

# CASEOUS LYMPHADENITIS

## The Organism

- *Corynebacterium pseudotuberculosis*
- Gram-positive
- Aerobe
- rod-shaped

## Epidemiology

- Disease of sheep and goats
- Source of infection is discharge from pulmonary or skin abscesses
- Infection is through intact skin or skin wounds
- Transmission in sheep occurs at shearing and dipping in sheep and in goats and sheep by direct contact

## Clinical Signs

- enlargement of one or more of the superficial lymph nodes
- submaxillary, prescapular, pre femoral, supramammary
- The abscesses commonly rupture and creamy to caseated pus, with no odor, is discharged.
- systemic involvement
- chronic pneumonia, pyelonephritis, ataxia, and paraplegia may be present depending on the site of infection
- The debilitating disease of adult ewes commonly referred to as '**thin ewe syndrome**' is often associated with the occurrence of internal abscesses

## Post Mortem Lesions

- Caseous abscesses filled with greenish yellow pus occur chiefly in lymph nodes and to a lesser extent in internal organs.
- In the early stages the pus is soft and pasty but in the later stages it is firm and dry and has a characteristic lamellated appearance.
- Locally extensive bronchopneumonia, with more fluid pus of a similar color.
- lesion expands, the limiting fibrous wall keeps reforming, creating the '**onion -skin**' layering noted grossly.

## Clinical Diagnosis

- Case history
- Clinical sign
- P.M sign

## **Differential Diagnosis**

- Tuberculosis
- Parasites infestation

## **Laboratory Diagnosis**

- ELISA and PCR
- Culture and direct smear from abscess

## **TREATMENT**

- treatment is not usually attempted because the abscess is encapsulated, the organism is intracellular and response is poor.
- Subcutaneous abscesses can be treated with surgical drainage or extirpation

## **Prevention and Control**

- Control of spread
  - There should be good hygiene and disinfection in the shearing shed, especially of the shearing board and holding pens.
  - Dipping after shearing may be undesirable in badly affected flocks
  - housing should be free of wire or other causes of skin trauma
  - External parasites must be controlled.
- Culling
  - culling all animals with enlarged lymph nodes.
  - Culling on the basis of serological tests has been used
- Vaccination
  - Vaccines formulated from concentrated, formalin -inactivated C. pseudotuberculosis
  - Vaccination appears less successful in Goats