Sheep Lameness

For many UK flocks, lameness is an endemic problem and prevalence has probably increased following the change in weather patterns to mild winters and wet summers. As well as being a considerable welfare issue, lameness is an important source of production loss. Estimates of costs vary but can be £5 per lamb or £7 per ewe.

In recent years there has been a lot of research into the causes of lameness and its treatment. This has produced interesting findings, some of which run against previous old advice. A vital aspect to understanding foot lameness is that the commonest forms – footrot and scald, are infectious diseases. When treated in this manner, rather than treating overgrown feet, the control of the problem is simplified.

Scald

Infection of the interdigital only, there is no under-running of the horn. Uncomplicated cases of scald will resolve spontaneously if the sheep are moved to dry pasture.

Footrot

Footrot starts as scald but then progresses to involve under-running of the horn. This typically starts at the base of the interdigital cleft, but in severe cases, it can spread around the hoof and lead to capsule loss.

Both of the above diseases are caused by one bacteria – *Dichelobacter nodosus*. This can live off the sheep, but only for about 10 days. This can give scope for a footrot elimination programme.

Contagious Ovine Digital Dermatitis (C Dodd)

Infection starts at the coronet and progresses down the hoof, separating it from the soft tissue of the foot. The cause is thought to be similar to Digital Dermatitis in cattle.

Toe Granuloma (strawberries)

If a hoof is trimmed excessively, then a lump of granulation tissue forms proud of the hoof, creating an entry point for footrot bacteria and making the problem worse.

White Line Abscess (Shelly hoof)

Diseases such as laminitis or footrot can damage this area and allow soil followed by bacteria to enter. If severe, the infection can burst out at the top of the hoof.
**LAMENESS CONTROL PLAN**

**Vaccination**
This can be an important part of a footrot control programme. Vaccinate sheep twice, 4-6 weeks apart, followed by a booster before periods of maximum risk. Vaccination alone will not control footrot on a farm and must be part of an overall control programme. Vaccination can cause unsightly lumps at the site of vaccination – so consider carefully if vaccinating show animals.

**WARNING.** Cydectin 1% injection should not be given to vaccinated sheep.

- Discuss control options with your vet as each farm is different
- Treat lame sheep as soon as they are seen lame – even if you consider it is only mild
- Identify the disease – Footrot, Scald, CODD, White Line Abscess, Toe Granuloma
- Treat all footrot cases with a tetracycline spray and tetracycline injection, but Do Not Trim
- Mark the affected leg
- Separate from the main flock if possible, and re-examine in seven days. Avoid trimming even at this stage if at all possible
- Cull sheep with more than two marks as they are carriers and will infect the rest of the flock. Use eartags to identify repeatedly lame sheep so they can be identified and culled when sound
- Consider vaccination
- Use a footbath for the sheep to walk through or stand in every time they are gathered
- Quarantine all replacements for three weeks. Inspect all feet during this period, treat cases as above and footbath before mixing with the home flock

**FOOT TRIMMING**
There is now clear evidence that trimming feet causes more damage than it cures. This is because:
- The gathering of sheep spreads infection
- If the trimming causes bleeding, this creates a toe granuloma and perpetuates the lameness
- Trimming aggravates the hoof horn and delays healing, even after treatment

The only time trimming should be done is in order to establish a diagnosis and not as part of routine treatment.

**FOOTBATHING**
This is not suitable as the only control measure for footrot but it may be useful in three circumstances:

1. Simple cases of scald in lambs. (Scald in ewes is generally thought to be early footrot and it would be advisable to give injectable antibiotic to individual cases).
2. As an additional measure for all sheep to walk through or stand in following any gathering for other management reasons.
3. For the group of sound sheep (after the lame ones have been separated off) assuming that they are then turned onto pasture that has had no sheep for 10 days. The effect of good footbathing lasts for a maximum of 36 hours. This means that its usefulness is limited if carrier sheep are still within the group or if the sheep are turned back to the same contaminated field.

For further information contact your local XLVets practice: