

Ultrasound Study of the Pelvic Organs of the Female Rabbit during the Period of Octress

**Rashidov Khujakhan Karim son, Erboboyev, Umarjon Ikram's son,
Uzokov Ulug'bek Dilshodovich, Bakhriddinov Jumanazar Sabriddin's son**
Samarkand State Veterinary Medicine, University of Livestock and Biotechnology, Talented students

Mukhtarov Elmurad Abdig'ulomovich
V.F.F.D., (PhD) assistant, Samarkand State Veterinary Medicine, University of Livestock and
Biotechnology

Abstract: Pelvic syncography is the imaging modality of choice for evaluating the animal pelvis. Does not use ionizing radiation (which can cause cancer and birth defects in the fetus). How the images are taken, the direction of the image, and how the sound waves move are checked. We examine the view of the anatomy of the divided uterus and ovary.

Keywords: Ultrasound, doppler, embryo, placenta, ovary.

INTRODUCTION. Ultrasound transfers sound waves through the body. Sound waves are reflected differently by different tissues, and the signal is converted into a visible image by the transfer. Sound waves travel through soft tissue or fluid. These types of structures are used as scans of us.

Noxious stimulation of rabbit muscles in the form of tetanizing electric currents is consistent with pelvic floor dysfunction, according to a number of investigators.

results in the following animal phenotype. As a result, a long-term dysfunctional state was observed in most animals, characterized by an increase in bladder capacity, an increase in the interval between contractions, and a prolonged duration of contraction. Future studies are needed to further characterize the long-term effects of pelvic floor dysfunction after noxious electrical stimulation [1].

In this retrospective study, the gap area under Valsalva was associated with prolapse recurrence with an average of 2.5 years after TVM surgery. Ultrasound can help clinicians target patients at high risk for prolapse recurrence. Clinicians should pay more attention to patients with enlarged hiatus area and take active measures to improve the prognosis of these patients [2].

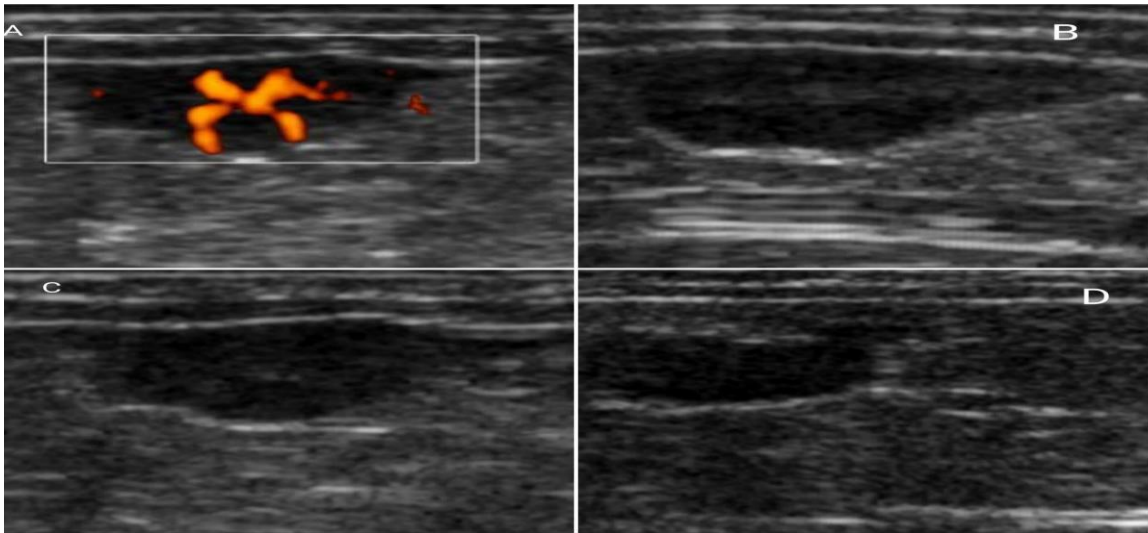


Fig. 1. Rabbit's left ovary.A).with color doppler connection (corpus luteum).B). left ovary with corpus luteum on day 3 of pregnancy (arrow C). left ovary 2 corpora lutea on the 3rd day of pregnancy).D).Left ovary of a rabbit before the onset of pregnancy.

