAYVONLAR TO'QMALARIDA POSTNATAL ONTOGENEZ XUSUSIYATLARI**

#### **ANNOTATSIYA**

*Qo'ylarning o'lchamlari va rivojlanishining turli fiziologik bosqichlarida morfometrik o'zgarishlar o'rganildi. Tuxumdonlarning morfometrik o'zgarishlari hayvonlarning rivojlanishi davomida o'zgarib turishi va hayvon zotiga qarab har xil xususiyatlarga ega ekanligi aniqlandi. Olingan ma'lumotlarga asoslanib, postnatal ontogenezda rivojlanish har xil ekanligi kuzatildi.*

**Kalit so'zlar:** *Qo'y, morfometrik, postnatal ontogenez, hayvonlar.*

### **ОСОБЕННОСТИ ПОСТНАТАЛЬНОГО ОНТОГЕНЕЗА В ТКАНЯХ ЖИВОТНЫХ**

#### **АННОТАЦИЯ**

*Изучены морфометрические изменения размеров и физиологических стадий развития овец. Установлено, что морфометрические изменения яичников изменяются в процессе развития животных и имеют разные характеристики в зависимости от породы животных. На основании полученных данных было замечено, что развитие в постнатальном онтогенезе различно.*

**Ключевые слова:** *овцы, морфометрия, постнатальный онтогенез, животные.*

### **INTRODUCTION**

The attention to animal breeding in our country is growing every year. Animals are important in meeting the population's need for meat and valuable fur. Animal meat is recommended as a portion of fast food for the human body.

The dynamics of variations in the amount of calcium and phosphorus in the bone marrow of broiler chickens were investigated during their postnatal ontogenesis. From the first day of postnatal development to day 14, the amount of Ca and P in the femur of broiler chickens grew, then dropped until day 35. Until the 14th day of postnatal ontogeny, the process of increasing the amount of Ca and P in the femur of broiler chickens was shown to be somewhat expedited[1].

In the postnatal ontogenesis of broiler chickens, the dynamics of changes in the amount of natural and hygroscopic[2].

In postnatal ontogenesis of broiler chicks, the dynamics of changes in the amount of natural and hygroscopic moisture in the composition of the shoulder bone has been studied. Broiler chicks it has been noted that the relative amount of natural moisture in the shoulder bone decreases from the first day of postnatal development to the 35th day, while the relative amount of hygroscopic moisture increases during this period. Broiler chicks in all the experimental groups studied have been found to[3]. Absolute indicators of the thickness of the proximal and distal epiphysis of the shoulder bone were studied in postnatal ontogenesis of broiler chicks belonging to the Ross 308 cross. Absolute indicators of the thickness of the proximal and distal epiphysis of the shoulder bone have been found to have specific growth dynamics during the postnatal development of chicks. Absolute indicators of the thickness of the proximal and distal epiphysis of the shoulder bone were observed to be especially high in broiler chicks from the experimental group that received probiotics after 14 days of postnatal ontogenesis compared to those in the control group[4].

The dynamics of changes in the amount of ash and total organic substances in the humerus in the postnatal ontogenesis of broiler chickens has been studied. There was an increase in the relative amount of ash and a decrease in the relative amount of total organic matter in the humerus from the first day to the 35-day age of postnatal ontogenesis of broiler chickens; there was a more intensive course of the process of increasing the relative amount of ash and lowering the relative amount of total organic matter in the humerus until the 14th day of postnatal ontogenesis of broiler chickens[5]. In the postnatal ontogenesis of broiler chickens of the ROSS 308 cross, absolute indicators of linear parameters and the weight of the cap were studied. It was found that the morphometric parameters of the cap have a specific growth dynamics in the postnatal development of chickens. The morphometric parameters of the cap in broiler chickens were higher than in the control group, especially in the experimental group receiving probiotics after 14 days of postnatal ontogenesis.

The linear dimensions and absolute values of the weight of the humerus in the postnatal ontogenesis of rabbits of the gray [6].

