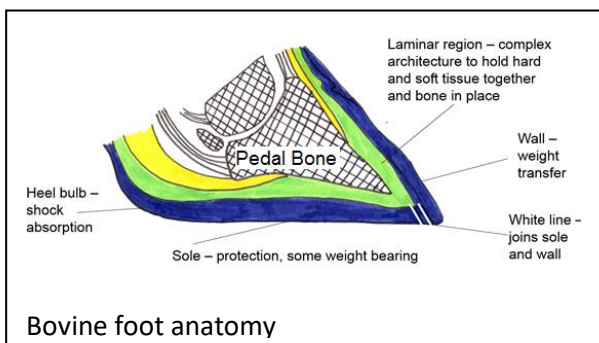


October 2019

Around 30- 32% of all adult cattle are lame at any one time, equating to over half a million cows. The cost is estimated at £450 million per year- an average of £42,000 per farm per year, or 3ppl. This is made up of reduced yields, poorer fertility, higher culling rates and reduced cull value, on top of treatment costs. As well as the financial implications, lame cows are in pain so there are also massive welfare implications, something which is especially pertinent in today's climate.

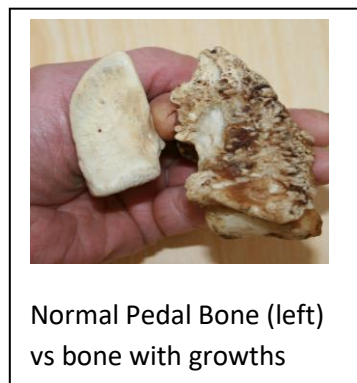
The Red Tractor guidelines from 1st October state that dairy health plans must now include a mobility scoring protocol. Regular mobility scoring combined with prompt effective treatment of score 2 and 3 cows has been shown to be the most effective method of reducing lameness on farm.

The remainder of this newsletter will discuss the latest innovations in best practice and knowledge on lameness.



Irreversible Bony Changes

Once a cow has been lame, she will always be prone to lameness. Reasons for this vary. Cows with sole bruising and sole ulcers can get bony growths on the pedal bone due to



inflammation. These growths lead to pressure within the hoof capsule, so further inflammation and repeated bruising/ ulcers are far more likely.

Role of NSAIDs

'NSAIDs' or non-steroidal-anti-inflammatory-drugs include Metacam, Rimadyl, Carprieve, Ketofen and others.

A study undertaken in 2015 looked at the best treatment for claw horn lesions (sole ulcer/ sole bruising). The study compared:

- trim only
- trim and block
- trim & NSAID
- Trim, block and NSAID

The group which received a block and NSAID treatment showed both an increase in speed of recovery and reduced recurrence of disease. Various theories exist as to why this should be the case- perhaps because the cows feel better, they recover more quickly, continuing to eat well and lie down. Another theory is that the NSAID reduces inflammation so reducing the vicious cycle of changes that occur in the foot.

The take home message is that we should be considering use of NSAIDs in even mild cases of claw horn lesions, and that this is economically viable even when only minor increases in recovery time/ rate are seen.

Once infected, always infected

Digital dermatitis (DD) is the most prevalent lesion causing lameness in UK herds. It is an infectious condition and cows with lesions are

likely to be the most important source of infection to other cows.

Bacteria can also be spread via hoof trimming knives and other equipment, so biosecurity and disinfection are still of utmost importance.

It now appears that if we can prevent heifers becoming infected before calving, cows have a much-reduced chance of having issues with DD later in life. A study in 2007 showed heifers with DD lesions 12 weeks pre calving had a much higher chance of developing lesions after calving.

It has been suggested that once a cow has DD, she will never completely cure and will just enter a cycle of remission and relapse.

Treponemes, the bacteria involved in DD, may have the ability to become dormant. They can also hide deep below the surface of the skin in hair follicles. This means treatment can only ever result in a partial and temporary cure. Prevention of spread within the herd is paramount via slurry management, foot bathing, biosecurity and prompt treatment of new cases.

Further research on this is being undertaken so watch this space.

The Fat Pad

The fat pad, or digital cushion is a cushioned area that runs underneath the heel of the foot, providing protection from concussive forces.

In thin cows, this fat pad tends to be thinner, which links into the age-old theory of thin cows becoming lame. Previously acidosis, or high protein diets leading to laminitis have been blamed for causing lameness, but we now know that anything causing cows to be thin will lead to increased lameness.

It is also likely (although not yet proven) that genetics, breed and



Fat Pad

age also have an impact on fat pad thickness and consistency, meaning in the future genomics may have a major role in helping select for better lameness resilience.

Summary

This newsletter contains some of the latest findings in the world of cattle lameness- Thanks to Owen Atkinson for his recent Vet Times article on which it is based, and to Roger Blowey for images.

If you would like to discuss lameness on your farm, Sarah & Ed are both AHDB trained Mobility Mentors. We also run 2-day foot trimming courses. Please contact the office for more information on either of these.

Welcome Lucy, Grace & Oli!

A few of you will have already met our new farm interns Lucy Fletcher and Grace Boardman. Lucy graduated from RVC in July this year, and Grace has just returned from 2 years working in New Zealand.

Oli Deac has also recently joined the team; his main role will be TB testing, but he also has a keen interest in poultry and game birds!

They are already settling into the team well - please make them feel welcome if you have them out on farm.



Lucy Fletcher
BVetMed MRCVS



Grace Boardman
BVSc (Hons) MRCVS



Oli Deac
MRCVS

Tetra Delta off license use.

Please be aware that the license for Tetra Delta is a course of 2 tubes 24 or 48 hours apart. Longer courses than this are off license so a statutory 7-day milk withhold should be applied. Please consult your vet before using off license treatments. We have heard of a few people failing Red Tractor on this so take care!

All the best, Sarah

