

CLINICAL SIGNS AND PREVENTION OF EPHEMERAL FEVER DISEASE IN CATTLE

A.S.MENGLIYEV

Independent Researcher (DSc) at the Veterinary Research Institute,
alimengliyev1972@gmail.com

I.KH.SALIMOV .

Senior Researcher, Doctor of Philosophy, Veterinary Research Institute.

Annotation. This article defines the clinical signs, diagnostics and preventive tasks of the disease ephemeral fever of cattle, which is one of the common diseases that has not yet been studied by our scientists in Uzbekistan.

Key words: cattle, ephemera, fever, virus, eye mucous membranes, body inflammation and tension leg muscles, mouth, nose, saliva, blood-sucking fly, disinsection, disinfection.

Introduction. Livestock is one of the most important sectors of agriculture, playing a key role in the production of milk, meat, leather and other products. Keeping livestock healthy is important for the development of livestock. However, in recent years, infectious diseases, in particular, ephemeral disease, have become widespread in cattle and have become one of the most important problems causing economic losses.

Ephemeral fever of cattle, one of the most common diseases in Uzbekistan that has not been studied by our scientists to date, is an acute viral disease, characterized mainly in cattle by short-term (gr. ephemer-short) fever, reddening of the nose, mouth, pharynx, mucous membranes of the eyes,

inflammation of the body and tension (stiffness) of the leg muscles, difficulty moving and lameness.

The disease was first recorded among cattle in 1867, then in 1907, 1908, 1915, in the countries of the Asian continent in 1887-1891, 1906-1908, 1919, in Australia in 1936-1937. Therefore, this disease has been studied especially well in Africa, Australia and Japan, and the presence of antigenically close descendants of the virus that causes it has been identified. Ephemeral fever has also been recorded among cattle in Finland, Germany, the Czech Republic, Slovakia, the Netherlands and Denmark. Ephemeral fever mainly spreads as an epizootic, and economic damage is caused by a sharp decrease in livestock production, partly due to the death of sick animals, and the costs of treatment, disinfection and disinfestation. The disease is caused by the lymphotropic bovine ephemeral fever rhabdovirus, which belongs to the Rhabdoviridae family and contains ribonucleic acid in its core. After the virus enters the body, antibodies are produced against it that neutralize the virus and fix complement. The disease is not contagious, the virus is transmitted primarily through the blood-sucking flies of the *Culex annuliro*s, *Anopheles annulipes* and other genera, and then to a healthy animal through mosquitoes. The virus is not mechanically transmitted to healthy cattle by the above-mentioned flies, but lives in their bodies. Therefore, flies are a reservoir of this disease in nature. Ephemeral fever is characterized by a very rapid spread. The source of the pathogen is sick and virus-carrying cattle. A fly that feeds on the blood of such animals first acquires the ephedrine virus, and then infects it with this virus while sucking the blood of a healthy animal. Due to the fact that flies infected with the virus are blown hundreds of kilometers by a strong wind, the disease virus can spread not only in one area, but also across the region, country, and even the continent.

Relevance of the topic. This disease is classified as exotic for our country, since ephemeral fever was first recorded in 1984 under the name

Termez fever, and later in 2002 and 2012 among cattle. In August 2012, this disease, which was observed among cattle in Surkhandarya region, was brought from Afghanistan by a strong wind. Because this disease has been recorded in various regions of the Asian continent (Indonesia, Japan, China, India).

Clinical signs of ephemeral disease. In sick cattle, the body temperature suddenly rises from 40°C to 42°C , the cattle's muscles tremble, they become lame, they become lax, the mucous membranes of the eyes, nose and mouth become inflamed, salivation occurs from the mouth and nose. There is a discharge of mucus and a foul-smelling liquid, redness of the visible mucous membranes, a rapid decrease in appetite, in many cases its complete loss, abdominal atony, tremors, weakness and recumbency. Body temperature returns to normal in 80% of cases after 2-3 days, in 10-20% of cases after 4-5 days. In some animals, coughing, breathing and heart rate increase, 90-95% of animals stop coughing. Pain is felt when the joints of the legs are pressed with the paws.

The elastic movement of the joints decreases, and animals often lie down, unable to support their own weight.

Prevention of the disease. The main way to protect susceptible animals from the virus of this disease is to conduct strict clinical control during the period of preventive quarantine of cattle brought to our country from regions healthy for the disease in order to improve their breed.

