

Popular Article

Lumpy Skin Disease: An Overview

Sumat Kumar Shakya^{1*}, K. K. Mishra², Rajeev Ranjan³¹Department of Livestock Production Management, College of Veterinary Science and Animal Husbandry, Rewa - 486001, NDVSU, M.P., India.²Department of Veterinary Medicine, College of Veterinary Science and Animal Husbandry, Rewa - 486001, NDVSU, M.P., India.³Department of Veterinary Pharmacology and Toxicology, College of Veterinary Science and Animal Husbandry, Rewa - 486001, NDVSU, M.P., India.**Corresponding author: Sumat Kumar Shakya, Email: shakyasumit72@gmail.com*

Introduction

Lumpy skin disease is a viral infectious explosive fatal disease that appears in the form of lumps on the skin and other parts of the body in animals, and other symptoms are found in it due to secondary bacterial infection. Traditionally, this disease is found in South and East African countries, but in the 1970s it spread to West Africa, and after 2000, this disease also spread to many countries of the Middle East, like Turkey, etc. This disease is also spreading rapidly in Madhya Pradesh and is moving towards the western parts of the state through Orissa and Chhattisgarh via Shahdol, Umaria, Dindori, Rewa, Mandla, and Jabalpur.

Transmission

- This disease is related to the capripox virus related to sheep measles and is a disease caused by the nail pox virus and often occurs in epidemic or latent form.
- This disease is transmitted through ear flies, mosquitoes, locusts, etc.

- This disease is usually found in areas with hot and humid climates; however, this disease can also be found in forests.
- This disease is found to be prevalent in low-lying and waterlogged areas due to the abundance of ear insects, especially where the prevention of disease is not done.
- This disease is found to be prevalent in areas with high density and low-lying water.
- Contagious infection is also possible due to the availability of viruses in saliva and other secretions of infected animals.

b. Timing of Insemination

- The period between the first entry of the virus in the body and the first symptoms appearing (incubation period) can be 4 to 14 days.
- The mortality rate in this disease is 5 to 50 percent, but the mortality rate is very low (1 to 5 percent).
- Firstly, painful swelling appears under the skin followed by severe fever (41 degrees Celsius), discharge from the eyes and nose, and excessive salivation.

- This is followed by raised rashes, especially in the skin, along with other parts of the body, and the milk production of dairy animals is reduced drastically.
- The nodules are well circumscribed, round, slightly raised, firm, and painful and may be found in addition to skin in the gastrointestinal or respiratory tract, on the muzzle, nasal passage, or mucous membrane of the mouth. Hard filled or yellowish tissue or mucus may be found in these.
- Apart from swelling in regional lymph nodes, swelling can also be found in the mammary glands, eyes, groin, testicles, vagina, and legs, due to which there is an inability to walk and the person becomes weak.
- Sometimes secondary bacterial infection is also possible, due to which mucus formation and skin peeling can be seen in the lumps. Sometimes there is a possibility of worms getting into these lumps by flies laying eggs in them.
- After the cysts heal over time, they appear as hard-raised areas resulting from necrosis in the skin and leave a scar when they separate from the skin.
- Complete recovery from this fatal infection takes a long time, and secondary pneumonia, thrush, worm infestation in the cysts, deep ulceration in the skin, etc. may occur. In addition, pregnant animals may abort and suffer from subsequent absence of oestrus for several months.
- Decrease in milk production and body weight, decrease in quality of leather after death, and medical expenses cause financial difficulties to the livestock farmers.

Treatment and prevention

- There is no specific treatment available to control this disease. Antibiotics should be used to control secondary bacterial infection, and proper care of animals is necessary.
- Antiseptic drugs should also be used in wounds to prevent secondary bacterial infection, and use of anti-fly drugs is appropriate to prevent insects from attacking the wounds after they heal.
- Keep sick animals separate from healthy animals and restrict the movement of animals from disease spreading areas.
- To prevent disease transmission, it is necessary to take measures to control flies, mosquitoes and lice.
- It will also be useful to spray disinfectant medicines in the animal enclosure.
- As a home remedy, turmeric and oil or paste of ground leeks leaves can be applied to swollen skin knots. It is also possible to prevent disease transmission by bathing the animals with boiled water with leeks added to it from time to time.
- For prevention, a live homologous LSD virus vaccine can be administered, which is not currently available in India. Live heterologous maternal disease inactivated vaccines used in sheep and goats can also be used.