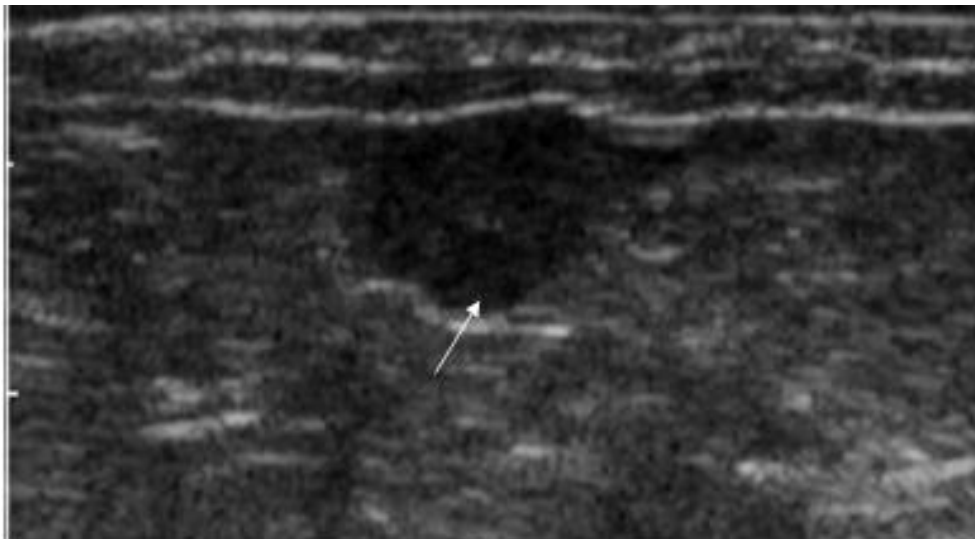


Fig. 1.1. Left ovary before the onset of pregnancy

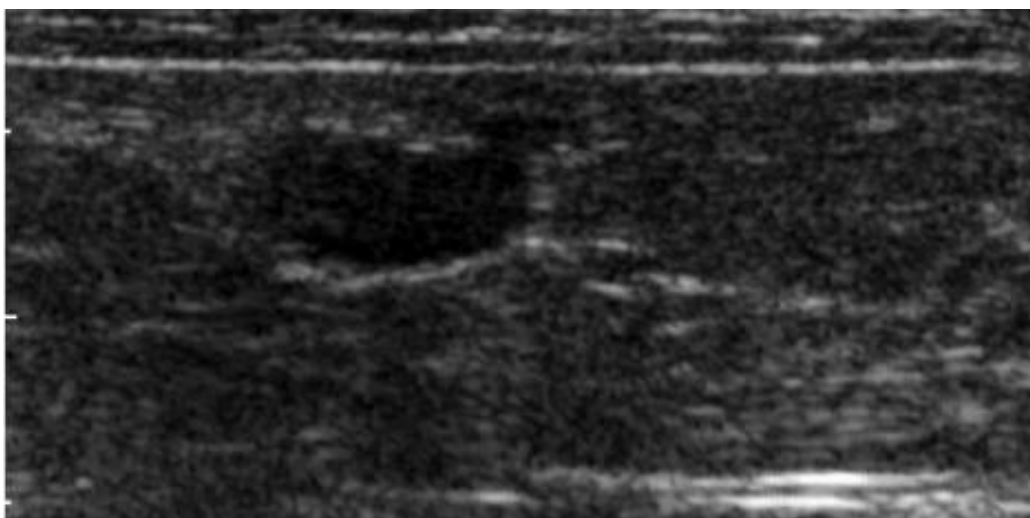


Fig. 1.2. On the 3rd day of pregnancy, 2 yellow bodies (arrow)

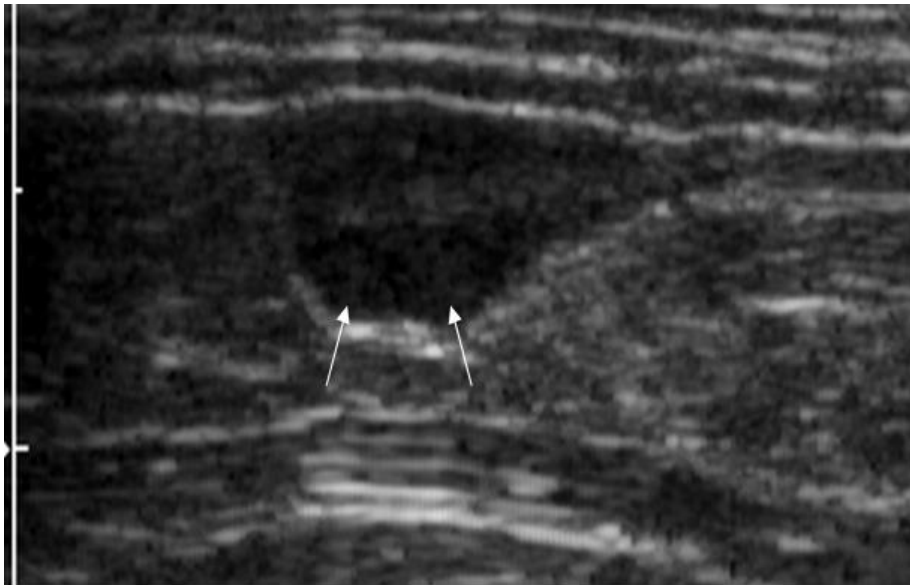


Fig. 1.3. Left ovary of a rabbit on day 3 of pregnancy with a yellow body (arrow)

It consists of a traditional transabdominal approach (TAS) combined with transvaginal sonography (TVS). Common Uses of Doppler Sonography (Figure 2) Transabdominal sonography uses the distended bladder as a window into the pelvic structures for a wide view..

