

## MEASURES FOR THE TREATMENT AND PREVENTION OF BOVINE THEILERIOSIS

Achilov Sh. A. Safarov X. Kh. Chorshambiyev A. B. Student, Termez Institute of Agrotechnologies and Innovative Development

Ibragimov A. Termez Institute of Agrotechnologies and Innovative Development

#### Annotation

In this article, taking into account the prevalence of blood-parasitic diseases of cattle in farms in some districts of Surkhondarya region and the large economic damage, literature data is analyzed and the efficiency of the disease is determined using modern means and methods for treatment and prevention.

**Key words**. Theileria annulata, pomegranate seeds, shaped elements, anemia, mites, ixodid mites, specific, symptomatic, lymph nodes, Hyalomma detretum, Hyalomma anatolicum.

**Enter.** Today, under the influence of environmental and anthropogenic factors, certain parasitic diseases in large horned animals, including blood-parasitic diseases of cattle, are the most dangerous and cause great losses. development of preventive measures is one of the important urgent tasks.

**The purpose of the study**. The purpose of the study is to determine the spread of cattle teileriosis among cattle of different ages in Angor district of Surkhandarya region, and the effectiveness of using certain drugs in their treatment and prevention. **The degree of study of the problem.** E. P. Zhukovskii and I. Luslar determined in 1904 that theileria annulata is the causative agent of cattle theileriosis, belonging to the Theileriidae family, while analyzing the data and literature sources.

Theileriosis is an acute and semi-acute transmissible invasive disease of large horned animals, bucks and zebu. It occurs due to Theileria annulata parasitising first in RES cells and then in erythrocytes, causing enlargement of lymph nodes, increase in body temperature. It is characterized by fever, anemia, failure of cardiovascular and digestive organs, emaciation of sick animals and high death rate.



# WEB OF SCIENTIST: INTERNATIONAL SCIENTIFIC RESEARCH JOURNAL ISSN: 2776-0979, Volume 3, Issue 12, Dec., 2022

Theileria develop in reticuloendothelial cells of lymph nodes, spleen, liver and other organs, lymphocytes and erythrocytes of blood. Hyalomma detritum and H. anatolicum mites, which spread pathogens, inject  $2-3 \mu m$  sporozoites in their salivary glands into the skin of the animal at the same time as sucking blood from the body of the animal every 2-5 days. The sporozoites entering the skin layer enter the lymph nodes first and then the parenchymatous organs with the lymph and blood flow and undergo the stage of schizogony. In the blood (erythrocytes) of sick animals, micromerozoites are present in round, oval, pear-shaped, and dotted forms.

Based on the above, the most dangerous and the biggest loss from blood-parasitic diseases of cattle is the identification of the causative agents of theileriosis, their species composition, diagnostic signs that differ from each other, and improving the methods of combating them is one of the urgent problems of veterinary medicine today. is lib.

Course of the disease and clinical signs. Theileriosis is spread by mites of the genus Hyalomma known as the two-bearing detritum and the three-bearing anatolicum. At the same time as they suck the blood of animals, they send diseasecausing parasites from their salivary glands into the animal's body. the first sign of the disease lasts 12-21 days, sometimes even more, after the tick bites the animal. Bovine theileriosis is acute and semi-acute and is characterized primarily by uneven enlargement of external lymph nodes: especially in front of the shoulder blade, above the udder and other lymph nodes (according to the place where the infected mites attach to the body of the animal). Lymph nodes are enlarged 2-4 times, hard and painful when palpated. After 1-3 days of such changes in the lymph nodes, the body temperature of sick animals rises to 41 degrees, sometimes even higher, at the same time, their appetite decreases and milk production decreases. With the development of the disease, in 3-4 days, the animal's appetite completely disappears, rumination stops. After the animal stops taking food, the work of the intestines decreases, and its peristalsis (contraction) becomes poorly audible. Sick animals lose weight quickly, their movement slows down, their stomach hangs down, their thirst increases (they drink water often and little by little). In the first days of the increase in body temperature, the mucous membranes of the eyes and nose of sick animals are hyperemic and spot blood is shed. when the animal's body temperature rises, its breathing speeds up to 40-80 movements per minute, and its pulse beats 80-120 times. Jugular vein pulsation is often felt. Sick animals have a dry cough, watery eyes, they lie down a lot and get up with great difficulty, and cow's milking occurs.





