

**DISTRIBUTION AND PATHOMORPHOLOGY OF BRUCELLOSIS IN FARM  
ANIMALS**

**Bobonazarov E.**

Senior teacher of the Department of Animal Anatomy,

Histology and Pathological Anatomy, Ph.D.

**Abstract:** In the article, the ways of spread of brucellosis disease in farm animals. Various macroscopic and microscopic changes in the organs and organisms of different animals are characteristic of brucellosis.

**Keywords:** Summoner, source of infection, damage, healthy area, fetal abortion, bursitis, orchitis.

**Abstract:** Statya posvyashchena rasprostraneniyu disease brucelleza u selskohozyyastvennyx jivotnyx. Shown the characteristics of brucellosis changes in organisms and various animals with various macroscopic and microscopic changes.

**Key words:** Inflammatory, heart infection, porogenic, healthy area, aborted fetus, bursitis, orchitis.

---

Brucellosis is an infectious disease of various animals and humans caused by bacteria of the genus *Brucella*. Brucellosis in animals is often abortive. The birth of non-viable offspring. It is accompanied by the capture of the star and long-lasting impotence. The causative agent of brucellosis is a bacterium belonging to the genus *Brucella*, which has the following types. *B. abortus* (cattle) *B. melitensis* (Goat) *B. suis* (pig) *B. ovis* (ram) some types of *Brucella* can infect other types of animals in addition to the specific type of animal. This disease is the source of disease. Sick animals. Especially when clinical symptoms are manifested, or when the fetus is aborted. When the fetus is caught, they are served by amniotic fluid, the fetus itself, mucus from the genitals, milk, urine, feces, and bull semen. The causative agent of brucellosis lives in the cow's udder for 7-9 years. It is stored in the udder for 3 years and is always secreted with milk. 15-30 days after an abortion, a large number of *Brucella* is released from the genitals of a cow. It is extremely dangerous not to neutralize the aborted fetus in time. As factors of transmission of the pathogen, the feed, water, and pasture contaminated with the milk, feces, and mucus from the genital organs of sick animals. Inventory used in animal care (horn, shovel, broom, etc.) is considered. Ways of infection - young animals are infected through food, and adult animals are infected through mucous membranes and skin during contact and sexual intercourse. In natural conditions, *Brucella* enters a healthy organism through alimentary canal. It is transmitted through the mucous membranes of the eyes, nose, mouth and genitals through water and hay. In most cases, brucellosis is spread in the water sources where animals drink. The spread of brucellosis can also be spread to healthy farms through sick animals purchased without inspection from farms to private auxiliary farms and public farms. Animal products, including milk products, are also spread in milk processing plants when they are not pasteurized to the required level. can become a source of brucellosis when sick animals are brought to the farm when quarantine rules are violated sick and healthy animals are kept together when they are fed together in pastures when they are watered in the same place or in the presence of dogs and rodents usually in newly spread foci for several months 60 or more more animals can get sick, first 1-2 head, then mass abortion is observed in the herd. If new healthy cattle are brought to such a farm after 2-3 years, first brucellosis is observed in these new healthy cattle, then mass abortion is observed. causes

swelling, the migration of brucella among animal species is also very strong, they pass from one species of animal to another, this situation occurs especially when the natural resistance of cattle decreases.

Humans are infected with brucellosis only from infected animals (due to direct contact) or through their products (raw milk, cream). The degree of ill health to brucellosis is determined depending on the course of the infection between the farm and the herd in the settlement (acute-chronic) or according to the prevalence of brucellosis disease among the number of cattle, the limiting level is if for 12 months in the farm (more than which species it belongs to) iy nazar) if up to 2% of the animals are sick compared to the average annual number of animals, widespread level - if up to 10% of animals are sick, widespread level if more than 1% of animals are sick , according to the level of brucellosis, districts are divided into the following categories, brucellosis incidence is limited, i.e. if it is 10% of the number of animals in some brucellosis-unhealthy points in this district, brucellosis disease is widespread, i.e. there is a brucellosis disease in this district If the number of animals in several unhealthy punts is 30% compared to the number of animals in the district, if there are no cows in an unhealthy herd or herd, the sign of brucellosis is hidden and chronic. It is detected by serological and allergic tests. In the second period of goiter, abortion is observed in cows at 5-8 months and in sheep at 3-5 months. In cattle, the udder swells 2-3 days before abortion, a cloudy liquid flows from the vagina and the child is discharged, mucous exudate in the uterus. is formed. Punctate hemorrhages form necrotic foci in carinulae, usually placental retention in cows after abortion is followed by purulent endometritis, in some cases, mastitis is inflammation of the ovaries due to endometritis, if the cow is sick in the last days of the disease. the calf is born prematurely and may die within 1-2 weeks. In the aborted fetus, the swelling in the subcutaneous tissue, the cloudy liquid in the chest and abdomen. punctate hemorrhages and catarrhal inflammations occur in the lungs and intestines, purulent necrotic inflammation develops in the joints and testicles of the hogs, and a large amount of exudate accumulates, so these organs become swollen and painful. It differs from that in sheep in that it develops around carbuncles, a purulent necrotic inflammation. Pigs have a peculiar disease. It is characterized by the formation of abscesses in parenchymatous organs.

