THE STUDY ON THE RELATIONSHIP OF ABOMASAL DISPLACEMENT AND FATTY LIVER SYNDROME IN DAIRY COWS

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Background: In cattle, diseases of abomasum are of great importance and include right and left displacement, torsion, impaction, pyloric stenosis and ulceration. Displacement of the abomasum has become one of the most important metabolic and organic internal disorders of cattle and the disease is most prevalent in high performing milk breeds. Abomasal displacement occurs most frequently in high yielding cows during early lactation. It has been reported that feeding a large amount of concentrations or corn silage to dairy cows inhibits the motility of the resulting in gas accumulation followed by dilation and atony and thereby causing bovine displaced. Abomasal displacement, ketosis, parturient paresis, retain placenta and endometritis has been often associated with a fatty liver.

Aims: This investigation was undertaken to determine the relationship of abomasal displacement and fatty liver syndrome in dairy cows.

Methods: this study, twelve cows with abomasal displacement (7 RDA, 5 LDA) and 10 healthy cows (after calving) have been used as materials. Age of animals varied from 3 to 7 years. Blood and liver biopsy samples were taken from all the cows. Sera were analysed for glucose, cholesterol, triglyceride, Total bilirubine, calcium, magnesium, phosphorus, Aspartate aminotranspherase (AST), Alkalen phosphates (ALP), Creatin kinase (CK), total protein (TP) and albumin (Alb).

Results: In 10 of all the cases, various degree fat infiltration of liver was observed. But two cases have not shown any fat infiltration of the liver. The differences in AST, glucose and Mg concentrations of healthy cows compared to cows with abomasal displacement were found to be significant (p<0.01). The differences in ALT, Ca and albumin concentrations of healthy cows compared to cows with abomasal displacement were found to be significant (p<0.05). But, there was no significant in ALP, cholesterol, triglyceride, total bilirubine, Ca, P and TP concentrations of healthy cows compared to cows with abomasal displacement.

Conclusion: The results of the present study that showed various degree fat infiltration of the liver in the cows with abomasal displacement.

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