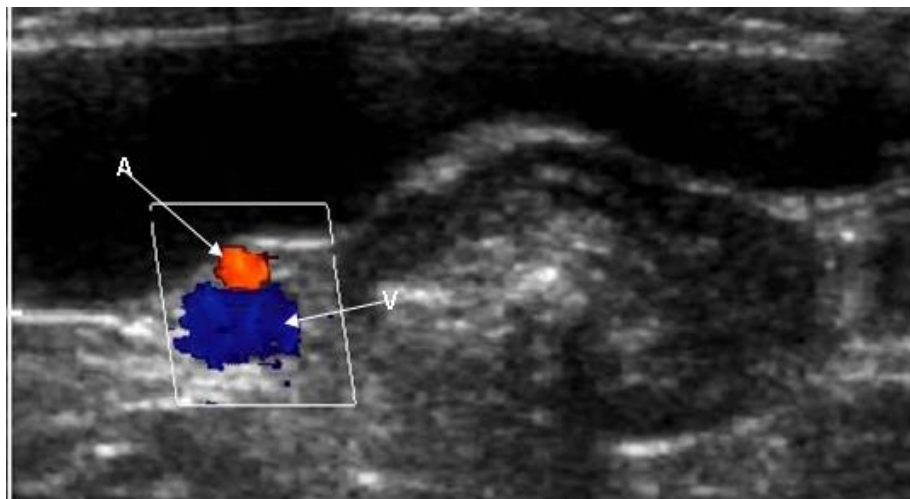


Fig. 2. Color Doppler imaging. A. and V. the uterus is clearly visible and easy to distinguish between them.

On the sagittal view, the uterus has a "teardrop" appearance.

Transvaginal sonography evaluates the pelvic structure in more detail using high-frequency transducers that are closer to the pelvic structures. Convention: the animal's head is on the left side of the screen. Transverse, usually axial to the body. Convention: the right side of the animal is shown on the left side of the screen.

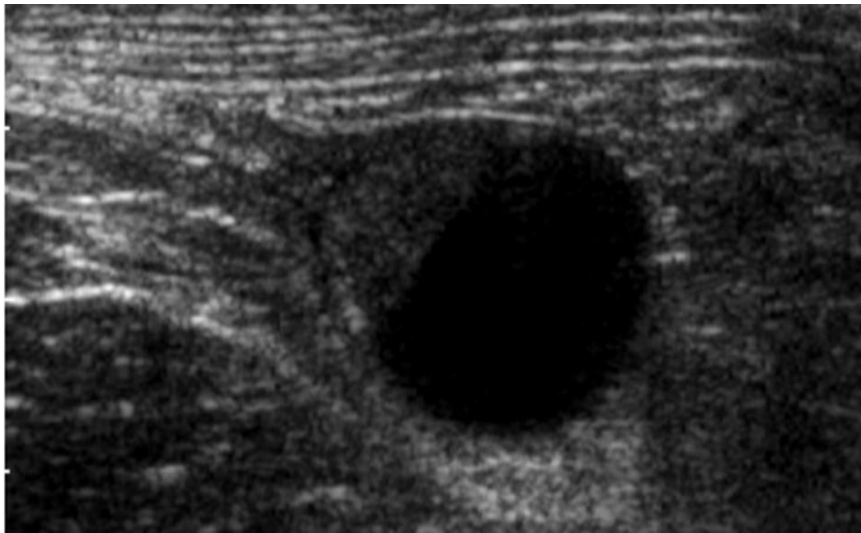


Fig. 4. The embryo (arrow) is visible for the first time. (day 9).

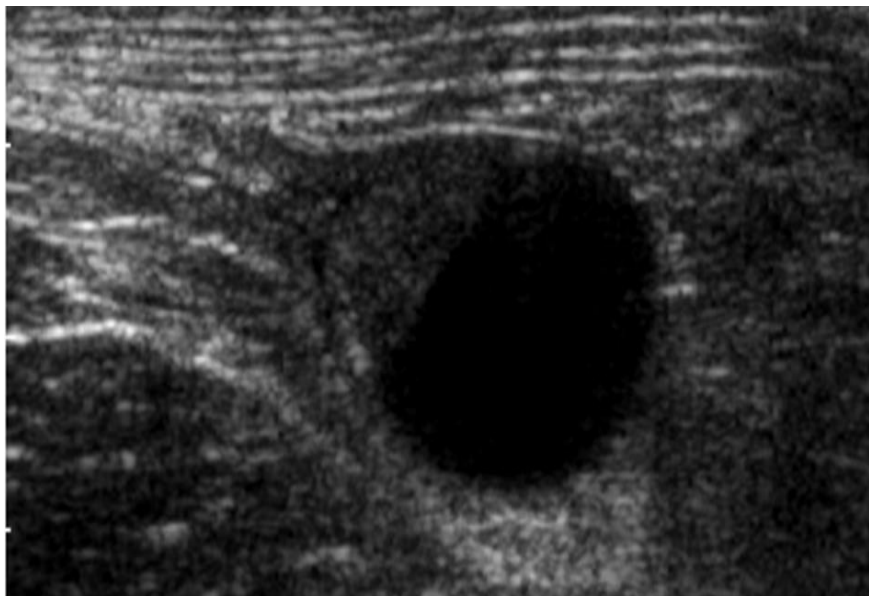


Fig. 5.). The placenta (arrow) is clearly visible. (Day 7).

