

Goatvetoz Summer Newsletter

Goat Veterinary Consultancies - goatvetoz

Summer 2021/22

Laminitis

Laminitis is inflammation of the laminae, which are the intricate folded vascular structures just underneath the hoof wall. The laminae become engorged and very painful.

Causes are:

- Excess grain
- Sudden access to grain
- Lush pastures
- Acid silage
- Septicaemia or a serious infection such as metritis, retained foetal membranes, mastitis and pneumonia. In this case the goat will have a high rectal temperature i.e. above 40°C.

As goats can get infections after kidding and also they get extra feed as now producing milk, a common time to see acute laminitis is just after kidding.

The main clinical signs are:

- Lameness
- Weight shifting of legs
- Lying down a lot
- Stiff gait
- Walking on knees
- More than 1 leg is always affected
- Front legs more likely to be affected or all 4 legs
- Heat at the coronet i.e. where the top of the hoof meets the hair.

This area may also be very painful if pressed.

- Toes can feel cold as blood supply is affected.

The last sign is diagnostic for acute laminitis. .

It is essential that early treatment is given as if acute laminitis is not treated properly, chronic laminitis results. The signs of chronic laminitis are:

- Toes that point up
- Slipper hooves
- Horizontal lines in the hoof wall
- Rock hard hooves

Treatment for acute laminitis involves the use of Non Steroidal Anti-Inflammatory Drugs or NSAIDs such as flunixin, carprofen, ketoprofen, or meloxicam. Even oral aspirin can be used in an emergency (100mg/kg every 12 hours). All these NSAIDs are "off-label" so need a vet's prescription. If an infection such as metritis (uterine infection) is also present then this must also be treated. Cold water hosing of hooves may help if a goat will tolerate it. Soft bedding or rubber matting is also helpful.

As some of the signs of laminitis are common to Caprine Arthritis Encephalitis (CAE) then a blood test is advisable. Heat at the coronet however does not occur with

Coccidia oocysts

When you get a report back on your worm egg count and it says there were coccidia oocyst present, what should you do?

It depends. Oocyst numbers are not like worm egg count numbers with a threshold above which you must treat. There are many different species of coccidia and some are dangerous and some are not. Some produce large numbers of oocysts and some few. Also a lot of the damage is done when they reproduce asexually in the gut cells and before the reproduce sexually and release their oocysts. Surveys of goats around the world has found most goats excrete oocysts in their faeces.

So unless a goat (generally a kid) has signs of coccidiosis (the disease) with the oocysts, then there is no need to treat. See your vet if goats have diarrhoea, blood in faeces, pot bellies, rough coats or dehydration. All treatments are "off-label" so needs a vet's prescription.

CAE. However a goat may have both laminitis and CAE.

There is no treatment for chronic laminitis except corrective hoof trimming which is very difficult to do as the hoof wall is so hard. In some cases the third phalanx bones inside the hooves may rotate causing the hooves to be at a deformed angle.



Prevention of acute laminitis is therefore essential and the livestock guidelines are:

- No sudden feed changes
- Feed dry hay when pastures are very green and lush
- Add sodium bicarbonate or another buffer such as limestone or 4% sodium bentonite to grain ration
- In total mixed rations ensure there is plenty of fibre and this is at least match-stick length
- Commercial yeast supplements
- Monensin or another rumen modifier may be useful but cannot be used in milking goats.
- Zinc methionine and biotin may be helpful if added to the ration.

There is still a lot of unknowns about laminitis including any genetic predisposition and treatments used in other species and listed above are actually useful in goats.

Heat Stress

The ideal temperature range for goats is 10 to 30 degrees C. Unfortunately Australia, like most countries, have more very hot days (defined as over 40C or 104F) per year now than in previous decades. The very first heat wave of summer is the most dangerous as goats have not had a chance yet to adapt.

The clinical signs of heat stress include

- panting
- higher respiratory rate
- high rectal temperature
- sweating
- not eating
- drinking more
- not active
- eventually convulsions, coma and death

The normal respiratory rate for an adult goat is 15-30/min But with heat stress this rises.

- Low heat stress = 40-60/min

- Medium heat stress = 60-80 min
- High heat stress = 90-120/min
- Severe heat stress >200/min

There are also hidden signs of heat stress as well, including the destruction of sperm, reduced eggs and egg maturation, reduced heat length and strength, a reduced immune system and kids born earlier with less teat seeking behaviour.

Treatment involves wetting goats with cool water, fans, replacing lost water by encouraging drinking or if won't drink stomach tubing with water and electrolytes, fans shearing, clipping or gently cutting away any long hair or fleece. Ice should not be used and the use of cool water enemas are debated in the literature. If heat stress is severe, then vet treatment may also be needed with intravenous fluids and drugs given, but start first aid immediately. .

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