Goat health - caseous lymphadenitis (cheesy gland or CLA)

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Animal Biosecurity and Welfare, NSW DPI

Caseous lymphadenitis (CLA) is a recurring bacterial disease in goats that causes abscesses in lymph nodes in internal organs and under the skin. It is the cause of extensive loss through carcase condemnation in sheep and, as the goat meat industry increases, a similar substantial loss is likely in the goat industry.

Cause
Cheesy gland is caused by infection with the bacterium *Corynebacterium pseudotuberculosis*. The organism occurs in abscesses as well as in the gut and faeces of the goat. It can survive for up to four months on the ground and on fences, feed troughs and head bails depending on shelter from wind and sun.

Spread of infection
The bacteria are abundant in the pus inside abscesses. When these abscesses burst, the pus containing bacteria is transferred to the environment around the goat pens. The infection is then picked up by other goats through contamination of wounds and broken skin.

The common behavioural habit of frequent licking, as well as rubbing their heads and necks against fence posts and sheds, allows the rapid spread of cheesy gland. Where goats are kept in small yards, the direct contact and close grazing of contaminated grass or food in feed troughs encourages spread.

Dairy goats that are placed in head bails for milking are particularly prone to being infected through splinters around the neck.

Contaminated grooming gear can spread the bacteria to other goats. Contaminated shearing blades are an important method of spread in Angoras and Cashmere goats.

Once the bacteria enter the goat’s body, they spread in the bloodstream until they become localized in the lymph nodes, organs or subcutaneous tissue.

Signs
Infected lymph nodes grow to become large abscesses ranging in size from an egg to a grapefruit. The contents are thick green/yellow cheese-like pus, hence the common name ‘cheesy gland’.

In short-haired dairy goats these swollen glands are obvious, particularly in the head and neck, in front of the shoulder, in the flank and udder lymph nodes.

Abscesses that develop in the internal lymph nodes present different problems.

Abscesses in the lungs, liver and spleen may cause ill thrift in the goat, making it lose condition or show other signs such as a chronic cough or loss of milk production. Severely affected goats may die or have to be put down because of debility.

Other abscesses occur in goats due to infection of a local wound.
Examples are vaccination sites after using contaminated needles, grass seed and thistle spines causing abscesses around the mouth and lips, and pustules (especially on the udder) which become infected with bacteria such as *Staphylococcus* spp. and develop into larger abscesses. These are not necessarily cheesy gland; however, treatment in individual goats is the same.

**Treatment**

Treatment is not usually recommended as antibiotics have limited ability to penetrate abscesses. The best form of control is prevention via vaccination on a flock basis and adopting hygienic management strategies.

**Stopping the spread**

- Cull infected goats with abscesses.
- Handle young goats before older goats.
- Avoid wounding of goats around the head and neck from head bails or fences with protruding nails, wire or splinters.
- Reduce time in holding pens and yards.
- Disinfect shearing equipment after use on infected goats.

**Prevention**

Vaccination is the best form of prevention.

In previously unvaccinated goats, two doses of vaccine four weeks apart are required. The second dose is very important and should not be missed. Annual booster vaccinations are recommended.

Vaccination has been shown to be effective in reducing the prevalence of CLA in flocks.

CLA vaccines are generally supplied in combination with clostridial vaccine.

**Personal hygiene**

After handling goats infected with cheesy gland, make sure you take personal hygiene measures, especially if you have cuts and abrasions on your hands or arms. These wounds can become infected, involving lymph nodes, which in turn become tender and swollen.

Seek medical attention if these signs occur.

**More information**

- Meat and Livestock Australia
- Zoetis
- Local Land Services, Tel: 1300 795 299
- Animal Biosecurity and Welfare, Tel: 1800 680 244,
- Department of Primary Industries at biosecurity@dpi.nsw.gov.au