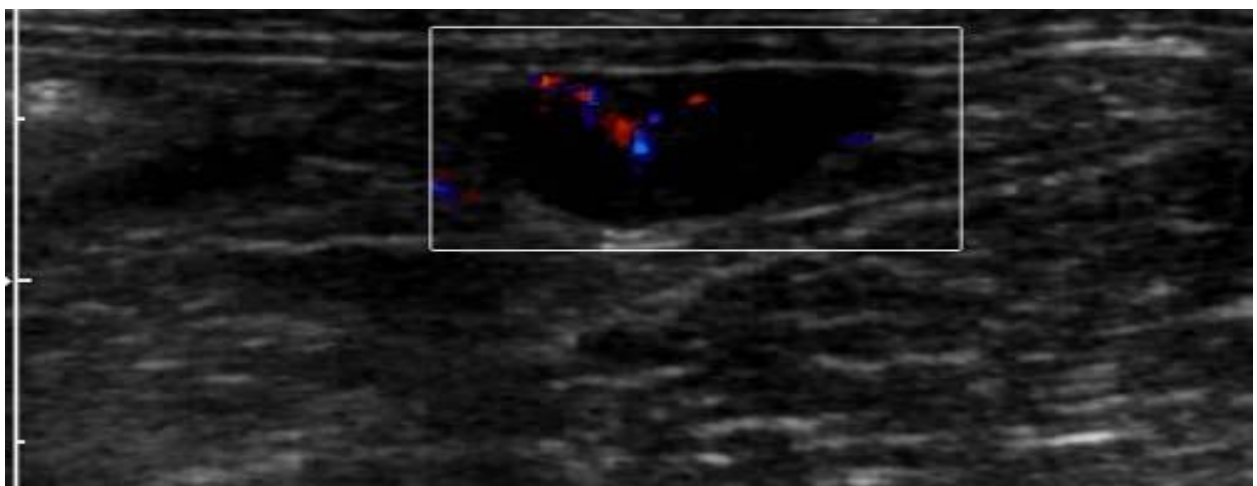


Fig. 6. then on the 5th day the first clear evidence of pregnancy

Physiological and pathological processes in reproductive organs are controlled by hormones.

The best way to determine whether an animal has strangulation is to assess the heart rate and crown length to determine whether it is positive or negative. Measurements used for dating:

determined by biparietal diameter (BPD), head circumference (HC), abdominal circumference (AC) and femur length (FL). During each scan, the first sonographer (Observer 1) obtained BPD_{oo} and BPD_{oi} measurements at the exact time on the first of the BPD duplicate images. Ultrasound images are still stored and measurements are recorded.

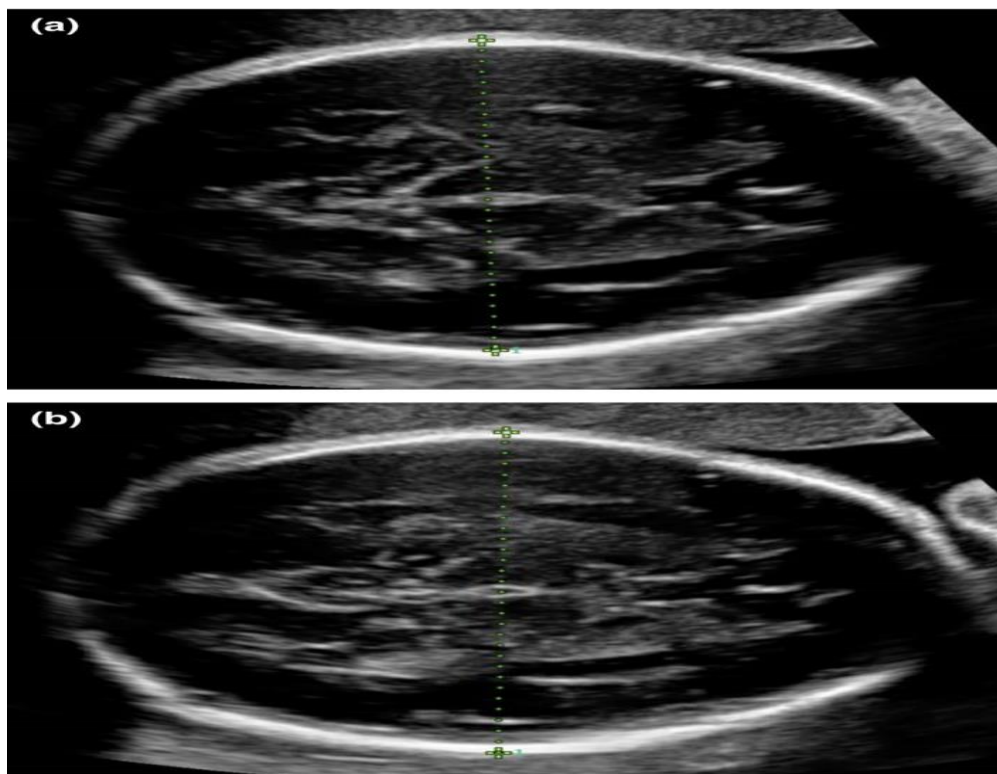


Fig. 6.1. BPD is measured from the outside to the inside. (a) Ultrasound image of fetal biparietal diameter measured using an external caliper (BPD oi) in the transthalamic plane. (b) Ultrasound image of biparietal diameter (BPD oo) measured using an external caliper.

The flow to the transducer is shown in red and blue. Doppler sample volume (oblique arrow) shows sampling location for pulsed Doppler interrogation. Right panel shows spectral Doppler of umbilical artery flow. As the current flows towards the transducer, it is described as follows (Fig. 7).