## Pathologoanatomical changes.

Animals infected with these diseases, dead or forcibly slaughtered, when dissected, their bodies are emaciated, the thin and non-pigmented parts of the skin are weakly yellow, and the mucous membranes are pale yellow and bleeding. The subcutaneous tissue is yellowish, and blood has squeezed out from some places. The external lymph nodes are enlarged, moist, blood-filled, the muscles are relaxed and pale, and hemorrhages occur in the heart, liver, kidney, and spleen. Liver and spleen are 2-3 times enlarged and softened. Up to 0.5 liters of serum fluid is observed in the chest cavity. There are bruises and wounds in Shirdon. The stomach is dry, solid food, and the gallbladder is full of thick bile.

**Treatment.** Cattle infected with theileriosis should be moved to a cool and quiet place before treatment. They should be given easily digestible feed: blue grass, crushed tubers, bran or dry fodder, fresh whey, yogurt, and clean water should always be available.

From the first day of the disease, symptomatic treatment should be carried out together with comprehensive antiparasitic measures.

As a special tool, one-time Butachem injections (two times when the disease is more severe) (Buparvaquone 5%) give very good results. In this case, it is necessary to send antibiotics with a wider effect to prevent secondary infections. (oxytetracycline, amoxicillin). For stimulation of the gastrointestinal tract, it is necessary to inject lactic acid, tincture of maralkulok (chemeritsa), milk serum. Intravenous injection of 10% solution of sodium chloride also gives good results. (once a day). Complex treatment should be carried out with the administration of Vitamin B12 and ascorbic acid. Recently, the administration of the drug Butasol-100, which contains vitamin B12, has given good results. Among the symptomatic drugs, sodium caffeine-benzoate is injected under the skin once a day.

**Prevention of theileriosis of cattle**. Iksod, Hyalomma anatolicum, Hyalomma detritum, which spread pathogens of theileriosis origin, is closely related to the active life period (in the warm seasons of the year), so it is necessary to fight against it not only in the warm seasons of the year, but also in the cool and cold seasons of the year. it will be appropriate to carry it out continuously.

For this, it is necessary to beautify the farm and its surroundings from the cold season of the year, eliminate biotopes suitable for the development of mites, and carry out rehabilitation works in pastures where cattle will be grazed in the future. Cleaning of manure, plastering and whitewashing of the buildings where cattle are kept during the winter, and culturalization are the most important activities. To prevent theileriosis,



## Website:

https://wos.academiascience.org



it is recommended to apply 1.0 ml of "Liquid cultural vaccine against theileriosis" under the skin of each head of cattle in the cold months of the year (December, January, February). As soon as the warm days of the year come, cattle are washed with one of the acaricidal preparations against mites based on the instructions.

For chemical prevention of piroplasmidoses, once every 15 days, 5.0 ml of polycarb drug is applied under the skin of cattle for every 100 kg of live weight of cattle.

In general, if measures to fight against piroplasmidoses are carried out in a timely and qualitative manner, cattle will be saved from theileriosis, as a result, it will be possible to provide the table of our people with abundant livestock products.

## REFERENCES

- 1. Haqberdiev P.S., Kurbanov.Sh.B. "Veterinary protozoology and arachnoentomology". Study guide, Tashkent 2019
- 2. Hakberdiyev P.S., Kurbanov.Sh.B. "Practical and laboratory training in parasitology". Study guide, Tashkent 2015
- 3. Gafurov A.G., Davlatov R.B., Rasulov O.I. Agriculture
- 4. protozoan diseases of animals. Monograph, 2011 114 p.
- 5. Ergashev E.Kh and others. "Livestock protozoa".
- 6. Samarkand-1998
- 7. Gafurov A.G. and others. "Protozoan diseases of agricultural animals" Samarkand-2010