The article shows the etiopathogenesis of purulent conjunctivitis caused by conjunctivitis and its complications, methods of treatment with novocaine blockade, methods of execution and economic efficiency [7].

In the treatment of keratoconjunctivitis in calves, in addition to traditional methods, when 3 ml of autoblood and 3 ml of 0.5% novocaine solution were mixed under the skin of the eyelids of the affected eyes, the morphological changes in their blood [8,9].

The morphometric indicators of the muscles affecting the leg joint at different physiological stages of the postnatal ontogenesis of sheep were studied, and the characteristics of muscle changes at their physiological stages were studied [10].

It has been found that sheep in different natural conditions exhibit specific dynamics of changes in serum triglycerine in the physiological stages of postnatal ontogeny in relation to living conditions. Changes in sheep blood were mostly reversible at 6 months and 60 months of postnatal ontogenesis [11].

Some histological features of the quadriceps muscle of the limb at different physiological stages of postnatal ontogeny of Hissari [12].

The morphometric indices of some muscles acting on the joints of the proximal thoracic and pelvic limbs in different physiological periods of postnatal ontogenesis of the Hissari sheep were studied, and an intensive increase in indices up to 3 months was found, and the highest indices were noted at 18 months of age than in the other studied ages. postnatal ontogenesis, also due to the direct influence of natural habitat conditions on the dynamics of the development of these muscle indicators, it is higher in sheep of adequate conditions than inadequate ones [13,14].

The morphometric parameters of some muscles acting on the joints of the pelvic limbs in different physiological periods of postnatal ontogenesis of the Hissari sheep, living in different conditions, were studied, and a peculiar dynamics of change was revealed depending on the anatomical and topographic conditions, the scale of muscle function and the living conditions of the animals [15,16].

## **INSPECTION METHOD AND MATERIALS**

The research work was carried out on the organs of sheep in the districts of Fergana region. The ovaries, fallopian tubes and uteri of animals at the 1st, 3rd, 6th, and 12th months of postnatal ontogenesis were taken for scientific examination.

General morphological methods used and introduced by N.P. Chirvinsky were used to determine the morphometric indicators of female reproductive organs.

Mathematical-statistical analysis was performed using Student's and Fisher's criteria in Microsoft Excel computer spreadsheet.

### **THE OBTAINED RESULTS AND ITS DISCUSSION**

As a result of scientific investigations, the linear dimensions and absolute weights of the female genital organs (ovaries, fallopian tubes and uterus) of sheep at different physiological stages of postnatal development were determined according to the anatomo-topographical condition and the natural living conditions of the animals. It was observed that it exhibits a specific dynamic of change.

The length of the left ovary of sheep is equal to 0.80 cm in the 1st month of the postnatal ontogeny of animals, and the growth coefficient increases up to 1.21 times during this period to 1 cm in the next 3 months of development. This index of the left ovary was 1.61 cm at the 6-month stage and 1.60 cm at the 12-month stage. The growth coefficient of the absolute index of the left ovary length was from 1 month to 12 months of postnatal development during the period it was equal to 1.83 times.

The indicator of the thickness of the left ovary is 0.74 cm in the 1st month of the postnatal ontogeny of sheep, this indicator reaches 0.40 cm in the 3-month period, it goes through this process step by step in the next 6 months (0.42 cm), in the 12th month another it was noted that it reaches the highest 0.50 cm compared to the age group. The growth coefficient of the thickness of the left ovary was 1.60 times during the period from 1 month to 12 months of postnatal development of sheep.

The absolute index of the weight of the left ovary of sheep is 8.2 g in the 1 month of postnatal ontogeny, and this indicator reaches 9.11 g in the 3 month period. In the next 6 months, this process is gradually passed. (11.4 g), reaching the highest level (12.60 g) at 12 months compared to other ages. The growth coefficient of the absolute indicator of the weight of the left ovary was 1.69 times during the period from 1 month to 12 months of postnatal development of sheep.

