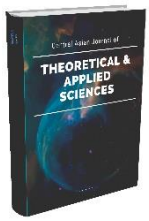

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The Effectiveness of Ivermectin and Multivitamin Preparation for the Treatment and Prevention of Cattle Trichophiton Disease

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Abstract: *This article analyzes the results of the use of 1%-vermectin for prophylaxis, 1% -vermectin and multivitamin for combined treatment in order to improve the control, treatment and prevention of bovine trichophytosis.*

Keywords: *Tr. verrucosum, trichophytosis, treatment, ivermectin, multivitamin, prevention, drug, luminescent analysis*

Introduction: In order to develop animal husbandry, to grow high-quality, cheap meat and dairy products, it is necessary to preserve, care for, improve the breed, increase productivity, and prevent the spread of various diseases among them. At the time of breeding and development of livestock in the population and private farms, dermatomycoses of animals found in livestock farms are important. In particular, trichophytosis is widespread in all regions of the Republic of Uzbekistan and causes great economic damage to farms.

Relevance of the topic: Trichophytia is a disease belonging to the group of dermatomycoses, which has been known for a long time. Trichophytosis is a chronic infectious disease, which is characterized by damage to the skin and wool in the form of a sharply demarcated, scaly scaly gray layer, or inflammation of the skin and follicles.

They enter the body through contact - touching each other. Despite the intensive development of veterinary medicine, especially veterinary dermatology, still in most countries of the world, trichophytosis has an important and stable share among animal skin diseases. It is one of the most common fungal diseases.

It is a mycotic disease that not only causes great economic damage to animal husbandry, but also threatens human health. Currently, it is very urgent to improve prevention and control measures in medicine and veterinary practice.

Research method. Ivermectin is a drug used against ecto- and endoparasites. But its ointments are used to treat skin inflammations caused by them. In some cases, trichophytosis in cattle is not the main cause, but a secondary factor, and due to another disease, the body becomes weak and becomes defenseless against the causative agent of trichophytosis. In this case, the use of the drug ivermectin against the main disease has a positive effect on the condition of the skin.

Sometimes, the causative agent of trichophytosis weakens the body, and it is prone to attacks by mites, hard-winged insects (flea, lice, etc.), round parasitic worms. In this case, the drug ivermectin eliminates additional pathology and relieves the course of trichophytosis.

In cattle hyperdermatosis, the larva trying to get out from under the skin causes inflammation around the exit site. This place is affected by fungus. Taking into account that ectoparasites can also be carriers, ivermectin was used in an experiment against trichophytia together with other drugs.

In order to treat and prevent cattle trichophytosis, we used 1% ivermectin and multivitamin in different ways. In order to prevent trichophytosis, healthy animals were checked and 1% ivermectin drug was injected subcutaneously, depending on their live weight, twice a month. In order to treat patients separately, 1% ivermectin 8-10ml was injected between the skin, and multivitamin 10ml was injected into the muscle twice a month with an interval of 15 days.

Currently, several types of trichophytons are known. Tr. faviforme (syn. Tr. verrucosum) in calves and lambs, Tr. equinum in horses, Tr. in rodents. gupseum, Tr.gallinaye in poultry, etc.

Research results and their analysis. Trichophytosis occurs in different ways, depending on the seasons, climate and sanitary conditions of the farm, the structure of animal husbandry and many other environmental factors. High humidity and comfortable temperature in the building, lack of sunlight in the winter months, long hair of animals, poor quality feeding and dense storage create favorable conditions for the development and rapid spread of ectoparasites. As a result of the epizootological examination, it was found that the level of occurrence of ecto-endoparasites among cattle depends on the sanitary condition of the population and farm animals.

Scientific research on the prevention and treatment of trichophytosis was carried out in breeding farms of Andijan, Samarkand, Kashkadarya regions, and 886 healthy and 51 sick cattle under the care of the population.

Shahrikhan District, Andijan Region, 576 cattle are treated with 1% ivermectin twice a month to prevent trichophytosis, and 310 cattle are treated with 8-10 grams of skin twice a month, depending on their live weight, at the "Inomjon Fayz" farm. was injected under and observed and analyzed during one season.

As a result, trichophytosis was not observed in all cows during observation. So 100% healthy.

Table 1. The level of study of the epizootic and treatment situation in the farm.

Name of the farm	Cattle numbers	Breed	Measures	Preparation in dose	Frequency	Pointers %
“Guliston nurli istiqboli”	576	“Holstein”	Preventive measure	Ivermectin 1% 5-10 ml t/n	Twice a month	100% healthy
“Inomjon fayz”	310	“Holstein”	Preventive measure	Ivermectin 1% 5-10 ml t/n	Twice a month	100% healthy
“Imkon chorva”	19	“Holstein”	Treatment	ivermectin 1% 8-10ml t/o Multivitamins 10ml m/o two times a month	Twice a month	100% treated
“Yurtirisqi” M.Ch.J.	32 bosh Bosh	Mixed breed	Treatment	ivermectin 1% 8-10ml t/o Multivitamins 10ml m/o two times a month	Twice a month	100% treated

19 out of 350 head of cattle in Shahrikhan district of Andijan region, "Yurti risqi" M.Ch.J. trichophytosis was detected in 32 heads of 580 cattle on the farm and was confirmed as a result of laboratory tests.

