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THE OCCURRENCE OF CATTLE NODULAR DERMATITIS WITH RESPECT TO THE BREED AND SEASON

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Abstract:

In this article, the features of the occurrence of Nodular dermatitis in cattle, depending on the breed and season, are investigated. According to the results of the study, the extent of the spread of the disease can vary depending on the breed of cattle and is observed more mainly in the spring-summer season, that is, during the period of increased insect activity. The resulting data is of great value in the development of effective preventive measures against the disease.

Keywords

Nodular dermatitis, cattle, disease, on the farm, livestock, clinical, seasonal, disease causative agent.

Introduction

The relevance of the topic. Today, the disease of nodular dermatitis of cattle is one of the urgent problems facing veterinary science and practice. Because the disease without borders spreads rapidly, diagnosis is more complicated, and the course of the disease, clinical signs and pathoanatomical changes are similar to the symptoms of a number of diseases. This, in turn, creates serious difficulties in the diagnosis of the disease. One of the current issues is the development of a pathomorphological diagnosis for an accurate diagnosis of this disease.

Worldwide, nodular dermatitis of large horned cattle The disease including the disease was mainly recorded in Central and South African countries, Madagascar, India, then in the countries of the Middle East, in 2014-2016 in the territories of Turkey, Azerbaijan, Lebanon, Iraq, Iran, Egypt, Cyprus, the Russian Federation, Dagestan, Chechnya, Armenia, Greece, Bulgaria, Macedonia, Serbia, Montenegro, Albania, Kazakhstan.

The occurrence of various infectious diseases in cattle farms and dependent cattle of the republic is a serious obstacle to the development of the sector. Especially the frequent occurrence of nodular dermatitis among large-horned animals in foreign countries is a threat of penetration of this disease beyond the border in our country and causing significant damage to livestock farming. In order to prevent this risk, according to the Resolution of the Cabinet of Ministers of the Republic dated October 25, 2016 No. 361 "Nodular dermatitis of cattle was included in the list of dangerous diseases". Therefore, one of the

most pressing problems is the development of modern methods of combating and preventing and treating this disease.

The purpose of the study

It consists in case studies of the occurrence of nodular dermatitis in cattle farms in some regions of Uzbekistan, depending on the breed and season.

Objectives of the study:

1. Study of seasonal dynamics of nodular dermatitis of cattle in some regions of the Republic.
2. Determination of the occurrence of nodular dermatitis in livestock farms and local cattle with high productivity;

Results of the study

Nodular dermatitis of cattle is one of the most common diseases among large horned animals in regions of the world, although the prevalence of it is observed throughout the year, but its relatively common occurrence in the spring and summer months has been identified as a result of studies.

For this purpose, 200 heads of cattle in the farm "Tarqkiyat" of the Novy Yul district of the Tashkent region, a total of 120 heads in the farm "Boz-Su Livestock and Poultry Invest" of this district, of which 85 heads of dairy cows and 30 heads of bulls, 1150 heads in Verkhne-Chirchik district of the Tashkent region, 35 heads of cattle belonging to Tashkent Baba cattle, 35 heads of cattle belonging to Tashpulotov Badir Jurniyazovich of Sherabad district of Surkhandarya region, The study of the occurrence of cattle of 75 heads of pedigree in the Saraikul vet center of Takhiatash district of the Republic of Karakalpakstan and in the section of individual cattle farms of the population in the area of 1580 heads of cattle depending on breed and season was studied.

In order to determine the occurrence of nodular dermatitis depending on the breed of cattle, a total of 80 heads of infected cattle from local and high-productivity cattle were studied in the cross-section of individual cattle farms of the population of the districts of the Republic of Karakalpakstan. At the same time, a total of 37 heads of people were infected with the virus in the citizens' assembly of the "Kashi" neighborhood of Kungirat district, 15 heads of the population of the Oraylyk neighborhood of Chimboy district, 17 heads of cattle belonging to the population of Nukus, 18 heads of cattle belonging to the village of Orta Kala of Amu Darya district.