Summary. Brucellosis is considered a highly dangerous infectious occupational disease, and its economic damage and social importance play an important role in society. The treatment of the disease is complicated, the food used for obtaining products from animals is wasted, the disease causes pathological changes in the body and organs. Products from sick animals. sick animals become foci of disease for humans and animals. This situation creates conditions for the spread of the disease. Calving in livestock farms leads to a decrease in the quality and quantity of milk production, weight gain, the birth of animals unsuitable for the production of meat in the herd, and a decrease in the number of the herd. Based on the above, detection of the spread of brucellosis and pathomorphological changes plays an important role in preventing the spread of the disease, the disease of humans and animals.

#### **Used literature**

1. Mirziyoev SH.M."O'zbekiston Respublikasi yanada rivojlantirish bo'yicha harakatlar strategiyasi to'g'risida"gi 2017 yil 7 fevral, PF-4947-son Farmoni.Toshkent, 2017.
2. Барамова Л.Л.Барамова Ш.А. "Диагностика бруцеллёза у сайгаков"Аграр. наука-2003№ 10.C-22-23

3. Жарова Л.В. Эффективность конъюнктивального метода иммунизации овец против бруцеллёза вакциной из штамма 19: Автореф. дисс. канд. вет. наук: 16.00.03/Л.В.Жаров; ИЭВС и ДВ, -Новосибирск, 2002. 47 с.
4. Косилов И. А. Противоэпизоотическая и противоэпидемическая эффективность специфической профилактики бруцеллез овец/ И.А. Косилов, П.К.Аракелян //Науч. обеспечение вет. пробл. в животноводстве. -Новосибирск, 2000. -С
5. Abdig'ulomovich, M. E., & Babaqulovich, D. N. (2022, April). Dynamics of triglycerin in blood in different conditions. In E Conference Zone (pp. 202-204).
6. 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.
7. Akhmedov, S. M., Daminov, A. S., & Kuliev, B. A. (2023). Epistological monitoring of sheep paramphistomatosis in different biogeotcenoses of Samarkand region. *Экономика и социум*, (5-1 (108)), 14-17.
8. 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.
9. Avazbek, B., Javohir, M., & Elmurod, M. (2022). Qondagi albuminning turli shashroitlardagi ko'rsatkichlari. *World scientific research journal*, 2(2), 128-132.
10. Axmedov, S. M., Daminov, A. S., & Kuliyeu, B. A. Paramfistomatozda qo 'ylar ichki organlaridagi patanatomik va patogistologik o 'zgarishlar. *International Journal of Agrobiotechnology and Veterinary Medicine*.
11. Axmedov, S., Daminov, A., Kuliyeu, B., & Bobonazarov, E. (2022). Патогенез, диагностика, лечение и профилактика парамфистоматоза.(По литературным данным). *Вестник ветеринарии и животноводства (ssuv. uz)*, 2(2).
12. Babashev, A., Saparov, A. R., Rahmonov, O. A., & Narzullayeva, F. S. (2022). Literature data of pathomorphology of joint diseases in horses. *Евразийский журнал медицинских и естественных наук*, 2(11), 271-274.
13. Bakhodirovich, Y. J., & Bobokulovich, D. N. (2022). Treatment and Prevention of Transmissive Veneric Sarcoma in Dogs. *Eurasian Medical Research Periodical*, 7, 81-85.
14. 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.
15. Dilmurodov, N. B. Doniyorov Sh. Z., Choriev ON 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. India. e-ISSN*, 2792-4025.
16. 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.
17. Dilmurodov, N., & Doniyorov, S. (2021). Влияние пробиотиков на морфогенез костей цевка у циплят-бройлеров. *Вестник ветеринарии и животноводства (ssuv. uz)*, 1(2).
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. 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).

