



**SHEEP BRUCELLOSIS IS A DANGEROUS DISEASE  
(LITERATURE REVIEW)**

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**Relevance of the Topic**

Brucellosis is a chronic infectious disease characterized by abortion, placental abruption, endometritis, and reproductive disorders in animals. When brucellosis is detected on a farm, first of all, mass abortion (abortion) is observed in sheep, and a lot of money is spent on quarantine and rehabilitation of the farm. The main thing is that brucellosis is transmitted from animals to humans, and the economic damage from it becomes a major social problem.

**Keywords:** Disease, sick animal, level of danger, types of diseases, epizootic transmission, economic damage.

**The Causative Agent**

The causative agent of brucellosis belongs to the genus *Brucella*, which has 6 species. The disease is found in cattle *Br. abortus*, in sheep *Br. melitensis*, in the epididymitis of rams *Br. ovis*, in pigs *Br. suis*, in dogs *Br. canis*, in rats *Br. neotomae*. For people *Br. melitensis* type is very dangerous.

In Uzbekistan, *Br. Biovars 1 and 3 of melitensis* are found everywhere except in Fergana region. Therefore, brucellosis is rare in Fergana region.

*Br. melitensis* is most common in sheep and goats and large horned animals in the Republic of Karakalpakstan and in Tashkent, Syrdarya, Jizzakh, Samarkand, Kashkadarya and Bukhara regions, so the disease is widespread and epizootic in these areas. The epidemiological situation is complex. In a mixed brucellosis outbreak, *Br. melitensis* and *Br. abortus* occurs. Brucellosis is 30-35% in urban areas and 70-75% in rural areas, but in Tashkent, Syrdarya and Jizzakh, on the contrary, it is twice as high.



### **Resistance to Pathogens**

Resistant to physical and chemical stress. It is rapidly inactivated at 60 ° C for 30 minutes, at 70 ° C for -5-10 minutes, and at 90-100 ° C. 4-7 days in milk and cream, 14 days in clothes; It is active for 67 days in cheese, butter, brisket and salted skin, 3 months in salted meat, 5 months in frozen meat and wool. It is active in soil, water, manure, hay for 4 months. Rapidly loses its activity in the decaying material. Brussels sprouts last from a few minutes to 2-3 hours under direct sunlight, and about a week under scattered sunlight. It does not lose its virulence for up to 160 days in cold temperatures. Can be stored in frozen pathological material for up to 1.5 years. Good results are obtained with the use of disinfectants 1% chlorinated lime, 10-20% lime solution, 3% lysol, 3-5% carbolic acid, 2% alkali, 1-2% formalin will give. Sources of disease are sick animals, especially when they show clinical signs or miscarriage, their amniotic fluid, the fetus itself, mucus from the genitals, milk, urine, faeces, bull The seeds are served.

The causative agent of brucellosis is stored in sheep's milk for 3 years and is constantly excreted in milk. The disease is rarely transmitted in pasture conditions.

Under natural conditions, brucellosis is transmitted to a healthy body through food, water and feces, eyes, nose, mucous membranes and genitals. In many cases, brucellosis is spread by drinking water from cattle. Rams and heifers are the most dangerous because the disease is often hidden in them. Brucella has been proven to be a carrier of wild animals, rodents and insects in the spread of the disease. Unsatisfactory pains, adhere to the requirements of touching the zoo, take responsibility in a timely manner, get the defecation on time, keep a lot of cattle in a tight place, do not clean the manure in a timely manner and reduces overall resistance to other health and leads to rapid development.

### **The Course of the Disease**

The development of the disease depends on the physiological state of the organism, immunoreactivity, virulence and the amount of the pathogen in the body, as well as the conditions in which the sick animal is.

Once in the body, the pathogen travels to the lymph nodes and parenchymal organs. In some animals, endometritis can cause mastitis, inflammation of the ovaries, fever, weight loss, infertility, and infertility. If a pregnant animal becomes infected with brucellosis in the last days of life, the baby will be born weak and will die within 1-2 weeks. A second miscarriage from brucellosis can occur in very rare cases. Brucellosis is associated with bursitis, hygroma, arthritis, tendovaginitis in some animals, orchitis in bulls, and swelling of the testicles.

Rams develop orchitis.

### **Diagnosis**

Diagnosis is based on clinical signs, epizootiological data and laboratory tests. Laboratory diagnosis of the disease includes serological, bacteriological, allergic and polymerase chain reaction (PCR) tests.

The aborted fetus, its membranes, placenta or amniotic fluid, liver, spleen, sperm, lymph nodes, and milk are sent to the laboratory. They are sent to the laboratory immediately by consignment without



preservation. If it is not possible to send the pathological material on the same day, it is necessary to preserve it (except for the fetus) in 40% glycerin.

**Treatment.** Affected animals are not treated and slaughtered.

**Prevention and control of the disease.** To prevent the disease, farms must do the following:

- Not to allow animals from other farms into the farm without the permission of a veterinarian and to ensure that animals are not moved from one place to another on the farm;
- Animals brought to the farm are quarantined for 30 days and tested for serology;
- Do not mix farm and domestic animals with other animals, even in pastures and public irrigated areas.

A vaccine made from Rev-1 strain is used to vaccinate sheep and goats against the disease. Vaccine Br. prepared from a weak virulent strain of melitensis. Females 4 months and older are vaccinated with it 2 months before calving. Vaccine In sheep, vulvovaginitis begins 2-3 days before abortion, and mucous, bloody, mucous fluid flows from the genitals.

By this time, the sheep are drinking a lot of water and lying down.

## Conclusion

1. All the factors that cause brucellosis are ignored local conditions are studied and prophylactic for the area an action plan will be developed.
2. When animals go to summer pastures, repair, disinfection, disinsection, deratization works must be carried out at the required level, manure must be cleaned and biothermally damaged.
3. It is necessary to keep a special epizootic journal in the district, analyze each case and take measures against it.

## References

1. Parmonov M.P. Farmonov N.O. Private epizootology textbook Samarkand. 2010 y.
2. Parmanov M.P. and others. Epizootology. Tashkent. 2007
3. Parmanov M.P. and others. Epizootology. Tashkent. 2006 y.
3. Parmanov M.P. and others. Epizootology. Tashkent. 1996 y.