



Ambic

Arm & Hammer

Ayurved

Berg & Schmidt

BCF

Boumatic

Diamond V

Ecolab

GEA

Holland Animal Care

Impextraco

Lallemand

Aetiology

Sporadic cases of type A enterotoxaemia caused by *Clostridium perfringens* type A have been seen in calves. In addition, abomasitis, abomasal bloat and abomasal ulceration have been linked to *Clostridium perfringens* type A. However, the aetiological link of these conditions to *Clostridium perfringens* type A is not the cause or sole cause of these conditions as *Clostridium septicum*, *Salmonella* and *Sarcina* Spp. have all been implicated.

Abomasitis

Abomasitis is a sporadic disorder of the calf up to weaning age and is typically characterised by a diffuse, haemorrhagic/necrotising inflammation of the abomasal mucosa which frequently involves the deeper layers of the abomasal walls in severe or chronic cases. Abomasal ulceration with or without perforation can occur as sequelae. Aetiology has been attributed to various things over the years including primary bacterial and fungal agents, immunosuppression, pica, trauma from coarse feed and vitamin and mineral (?copper) deficiencies. Experimentally, *Clostridium perfringens* type A has been shown to cause abomasitis and this bacterium's ability is considered to contribute to dilation of the stomach and the intramural emphysema seen in affected animals. *Salmonella typhimurium* DT104 has been isolated from the abomasal walls of veal calves.

Clinical signs

Affected calves are lethargic and show abomasal tympany, bruxism or teeth grinding, fluid distension of the stomach, colic and scouring and death. Case fatality rate is high.

Treatment

Treatment for the enterotoxaemia is similar to that used for enterotoxaemia caused by *Clostridium perfringens* type C and other enterotoxaemias. For abomasitis, fluid therapy and antibiotics should be considered. If abomasal tympany is excessive or can be heard on the left hand side the possibility of a displaced abomasum must be considered.

Prevention

Contributing factors to calf abomasitis include poor milk hygiene, intermittent feeding of large volumes of milk and the feeding of cold milk or milk replacer often by bucket. Management of these factors should be in any preventive programme. Vaccines may play a role in the prevention of abomasitis caused by *Clostridium perfringens* type A.

Nuscience

Norel

Olmix