20. Dilmurodov, N., Raxmanova, G., Fedotov, D., & Normuradova, Z. (2022). Возрастная морфология надпочечников у птиц. Вестник ветеринарии и животноводства (ssuv. uz), 2(2).
21. Gulyamovich, M., & Hakimovich, I. B. (2021). Morphofunctional properties of the adrenal glands of rabbits. Webology (ISSN: 1735-188X), 18(1), 19-24.
22. Hakim, N., Numon, D., & Nasriddin, D. (2021). Treatment of aseptic diseases of limb distal part joints in uzbek sport horses. Journal of Microbiology, Biotechnology and Food Sciences, 2021, 478-481.
23. Mirzoev, Z. R., Rakhmonov, R. A., & Khudoynazarova, N. E. (2021). Morphometric properties of the shoulder bone in the postnatal ontogenesis of rabbits in the meat direction. nveo-natural volatiles & essential oils Journal| NVEO, 15714-15717.
24. Mirzoev, Z. R., Rakhmonov, R. A., & Khudoynazarova, N. E. (2021). Morphometric properties of the shoulder bone in the postnatal ontogenesis of rabbits in the meat direction. nveo-natural volatiles & essential oils Journal| NVEO, 15714-15717.
25. Mukhitdinovich, A. S. (2023). Clinical signs of sheep paramphistomatosis. American Journal of Pedagogical and Educational Research, 12, 47-50.
26. Mukhitdinovich, A. S. (2023). Morphofunction changes in sheep paramphistomatosis. Conferencea, 31-34.
27. Mukhitdinovich, A. S., Suvonovich, D. A., & Amridinovich, K. B. (2023). Pathohistological changes in organs in sheep paramphistomatosis. Conferencea, 113-117.
28. Mukhtarov, B. Z., & Dilmurodov, N. B. Some Biochemical Indicators of Blood in Prosperous Cows in Pure Pododermatitis. JournalNX, 6(06), 58-62.
29. Mukhtarov, E. A., Bobokulovich, D. N., & Ishkuvvatovich, B. E. (2022). Dynamics of some indicators of sheep blood. Journal of new century innovations, 17(2), 36-42.
30. Mukhtarov, B. Z., & Dilmurodov, N. B. (2021). Pathomorphological changes in poultry pododermatitis in cows. Academicia: An International Multidisciplinary Research Journal, 11(4), 1679-1683.
31. Mukhtarov, B. Z., & Dilmurodov, N. B. (2021). Pathomorphological changes in poultry pododermatitis in cows. Academicia: An International Multidisciplinary Research Journal, 11(4), 1679-1683.
32. 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.
33. Muzafar, Y., Zoyir, M., & Nasriddin, D. (2023). Morphometric features of the femor bone of different rabbits. Scientific Impulse, 1(9), 563-570.
34. Nasriddin Dilmurodov, Shokhruxh Doniyorov, Otabek Choriev Изменение количества золы и общих органических веществ в составе плечевой кости цыплят-бройлеров в постнатальном онтогенезе. 2022. Вестник ветеринарии и животноводства (ssuv. uz)
35. Normuradova Z.F. Karimov. M.G., Ibragimov B.Kh. Toxic Effect of Gossypol-Containing Food on Chickens. Jundishapur Journal of Microbiology Research Article Published online 2022 April. 7252 – 7257.
36. Normuradova, Z. F., & Arzikulova, S. M. (2022, May). Quyonlarning biologik xususiyatlarI. In E Conference Zone (pp. 44-47).
37. O`A Rahmonov, NE Khudoynazarova, Karimov MG, Ibragimov BH, Morphofunctional Properties of the Adrenal Glands of Rabbits. Jundishapur Journal of Microbiology Research Article Published online 2022 April, 7245-7251.
38. Oybek, A., & Elmurod, M. (2022). Morphometric changes of skeletal muscles of animals in the postnatal period (review of literature). Conferencea, 161-165.
39. OZ Ergasheva, S Sh Beknazarov 2023 Respublikamizda parvarishlanayotgan quyon

zotlari va ularning biologik xususiyatlari. Новости образования: исследование в XXI веке, 418-424.

40. Po'lat, Z., & Nasriddin, D. (2022). Tovuqlar ovqat hazm organlarining tuzilishidagi morfofunktsional xususiyatlar (Adabiyot ma'lumotlari tahlili). Conferencea, 120-125.

41. Qurbonova, N., & Dilmurodov, N. (2022). Problems in learning a foreign language. Ilm fan taraqqiyotida zamonaviy metodlarning qo'llanilishi, 2(28), 51-53.

42. Rajabovich, M. Z., Alimjonovich, Y. M., & 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.

43. Sh Z Doniyorov, NB Dilmurodov. Broylar jo'jalar elka suyagi tarkibidagi namlik hududni postnatal ontogenezda o'zgarish dinamikasi. 2021. Qishloq xo'jaligi fanlari, atrof-muhit, shahar va qishloqlarni rivojlantirish bo'yicha xalqaro konferentsiyada.(45-48-betlar)

44. Shuxratovna, R. G., Babakulovich, D. N., & Nikolayevich, F. D. (2022). Anatomical Structure of Reproductive Organs of Chickens in the Egg Direction. Middle European Scientific Bulletin, 24, 240-243.

45. Shuxratovna, R.G., Babakulovich, D.N., Fayzullayevna, N.Z., & Nikolayevich, FD (2022). "Tuxum yo'nalishidagi tovuqlar reproduktiv organlarining postnatal morfogenezi"(adabiyot ma'lumotlari asosida). Ilmiy impuls , 1 (4), 603-608.

46. Turdiyev, A. K., Raxmonov, D. A., Beknazarov, S. S., & Raxmonov, U. A. (2023). Nutriyachilikvamo 'ynachiliknirivojlantirishdaveterinariyasaniitariyagigiyenasitadbirlari. Scientific Impulse, 1(9), 542-548.

47. 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.

48. 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.

49. Tursagatov, J., & Dilmurodov, N. (2022). Динамика изменения линейных параметров большеберцовой кости в постнатальном онтогенезе каракульских овец. Вестник ветеринарии и животноводства (ssuv. uz), 2(2).

50. 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.