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Abstract: Information is provided on the seasonal occurrence of nodular dermatitis in cattle in 200 heads of the Taraqqiyot farm in Yangi Yul district of Tashkent region, in a total of 120 heads of cattle, including 85 dairy cows and 30 bulls, in the Boz-Suv Chorva va Parranda invest farm in the same district, in the Ergash Ota cattle farm in Yukorichirchik district of Tashkent region (1150 heads), in 75 heads of productive cattle in the Saraykul vetpunkt of Takhiatash district of the Republic of Karakalpakstan, and in 35 heads of cattle in the Toshpulotov Bahodir Juraniyozovich farm in Sherabod district of Surkhandarya region, in a total of 1580 cattle.

Keywords: Economy, lumpy dermatitis, farm, virus, district, season, cattle, region, diet.

Relevance of the topic: Worldwide, lumpy dermatitis disease of bighorn sheep has been recorded in 29 Central and Southern African countries and India. Later, it was also found in the countries of the Middle East. During 2014-2016, lumpy dermatitis disease of cattle was reported in such foreign countries as Turkey, Azerbaijan, Lebanon, Iraq, Iran, the Russian Federation, the Republic of Dagestan, Armenia, Greece, Bulgaria, Serbia, Albania, Kazakhstan, and the frequent occurrence of this disease among bighorn sheep poses a risk of lumpy dermatitis entering our country from across the border and causing great damage to our livestock. The lack of biological and chemical drugs against lumpy dermatitis in the veterinary sector further complicates the problem and causes the disease to spread to wider areas.

Material and methods: The seasonal occurrence of nodular dermatitis in cattle was determined in 200 heads of the Taraqqiyot farm in Yangi Yul district of Tashkent region, in a total of 120 heads of cattle, including 85 dairy cows and 30 bulls, in the “Bo’s-Suv Chorva va Parranda invest” farm in the same district, in the Ergash Ota cattle farm in Yukorichirchik district of Tashkent region (1150 heads), in 75 heads of productive cattle in the “Saraykul vetpunkt” of Takhiatash district of the Republic of Karakalpakstan, and in 35 heads of cattle in the Toshpulotov Bahodir Juraniyozovich farm in Sherabod district of Surkhandarya region, in a total of 1580 cattle, depending on the season.

Research results: Seasonal occurrence of nodular dermatitis in cattle was determined in 200 heads of the Taraqqiyot farm in Yangi Yul district of Tashkent region, in a total of 120 heads of cattle, including 85 dairy cows and 30 bulls, in the “Bo’s-Suv Chorva va Parranda invest” farm in the same district, in the Ergash Ota cattle farm in Yukorichirchik district of Tashkent region (1150 heads), in 75 heads of productive cattle in the “Saraykul vetpunkt” of Takhiatash district of the Republic of Karakalpakstan, and in 35 heads of cattle in the Toshpulotov Bahodir Juraniyozovich farm in Sherabod district of Surkhandarya region, in a total of 1580 cattle, depending on the season (Table 1).

Table 1.

It was found that the incidence of lumpy dermatitis in cattle is seasonal

№	Total number of cattle	Number of cattle infected	Seasons in a nutshell			
			Winter	Spring	Summer	Autumn

	Name and location of the farm		with the virus	bosh	%	bosh	%	bosh	%	bosh	%
1	Taraqkiyot f/x of Tashkent region	200	78	9	11,5	43	55	26	33	0	0
2	Tashkent region's "Boz-Suv Livestock and Poultry Investment"	120	18	0	0	5	28	9	50	4	22
3	Tashkent region Ergash ota f/x	1150	45	23	51	14	31	0	0	8	18
4	"Saraykul Vetpoint" of the Republic of Karakalpakstan	75	63	8	13	33	52	18	29	4	6
5	Surkhandarya Toshpulotov Bakhodir Juraniyozovich f/x	35	13	0	0	7	54	6	46	0	0
	Total	1580	217	32	15	102	47	59	27	16	7,3

According to the analysis of the results of Table 1, when analyzing the seasonal dynamics of nodular dermatitis in cattle, a total of 217 heads of cattle infected with the virus were analyzed, it was found that the incidence was 14%, and the average was 2.8%. In the "Taraqkiyot" livestock farm of the Yangi Yul district of Tashkent region, 78 out of 200 heads of cattle were infected with the virus, of which 9 heads (11.5%) were infected in the winter season. The main reason for this was the decrease in natural resistance as a result of not keeping cattle at the level of zoohygienic requirements and not feeding them with an adequate diet. By spring, this indicator increased slightly in this farm, that is, 45 cattle were infected with the virus, which is 51%, and this was mainly due to the fact that high-yielding Kazakh white cattle imported from abroad were added to healthy cattle without observing quarantine rules, the number of cattle on this farm was changed frequently, and the fact that cattle were brought from abroad in the spring, as well as the changeable climate, relative humidity, high air pressure and insufficient feed ration, weather variability, and weakening of the organism.