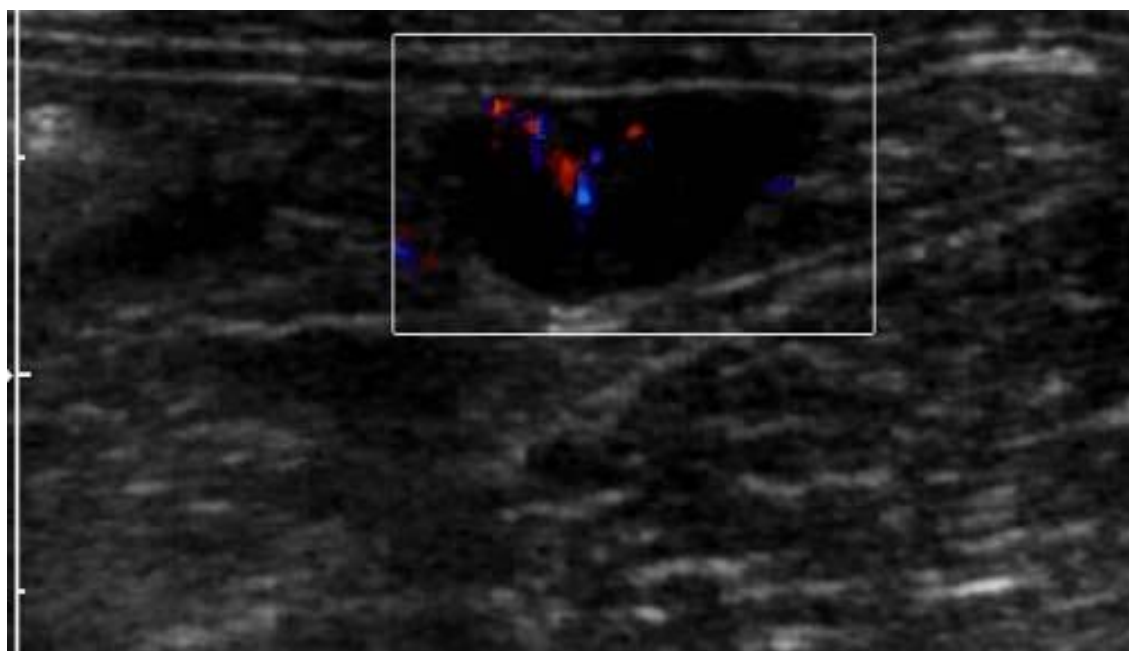


Fig. 7 On postpartum day 5, severe ovarian hyperemia subsided in Can 01.

Conclusion. We examined the uterus, ovary and other (we considered the normal anatomy of the uterus and ovary) organs in the pelvic organs of the estrous female rabbit by ultrasound, which does not use ionizing radiation, through soft tissues or fluid. uses sound waves that travel best. can be done transabdominally or transvaginally. Traditional methods are used to obtain images.

We looked at the normal appearance of pregnancy in the first and second trimester. Measurements (BPD, HC, AC, FL) are used to determine the animal's obesity.

REFERENCES

1. Zhenzhen Liu, Gaowa Sharen, Pan Wang, Liyuan Chen. Clinical and pelvic floor ultrasound characteristics of pelvic organ prolapse recurrence after transvaginal mesh pelvic reconstruction. Liu et al. *BMC Women's Health* (2022) 22:102
2. Amy D. Dobberfuhr, MD, Sara Spettel, MD, Catherine Schuler, BA, Andrew H. Dubin, Robert M. Levin, Elise J.B. De, MD. A Novel Cystometric Model of Pelvic Floor Dysfunction After Rabbit Pelvic Floor Noxious Electrical Stimulation. ORIGINAL ARTICLE *Female Pelvic Medicine & Reconstructive Surgery* • Volume 22, Number 4, July/August 2016. 248-253
3. Dilmurodov, N. (2010). The Developmental Peculiarities of Tubular Bones of Autopodies of Sheep at Postnatal Ontogenesis in Dependence on Habitat Conditions. *新疆农业大学学报*, 6.
4. Yunusov, H. B., Dilmurodov, N. B., Kuliev, B. A., & Akhmedov, S. M. (2021). The Role Of Coccal Microflora In The Etiology And Pathogenesis Of Respiratory Diseases In Lambs Of The Karakul Breed Of Uzbekistan. *Int. J. of Aquatic Science*, 12(3), 1923-1928.
5. Ярмолович, В. А., Юнусов, Х. Б., Федотов, Д. Н., Даминов, А. С., Дилмуродов, Н. Б., & Кулиев, Б. А. (2020). Морфофункциональная характеристика вымени у коров различной продуктивности.
6. Bakhodirovich, Y. J., & Bobokulovich, D. N. (2022). Treatment and Prevention of Transmissible Veneric Sarcoma in Dogs. *Eurasian Medical Research Periodical*, 7, 81-85.
7. Дилмуродов, Н. Б., Дониёров, Ш. З., & Чориев, О. Н. (2022). Бройлер жўжалар елка суяги таркибидаги кул ва умумий органик моддалар микдорини постнатал онтогенезда ўзгариши. *Вестник Ветеринарии и Животноводства*, 2(1).
8. Mukhtarov, E. A., Bobokulovich, D. N., & Ishkuvvatovich, V. E. (2022). Dynamics of some indicators of sheep blood. *Journal of new century innovations*, 17(2), 36-42.
9. Abdig'ulomovich, M. E., & Babaqulovich, D. N. (2022, April). Dynamics of triglitsrin in blood in different conditions. In *E Conference Zone* (pp. 202-204).
10. Дилмуродов, Н., & Мухторов, Э. (2021). Турли яшаш шароитидаги ҳисори зотли қўйлар постнатал онтогенезида оёқлар проксимал мускулларининг морфометрик хусусиятлари. *Вестник Ветеринарии и Животноводства*, 1(1).
11. Mukhtarov, B. Z., & Dilmurodov, N. B. (2021). Pathomorphological changes in poultry pododermatitis in cows. *Academicia: An International Multidisciplinary Research Journal*, 11(4), 1679-1683.
12. Muxtarov, E. A., Normuradova, Z. F., & Dilmurodov, N. B. (2022). Qo'ylar muskullarning morfometrik o'zgarish dinamikasi. *Agrobiotexnologiya va veterinariya tibbiyoti ilmiy jurnali*, 407-410.
13. ДИЛМУРОДОВ, Н. Б. (2015). Физические параметры метаподия овец гиссарской породы в постнатальном онтогенезе. *Вестник ветеринарии*, (4), 58-60.
14. Mukhtarov, B. Z., & Dilmurodov, N. B. Some Biochemical Indicators of Blood in Prosperous Cows in Pure Pododermatitis. *JournalNX*, 6(06), 58-62.