In total, 37 heads of infection with the virus were detected in cattle belonging to the population of the Kashi district of the Kungirat district of the Republic of Karakalpakstan, of which 23 heads (62%) of cattle with high productivity, and 14 heads (38%) of domestic cattle. Infection with the virus in total in cattle belonging to the Sredny Kala neighborhood of the Amu Darya district was detected in 18 heads of cattle, of which 10 heads (55.5%) were productive cattle, 8 heads (44.4%) were local cattle.

The case of infection with the virus was detected in 15 heads of cattle of the Oraylyk neighborhood of Chimboy district, of which 9 heads (60%) were productive cattle, 6 heads (40%) were local cattle. The virus of the disease of total nodular dermatitis in the farms of the city of Nukus was detected in a total of 17 heads of cattle, of which 11 heads (65%) were detected in productive cattle, 6 heads (35%) in local cattle breeds. The disease was detected in 53 productive cattle in a cross-section, 4 districts of the Republic of Karakalpakstan, with an average of 13.2 heads (15.2%) in 53 heads of productive cattle, the incidence of the virus in domestic cattle was detected in 34 heads in total, which is 39% of the average 8.2 heads, which is the average (9.4%).

Occurrence of nodular dermatitis of cattle in the cross-section of districts of the Republic of Karakalpakstan, scientific research on the epizootological condition of ND in cattle in 2023-2024, samples brought to the Regional Diagnostic Laboratory of the Veterinary Research Institute and serological and pathomorphological examinations of cattle farms and population in some regions of the Republic results were analyzed.

Seasonal occurrence of nodular dermatitis of cattle is carried out in the Development farm of Yangiyul district of the Tashkent region with 200 heads, in the farm "Boz-Su Livestock and Poultry Invest" of this district with a total of 120 heads, of which 85 heads of dairy cows and 30 heads of bulls, in the Gorka Ata cattle farm of the Verkhne-Chirchik district of the Tashkent region (1150 heads), Seasonal occurrence of 75 head of productive cattle in the "Saraikul vetpunkt" of Takhiatash district of the Republic of Karakalpakstan, as well as 35 heads of cattle in the farms of Toshpulotov Bahodir Juraniyazovich of Sherabad district of the Surkhandarya region

Nodular dermatitis of cattle in this farm was detected at 26 heads in the summer (33%), the increase in this indicator was explained mainly by the fact that the reproduction of virus-carrying insects in the summer months On the farm, by the autumn season the disease somewhat decreased even in the fact that it did not occur on this farm.

In total, the causative agent of the virus was detected in 18 cattle at the Boz-Su Livestock and Parranda Invest farm in Tashkent region, the disease was not detected on the farm during the winter season, however, in spring in 5 head of productive cattle as a result of a serological reaction, which was a result of 28%. The farm over the summer season was diagnosed with the disease in a total of 9 piglets, which was recorded with a result of 50%, when the occurrence of the disease was observed due to various factors. In particular, due to the non-compliance of farm personnel with quarantine rules, due to the insufficient keeping of cattle with high productivity, insufficient feeding, and a large number of virus-carrying factors, by the autumn season this indicator decreased significantly, that is, the disease occurred in 4 heads of cattle, (22%) on the farm farm. It has been observed that nodular dermatitis of cattle has also occurred in other seasons.

The causative agent of nodular dermatitis was detected in a total of 45 heads of cattle on the Ergash Ata farm in Verkhnechirchik district of the Tashkent region. It was found that the highest damage rate fell on the winter months. During the winter season, 23 heads (51%) got sick as a result of high humidity, feeding and non-compliance with quarantine

rules in this farm. By the spring season, a small decrease in the incidence of the disease was observed in this farm, a causative agent of the disease was identified in a total of 14 heads (31%) of cattle. It turned out that in the summer season on the farm cattle were not at all infected with the causative agent of the disease nodular dermatitis. It turned out that by the autumn days the farm recorded a lesion (18%) in 8 heads of cattle.

