



OVINE PROGRESSIVE PNEUMONIA

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Ovine Progressive Pneumonia



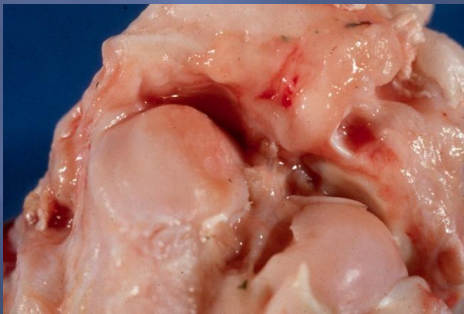
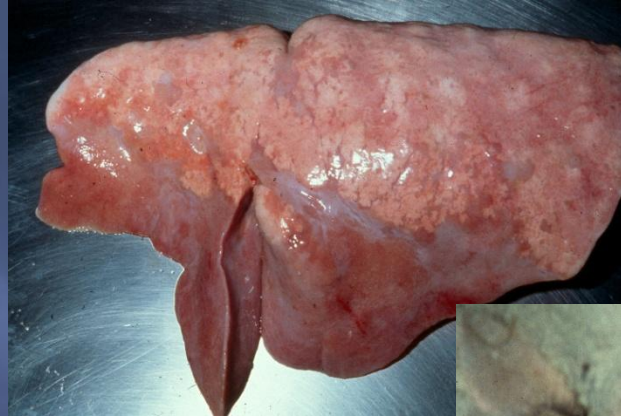
- ▣ OPP
- ▣ Visna-Maedi
 - Wasting
 - Shortness of breath
- ▣ Iceland
- ▣ Montana
 - 1923

- ▣ Retrovirus – subfamily of Lentivirinae
 - CAE – caprine arthritis-encephalitis
 - VV – Visna virus
 - OPP – Ovine Progressive Pneumonia
- ▣ Lenti – slow
 - 1-2 yrs
- ▣ Contagious
 - Colostrum
 - Aerosol
 - Ingestion
- ▣ Environment?



Syndromes of the disease:

- ▣ Pneumonia
- ▣ Arthritis
- ▣ Visna – nervous
- ▣ Mastitis



Diagnosis / Testing

- ▣ AGID – Agar Gel ImmunoDiffusion
- ▣ ELISA – Enzyme Linked ImmunoSorbent Assay
- ▣ PCR – Polymerase Chain Reaction
- ▣ Complement Fixation
- ▣ ?Genetic- GeneseeK
 - ▣ Lower susceptibility



~~Treatment/Vaccine~~ - NONE

▣ Control

- Testing
 - ▣ Cull / separate herds



▣ Prevention

- Only purchase test negative animals from a “clean” herd.
- Will the genetic test facilitate this?
 - ▣ TMEM 154 haplotype 1 = low susceptibility

2001 NAHMS Study

- 87% of sheep operations in the US
 - 72% of the sheep in the US
- 36.4% of sheep operations had 1 or more animals test positive for OPP
- 2 x's the number of large operations as small operations with positive animals.
- Large operations had 4x's the number of sheep testing positive than small operations.

Depending on...

- ▣ Prevalence of disease within a flock
- ▣ Management
- ▣ Overall goals of the flock

We see...

Increased evidence at stressful times...trailing, lambing...

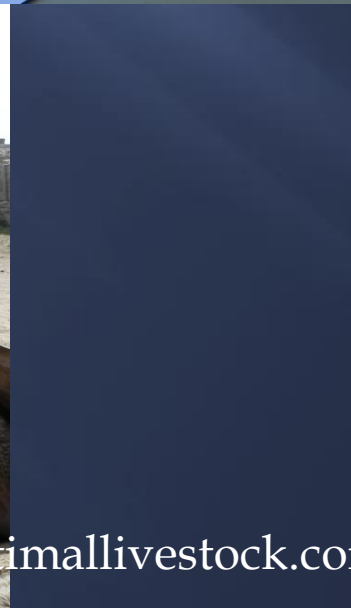
- ↑ in pregnancy toxemia
- ↑ mastitis – hard bag
- ↑ lamb starvation
- ↑ variable sized lambs – tw, tr
(unfair competition, orphaning,
stealing milk – spreading the
virus more)
- ↑ symptomatic disease signs



Economic Effect

- ▣ Increased labor requirements
 - Costs associated
- ▣ Decreased weaning weights & percentages
- ▣ Increased treatments
 - Labor cost
 - Medicine cost
- ▣ Increased ewe death loss
- ▣ Increased cull rates
- ▣ Decreased productive life
- ▣ Increased ewe replacement





Ram Breeding Soundness Evaluation

