Severe coccidial enteritis in a commercial beef calf

Shannon Palmer

Signalment and History

- One month old Hereford X heifer (# 135)
- Presented to VMC May 2, 2017
- Lethargic, bloody tail noted yesterday
- Treated on-farm with oral electrolytes and trimethoprim/sulfadoxine
- 185 pairs on-farm
- No other animals currently sick

Physical exam

- T 33°C
- P 96 bpm
- R 16 bpm
- CRT 7 seconds
- White mucus membranes
- Enopthalmic
- Depressed mentation
- Serous bloody fluid from rectum
- Pain on abdominal palpation

Diagnostics

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<table>
<thead>
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<tbody>
<tr>
<td>Packed cell volume</td>
<td>33%</td>
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<tr>
<td>Total protein</td>
<td>7.1 g/dL</td>
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<tr>
<td>pH</td>
<td>7.059</td>
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<tr>
<td>Complete blood count</td>
<td>Mild neutrophilia Left shift</td>
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Differential diagnoses

- Bacterial enteritis
  - Clostridia, Salmonella, E.coli
- Parasitic enteritis
  -Cryptosporidium, Eimeria
- Viral enteritis
- +/- Intussusception

Treatment plan

- Active warming
  - IV Ringers solution
  - 2 L bolus then 488 ml/hr
- Trimethoprim/sulfadoxine
  - 16 mg/kg IV q24
Nasty find at night check...

Disease escalation
- T 39.1°C
- HR 140 bpm
- PCV 18%
- Drastic salt and water intake
- Passing intestinal mucosa and frank blood

Therapeutics
- Ketoprofen
  3 mg/kg IV q8
- Whole blood from dam
  Donor PCV 26%
  450 mL

More diagnostics
- Fecal floatation
  3+ Eimeria oocysts
- Fecal culture
  4+ Clostridia perfringens Type A
- Complete blood count
  Nonregenerative anemia
  Neutrophilia with left shift
  Marked fibrinogen

Drug therapy
- Ceftiofur sodium
  5 mg/kg IV q12
- 5% Toltazuril
  20 mg/kg PO once
- Sucralfate
  20 mg/kg PO q8

Another victim...
Final diagnosis

- Severe typhlo-enteritis due to *Eimeria* spp.

Site visit and recommendations

- Clean/improve bedding pack
- Force feed cows monensin
- Move to pasture ASAP

The happy ending...

Questions?

Special thanks to...

Dr N Erickson
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Dr E Sperry
Dr M Wichtel
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