The length of the right ovary of sheep is equal to 0.92 cm in the 1st month of the postnatal ontogeny of animals, and in the next 3 months of development, it reaches 0.99 cm. During this period, the growth coefficient increases up to 1.30 times. From 1.46 cm at the 6-month stage to 1.67 cm at the 12-month stage, the coefficient of growth of the absolute index of the length of the left ovary increased by 1.98 times during the period from 3 months to 12 months of postnatal development of animals. was equal.

The thickness of the right ovary of sheep is equal to 0.39 cm in the 1st month of the postnatal ontogeny of the animals, and in the next 3 months of development, it reaches 0.42 cm. During this period, the growth coefficient increases up to 1.19 times. From 0.43 cm at the 6-month stage to 0.43 cm at the 12-month stage, the coefficient of growth of the absolute indicator of the length of the left ovary increased by 1.6 times during the period from 3 months to 12 months of postnatal development of animals. was equal.

The absolute index of the weight of the right ovary of purebred sheep in the 1-month period of postnatal ontogeny is 9.0 g, in the 3-month-old stage it is 9.98 g, in the 6-month-old 101.31 g, in the 12-month-old again 12 ,6 g, was recorded. The coefficient of growth of the absolute indicator of the weight of the right ovary was 1.64 times during the period from 1 month to 12 months of postnatal development of sheep.

## **CONCLUSION**

The linear dimensions of the left and right ovaries of sheep, as well as the morphometric changes in weight from 1 month to 3 months of age, increasing gradually in the following months, according to the literature, the development of the organism at different stages of postnatal ontogenesis is noted to manifest. It is observed that the physiological stages of animal development are higher in sheep.

## **REFERENCES**

1. Xayitmurotovich, K. I., Qizi, M. G. M., & Odiljon O'g'li, M. O. (2021). Root System Development And Its Activity. *The American Journal of Engineering and Technology*, 3(03), 65-69.
2. Mamatqulov, O., Qobilov, S., & Abdullaaxatov, A. (2022). FARG 'ONA VILOYATI SHAROITIDA TOK KASALLIKLARIGA QARSHI KURASHISH. *Science and innovation*, 1(D6), 307-311.
3. Sodiqova, Z. T. (2022, May). DANAKLI MEVA KASALLIKLARIGA QARSHI KURASHISH YO'LLARI. In *INTERNATIONAL CONFERENCES ON LEARNING AND TEACHING* (Vol. 1, No. 8, pp. 240-244).
4. Ugli, M. O. O. (2021). RECYCLING OF THE CURVE PLANNING IN GAT TECHNOLOGY (Auto CAD) PROGRAM. *Galaxy International Interdisciplinary Research Journal*, 9(11), 480-483.
5. Mamatkulov, O. O., & Numanov, J. O. (2021). Recycling of the Curve Planning in Gat Technology (Auto Cad) Program. *Middle European Scientific Bulletin*, 18, 418-423.



