Case 69

OADDL 17020574

Boer Buck (*Capra aegagrus hircus*)

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Case 69: Signalment/History

- 5 year old Boer buck
- Lethargic, loose stool, weight loss

Gross Diagnoses:
- Body as a whole: Thin body condition with chronic serous atrophy of fat
- Skin: Marked, chronic, multifocal to regionally extensive hyperplastic dermatitis
- Lung: Aspiration pneumonia
- Abomasum: Mild nematodiasis (Haemonchus sp.)
- Oral cavity: Moderate abnormal dental wear

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Gross Pathology

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• Inguinal skin
• 5 y.o. goat
• H&E

Skin: Severe, chronic-active, regionally extensive, hyperplastic dermatitis with numerous surface arthropods
Histology

- Chitinized body wall
- Striated muscle
- Jointed appendages
Chorioptes bovis

Cup-shaped pulvilli

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OSU Parasit D-Lab YouTube Channel
https://goo.gl/1kYGHD
More parasitology
- Low numbers coccidian oocysts
- Mild *Haemonchus* spp. adults and eggs
- Moderate trichostrongyles

Toxicology/Trace Mineral Analysis
- Sample: Liver
- Methodology: ICP-MS
- Zinc: 112.239 ppm (HIGH; Reference range 25-100 ppm)
- Copper: 422.004 ppm (HIGH; Reference range 25-150 ppm)
  - Possible copper toxicity; no kidney concentration; no renal lesion
- Manganese/Selenium also elevated
  - Possible injectable mineral compound before death
Skin: Severe, chronic-active, regionally extensive, hyperplastic dermatitis with numerous surface arthropods

Etiology consistent with: *Chorioptes bovis*
Discussion: Parasitology

- *Chorioptes bovis*
  - Typical life cycle: Egg → Nymph → Adult
  - All developmental cycles occur ON host
  - Approximately 3 weeks
  - Females produce 1 egg/day. Females live 2-3 weeks.

- Common (?) in horses and cattle

- Goats
  - Infestations usually mild
  - Forefeet, axilla, inguinal region, scrotal
  - More common in goats than in sheep

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Chorioptes bovis
  - Synonymous with C. caprae, C. ovis, C. cuniculi, C. equinus

Treatment
  - Easily treated
  - Topical acaricides
  - Macro cyclic lactones

Management/Husbandry Implications
  - Testicular degeneration; Scrotal dermatitis
  - Modern acaricides and endectocides should make this rare
  - Severity, extent, chronicity of this case is striking
References


Doin’ Some ‘Crootin…
Two Open Positions: Oklahoma State Univ.

 Ass’t/Assoc. Professor

Responsibilities:
• 50%+ Research
• Involvement in Teaching and service

Qualifications:
• DVM or equivalent degree
• PhD Preferred
• ACVP Diplomate or Phase II board-eligible
• Excellent communication skills

Contact:
anthony.confer@okstate.edu
Ad: JAVMA

 Temporary Lecturer

Responsibilities:
• Independent biopsy/necropsy
  • (DL & VTH cases)
• Necropsy instruction
• Rounds participation

Qualifications:
• DVM or equivalent degree
• Completion of 3 years of anatomic pathology training
• ACVP Phase II board-eligible
• Excellent communication skills

Contact:
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Ad soon: ACVP Career Center