WHAT is Lumpy Skin Disease?



Lumpy skin disease virus (LSDV) belongs to the family Poxviridae, subfamily Chordopoxviridae, and genus Capripoxvirus. LSD is a disease of cattle characterised by fever, nodules on the skin, mucous membranes and internal organs, emaciation, enlarged lymph nodes, oedema of the skin, and sometimes death.

The disease is of economic impor tance as it can cause a temporary reduction milk production, in temporary or permanent sterility in bulls. damage hides and. to occasionally, death. Bos taurus is generally more susceptible clinical disease than Bos indicus; he Asian buffalo (Bubalus spp.) has also been reported to be susceptible. In the acutely infected animal, there is an initial pyrexia, which may exceed 41°C and persist for 1 week. All the superficial lymph nodes become enlarged. In lactating cattle there is a marked reduction in milk yield. Lesions develop over the body, particularly on the head, neck, udder, scrotum, vulva and perineum between 7 and 19 days after virus inoculation.

The characteristic integumentary lesions are multiple, circumscribed to coalescing, 0.5-5 cm in diameter, firm, flat-topped papules and nodules. The nodules involve the dermis and epidermis, and may extend to the underlying subcutis and occasionally to the adjacent striated muscle. These nodules have a creamy grey to white colour on cut section, which may initially exude serum, but over the ensuing 2 weeks a cone-shaped central core or sequestrum of necrotic material/necrotic plug ("sit-fast") may appear within the nodule.