Keeping livestock farms neat and tidy, timely carrying out veterinary and sanitary measures, namely, installing disinfectant barriers at the entrance to livestock buildings, organizing entry into buildings through disinfectant mats thoroughly moistened with disinfectant, and spraying 3-4% o. every 10 days. detergent sodium, 5-10% active chlorine lime, regular disinfection with 2-3% formaldehyde, biothermal disinfection of accumulated manure, 3% creolin against hematophages (blood-sucking insects), 0.015-0.025%,

cypermeter 0.025% or 0.060.0% 0.125% nurel-D aqueous emulsion for disinfection, keeping animals within zoohygienic requirements to increase their resistance, feeding them nutritious and vitamin feeds to prevent ephemeral fever among cattle. Based on the "Guidelines" for the use of these drugs for special prophylaxis of ephemeral fever in cattle. If this disease is detected among cattle by clinical, epizootic, pathoanatomical, serological and virological methods, the farm or settlement is recognized as unhealthy in accordance with the Law "On Veterinary Medicine" and is restricted by the decision of the regional khokim based on the conclusion of the chief veterinary officer. district (city) inspector. All protective measures and measures are taken to prevent the spread of the disease at the unhealthy point. It is prohibited to introduce and remove new cattle to the farm, mix them with other groups.

Sick animals that are considered the source of the disease are immediately isolated in a separate building, and in order to fully protect them from hematophagous, disinfection and disinfestation measures are carried out in the isolator, as mentioned above, and the sick are managed. treated.

After the disease is detected, the veterinary specialist serving this address must, in cooperation with the head of the farm, the head of the farm or the chairman of the citizens' assembly and relevant officials, carry out the following measures:

- all cattle kept at this location will undergo clinical examinations and thermometry, all sick and suspected cattle will be isolated and special containment measures will be taken;
- after the disease is detected, it is not allowed to take cattle out of the farm, from a populated village, to distant pastures, or to bring in new cattle from another place without the permission of the district chief veterinarian. ; it is prohibited to obtain any biological preparations (blood serum, defibrinated blood, etc.) from cattle in an unhealthy area;

- buildings where infected cattle are kept are disinfected once every 10 days until the end of the restriction, for this purpose, a mixture of 2-3% caustic soda, 5% sulfuric and carbolic acids at a temperature of 70⁰C - 80⁰C, 2 -3% formalin is used; 0.5% neocidol, 0.015% simbush or karate, 0.5% ectomine solutions are used for disinsection; drying measures are taken in small and stagnant water bodies or disinsection measures should be carried out there;

All measures are taken to feed the cattle, stop their movement, and prevent

them from coming into contact with blood-sucking flies.

REFERENCES.

1. Salimov X.S., Qambarov A.A., Salimov I.X. Darslik. Epizootologiya va infeksiyon kasalliklar - Toshkent, 2021. –B.299-304.
2. Mengliyev, A., Bobomurodov, U., Abdullayev, B. (2022). Epidemiology And Control of Bovine Ephemeral Fever Over Central Asia Region. *Science And Innovation*, 1(D7), 126-131.
- 3.A.Mengliyev,I.Salimov I.Siddikov Sh.Chorshanbiev Measures for the prevention And control of Ephemeral fever in cattle Journal of Intellectual Property and Human Rights ISSN 2720-6882) IF:8.2 10.102024 1-3 pg
4. A.S.Mengliyev. Epidemiology and control of bovine ephemeral fever over Central Asia region TJCS Thematics Journal of Communication Skills Impact faktor (SJIF):7.40 ISSN:2277-3058 (Online) 2022/4/15 45-49 s
- 5.A.S.Mengliyev. Эфемерная лихорадка крупного рогатого скота. In an International Multidisciplinary Scientific "Global Conference on Education and Science- 2022", Published with Archive of Conferences International Database, hosted online from Warsaw, 2022/10/10 B.137-145.
6. A.S.Mengliyev.,I.Siddqov. Qoramollarning efemer isitmasi kasalligini davolash va oldini olish. International scientific journal «Modern Science And Research» ISSN: 2181-3906 UIF:2023-8.2 <https://doi.org/10.5281/zenodo.8187282>:2023/7/26 344-348 s.
7. A.S.Mengliyev.,I.Siddqov.,Sh.Chorshambiev Ephemeral fever prevention. International scientific journal «Modern science and research»

8. A.S.Mengliyev.,Sh.Chorshambiev Qoramollarning efemer isitmasi kasalligini davolash va oldini olish MALAYZIYA Multidisciplinary Scientific Journal International conference on education and innovation Voiume 1,Issue 1, April. 2024 20-24 betlar.

9. A.S.Mengliyev., I.Salimov .,I.Siddqov.,Sh.Chorshambiev Measures For The Prevention And Control Of Ephemeral Fever In Cattle. Eurasian Journal of Academic Research Innovative Academy Research Support Center UIF = 8.1 | SJIF = 7.899 www.in-academy.uz [ttps://doi.org/10.5281/zenodo.12197814](https://doi.org/10.5281/zenodo.12197814) Received: 14 th June 2024 Accepted: 20th June 2024 Online: 21th June 2024 98-101 pg.