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. First, livestock condition was studied blood 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). After serological tests and blood 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.

<table>
<thead>
<tr>
<th></th>
<th>RBC</th>
<th>Hb</th>
<th>PCV</th>
<th>WBC</th>
<th>Neutrophil</th>
<th>Monocyte</th>
<th>Eosinophil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lameness Group</td>
<td>6.42</td>
<td>9.86</td>
<td>29.5</td>
<td>13.24</td>
<td>84.23</td>
<td>3.2</td>
<td>.98</td>
</tr>
<tr>
<td>Healthy Group</td>
<td>7.92</td>
<td>11.32</td>
<td>34.12</td>
<td>8.10</td>
<td>58.22</td>
<td>1.98</td>
<td>1.38</td>
</tr>
</tbody>
</table>

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 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 sprechee 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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