In this farm, nodular dermatitis disease of cattle occurred in 26 heads in the summer, (33%), the increase in this indicator was explained mainly by the fact that the increase in the number of insects carrying the virus in the summer months. By autumn, the disease decreased somewhat in the farm, and even did not occur in this farm.

In the "Bo'z-Suv Chorva va Parranda invest" farm in Tashkent region, the virus pathogen was detected in a total of 18 cattle, and the disease was not detected in the farm in the winter, however, in the spring, the disease was detected in 5 productive cattle as a result of a serological reaction, which was a 28% result. In the summer, the disease was detected in a total of 9 cattle on the farm, which was a 50% result, and it was observed that the disease occurred due to various factors. In particular, as a result of the work of farm employees without observing quarantine rules, insufficient maintenance and feeding of high-yielding cattle, and the high incidence of virus carriers, this indicator

decreased somewhat by the autumn season, that is, the disease was detected in 4 cattle, (22%) on the farm. It was observed that cattle nodular dermatitis also occurs in other seasons.

The pathogen of lumpy dermatitis was also detected in a total of 45 cattle on the Ergash Ota farm in Yukorichirchik district of Tashkent region. It was found that the highest infection rate coincided with the winter months. In this farm, where 23 cattle (51%) were infected in the winter, the disease was detected as a result of high humidity, feeding and non-compliance with quarantine rules. By spring, a slight decrease in the disease rate was observed on this farm, with a total of 14 cattle (31%) infected. It was found that cattle were not infected with lumpy dermatitis at all on this farm in the summer. By autumn, it was found that 8 cattle (18%) were infected.

In the territory of the “Saraykul vetpunkt” of the Takhiatash district of the Republic of Karakalpakstan, there are a total of 75 cattle, of which 63 cattle were found to be infected with the nodular dermatitis pathogen. The highest rate on this farm was found in the spring, when 33 cattle (52%) were infected, while the average infection was observed in the summer, when 18 cattle (29%). The lowest result was found in the autumn months, when 4 cattle were infected (6%), while in the winter, when 8 cattle were infected with the pathogen (13%). In this farm, cattle were infected with the pathogen throughout the year. The main reason for this was found to be non-compliance with quarantine rules, non-feeding cattle on a regular ration, and constant humidity in the conditions of their detention.

Although there is a private farm in Surkhandarya region, cases of disease were observed due to the fact that it was more engaged in the purchase of cattle. This farm has a total of 35 heads of high-yielding cattle, of which 13 cattle were found to be infected with the pathogen. No cases of infection with the pathogen were observed on the farm in the winter and autumn months. In this farm, 7 heads (54%) of cattle were found to be infected with the pathogen in the spring, and by the summer months, 6 heads (46%) of cattle were found to be infected with the pathogen. As a result of these studies, it was found that cattle are affected by nodular dermatitis throughout the year, the main reasons for which were the violation of quarantine rules, increased humidity in the places where cattle are kept, the inadequate feeding and housing conditions of animals, and the failure to carry out disinfestation measures against various virus-carrying insects. The season with the highest incidence of the disease fell on the spring and summer months, and the causative agent of the disease was detected in 217 cattle in total on farms, of which 102 (47%) were recorded in the spring months, and 59 (27%) in the summer. The lowest rate fell on the autumn months, accounting for 16 (7.3%) heads. The average incidence fell on the winter months, and was found in 32 (15%) heads. When analyzing the average incidence across farms, it was found that the average incidence was 3% in winter, 9.4% in spring, 5.4% in summer, and 1.46% in autumn. The highest average incidence of the disease was recorded in spring.

Conclusion

1. In conclusion, the seasonal dynamics of nodular dermatitis in cattle have been determined, and the pathogen is infected throughout the year. Keeping animals in optimal zoohygienic conditions, feeding them with a proper diet, protecting them from virus-carrying insects, and observing quarantine rules provide prophylaxis for the disease. The disease can occur more often and spread as a result of adding clinically healthy animals to the farm with imported cattle.

It was also observed that the failure to feed highly productive cattle with a nutritious and proper diet is also a factor.

2. During the study, it was found that 47% of cattle were infected in spring, 27% in summer, 15% in winter, and 7.3% in autumn.

3. As a result of the study, it was found that the highest number of cattle were infected with nodular dermatitis, 47% in spring.

4. Studies have shown that the lowest incidence of nodular dermatitis in cattle is in the fall, with a rate of 7.3%.

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