There are 75 heads of cattle in the territory of the "Saraikol vetpunkt" of Takhiatash district of the Republic of Karakalpakstan, of which 63 heads of cattle were found to be infected with the causative agent of the disease. The highest rate was found on the farm when 33 heads (52%) were found in the spring season, while the average lesions were observed at 18 heads (29%) by the summer season. The lowest result was detected in 4 heads of cattle by the autumn season (6%), then by the winter season infection with the causative agent of the disease was detected in 8 heads of cattle, and this (13%). On this farm, it was found that cattle are infected with the causative agent of the disease throughout the year. It became clear that the main reason for this was the lack of compliance with the rules of quarantine, the insufficient feeding of cattle on a regular basis and the constant dampness of storage conditions. In the Surkhandarya region, there were cases of the occurrence of the disease due to the fact that there is a private farm, which is mainly involved in the purchase of cattle, in total 35 heads of cattle with high productivity, of which 13 heads were found to be infected with the causative agent of the disease. In the farm, no cases of contamination with the disease causative agent were observed in winter and autumn. In this farm, in the spring season, infection with the causative agent of the disease was detected in 7 heads (54%) of cattle, and by the summer months, 6 heads (46%) of cattle were infected with the causative agent of the disease. As a result of these studies, it was established that nodular dermatitis of cattle occurs throughout the year, the main reason for which is the excessive humidity in the premises where cattle are kept, the diet and storage of animals, the conditions of which are not in the norm, as well as the failure to carry out dezinsection measures against various virus-bearing insects. The most diseased season fell on spring and summer, and in total, the causative agent of the disease was detected in 217 heads of cattle on farms, of which 102 heads (47%) fell on the spring months, 59 heads (27%) were recorded in the summer season. The lowest rate fell on the autumn months and amounted to 16 heads (7,3%). The average incidence was during the winter months, with an outbreak found in 32 head (15%). Analysis of the average occurrence in the section of farms revealed an average incidence of 3% in winter, 9.4% in spring, 5.4% in summer, and 1.46% average occurrence in autumn. The highest number of cases of the disease was recorded in the spring, on average.

Seasonal dynamics of nodular dermatitis of cattle It was found that in the autumn season there was no disease at all in the farm "Tarakqiyat" of the Novy Yul district of the Tashkent region, the highest indicator was recorded on the farm in the spring season (55%), a low indicator in winter (12%), and an average in summer - 33%.

The highest rate of infection with the causative agent of the disease was recorded in the summer at the farm "Empty Water Livestock Poultry Invest" in this region, where the

percentage was 50%. In winter, the disease is not detected, in the spring season 28%, in the autumn - 22%, cattle are diagnosed with the causative agent of the disease. In the cattle of the Ergash Ata farm in Verkhne-Chirchik district of the region, a high incidence of the disease in winter was found, 51% in the spring season, 31% in autumn, 18% in summer, and the infection of cattle with the causative agent of the disease in the autumn was not detected on the farm.

The incidence of the disease in cattle of the Sayrakul veterinary center of Takhiatash district of the Republic of Karakalpakstan was found in all seasons, the highest in spring (52%), the lowest in autumn (6%). The incidence of the disease was detected in 13% of cattle in winter and 29% - in summer.

Conclusion

Seasonal dynamics of nodular dermatitis of cattle is detected year-round infection with the causative agent of the disease, keeping animals in optimal zoohygienic conditions, feeding on the correct diet, protection from virus-carrying insects and observance of quarantine rules ensures the prevention of the disease. Thus, according to studies on the dependence of the ND disease on a pedigree of cattle, it turns out that productive cows imported from abroad are more susceptible to the disease than domestic cattle. Nodular dermatitis of cattle is found to occur on average 15.2% in cattle with high productivity, in domestic cattle - on average 9.4%, seasonally in the spring 47%, 27% in summer, 15% in winter, 7.3% in autumn

It was also observed that this was due to the failure to feed cattle with high productivity on the basis of a nutritious and proper diet

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