FOOT RADIOGRAPHIC CHANGES IN CATTLE LAMENESS

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Introduction: Digital affections are very frequent in cattle bringing about irregular distribution of weight, producing stress of joints, tendons and ligaments causing severe LAMENESS that could influence the production performance and causes important economic losses. Although this problem has been knew, the bovine foot radiographic changes were a little explored area in buiatrics practice.

Objective: Observe the kind and frequency of radiography foot lesions in cattle LAMENESS.

Material and methods: Digits, including metacarpophalangeal (metatarsophalangeal) joints, were radiographed in 112 foot LAMENESS animals. Dorsopalmar (dorsoplantar) and oblique views were taken using a portable X-ray machine (MinXray HF100 - Toshiba), and 24 x 30 cm rare-earth screen cassettes. Lateromedial view was taken just if necessary. Focal-film distance was kept on 70 cm.

Results and discussion: Dairy cattle (56.25%) and females (60.71%) were majority. Adults (89.29%) were more affected than young animals. LAMENESS was found in only one leg in 72.32% of animals. Each affected member was considered a clinical case, totalizing 145 cases. Both digits of the same leg were affected in 43.45% of times. Hindfeet (80.68%) were more affected by 18 different kinds of the diagnosed diseases. Degenerative joint disease, osteitis, periostitis, osteomyelitis, and septic arthritis were respectively the major LAMENESS causes, totalizing 78.30% of cases, however, there were no radiographic changes in nine cases. Associated osteitis, osteomyelitis, and septic arthritis were common finds (28.05%). The most affected sites were distal phalanx (71.69%) and distal interphalangeal joint (83.19%) because their proximity to the ground and possible contamination by getting worst affections of the bovine foot skin and claws.

Conclusions: Radiographic study of bovine foot lame could help to obtain an accurate diagnosis and prognosis and ensure a correct surgical or medical care to the patient.

Keywords: Bovine, LAMENESS, frequency, osteoarticular, radiology