Fact sheet: Digital Dermatitis (Mortellaro)

What causes digital dermatitis (DD):
The cause of DD is still uncertain, although specific bugs called spirochetes have been found in typical cases. DD is characterised by a mild to moderate lameness without swelling unless secondary infection is present. The classic lesion is a strawberry like lesion with erect hairs on the border of skin and horn between the bulbs of the heels. Lesions are smelly and painful when pressure is applied and can also occur anywhere else on the coronary band and between the claws. At this stage the cow may occasionally lift and stretch or shake the affected leg. At a later stage the lesion becomes more invasive with wart like growths and ulceration.

DD occurs mostly in the winter because of increased contact with slurry, but also occurs in the summer. It is often brought into the herd by bought in cattle, often not showing any signs of lameness.

Treatment of digital dermatitis:
Individual cows must be treated by removing any underrun horn and applying an antibiotic spray (e.g. oxytetracycline) twice a day for 3-5 days to a washed and dried lesion. Also check the other foot for lesions and treat if present. Injectable antibiotics are of limited use, the only registered treatment being Tylan.

If multiple cases of DD are present, the provision of a footbath reduces labour. The herd should be put through a pre-treatment water bath and then a medicated footbath of 3 meter length, 1 meter width with a 10-12 cm fluid depth. This should be done twice daily for 3 consecutive days. It can be repeated at intervals of 2-4 weeks depending of the size of the problem. The following solutions can be used:

- lincospectin - 150 g per 200 ltr of water (treatment) 150 g per 400 ltr (control)
- tylosin - 100 g per 100ltr (treatment) 100 g per 200 ltr (control)
- erythrocin- 400 g per 200 ltr
- oxytetracycline- 6-10 g per ltr
- formalin- 2-5%
- copper sulphate- 5-10%
- zinc sulphate- 10%

Beware that none of these products are licensed for use in a footbath. Furthermore, cows should not be allowed to drink the solution as they can be toxic and can result in detectable antibiotic levels in the milk. Formalin is hazardous to human health and should not be used near the milking parlour. Correct disposal of the solutions should be taken care of and can be difficult (a mat or minimal solution bath will reduce drug usage).

Prevention of digital dermatitis:
Hygiene is very important and cubicles and passage ways need to be scraped at least twice a day. An automatic scraper can make matters worse by exposing cows feet to waves of slurry. Foot trimming equipment needs to be disinfected after every use to prevent spread of infection.

Buying in and hiring animals needs to be avoided. If necessary they need to be quarantined for a month or the feet need to be trimmed and cleaned and treated with antibiotic solution for three consecutive days.

Footbaths can be made up at half the strength for preventative use.

Tracks and walkways need to be comfortable to prevent trauma to the skin and hoofs.