

Focus on digital dermatitis

OCTOBER 2022

Hi All,

I hope everyone is enjoying some long-needed relief from the hot weather and hopefully the tentative re-appearance of green pastures!

In this newsletter, I will be returning to digital dermatitis as a topic of focus. This is a condition that many of you will be familiar with, however with an estimated cost of around £99 per cow and as well as the other implications of lameness on farm, it is well worth a re-visit. With housing season approaching DD is a condition that is likely to rear its head after a hot dry spell and it would seem an apt time to revisit the mainstay of DD management.

Identification

Digital dermatitis lesions are best identified on visual examination which relies on picking up a foot and visually inspecting the interdigital space for a lesion.

The importance of acute and chronic lesions

An important facet of DD disease is the ability of the bacteria (Treponema) to hide itself on apparently healed lesions. These are termed chronic lesions and are the principle source of future infections. Cows with such lesions become re-activated and spread to other animals through slurry as well as other routes like contaminated foot knives. Therefore some of the main principles of managing DD are:

Treating acute lesions

It is imperative acute lesions are identified and treated early before they progress to chronic lesions. These should NOT go through the footbath as formalin can promote the bacteria to enter the chronic dormant state.

Instead **lifting feet, thorough washing** (scrubbing), drying and **topical antibiotic spray** for three consecutive days is most effective for these cases.

Meetings coming up...

BEEF MEETING -ECONOMIC FEEDING OF BEEF CATTLE TUESDAY 18TH OCTOBER @ KITES FARM, GL12 8JY MEDICINE HANDLING COURSE @ THE PRACTICE ON THURSDAY 24TH NOVEMBER 11AM TO 1PM -SUITABLE FOR BEEF AND SHEEP

Identifying and treating new infections	 Vigilant visual inspection of feet Washing and application of topical antibiotic spray to active lesions
Preventing spread and re-activation of old infections	 Routine foot-bathing Slurry management



Types of lesion from left to right - no lesion, early acute lesion, active lesion and healed chronic lesion harboring DD*

*Relun et al. (2012) Effectiveness of different regimens of a collective topical treatment using a solution of copper and zinc chelates in the cure of digital dermatitis in dairy farms under field conditions. Journal of |Dairy SCience. Volume 95, issue 7, pp. 3722-35.





Foot-bath use

Foot-bathing is one of the main components of DD control. It is important to understand what foot-bathing is trying to achieve:

1) Stopping the re-activation of chronic lesions and the subsequent spread off DD to the rest of the herd.

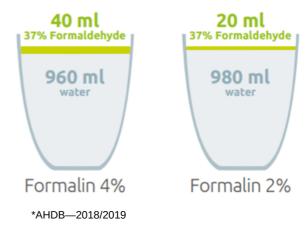
2) Stopping the establishment of new infections on 'clean feet'.

Remember...Non-milkers still count! Heifer groups, dry cow groups and sick cow groups still need treating.

Foot-bath Hot Points

Products

- Formalin at 2-3 % or copper sulphate at 5% (for non-acidified, 1-2% for buffered acidified). Correct dilution rate is essential to prevent chemical injury which can exacerbate both lameness and DD problems - calculate your bath volume before mixing.
- Safety: Formalin is a possible carcinogenic so should be mixed in well ventilated areas with proper PPE. Copper sulphate is an environmental hazard if discarded onto pasture so safe drainage is crucial.



Design

There is no one-size fits all but some general principles:

- 1 Litre solution per cow passage.. CHANGED REGULARLY....all chemicals have a greatly reduced efficacy when contaminated! For a 180 L footbath = 180 cows maximum (for automatics - check dosing regularly).
- 2 dunks per foot. for most cows this equates to a minimum length of 3m regardless of width.
- A general depth guideline of 20-28cm with the bath floor at entrance/exit height.. works well to avoid splashing, ensure coverage and sufficient volume.
- Good cow flow.. e.g. avoiding slopes in and out of baths or step-downs on entrances and utilizing flat topped curbs can reduce hesitation and stress.
- *Frequency is farm-dependent..* as a guideline where DD is under control four consecutive milkings every 2 weeks can be effective in prevention whereas in an outbreak daily footbathing becomes a must.
- *Finally*.. drainage is essential for cleaning as a poorly cleaned bath creates more issues than it resolves.

Key DD facts

Lameness is a poor indicator of how prevalent DD is. Only 50% of cows with active lesions (not including chronic healed lesions) will present as lame; routine visual inspections are key if new infections are to be identified and controlled.

When washing feet in parlour always apply clusters first and angle volume washers downwards to avoid contamination of teats and udders. ALWAYS check front feet and the dorsal aspect of the foot as these account for 10% and 5% of missed lesions respectively.

DD lesions can take up to 4 months to develop, when dealing with an apparent outbreak it is important to realise that culprit cows or un-identified infections likely occurred in the past and are the 'iceberg' below the surface.

Embryo arrivals.....

You may have seen on various platforms that over the last year our new embryo service has been up and running. Opposite the first arrivals have made a safe landing (all three are embryo calves)!

This service has been targeted at **repeat breeders** and we have had some real success in saving viable cows that would otherwise be **confined to the barren list** (like those that carried the calves opposite). In these cases we know that many of these repeat breeders are experiencing pregnancy failure in the early stages; embryos are implanted at a later stage and boost maternal signaling making them a good option to increase the chances of these problem cows staying in calf.

If problem breeders arise on your farm please get in touch to find out more about how you could benefit!



Best wishes,

Have you seen our invitation?

Join us at our skittles evening with food and 1st drink on us on the following dates, starting @ 7pm:

Tuesday 18th October, The Royal Oak Pewsey Tuesday 25th October, Old Royal Ship Luckington Monday 31st October, The Farmers Arms Guiting Power

Numbers will be limited, so places are available on a first come first served basis.



Will Balhatchet BVetMed MRCVS

VET TECH - UPDATE

Our freeze branding service is going very well with lots of bookings. If you are interested in this new service please book early, so we can accommodate the day that best suits you.

Don't forget our Vet Techs do disbudding, calf weighing and vaccinating too!



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