CLAW-HORN LESIONS IN DAIRY HERDS; AN UPDATE ABOUT AETIOLOGY, THERAPY AND PREVENTION OF SOME RELATIVELY NEW DISORDERS

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Introduction: Since 5 years GD has investigated 2 relatively new claw disorders, observed in modern dairy herds: toe ulceration (TU) and non-healing white line disorder (NHWD).

Objective of this contribution: Clinical presentation, pathogenetic background and therapy of these disorders.

Material and methods: On 12 herds with these problems information was gathered about breed, production level, management and housing circumstances. In case of NHWD, an agreement was made to offer the affected and the non-affected underfoot from culled cows to GD for pathological investigation. At a later stage, different therapeutical approaches (among others antibiotic spray and an acetylsalicylacid-based unguent) have been evaluated. Dairy cows having TU were advised to perform a partial-claw amputation, combined with the support of a wooden block under the sound claw. All approaches have been evaluated in more than 25 dairy cows after 1 and 3 months.

Results:

Clinical findings: The within-herd prevalence varied from 0-2% for TU and 1->10% for NHWD. Both lesions were situated in one of the outer hind claws mainly, but in front claws occasionally also. Both lesions were characterized by serious and chronic LAMENESS, affection of the claw-horn capsule, necrotic smell, unsatisfied traditional therapeutical approaches and TU by continuous shortening of the horn shoe. TU seemed to be related to irregularities (steps up and down) in the dairy herd floors and a steep claw angle in heifers. NHWD seemed to be related to feeding at a high energy level and sharp turning, combined with softer horn quality.

Pathological findings: Toe ulceration is characterized by affection (osteïtis) of the pedal bone, while NHWD showed serious damage and/or proliferative changes of the corium in caudo-lateral zone, combined with a double sole, but without an affection of the pedal bone.

Therapy: Amputation of the tip of the claw-horn capsule by TU and an acetyl-salicyl-acid based unguent treatment in case of NHWD was good applicable in practice and provided satisfied results after 1 and 3 month. In both lesions, a wooden block on the inner claw was advised in most cases.

Discussion and conclusions: Although the clinical presentation seems to be comparable, the etiological background for these lesions was different. The dairy practitioner can make an important contribution to ANIMAL WELFARE by preventing and properly treating these painful claw disorders.

Keywords: Claw-horn lesions, treatment