15. Дилмуродов, Н. Б., Дониёров, Ш. З., & Султонов, Б. А. (2021). Бройлер жўжалари узангилик (цевка) суягининг морфогенезига пробиотиклар таъсири. *Вестник Ветеринарии и Животноводства*, 1(2).
16. Muzafar, Y., Zoyir, M., & Nasriddin, D. (2023). Morphometric features of the femor bone of different rabbits. *Scientific Impulse*, 1(9), 563-570.
17. Zafarovich, D. S., Babakulovich, D. N., & Norboyevich, C. O. (2022). Changes in the Amount of Calcium and Phosphorus in the Composition of the Femur Bone of Broiler Chickens in Postnatal Ontogenesis. *International Journal of Innovative Analyses and Emerging Technology*, 2(2), 21-25.
18. Dilmurodov, N., Mirzoyev, Z., & Normuradova, Z. (2022). Морфогенез бедренной кости кроликов породы фландер на разных физиологических стадиях. *Вестник ветеринарии и животноводства (ssuv. uz)*, 2(2).
19. Мухторов, Э., & Дилмуродов, Н. (2021). Ҳисори зотли қўйлар елканинг сонниг тўрт бошли мускули толасининг ядроси диаметрини постнатал онтогенезда ўзгариши. In *International Conference on Agriculture Sciences, Environment, Urban and Rural Development*. (pp. 49-52).
20. Dilmurodov, N. B., Yakhshieva, S. K., & Rakhmanova, G. S. (2021). Probiotics influence on the glandular stomach of broiler chickens in postnatal morphogenesis. *Academicia: an international multidisciplinary research journal*, 11(2), 1656-1660.
21. Dilmurodov, N., Rakhmanova, G., Fedotov, D., & Normuradova, Z. (2022). Возрастная морфология надпочечников у птиц. *Вестник ветеринарии и животноводства (ssuv. uz)*, 2(2).
22. Po'lat, Z., & Nasriddin, D. (2022). Tovuqlar ovqat hazm organlarining tuzilishidagi morfofunktsional xususiyatlar (Adabiyot ma'lumotlari tahlili). *Conferencea*, 120-125.
23. Qurbonova, N., & Dilmurodov, N. (2022). Problems in learning a foreign language. *Ilm fan taraqqiyotida zamonaviy metodlarning qo'llanilishi*, 2(28), 51-53.
24. Дониёров, Ш. З., & Дилмуродов, Н. Б. (2021). Бройлер жўжалар елка суяги таркибидаги намлик микдорини постнатал онтогенезда ўзгариш динамикаси. In *International Conference on Agriculture Sciences, Environment, Urban and Rural Development*. (pp. 45-48).
25. Shuxratovna, R. G., Babakulovich, D. N., Fayzullayevna, N. Z., & Nikolayevich, F. D. (2022). "Tuxum yo 'nalishidagi tovuqlar reproduktiv organlarining postnatal morfogenezi"(adabiyot ma'lumotlari asosida). *Scientific Impulse*, 1(4), 603-608.
26. Tursagatov, J. M., & Dilmurodov, N. B. (2022). Har xil yoshli qorako'l qo'ylar stilopodiy suyaklari diafizi qalinligining o'zgarish dinamikasi. *Agrobiotexnologiya va veterinariya tibbiyoti ilmiy jurnali*, 949-953.
27. Dilmurodov, N., & Doniyorov, S. (2021). Влияние пробиотиков на морфогенез костей цевка у циплят-бройлеров. *Вестник ветеринарии и животноводства (ssuv. uz)*, 1(2).
28. Tursagatov, J. M., & Dilmurodov, N. B. (2023). Influence of the Conditions Regions on the Linear Parameters Forearm-Elbow Bones of Karakul Sheep. *European Journal of Veterinary Medicine*, 3(6), 8-11.
29. Ulomovich, m. E. A., & Babakulovich, D. N. Morphogenesis Of The Hind Leg Distal Muscles Of Hissar Sheep Of Different Breeds In Different Ecological Conditions. *JournalNX*, 6(06), 25-29.
30. Дилмуродов, Н. Б., & Мухтаров, Э. А. (2021). Ҳисори зотли қўйлар постнатал онтогенезида соннинг икки бошли мускулларнинг морфологик хусусиятлари. *Veterinariya meditsinasi Agrozoovetservs*.
31. Нурмухамедов, Б. М., Дилмуродов, Н. Б., Эшбуриев, С. Б., & Рахмонов, У. А. (2019). Морфофункциональная характеристика яичников у коз.