6. Эшпулатов, Ш. Я. ВЛИЯНИЕ ОРОСИТЕЛЬНЫХ ВОД НА ПЛОДОРОДИЕ СВЕТЛЫХ СЕРОЗЕМОВ. Актуальные вопросы современной науки, 25.
7. Эшпулатов, Ш. Я., Турдалиев, А. Т., & Мирзаев, Ф. (2017). Почвенно-археологический метод для определения возраста древних орошаемых палеопочв. Актуальные вопросы современной науки, (2), 63-67.
8. Эшпулатов, Ш., Тешабоев, Н., & Мамадалиев, М. (2021). INTRODUCTION, PROPERTIES AND CULTIVATION OF THE MEDICINAL PLANT STEVIA IN THE CONDITIONS OF THE FERGHANA VALLEY. EurasianUnionScientists, 2(2 (83)), 37-41.
9. Эшпулатов, Ш. Я., Тешабоев, Н. И., & Мамадалиев, М. З. У. (2021). ИНТРОДУКЦИЯ, СВОЙСТВА И ВЫРАЩИВАНИЕ ЛЕКАРСТВЕННОГО РАСТЕНИЕ СТЕВИЯ В УСЛОВИЯХ ФЕРГАНСКОГО ДОЛИНЫ. Евразийский Союз Ученых, (2-2 (83)), 37-41.
10. Эшпулатов, Ш. Я., & Джураева, Д. Э. (2021). Интродукция и выращивание лекарственных растений в условиях Узбекистана. Тенденции развития науки и образования, (71-1), 170-173.
11. Isag'aliyev, M., Obidov, M., & Matholiqov, R. (2019). Morphogenetic and biogeochemical features of the medicinal capparid spinosa. Scientific journal of the Fergana State University, 2(4), 46-49.
12. A. Turdaliev, M. Usmonova, & R. Matholiqov (2022). ОЛИЙ ТАЪЛИМ ТИЗИМИДА ЎҚИТУВЧИНИНГ МЕТОДИК КОМПЕТЕНТЛИГИНИ МОЎЖИЯТИ. Science and innovation, 1 (В6), 450-455. doi: 10.5281/zenodo.7164839.
13. Маматожиёв, Ш. И., Тожимаматов, Д. Д. У., Камолов, З. В. У., & Холиқов, М. Б. У. (2020). ФАКТОРЫ, ВЛИЯЮЩИЕ НА ПРОЦЕССЫ ХРАНЕНИЯ ЗЕРНА И НА ПОКАЗАТЕЛИ КАЧЕСТВА. Universum: технические науки, (12-4 (81)), 75-78.
14. Маматожиёв, Ш. И., Тожимаматов, Д. Д. У., Камолов, З. В. У., & Холиқов, М. Б. У. (2020). ПРЕИМУЩЕСТВА НОВОЙ СИСТЕМЫ ПРИ ПРИЕМКЕ ЗЕРНА. Universum: технические науки, (12-2 (81)), 96-99.
15. Anvarjonovich, D. Q., & Ogli, X. M. B. (2021). The effect of grain moisture on grain germination during grain storage. *ACADEMICIA: An International Multidisciplinary Research Journal*, 11(5), 418-421.
16. Газиев, М. А., Мирзахмедова, Х., Арипжанова, М., & Омурзакова, Г. (2008). ЭКОЛОГИЧЕСКИЕ СРЕДСТВА ЗАЩИТЫ ХЛОПЧАТНИКА ОТ ЗАБОЛЕВАНИЯ ВИЛТОМ. Известия, (1), 84.

17. Эшпулатова, Г. Т. (2015). Гумус в древних палеопочвах сероземного пояса. *Проблемы современной науки и образования*, (8 (38)), 49-51.
18. Исаков, В. Ю., Мирзаев, У. Б., & Юсупова, М. А. (2009). К характеристике почв песчаных массивов Центральной Ферганы. In *Современное состояние и перспективы развития мелиоративного почвоведения. Матер. межд. конф. посвященной* (pp. 35-38).
19. Исаков, В. Ю., Мирзаев, У. Б., & Юсупова, М. А. (2020). Особенности характеристики почв песчаных массивов Ферганской долины. *Научное обозрение. Биологические науки*, (1), 15-19.
20. Litvishko, V., Litvishko, O., Myaskovskaya, T., Isaqov, V., Yusupova, M., Matveeva, L., ... & Nikulin, O. (2017). *Innovations in technical and natural sciences: Monograph*.
21. Исаков, В. Ю., Юсупова, М. А., & Хошимов, А. Н. (2016). Геоэкология и химические свойства песчаных почв Ферганской долины. *Учёный XXI века*, (1 (14)), 3-6.
22. Турдалиев, А., & Юлдашев, Г. (2015). Геохимия педолитных почв. Монография. Т." Фан, 41-48.
23. Маматожиев, Ш. И., & Усаркулова, М. М. (2020). Определение процедуры, состава и методики процесса увлажнения пшеницы. *Актуальная наука*, (1), 18-21.
24. Маматожиев, Ш. И. (2020). Влияние минимализации до посевной обработки на агрофизические свойства почвы. *ЖУРНАЛ АГРО ПРОЦЕССИНГ*, 2(3).
25. Маматожиев, Ш. И. (1990). *Приемы минимализации допосевной обработки почвы и их влияние на плодородие и урожайность хлопчатника в условиях луговых сазовых почв Ферганской долины* (Doctoral dissertation, ВНИИ хлопководства).
26. Маматожиев, Ш. И., Мирзаева, М. А., & Шокирова, Г. Н. (2021). Влияние технологии допосевной обработки на содержание влаги в почве. *Universum: технические науки*, (6-3 (87)), 46-49.
27. Маматожиев, Ш. И., & Усаркулова, М. М. К. (2020). Влияние изменения физико-химических свойств зерна в зависимости от влажности на равномерное распределение нагрузки по поверхности дробильного вала. *Проблемы современной науки и образования*, (4-2 (149)), 5-8.
28. Газиев, М. А., & Турдалиев, А. Т. (2019). Роль органических и минеральных удобрений в развитии физиологических групп микроорганизмов в

