

## **Haemorrhagic enterocolitis in cattle? Consider Bovine Adenovirus**

In cattle, Bovine Adenovirus (BAdV) may produce severe enterocolitis causing watery haemorrhagic diarrhoea. It is most often seen in animals 6 to 12 months of age. Calves may be asymptomatic with clinical disease developing in those exposed to stressors such as inclement weather, changes in management, and feed shortage. Sudden death without clinical signs may be seen in peracutely affected animals. Disease is seasonal being most often seen from autumn to spring. While it is primarily a gastrointestinal virus, BAdV may cause pulmonary oedema, bronchiolitis and bronchopneumonia.

Differential diagnoses for BAdV include other causes of fibrinous and haemorrhagic enterocolitis such as coccidiosis, bovine viral diarrhoea, salmonellosis, yersiniosis and bovine malignant catarrhal fever. Other differential diagnoses for sudden death include nitrate or other toxicities, and clostridial infection.

Diagnosis relies on finding viral inclusions on histopathology of the intestines (ileum, especially near Peyer's Patches, colon), kidney, liver, and lung, or PCR on fresh or fixed intestine, or EDTA blood.

### **References:**

- Orr JP. Necrotizing Enteritis in a calf infected with adenovirus. *Can Vet J* (1984) 25: 72-74.
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- Vaatstra B. Calf Diarrhoea Diagnostics. *VetScript* (2018) 31(9): 52-55.