32. Дилмуродов, Н. Б., & Мухтаров, Э. А. (2020). Ҳисори зотли қўйлар олдинги оёқ дистал мускулларнинг постнатал онтогенезидаги морфологик хусусиятлари. *Veterinariya meditsinasi*.
33. Yakubov, M. A., Dilmurodov, N. B., Muxtorov, V. Z., & Muxtarov, E. A. (2023). Change of biochemical indicators of blood in putural pododermatitis of productive cows. *Scientific impulse, 1(9)*, 555-562.
34. Мухтаров, Э. А., & Дилмуродов, Н. (2021). Ҳисори зотли қўйлар постнатал онтогенезида мускулларнинг айрим кимёвий кўрсаткичлари. *Veterinariya meditsinasi Agrozoovetservs*.
35. Мухторов, Э. А., & Дилмуродов, Н. Б. (2020). Ҳисори зотли қўйлар постнатал онтогенезида оёқ мускулларининг морфологик кўрсаткичларига яшаш шароитини таъсири. *журнал агро процессинг, 2(2)*.
36. Дилмуродов, Н. Б., Пардаева, Ш. А., & Мирзаев, С. М. (2023). Сигирларда пододрматит жараёнларини келтириб чиқарувчи омиллар ва кечиш хусусиятлари. *Вестник ветеринарии и животноводства, 3(1)*.
37. Рахманова, Г. Ш., Дилмуродов, Н. Б., & Федотов, Д. Н. (2022). Гистологическое состояние надпочечников у кур в условиях птицефабрик узбекистана. *Agrobiotexnologiya va veterinariya tibbiyoti ilmiy jurnali, 353-355*.
38. Zafarovich, D. S., & Babakulovich, D. N. (2021). Changes In Natural And Hygroscopic Moisture Content Of Broiler Chickens In Postnatal Ontogenesis. *nveo-natural volatiles & essential oils journal/ NVEO, 15710-15713*.
39. Федотов, Д. Н., & Дилмуродов, Н. Б. (2020). Практическое изучение микропрепаратов в общей и частной гистологии.
40. Нурмухамедов, Б. М., Дилмуродов, Н. Б., Эшбуриев, С. Б., & Эшматов, Г. Х. (2019). Морфофункциональные изменения в яичниках коз под влиянием гонадотропных препаратов.
41. Zarpullayev, P., & Dilmurodov, N. (2022). Ferula assafoetida o 'simligining hayvonlarning reproduktiv faoliyatiga TA'SIRI. *Conferencea, 88-90*.
42. Abdigulomovich, M. E., & Bobokulovich, D. N. (2021). Changes In The Postnatal Ontogenesis Of Histological Indicators Of The Four-Headed Muscle Number Of Hisori Sheep. *nveo-natural volatiles & essential oils journal/ nveo, 15705-15709*.
43. Дилмуродов, Н. Б. (2009). Влияние экологических условий на онтогенез кости метаподий у овец. *Ветеринария, (4)*, 42-43.
44. Дилмуродов, Н., & Худойназарова, Н. (2019). Закономерности изменения суставного и метаэпифизарного хряща костей акроподий в постнатальном онтогенезе.
45. Dilmurodov, N. B., Karimov, M. G., & Normurodova, Z. F. (2018). Hayvonlar marfologiyasi fanidan amaliy laboratoriya mashg'ulotlari.
46. Dilmurodov, N. B., Yakhshieva, S. K., & Rakhmanova, G. S. Probiotics influence on the glandular stomach of broiler chickens in postnatal morphogenesis, *cademia: an international multidisciplinary research journal*.
47. Mukhtarov, E. A. U., & Dilmurodov, N. B. Morphogenesis of the hind leg distal muscles of hissar sheep of different breeds in different ecological conditions. *A Multidisciplinary Peer Reviewed Journal. P, 25-29*.
48. Dilmurodov, N., & Mukhtarov, E. Effect of ecological conditions on the morphometric properties of wrist joint muscles in postnatal ontogenesis of sheep.

