

Actinobacillosis (Wooden Tongue)

Etiology:

Actinobacillus lignieresii

Epidemiology:

- 1- The organism normal inhabitant of oral cavity and rumen of ruminant .
- 2- Infection of soft tissue result from damage to oral mucosa.
- 3- It is occur sporadic .
- 4- It higher prevalence in area of copper deficiency .
- 5- Transmission by infected discharge .

Pathogenesis :

Local infection then acute inflammatory reaction then development granulomatous lesion and suppuration, necrosis occur ,pus discharge to exterior.

Clinical Finding :

- 1- Affected animal unable to eat for a period of about 48% ,salivation ,gentale chewing of the tongue .
- 2- Tongue is swollen and hard at base .
- 3- Nodules and ulcer present on the side of tongue and they may be an ulcer at the anterior edge of dorsum ,in the later stage when the acute inflammation is replaced by fibrous tissue .
- 4- The tongue becomes shrunken and immobile .
- 5- lymph adenitis of the submaxillary and parotid node .
- 6- local ,firm swelling develop and rupture with discharge of thin non-odorous pus .
- 7- Enlargement of retropharyngeal node thy interference with swallowing and loud snoring respiration .

8- Actinobacillosis occur atypical area external nares or eye lids and unusual cutaneous actinobacillosis .

In sheep:

-the tongue is not affected ,lesion occur in lower jaw ,face and nose or in skin-fold from lower jaw to sternum. Yellow-green pus containing .

Clinical Pathology :

1- Purulent discharge commonly contain (Sulfur bodies).which are granular in nature .

2- Microscopic examination , consist of club like rosettes with central mass of bacteria .

Necropsy finding : cattle is not usually carried .

In sheep : lymphangitis and abscesses containing thick yellow green pus occur around local lesion .

Differential Diagnosis :

-Salivation ,Chewing and Anorexia resemble;

1- Rabies .

2-Foreign bodies in the mouth .

3- Tuberculosis (lymph node enlargement when tongue not affected)
Tuberculin test.

4- Lymphomatosis affects multiple node .

In sheep :

1-mandibular abscess due to grass seed penetration of alveoli cause large bony swelling on mandible .

Treatment :

Rx –Sulfonamides ,Penicillin ,Streptomycin

1- Surgical treatment .

2- Oral or intravenous Iodine

- Potassium Iodide 6-10 g /day for 7-10 days orally as a drench to cattle ,until iodism develops (anorexia, lacrimation coughing).
- Sodium Iodide 1gm/12 kg bw. I/v 10% solution , for sheep and cattle use in soft tissue lesion . one or preferably two further treatment at 10-14 days intervals .
- For bony lesion :
 - for sheep:
 - S/c injection of Sodium Iodide caused sever irritation and local swelling 20 ml of 10 % solution weekly for 4-5 weeks .

Control :

- 1- Restriction of spread of both disease is best .
- 2- Treatment of affected animal .
- 3- Prevention of contamination of pasture .
- 4- Isolation or disposal of animal with discharging lesion.

Actinobacillosis

Restriction of the spread of disease is the best implemented by quick treatment of infected animals and the prevention of contamination of pastures and feed troughs . Isolation or disposal of animals with discharging lesions is essential , although the disease does not spread readily unless predisposing environmental factors cause a high incidence of oral or skin laceration .