A total of 51 cattle pathological material was examined by microscopy. For this, the feather material was treated with 10% alkali for 20-30 minutes. A drug was prepared from it by the crushed drop method, and the presence of fungal mycelium and spores was found under a microscope. Trichophyton verrucosum was seen in the form of spores that were arranged in rows inside and outside the affected hair.

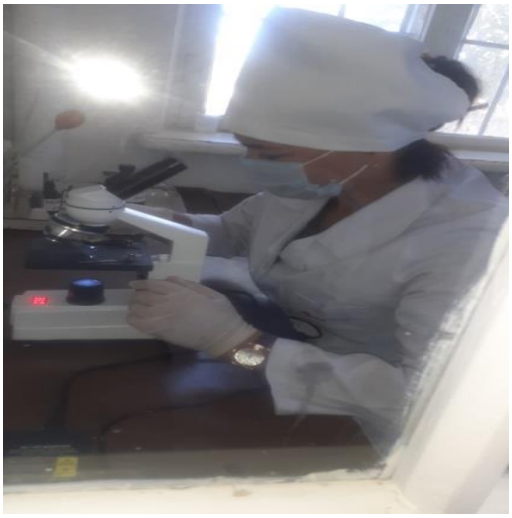

Photo. 1-Tr. verrucosum cultures Photo. 2- Luminescent analysis

extraction Wood’s Lamp Luminescent analysis is mainly used to distinguish trichophytia and microsporia pathogens

By placing the feather material in a Petri dish, under the ultraviolet rays of a mercury-quartz lamp (PRK-2, PRK-4) in a dark room, wool fibers injured by microsporia give green radiation when seen at a distance of 20 cm, while trichophytia does not show this condition. . Because fungi of the genus Microsporum produce radiant pigment-pterin. In this method, the hidden form of microsporia can be determined.

Luminescence analysis was performed using a Wood's lamp. As a result, radiation was not detected in injured wool fibers (radiation is present in microsporia). In some suspected cases, when the causative agent Trichophyton verrucosum was planted in special nutrient mediums, pure cultures were isolated, and the skin of a guinea pig or rabbit was scratched and smeared with fur material, the pathological process and characteristic clinical signs of trichophytosis appeared. It was confirmed by microscopic examination.

Sick animals were separated from healthy ones and kept in separate buildings and treated. We used the above drugs to treat cattle. The 1% ivermectin drug we used was manufactured by Zhengzhou Henan China. 1% ivermectin drug in a dose of 8-10 ml was injected between the skin, at the same time multivitamin 10 ml was injected into the muscle twice a month with an interval of 15 days. After 8-15 days, wool started to grow from the wound and heal

Conclusion.

1. Trichophytosis is the most common mycotic disease in many countries, as well as in Uzbekistan, which not only causes great economic damage to livestock, but also threatens human health, and it is necessary to improve measures for its prevention and control.

2. Trichophytosis occurs in different ways depending on the seasons, climatic and sanitary conditions of the farm, livestock management structures and many other environmental factors, occurrence of ecto-endoparasites among cattle, primary or secondary infection of trichophytosis was found to occur as
3. In order to prevent trichophytosis, equally effective results were obtained when 8-10 g of ivermectin drug was injected subcutaneously three times or twice a month depending on the live weight of 886 cattle. No disease was observed in animals during the season.
4. It was found that sick animals can be quickly and effectively treated by injecting 1% ivermectin drug in a dose of 8-10 ml between the skin, 10 ml at the same time, and multivitamin into the muscle twice a month with an interval of 15 days.
5. Specific difficulties in the problem of chemotherapy of mycoses due to the large number of pathogens and the variety of clinical manifestations. Current failures in the treatment of fungal infections have determined the rapid development of research on the complex treatment of these infections, including the study of the combined effect of only synthetic drugs, their combination with antifungal antibiotics and synthetic drugs of other directions of action.
6. In the case of combined therapy, the important tasks are to increase the direct antifungal effect, to increase the therapeutic efficiency due to the more favorable pharmacokinetic properties of one of the components of the combination, and to prevent the development of drug resistance. The problem of acquired drug resistance for fungi is not as serious as chemotherapy for bacterial and viral infections. General prevention of trichophytosis consists in following veterinary and sanitary regulations on farms, creating normal conditions for keeping animals, providing them with complete feed, regular disinfection and deratization.

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