

seems to be a great need to educate dairy farmers and planners of dairy barns of the benefits and factors contributing to claw and leg health and cow comfort. More emphasis should be placed to proper manure removal and urine drainage.

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Evaluation of hoof score changes during time in dairy cows

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Objectives: Hoof scoring known as a method for selecting cows for hoof trimming and evaluating hoof trimming status of the herd. Hoof overgrown reported as one of the most important factors in increasing this score, however the ability of this method on selecting long toed cows is controversial. Since the hoof trimming program was done in dry cows and 120 days after parturition, this current study was done in order to evaluate the effect of hoof growth on hoof scores.

Materials and Methods: The study was done in a farm with 2200 milking cows, average production of 36 lit/day on freestall barns. Foot care programs including hoof trimming and hoof bathing were done regularly. Hundred and 50 cows were selected randomly immediately after drying off. Hoof scoring on a three point scale based on hoof rotation from midline was assessed by five independent observers. Hoof scoring was done in selected cows after drying (group I), twenty days after parturition (Group II), 120 days after parturition before hoof trimming (Group III) and 150 days after parturition, 30 days after hoof trimming (Group IV). All hooves were photographed and five educated observers were scored hooves.

Results: Data statistically tested by One way Analysis of variance in Sigma-stat software. P values less than 0.05 considered significant. No significant changes recorded between different observers among the study. Significant change in hoof scores were recorded in different groups as the highest hoof score recorded in group one (2.08 ± 0.72) and the lowest recorded in group two (1.56 ± 0.64). A significant increase in hoof scores from parturition to 150 days in milk recorded (1.56 ± 0.64 , 1.8 ± 0.71 , 1.85 ± 0.74) as the highest one is on highest days in milk.

Conclusions: It seems that the most important factor in hoof scores is size of udder that can be a result of udder edema or milk production level.

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Lameness in beef cattle: retrospective study of foot disorders (2007-2010)

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Objectives: Identify causes of beef lameness presented to Kansas State University Identify if gender, or season are risk factors Identify claws affected in beef cattle,

Materials and Methods: Computer search of Kansas State University Medical Records All cases being presented for a lameness examination Collected data on cattle from 2007-2010 Records excluded: Dairy breeds Records included: 270.

Results: The medical records of 270 beef cattle were reviewed of which 63.2% were male and 36.8% were female. Beef cattle presented for lameness most often during the summer months (34%) and least during autumn (18%). Causes of lameness were categorized as infectious (44.6%) or non-infectious (55.4%) and infectious lameness subcategorized as either a primary disorder or a secondary infection. All cases of a primary infectious disorder were interdigital phlegmon. Secondary infectious diseases included sole abscess (25.9%), septic arthritis (11.1%), tenosynovitis (2.8%), and pedal osteitis (1.3%). Non-infectious lameness included proximal limb lameness (19.6%), foot trauma (14.6%), hoof horn cracks (9.5%), hoof defects (2.5%), interdigital fibromas (1.9%), overgrown hooves (1.9%), sole bruise (1.3%), subclinical laminitis (1.3%), white line disease (0.9%), osteoarthritis (0.9%), heel erosion (0.3%), sole ulcers (0.3%), and sole hemorrhage (0.3%). The most frequently affected claw was the lateral digit of the hind

limb (36.4%), followed by the medial digit of the front limb (27.1%), lateral digit of the front limb (23.6%), and the medial digit of the hind limb (12.9%).

Conclusions: The findings of this study suggest significant differences in the frequency of disease causing lameness in beef cattle compared to published reports for dairy cattle.

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Wound management in cattle

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Objectives: Information about management of wounds in cattle is scanty. Wound management is not easy in cattle. Appropriate restraint; sedation; and local, regional, or in some cases general anesthesia are essential to effectively examine and manage any wound. Although local anesthesia can delay wound healing, this method of analgesia is more applicable in cattle.

Materials and Methods: Most of wounds in cattle are lacerated and contaminated wound. Management should be included primary closure or secondary intention healing depends on the condition of wound and animal. Wounds should be covered with a clean, dry bandage immediately after injury or when the animal is brought for treatment to prevent further contamination and hemorrhage. These first aids have been minimally for the cases referred to the Vet Med Clinics in which caused compromising of open wounds.

Results: After closure, the movement of wound edges is most important factor of wound healing in cattle especially wounds located over joints or tendons are subject to excessive motion which delays wound healing. Tension against a wound and recurrent irritation may cause chronic inflammation and exuberant granulation tissue development. To minimize the inflammatory reaction, nonreactive suture material and the minimum number of sutures necessary to close the defect are used. A bandage or cast may be applied over the closed wound to minimize contamination and prevent of motion. In my experiences, immobilization by cast and restriction of animals has been very effective for acceleration of wound healing.

Conclusions: Daily monitoring of treated wounds by animal nurse or veterinarian is essential. In my experiences the patients that kept in the hospital with appropriate monitoring had excellent outcome but patient discharged immediately after treating had not a good prognosis.

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Quantification of connective and adipose tissue in bovine digital torus

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Objectives: The digital torus is characterized as a modified subcutaneous tissue that acts in absorption of the impact during the locomotion and helps the venous return of the hoof. This study aimed to quantify the proportion of connective and adipose tissue of the palmar and plantar digital torus of bovines.

Materials and Methods: Were used forelimbs and hindlimbs of twelve bovines, from crossbred Nelore breed, of both sexes, being eleven males and one female, with average carcass weight of 269kg and without locomotor disorders. The fragments of the torus were subjected to conventional histology, cut to a thickness of 4µm and stained with Picrosirius Red. Using a digital optical microscope, the connective tissue was quantified employing the image analysis program Image-Pro Plus® and for the quantification of the adipose tissue, a point counting technique was applied. The data obtained was subjected for application of the normality test of Kolmogorov-Smirnov, following it, the "T" Student test was applied, verifying the occurrence of difference between fore and hindlimbs, with a significance level of 5%.

Results: In the forelimbs was verified that the mean and standard error in the proportion of connective tissue was $50.10 \pm 16.87\%$ and for the adipose tissue was $21.34 \pm 15.76\%$. In the hindlimbs were observed proportion of connective tissue of $61.61 \pm 16.62\%$ and adipose tissue of $20.66 \pm 16.79\%$.