

Characterisation of equine pastern dermatitis (greasy heel, mud fever) in Nordic breeds Døla and North Swedish coldblooded horse

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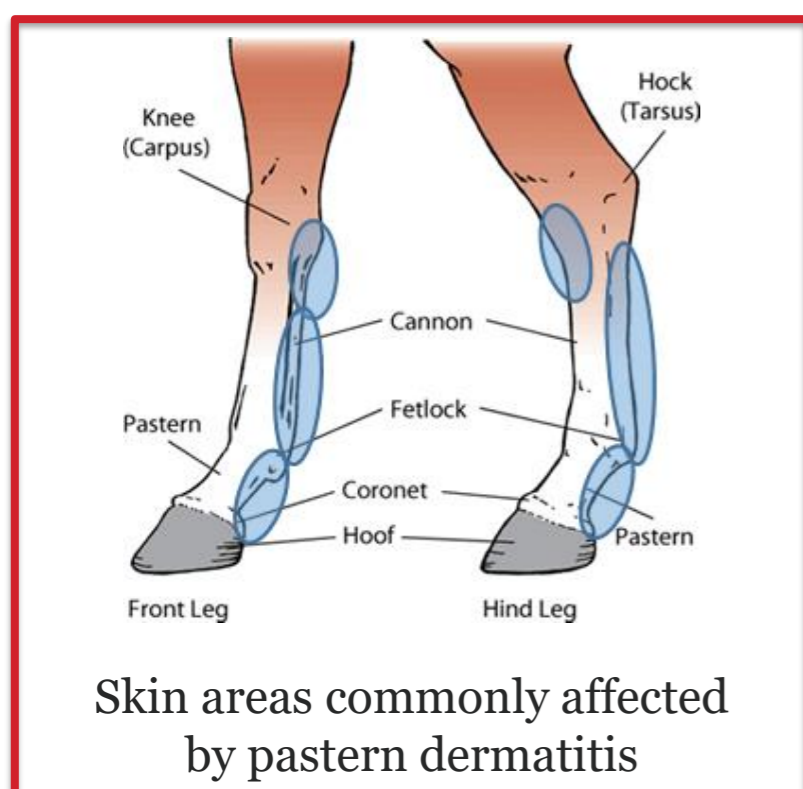
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INTRODUCTION. Pastern dermatitis and leg mange caused by *Chorioptes bovis* are undesirable and often chronic animal welfare problems in horses. The overall aim for this study was to gain deeper knowledge about the occurrence and etiology of pastern dermatitis and associated conditions in horses.

MATERIALS AND METHODS.

Chorioptes mites were detected from skin scrapings with PCR method and direct microscopy (n=106). The distal legs were examined in n=103 horses (58% belonging to North Swedish Draught and Døla horses) in Sweden and Norway using an Equine Leg Dermatitis Score (ELDS) protocol (Fig. 1). A total of 53 samples from 43 horses with pastern dermatitis were examined for bacteria and fungi.



Leg:	HF	VF	HB	VB						
Lesion	Carpus/hock flex	MC/MT rostralt	MC/MT lat/med	MC/MT palmart	Pastern rostralt	Pastern lat/med	Pastern palmart	Coronary band	Chestnuts	Ergot
Alopecia										
Scaling										
Seborrheic callus										
Crusts										
Erosions										
Erythema										
Swelling										
Skin folding										
Nodules										
Subtotal										
Pain (0-10)										
Pruritus (0-10)										
Total										
Colour (0/P)										

Fig. 1: ELDS – each leg was divided in 10 distinct areas & scored 0-5 for different types of lesions (alopecia, scaling, crusts, seborrheic callosity, erosions, swelling, skin folds, nodules and erythema). Pain & pruritus was graded 0-10.

RESULTS AND CONCLUSIONS. Pastern dermatitis was detected in 65% of horses. Highest score for skin lesions was reached on the palmar aspect of the cannon bones, followed by the palmar aspect of the pastern region and the flex region of the carpus and hock.

Clinical signs compatible with keratinization defects “sallenders & mallenders” were recorded in 50/103 (50%) of the horses and 51/103 (50%) were affected with lesions typical for Chronic Progressive Lymphedema (CPL).

Pruritus (itching) was reported in 46% and pain in 28% of all the horses. In 41/106 horses (38.7%) chorioptic mange was diagnosed by at least one test method. *Staphylococcus aureus* and *Streptococcus dysgalactia equisimilis* were detected in 51% and 23% of the examined horses respectively; yeasts and molds were detected in 48% and 69% of horses respectively, while no dermatophytes were detected.

Chorioptic mange was part of the problem in many horses, often characterized by itching behaviour and skin lesions but in 19.5% and 9.7% of *Chorioptes*-positive horses, respectively, neither pruritus nor skin lesions were noticed.

This makes necessary having in place a correct diagnostic protocol and an effective and safe treatment protocol. Bacterial infections might develop in pastern dermatitis areas, while mycological infections seem to be a minor problem.



a. Seborrheic, horizontal callosity (photo K. Bergvall)



b. Skin folding & nodules typical for CPL (photo C. Pettersson)

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