

Measures for the Prevention and Control of Ephemeral Fever in Cattle

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Abstract: This article discusses the clinical signs of the disease, pathological changes, diagnosis, treatment and preventive measures, control and problems of ephemeral fever in cattle.

Keywords: cattle, ephemera, fever, virus, blood-sucking fly, disinsection, disinfection.

Enter. Ephemeral fever disease is an acute transmissible viral disease, mainly in cattle short-term (gr. ephemeral-short) fever, inflammation of the nose, mouth, red pharynx, mucous membranes of the eyes, body and It is characterized by tension (stiffness, stiffness) of the leg muscles, difficult movement and lameness.

The disease was first registered among cattle in 1867, then in 1907, 1908, 1915, in 1887-1891, 1906-1908, 1919 in the countries of the Asian continent, and in 1936-1937 in Australia. Therefore, this disease has been well studied especially in Africa, Australia and Japan, and it has been established that there are antigenically close descendants of the virus that causes it. Also, ephemeral fever has been recorded among cattle in Finland, Germany, the Czech Republic, Slovakia, the Netherlands and Denmark. Ephemeral fever spreads mainly as an epizootic, and the economic damage is caused by a sharp decrease in animal products, partly by the death of a sick animal, and the costs of treatment, disinfection and disinsection. The disease is caused by the lymphotropic bovine ephemeral fever rhabdovirus, which belongs to the Rabdoviridae family and stores ribonucleic acid in its nucleolus. After the virus enters the body, antibodies are formed against it that neutralize the virus and bind complement. The disease is non-contagious, the virus is transmitted to cattle first by the flies of *Culex annulirois*, *Anopheles annulipes* and other genera that suck the blood of cattle, and then through flies to a healthy animal. The virus is not mechanically transferred to healthy cattle through the above-mentioned flies, but lives in their body. That is why flies are reservoirs of this disease in nature. Ephemera 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 picks up the ephedrine virus, 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 belongs to the category of exotic diseases for our country, because ephemeral fever was first recorded in 1984 under the name of Termiz fever, then it was

recorded among cattle in 2002 and 2012. In August 2012, it was concluded that this disease, which was observed among cattle in Surkhandarya region, was brought by a fly infected with the virus from Afghanistan with the help of a strong wind. Because this disease has been registered in the regions of the Asian continent (Indonesia, Japan, China, India) at different times.

Clinical signs of ephemeral addiction. In infected cattle, the body temperature suddenly rises from 40°C to 42°C, trembling of the cattle's muscles, lameness, tears, inflammation of the mucous membranes of the eyes, nose and mouth, saliva from the mouth and nose. discharge of mucus and foul-smelling liquid, redness of visible mucous membranes, rapid decrease in appetite, in most cases complete loss, abdominal atony, tremors, weakness and lying down are observed. Body temperature returns to normal after 2-3 days in 80% cases, and after 4-5 days in 10-20% cases. 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 of the hands.

The elastic movement of the joints decreases, the animals often lie down without being able to bear their own weight.

Diagnosis of ephemeral fever. The initial diagnosis is based on clinical signs, epizootological data and pathologoanatomical changes. The final diagnosis is made by biological testing of 1-3-day-old white mice and calves, detection of fluorescent antibodies against the viral antigen in leukocytes during fever, as well as serological reactions (immunodiffusion, complement binding or neutralization reactions) against the virus formed in the diseased organism. based on antibody detection.

Disease prevention and control measures. The main way to protect susceptible animals from the virus of this disease is to bring the cattle brought to our country for the purpose of improving the breed from regions healthy for this disease, and to conduct strict clinical control during their preventive quarantine.

Keeping livestock farms clean and tidy, carrying out veterinary and sanitary measures on time, that is, installing a dezobarer at the entrance to the livestock building, organizing access to the buildings through dezogilims thoroughly soaked with disinfectant, every 10 days 3-4% o 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 % cypermethrin, 0.5% ectomin or 0.0062-0.125% nurel-D aqueous emulsion for disinfection, keeping them within zoohygienic requirements to increase animal resistance, giving nutritious and vitamin feeds to prevent ephemeral fever among cattle helps to get It is recommended to use live and inactivated cultural vaccines, hyperimmune and convalescent blood sera based on the "Guide" for the use of these preparations for the special prevention of cattle against ephemeral fever. If this disease is detected among cattle by clinical, epizotological, pathologoanatomical, serological and virological methods, the farm or settlement is declared unhealthy under the Veterinary Law and restrictions are placed on it by the decision of the governor based on the report of the chief veterinary inspector of the district (city). At the unhealthy point, all containment measures and measures to prevent the spread of the disease are taken. Entry and exit of new cattle to the farm, mixing them with other groups is prohibited.

Sick animals, which are considered to be the source of the disease, are immediately separated into a separate building, in order to completely protect them from hematophages, disinfection and disinsection activities are carried out in the isolator, as mentioned above, and the sick are treated.

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

- all cattle kept at this address are subjected to clinical examination and thermometry, all sick and suspected disease cattle are separated and special storage measures are taken;
- after the diagnosis of the disease, it is not allowed to take the cattle out of the farm, the village where the population lives, to distant pastures, or to introduce new cattle from another place without the permission of the chief veterinarian of the district; it is forbidden to take any biological preparations (blood serum, defibrinated blood, etc.) from cattle in an unhealthy location;
- buildings where infected cattle are kept are disinfected 1 time every 10 days until the restriction is over, for this purpose, the temperature is 70-800 C with a mixture of 2-3% caustic sodium, 5% sulfuric and carbolic acids, 2-3 uses formalin with %; 0.5% neocidol, 0.015% simbush or karate, 0.5% ectomyn solutions are used for disinsection; drying measures are taken in small and non-flowing pond water sources or it is necessary to carry out disinsection measures there; All measures are taken to herd cattle, stop their movement, and prevent the contact of blood-sucking flies with them.

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