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Umme Aysha Habiba

(The author)

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List of abbreviation

Sl no	Abbreviation	Elaboration
1.	DLS	Department of livestock Service
2.	LSD	Lumpy Skin Disease
3.	NSAID	Non Steroidal Anti Inflammatory Drug
4.	BBS	Bangladesh Bureau of Statistics
5.	GDP	Gross Domestic Product
6.	UVH	Upozila Veterinary Hospital
7.	PCR	Polymerase Chain Reaction
8.	CDIL	Central Disease Investigation Laboratory
9.	RUVH	Rangunia Upozila Veterinary Hospital
10.	OIE	Office International Des Epizootics

Abstract

Livestock is an integrated component of the farming system plays a crucial role in the traditional economy of Bangladesh. Different types of disease outbreaks are becoming a threat to her economic growth. Recently, lumpy skin disease (LSD) outbreak had identified in Bangladesh and had spread out throughout the country (DLS, 2019). We have done the study to determine the epidemiological investigation on risk factors and the rationale for the treatment of lumpy skin disease at Rangunia upozila of Chattogram district from April 2019 to March 2020. The study was done on a total of 116 LSD cases at Rangunia UVH where calves were 38, Adult females were 55 and 23 male patients in number. In this study, we have found some association of occurring LSD with some risk factors like season, breed, age, sex, herd size, farm owner gender, etc. In the fall season, the disease occurrences were more (63.8%). We have found more cases in indigenous cattle (93.1%) because in the village area, people rear more indigenous cattle than the crossbred cattle and found more cases in females (47.4%) than males. Adult animals were more infected (37%) than young. The more cases were in the adult female of large herd than the female in small herd. In this study, the symptoms like fever (75.9%), skin nodules (69%), leg swelling (28.4%), brisket swelling (18.1%) etc. in LSD cases. We tried to treat the patients with NSAID (63.8%), antihistaminic (31.9%), antibiotics (56%), diuretics (31%), Vitamin C and Zinc supplement etc. as symptomatic treatment and used an antiviral drug (56%) as a specific treatment. We have found a significant relationship between fever and drug choice. In patients with fever, we prescribed vitamin C (54 cases) and Zinc (49 cases) to reduce stress. We used more broad-spectrum antibiotics in calves and a narrow spectrum in adult ages above 2.5 years. Patients having nodules on the skin treated with more combined antibiotics (26) than single antibiotics to check both gram-positive and negative bacterial infection and it is also statistically significant that povidone-iodine dressing suggested to cases where nodules were present and ruptured. We also have found a significant association between antibiotics and antihistaminic use. After discussing all the results, we can say that, age, breed, sex, etc are epidemiological risk factors for LSD at Rangunia.

Key words: LSD, Rangunia, symptoms, antibiotic, treatment