



Bovine Digital Dermatitis

What is Digital Dermatitis

A specific, lesion based cattle foot condition was first described internationally in 1974. It was originally reported in the UK in 1987 and it is currently estimated that over 70% of UK dairy herds have been infected. Approximately 25% of cattle lameness is thought to be attributable to digital dermatitis. Unfortunately however, the question as it stands remains largely unanswered at present.

It is thought that the infection is complex and caused by more than one single species of bacteria contributing to the initial onset and continual progression of this disease. *Treponemes* are a bacterial family thought to be involved with the onset of the disease but little is known of their specific biology at this time.

Digital Dermatitis appears to be very contagious and is spread by breaching biosecurity. This may take the form of the introduction of an infected animal to a clean herd or insufficient measures taken to sterilise equipment or clothing of foot trimmers and vets between farms.

Diagnosis

Diagnosis of this disease is sometimes difficult where no lameness is seen but it is common for infected cows to shake the affected foot, shift their weight from one foot to another and walk on their toes. Circular lesions frequently appear on the back of the heel and sometimes on the front of the claw although they can occur anywhere around the coronary band.

Treatment

Systemic Antibiotics

Cephaguard has been licensed for use in the UK as a treatment for dermatitis although the cost, withdrawal periods and doubts over efficacy mean this is not a popular method of treatment.

Topical Antibiotics

This covers effective aerosol treatments based on oxytetracycline. Repeated application has shown better results than a single treatment as has precleaning the foot.

Non Antibiotic Products

Products used include bacteriocidal agents, for example, PVP-iodine and hydrogen peroxide/ peroxyacetic acid as well as caustic agents, such as copper sulphate, formalin, peroxide based products, peracetic acid and others such as zinc sulphate. It is not certain however, how long these products will remain licensed for this purpose. Some alternatives would be antiseptics, acidified copper salts and organic acids with essential oils.

These products can all be used for group therapy in the form of footbaths.