CASEOUS LYMPHADENITIS (CLA) CHEESY GLAND

KEY MESSAGES

1. Caseous lymphadenitis (CLA) or cheesy gland, is a common contagious bacterial disease causing abscesses in the lymph nodes of sheep.
2. It is a common cause of wastage at abattoirs.
3. It is easily prevented through vaccination and management changes.

What is CLA?

CLA is caused by the bacterium *Corynebacterium pseudotuberculosis* and results in the formation of lymph node abscesses throughout the body. Most commonly these abscesses are superficial but they can also be found in the lungs, liver, spleen and kidneys. The abscesses are initially pus filled which over time dries and becomes "cheesy" progressing to multi-layered capsules resembling "onion rings".

Disease on farm

The majority of sheep flocks in Australia are affected with CLA, however the level varies depending on the management and vaccination program. Flocks that don't vaccinate will have on average 30% of adult sheep infected.

Most infected animals show no clinical signs, apart from the occasional ruptured abscess at shearing. In the first year that sheep are infected they grow 4-7% less wool.

Occasionally sheep will have a severe chronic infection resulting in ill thrift and wasting.

The level of infection is usually low in lambs but increases rapidly after the first and second adult shearing.

How is it spread?

Most spread occurs at shearing, when infected animals with lung lesions, cough bacteria on to the skin of freshly shorn sheep, with bacteria entering the body through cuts or intact skin. Confining sheep together after shearing for off shears lice treatment or other reasons increases the chance of infection.

Infection can also occur through the rupture of superficial or skin abscesses.

Image provided by Zoetis

Disease picture at the abattoir

The disease is uncommon in lamb lines, but the incidence increases dramatically in older sheep. Between 20 and 95% of PICs are found to be affected at abattoirs. It is estimated that 75% of a meat inspector's time on the mutton chain is spent checking for and removing CLA lesions. These trimming costs, plus the condemnation of severely affected carcasses result in increased costs of processing, and results in a lower price for producers.

Treatment

There is no available treatment for infected animals although the disease can be controlled through vaccination.

Prevention

- Vaccinate. CLA vaccine is included in "3 in 1" or "6 in 1" vaccines not "2 in 1" or "5 in 1" vaccines. It is recommended to be given at marking and then again at weaning, (4-6 weeks later). Annual boosters are required and these should ideally be given one to six months before shearing, not at shearing. Failure to follow the recommended initial two shots plus an annual booster every year results in less than optimal protection with little or no reduction in the level of disease within the flock.
- Prevent spread. The main spread period is thought to be immediately after shearing and confining sheep after shearing is thought to increase spread.
    - » Shear in age groups youngest to oldest.
    - » Allow sheep to disperse as soon as possible after shearing and backlining when required.
    - » If dipping sheep, dip after shearing cuts have healed (between 2 and 4 weeks after shearing), use a recommended disinfectant in the dip and dip sheep in their age groups from youngest to oldest. Sheep with obvious discharging abscesses should be removed and dipped last.

What to expect from Prevention program

It takes some time to see the results from a control program for CLA, but you are likely to see a significant change in the level of infection at the abattoir once the first fully vaccinated lambs are sent to slaughter as adult culls.

Vaccination when performed correctly can reduce the average prevalence in adult sheep from around 30% to around 3%.