

# Hemorrhagic septicaemia



# HS

(Shipping/transport fever, stockyard's disease, Barbone disease, Galaghotu in Hindi.)

## Definition

An acute highly fatal disease characterized by acute septicaemia, high fever, swelling at the ventral aspect of throat, neck and brisket causing dyspnoea

## Etiology

- *Pasteurella maltocida* type 1 or B, G -ve, Known as Bipolar organism

## Host Range

- Buffalo > Cattle > Pig > Horse > Sheep & Goat
- Affect any age and group
- Maximum occurrence- During Monsoon

## Precipitating factors

- Stress (Transportation, Heavy worm, Starvation and Viral infections like IBR, Parainfluenza-3)

## Transmission

- Ingestion or inhalation
- The initial site of proliferation thought to be the tonsillar region.
- The source of infective bacteria is thought to be the nasopharynx of bovine carriers.

## PATHOGENESIS

Organism → from environment → enters into terminal bronchioles and alveoli → causes changes in lungs in presence of predisposing factors → destroying the leucocytes and macrophages → and then release of histamines and PGF<sub>2</sub>alpha and sometimes fibroblastic elements → leading to septicemic changes in body and inflammatory changes in lung parenchyma → and produce pneumonia with the help of secondary invaders (Parainfluenza-II, Bovine herpes virus and other bacteria) → Death due to asphyxia



## Clinical findings

- High Fever (106-107° F), Profuse salivation, Petechiae on mucous.
- Edematous swelling (Under throat, neck and brisket region)
- Swellings are hot and painful
- Increased respiration, Grunting sounds followed by dyspnoea
- Death

## Diagnosis

- Clinical findings
- Seasonal occurrence make tentative diagnosis
- Animal inoculation
- Serological (HAT, HIT, CFT etc.)



## Treatment

- Various sulfonamides (130-150 mg/Kg, IV for 3-5 days), tetracyclines, penicillin and chloramphenicol are effective if administered early.
- Anti-inflammatory
- Antihistamins
- Supportive therapy

## Prevention and control

- Prevention is by vaccination.
- Three kinds of vaccine are widely used: plain vaccine (HS broth vaccine), alum-type precipitated vaccine, and oil-adjuvant vaccine.
- The most effective bacterin is the oil-adjuvant-one dose provides protection for 9-12 month; it should be administered annually.
- The alum-precipitated-type bacterin is given at 6 months intervals.
- Age of vaccination: Above 5-6 months of age