

Lumpi Skin Disease Virus in Animal

Mr. Vedant Pundlikrao Chandrawanshi, Asst. Prof. Vaishnavi C. Tajne, Dr. Avinash .S. Jiddewar

Mr. Sheikh Naved Sheikh Ahemad, Mr Shaikh Ayyan Shaikh Hasham

NSPM College of Pharmacy, Darwha, Yavatmal

Abstract: *Lumpy Skin Disease (LSD) is a significant transboundary viral infection caused by the Lumpy Skin Disease Virus (LSDV) of the genus Capripoxvirus and family Poxviridae. Primarily affecting cattle and water buffalo, the disease is vector-borne, transmitted mechanically by blood-feeding arthropods such as mosquitoes, ticks, and flies. LSD is characterized clinically by fever, lymphadenopathy, and the eruption of circumscribed cutaneous nodules, which may lead to ulceration and necrosis. The disease imposes severe economic burdens on the livestock industry due to emaciation, substantial loss in milk production, hide damage, infertility, and mortality rates up to 20%. Historically endemic to Africa, LSD has recently spread to the Middle East, Europe, and Asia, posing a global threat to animal health and international trade. This review synthesizes current knowledge on the etiology, epidemiology, pathogenesis, and clinical manifestation of LSD. It further discusses diagnostic methods, including Polymerase Chain Reaction (PCR) and Transmission Electron Microscopy (TEM), and evaluates control measures. As no specific antiviral treatment exists, management focuses on symptomatic support to prevent secondary bacterial complications and the implementation of effective vaccination programs using attenuated homologous or heterologous strains to achieve herd immunity.*

Keywords: Lumpy Skin Disease (LSD) Lumpy Skin Disease Virus (LSDV) Capripox virus Poxviridae Cattle and Water Buffalo Vector-borne Disease Livestock Epidemiology Viral Pathogenesis Vaccination Economic Impact