системе севооборота. Современные фундаментальные и прикладные исследования, (2), 9-12.

29. Sobirov, A., Gaziev, M., & Gulomova, G. (2021, August). THE USE OF THE MEDICINAL PLANT OF THE LEONURUS L. AND ITS AGROTECHNOLOGY OF GROWING: <https://doi.org/10.47100/conferences.v1i1.1407>. In RESEARCH SUPPORT CENTER CONFERENCES (No. 18.06).

30. Sobirov, A., Gaziev, M., & Gulomova, G. (2021, July). THE USE OF THE MEDICINAL PLANT OF THE LEONURUS L. AND ITS AGROTECHNOLOGY OF GROWING. In Конференции.

31. Газиёв, М. А., Турдалиев, А. Т., & Тухтасинов, М. Р. (2018). Пути восстановления биоценоза типичных сильно-зараженных вилтом сероземов. Современные научные исследования и разработки, (6), 168-171.

32. Закирова, С., & Газиёв, М. (2010). ВЛИЯНИЕ ПРИМЕНЕНИЯ ОРГАНИЧЕСКИХ И МИНЕРАЛЬНЫХ УДОБРЕНИЙ НА АГРОХИМИЧЕСКИЕ СВОЙСТВА СПЛАНИРОВАННЫХ БУГРИСТО-БАРХАНИСТЫХ ПЕСКОВ. Известия ВУЗов (Кыргызстан), (6), 175-176.

33. Idrisov, X. A., Atabayeva, X. N. (2022, may). Loviya va mosh ekinlarining umumiy ahamiyati va biologik xususiyatlarini tahliliy o'rganish. In international conferences on learning and teaching (vol. 1, no. 8, pp. 644-651).

34. Xalima, A., Xusanjon, I., & Abdulvosid, S. (2022). O'tloqi-botqoq tuproqlar sharoitida mosh (*Phaseolus aureus piper*) ning o'sishi, rivojlanishi va don hosildorligi. Research and education, 1(2), 373-381.

35. Xusanjon, I., & Abduxolik, K. (2022). Moshning yangi navlarini yaratishda seleksiya ko'chatzorida o'tkazilgan tadqiqotlar. Research and education, 1(4), 50-56.

36. Abdujabborovich, I. X., Ozodbek, A., Nodirbek, X., & Abrorbek, a. (2022). Sug'oriladigan maydonlarda mosh (*Phaseolus aureus Piper*) navlarining simbiotik faoliyatiga ekish muddati va me'yoring ta'sirini o'rganish. Science and innovation, 1(1), 615-624.

37. Abdujabborovich, I. X., o'gli, u. X. I., qizi, a. D. A., qizi, y. M. N., & ogli, m. A. A. (2022). Tipik bo'z tuproqlar sharoitida mosh (*Phaseolus aureus Piper*) navlarini tadqiq etish. Science and innovation, 1(d2), 160-165.