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Popular Article

Contagious Ecthyma: - Economic losses in Sheep and Goats

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Introduction

Contagious ecthyma is a contagious viral infection that causes economic losses in sheep and goat-rearing countries. This condition is distinguished by its unique cutaneous lesions, which appear primarily in the mouth but less frequently in other areas such as the belly and groin region. Most cases of the condition are mild. However, the virus's capacity to induce recurring infection in the same animal, severe morbidity in adults, death in young lambs and kids, zoonotic origin, and potential to cross-infect other species besides sheep and goats make it a worldwide illness. The disease is prevalent throughout India and causes significant economic losses. The lesions are distinctive, and the diagnosis is verified by a PCR assay.

Synonyms: Orf, Sore mouth, Scabby mouth, Infectious labial dermatitis

Etiology

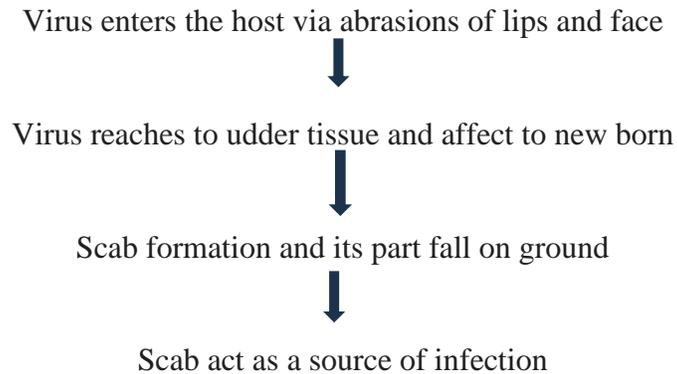
Contagious ecthyma is caused by a virus that is a prototypic member of the genus Parapoxvirus and the family Poxviridae. Other notable members of the genus include pseudocowpox virus (PCPV) and bovine papular stomatitis virus (BPSV) for cattle.

Transmission

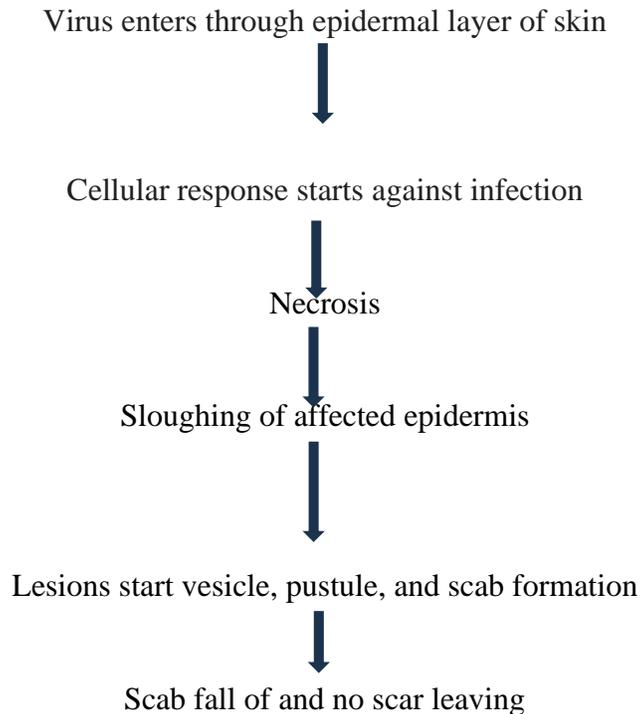
All ages of sheep and goats are vulnerable. Seasonal occurrences shortly following lambing and admission onto a feedlot are typical because stress increases susceptibility to this viral illness.



The virus is very resistant to environmental conditions and can infect small ruminant facilities for years.



Pathogenesis



Clinical finding

- Initial sign anorexia, dullness rise temperature
- Mucopurulent nasal discharge
- Nodular formation around lips, mouth, and nostrils
- Scab formation within a week
- Lambs and kids unable to suck
- Extension of lesions in oral cavity and respiratory tract cause gastroenteritis and pneumonia



- Enlargement of superficial lymph node



Common symptoms of orf virus in Human

- Presence of wound on arm and hand
- Mild fever
- Local swelling of lymph node

Diagnosis

- Characteristics clinical finding
- Virus inactivation
- Complement fixation test
- Fluorescent antibody test
- Animal inoculation test

Prevention and control

- Vaccination is an important preventative strategy for animals.
- Small ruminants should be vaccinated with live attenuated virus at age of 4-6 month.
- Newly purchased animals should always be isolated to ensure they are free from any infection.
- Laboratory techniques can be used to determine the source of a disease and isolate sick animals.
- Proper disposal of scab's layer to reduce the risk of contamination.
- Hygiene practices and precautionary measures play a vital role in prevention.

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