Blood energy metabolites and lipid profile in cattle with clinical and subclinical mycoplasma mastitis

Mona Momen*, Mohammad Heidarpour, Babak Khoramian

Department of Clinical Sciences, School of Veterinary Medicine, Ferdowsi University of Mashhad

***correspondence author: mona.momen@yahoo.com**

Mycoplasma is a pathogen in cattle with high virulence which can cause different infections, such as mastitis, pneumonia, otitis, polyarthritis, abortion and meningitis. The objective of the present study was to evaluate the changes of energy metabolites including non-esterified fatty acids (NEFA), beta-hydroxybutyrate (BHB) and glucose in cattle with clinical and subclinical mycoplasma mastitis. Cattle in the clinical mastitis group presented a significant increase ($p \leq 0.05$) in BHB, when compared to the control group. A significant reduction ($p \leq 0.05$) in serum glucose concentration in clinical mastitis group was observed, when compared to the subclinical mastitis and control groups. No significant differences were observed for NEFA concentrations between the different groups. The results of the present study revealed that cattle with clinical mycoplasma mastitis showed more severe negative energy balance than subclinical mycoplasma mastitis and healthy cattle.

Keywords: Cattle, Mycoplasma, Mastitis, Energy Metabolites.

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