49. Турсагатов, Ж. М., & Дилмуродов, Н. Б. (2022). Ҳар хил ёшли қорақўл қўйлар стилоподий суяклари диафизи калинлигининг ўзгариш динамикаси. *Agrobiotexnologiya va veterinariya tibbiyoti ilmiy jurnali*, 949-953.
50. Muxtarov, E. (2021). Changes In The Postnatal Ontogenesis Of Histological Indicators Of The Four-Headed Muscle Number Of Hisori Sheep. *Scienceweb academic papers collection*.
51. Дилмуродов, Н. (2016). Суяк илиги бўшлиғини қўйларнинг ёши ва зотига кўра ўзгариши. *Зооветеринария*, 2, 19-21.
52. Zafarovich, D. S., Babakulovich, D. N., Khojimukhammad, K., Suhrob, A., & Bunyodjon, R. (2023). Change of ash and total organic substances of the humerus chicken broiler applied probiotics during postnatal ontogenesis. *Ethiopian International Journal of Multidisciplinary Research*, 10(12), 399-406.
53. Zafarovich, D. S., Babakulovich, D. N., Kakhramon, N., & Otabek, Y. (2023). Postnatal ontogenesis of macroatomical indicators of tarsometatarsus of broiler chickens receiving probiotics. *Ethiopian International Journal of Multidisciplinary Research*, 10(12), 345-350.
54. NB Dilmurodov,. Change of the morphometric dimensions of the sheep's local ring and thyroid areas during postnatal ontogenesis. *Ethiopian International Journal of Multidisciplinary Research*. 2023/12/9.
55. Dilmurodov, Nasriddin Bobokulovich; Mukhtarov, Elmurod Abdihulomovich; Urinboyev, Hasanboy Abdusamad o'g'li. The dynamics of changing of the sheep glossary muscle. *International Multidisciplinary Journal for Research & Development*. 2023/12/6.
56. Mukhtorov, Elmurad Abdigulomovich; Dilmurodov, Nasriddin Bobokulovich; Azimoba, Dilnura Madat qizi. (2023). Postnatal morphogenesis of histological indicators of the quadrice muscle of hisori breed sheep. *Ethiopian International Journal of Multidisciplinary Research*, 10(12), 240–247.
57. N.B. Dilmurodov. (2023). Characteristics of changes in the postnatal ontogenesis of the scapula of small corn molars. *Ethiopian International Journal of Multidisciplinary Research*, 10(12), 195–203.
58. S.X. Yakhshieva, N.B. Dilmurodov,. (2023). Intestinal morphogenesis in postnatal ontogenesis of broiler chicks. *Ethiopian International Journal of Multidisciplinary Research*, 10(12), 232–239.
59. N.B. Dilmurodov, (2023). Characteristics of changes in postnatal ontogenesis of the pelvic bone of small corn molars. *International Multidisciplinary Journal for Research & Development*, 10(12).
60. Avazbek, B., Javohir, M., & Elmurod, M. (2022). Qondagi albuminning turli shashroitlardagi ko'rsatkichlari. *World scientific research journal*, 2(2), 128-132.
61. Oybek, A., & Elmurod, M. (2022). Morphometric changes of skeletal muscles of animals in the postnatal period (review of literature). *Conferencea*, 161-165.
62. Кулиев, Б. А., Ахмедов, С. М., & Мухтаров, Э. А. (2022). Лечение т-активинном ягнят каракульской породы, больных пневмонией. *Journal of new century innovations*, 17(4), 130-138.
63. Alimjonovich, Y. M., & Abdiglomovich, M. E. (2022). Estropane some morphogenesis of cow blood. *American Journal of Research in Humanities and Social Sciences*, 6, 38-42.
64. Кулиев, Б. А., Ахмедов, С. М., & Мухтаров, Э. А. (2022). Патоморфология пневмоний у ягнят каракульской породы. *Journal of new century innovations*, 17(4), 146-154.
65. Мухторов, Э. А. (2020). Действие условия содержания на морфологические показатели мускулатуры конечности постнатального онтогенеза у гиссарской породы овец. *In современное состояние, традиции и инновационные технологии в развитии анк* (pp. 137-140).

66. Мухторов, Э. А. (2019). Ҳисори зотли қўйлар орқа оёқ мускулларининг постнатал онтогенездаги морфометрик хусусиятлари. *Журнал агро процессинг*, (4).
67. Alimjonovich, Y. M., Rajabovich, M. Z., & Abdiglomovich, M. E. (2022). Morphometric characteristics of tibi bone in postnatal ontogenesis of rabbits of different breeds. *Spectrum Journal of Innovation, Reforms and Development*, 9, 324-330.
68. Бобоназаров, Э. И., & Мухтаров, Э. А. (2022). Применение препарата полиамидин-п для профилактики и лечение пироплазмоза крупного рогатого скота. *Journal of new century innovations*, 17(2), 43-50.
69. Мухтаров, Э. А. (2020). Қўйлар постнатал онтогенезида мускулларнинг айрим кимёвий хусусиятлари.
70. Muxtarov, E. (2022). Estropane some morphogenesis of cow blood. *American Journal of Research in Humanities and Social Sciences*.
71. Karim o'g'li, R. K., Ikram o'g'li, E. U., & Abdigulomovich, M. E. (2023). Karakol sheep lymphatic flow from the skin of the distal and wrax of the front leg. *International Multidisciplinary Journal for Research & Development*, 10(12).
72. Umarjon, E., Khujakhan, R., & Elmurod, M. (2023). Liver histomorphological structure. *Ethiopian International Journal of Multidisciplinary Research*, 10(12), 213-220.