

**EIGHTH SYMPOSIUM  
ON  
DISORDERS  
OF THE RUMINANT DIGIT  
AND  
INTERNATIONAL CONFERENCE  
ON  
BOVINE LAMENESS**

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## EPIDEMIOLOGICAL INVESTIGATIONS OF DIGITAL DERMATITIS IN DUTCH DAIRY CATTLE

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The picture of digital dermatitis seems to have changed since 1974, moving towards milder, less painful, and dryer forms (MORELLARO 1985). Increasingly hyperkeratotic processes can be observed, leading to chronic states of disease with recurrence (CHELI 1986, MERKENS et al. 1992).

In the present study a classification system for lesions caused by digital dermatitis has been developed. In order to study the dynamics of the course of disease the evolution of skin lesions from normal skin to the typical ulcerations and vice versa was studied. Early, typical, healing and suspect cases were differentiated.

A quantitative classification system was developed in order to compare the severeness of conditions in the bovine digit and to standardise the description of signs recorded in a longitudinal cross sectional study with multiple follow-up periods.

This scoring system allows a quantitative evaluation of the course of disease both on the individual and group level. Applying epidemiological methods, risk indicators for disease in the two study groups (2x45 Dutch dairy cows followed for 4 and 11 months respectively) have been described.

The gross clinical findings of this and other studies were compared to histological findings using silver stains for spirochaetes and an

immunofluorescence test for *Campylobacter faecalis*  
applied to smears of wound exudate.

The present classification and scoring systems promote a standardised discussion of the signs of disease and are a contribution to the disentanglement of this complex digital disease with unknown etiology and economic importance.

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