predisposing factors like change in weight distribution among digits, micro cracks in Interdigital space and possibility of an anaerobic condition in Interdigital region may play a role in this acute disease. Increasing of locomotion scores may be a result of the effects of predisposing factors.

"Lameness and changes in blood cells: changes in blood leukocytes of cows lame compared to healthy cows"

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In this study, 42 patients with 30 beef cattle healthy (as controls) were selected, blood components in atients and healthy control cows were measured by standard techniques. Reduced (0.05< p) significant number of red blood cells, hemoglobin and cell volume in cattle, compared with control patients there. Number of white blood cells (leukocytes), especially neutrophils and monocytes in cattle patient was much higher than normal. But the number of lymphocytes and eosinophils between the two groups were almost identical. Lameness in dairy cattle disease is damaging to farmers, which will lead to reduced production. It also causes pain and discomfort of animals that otherwise survived the damaging effects of treatment and care offers. In livestock condition was studied copper samples were taken from the jugular vein and was shed into sterile test tubes containing the anticoagulant substance (blood samples from healthy cows were used as controls). Fiber serological tests and blood cell count extend two groups were compared, including RBCs and WBCs (leukocytes). Also, white blood cell count, hemoglobin and PCV by standard techniques of blood were measured. Significant reductions in the amount of red blood cells and hemoglobin, the patient group than the control group was observed but in contrast the number of white blood cells including neutrophils and monocytes in the patient group was increased. In addition, more careful examination and realized that despite the increased number of white blood cells, the number of lymphocytes and eosinophils remained almost constant. In this study anemia Normochromic Normocytic also became clear that it seems to cause cytokine associated with inflammation and is haptoglobin. Increased neutrophils and monocytes may also be due to inflammatory response and stress is caused by pain.

**Morpho – Pathological study of white line zone injuries on solar surface of digit in dairy cattle**

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White line disease has been defined as a clinical entity resulted with increased culling rates in large dairy operation in Iran. Although laminitis is generally regarded as the primary cause for the pathological changes within the white line region of the sole, other contributing factors should be considered. In this case series study cows with white line lesions were identified in one large dairy herd consisting 2800 lactating cows with records of lameness events over a 12 months period (June 2008-2009) in the vicinity of Tehran, Iran. Cows were kept in free stall with sand bedding and lameness evaluation was carried out every other month for the entire period of study using 5 points scoring system by sprecheer et al 1997. Close observation of the involved claws was made in the hoof trimming chute following corrective trimming and debridement procedures. The criteria such as hemorrhage at the abaxial sole/white line region in zone 1 and 2, the separation at the sole from the white line at the junction of the sole with the white line in zones 1 and 2 and the complicated abscess in zone 3 served as a basis for the diagnosis. Management of individual white line lesion was carried out and culling was considered in cases of older cows with prolonged lactation and low milk yield. White line lesions were confirmed on 232 of cows with the score of 3 and 4. The mean monthly incidence was 17.10% (9.55% to 27.14%) mostly recorded for first lactation cows. More than 75% of lesions were found at outer claw of the hind-limbs and sub-solar abscess in zone 3 progressed to the septic osteitis of the third phalanx with osseous sequestration in 33 cases. Complete recovery was achieved in 82% of cases following non-irritating topical ointment therapy with application of either bandage or foot block. This study showed that laminitis-associated white line disease response well to appropriate therapy and correct recording can play an important role for lameness prevention strategies in large dairy herds.

**Morphometric and radiographic study of proximal sesamoid bones in digits of camels**

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Proceedings of the 3rd ISVS & 9th ISVSAR 2011
Session: Cattle Lameness

The Sesamoid bones are developed along the course of tendons or in the joint capsules at points where there is increased pressure. This study was carried out to find out the radiographic and morphometric characteristics of proximal sesamoid bones in camel. 20 digits of forelimb and hind limbs (right and left) of camel were collected from the Marvdast slaughter house. Standard radiographs of latero-medial, dorso- palmar or dorso-plantar views were obtained from each specimens. Also each specimen was dissected and following the gross anatomical study of the position of sesamoid bones, the length and width of each sesamoid bone was measured. This study revealed that the proximal sesamoid bones were elliptical shape with high sagittal diameter and palmar or plantar convex surface and dorsal concave surface. These sesamoid bones were placed at the flexor side of the metacarpophalangeal joint. There was a significant difference in length and width of sesamoid bones of digits between left and right forelegs and hind limbs. But there was no significant difference in dimensions of these sesamoid bones in fore limbs in comparison to hind limbs. The proximal sesamoid bones in camel are similar to that of the cattle both radiographically and morphometrically.

Occurrence of Onchocerca reticulata infection in the deep digital flexor tendon in a horse: a case report

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Onchocerca reticulata is a parasite of horses, mules and donkeys. Adult worms are found in the connective tissue of flexor tendons and suspensory ligament of the fetlock, mostly in the forelimb. The prevalence of Onchocerca sp. infection in horses increases with age. In a survey ten percent of horses less than one year old were infected, 28% of horses one to five years old, 48% of horses six to 15 years old, and 90% of horses over 16 years old. The adults live and breed in subcutaneous fibroid nodules. The young (the microfilariae) are carried by the lymph and are found chiefly in the skin, subcutaneous connective tissues, and eyes. A research was conducted on 10 adult indigenous Iranian horses from both sexes. Tissue sections were processed routinely; for histopathological evaluation from deep digital flexor tendon of forelimb. Observation of the specimens revealed that in one of the DDF there is some nematodes named Onchocerca reticulata. In horses, new infections with O. reticulata may cause swelling of the suspensory ligament, DDFT and SDFT, and a hot edematous swelling of the posterior part of the cannon which persists for 3-4 weeks. After the swelling subsides, the suspensory ligament remains thickened and small cascated or calcified nodules may be palpated. Affected animals are lame while the area is edematous and swollen, but many recover when the swelling disappears.

Case report: Report of congenital syndactyly (mulefoot) in cattle

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Syndactyly in cattle also known mulefoot is a rare malformation which is inherited as an autosomal recessive trait with variable penetrance in different cattle breeds. Mulefoot refers to the fusion or non-division of the two developed digits of the bovine foot. The variable expressed syndactyly phenotype in cattle is most often seen in the front feet, but all four feet underlying a right-left and front-rear gradient may be involved. The bovine syndactyly consists mainly of pairs of horizontally synostotic phalanges and adaptive structural changes develop proximal to the fused digits. A 7 days old Holstein female calf with clinical signs contain: stiffness during walking and weight bearing on toes, syndactyly was observed in all of its limbs. No other congenital malformation was observed and it had normal appearance. Radiograph in DPI, DPA and Lateral were taken and radiograph findings were include: absent proximal sesamoid bone, complete fusion in midline phalangeal, compact single pedal bone.

Fluor analysis of distal sesamoid bursa and distal interphalangeal joint in fresh normal cadaver foot and comparison with normal alive in cattle

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Synovial fluid analysis is a group of tests that examine joint (synovial) fluid. Physical, cellular and some of biochemical parameters of synovial fluid have