



Rochester Veterinary Practice 72 Lowry Street, Rochester, Vic, 3561, Ph: (03) 54 84 22 55, email: admin@rochyvet.com.au

Theileriosis In Cattle

Theileriosis is a tick-borne infectious disease caused by *Theileria orientalis*. It is spread by the Australian bush tick (*Rhipicephalus longicoris*). When the tick bites the cow, the protozoan organism transmitted from the tick to the cow. Once in the blood stream the protozoa parasitizes the red blood cells, which results in their destruction. The affected cattle become anaemic (low blood levels).

Clinical signs include:

- Anaemia- Pale mucous membranes
- Lethargy and depression
- Fever
- Jaundice
- Abortions
- Weakness that can result in cattle being down
- Death

Diagnosis is generally made on assessment of a blood smear or PRC testing on blood from affected cattle.

Treatment: There is no specific treatment for affected cattle. Treatment is usually based on Oxytetracycline IM for 3 to 5 days, reduced stress and for severely anaemic animals a blood transfusion is needed.

Control and management: Control and management of benign theileriosis is not without difficulties. No vaccine is currently registered in Australia and many features of the biology and epidemiology of benign theileriosis are poorly understood. For these reasons, control and management are based on a combination of risk management of cattle movements, general stock management and tick control.

Despite having followed recommendations for control and management, some producers have experienced significant losses, and the reasons why some herds are more severely affected than others is not clearly understood.

Prevention: Cattle in good condition and on good feed will be less susceptible to benign theileriosis. Careful attention should be given to nutrition, parasite control and trace element supplementation (if required) to minimize susceptibility to disease. If possible, mustering or otherwise stressing stock should be avoided at times when there is a high risk of disease.

It is not presently known if infection can be transferred from animal to animal by management procedures such as multiuse needles, castration knives, etc. If practicable, items such as needles should be cleaned and then disinfected between animals. Where this is not possible, such as vaccinating a mob of cattle, sharp needles should be used and changed regularly to minimize blood transfer.

Tick control: Reducing tick numbers using a registered acaricide should reduce the likelihood of cattle becoming infected. Although suppression of tick numbers will not do anything for animals already infected, it may reduce new instances of transmission.

It is highly unlikely that bush ticks from a property can be eradicated as they spend more than 9 months living on the ground and can attach to other animal hosts such as wildlife. A nil tick population through chemical treatment should therefore not be the aim of any tick control program.

Rotational grazing practices may also help to control ticks; the use of non-bovine species may assist with removal of ticks from pasture prior to the introduction of cattle.