J Vet Clin Vol. 24, No. 2(Suppl.) October (2007)

Relationship between chemistry level and several hematocytes level of domestic cow in Korea

Yoon-Jung Do, Il-Sun Ryu*, Lee Keun Woo[1], Tae-Young Hur, Seok-Jin Kang, Chang-Yong Choi, Youn-Hun Jung, Dong-Su Son

National Institute of Animal science,
[1]The college of veterinary medicine in Kyung Pook National University

To get the basis of the study about metabolic disease of domestic cow in Korea, we analyzed the relationship between several factors to have effect on the condition of cow and hematocyte and blood chemistry level of cow. 294 Samples to study were collected from National Institute of Animal Science(NIAS) and 15 farms in Gyeonggi Province. In addition, keton body level of 84 cows and MUN of 54 cows were detected. As a result of analyses for the relationship between chemistry level and hematocytes level of domestic cow, MUN and Lympocyte(K/μl) were in high negative relationship. On the other hand, MUN was in high positive relationship with BUN, GGT, CHO (p-value 0.01). Milk keton body level of 84 cows was in 0~0.5mg/dl of normal range(88.02%), 9 cows were in semi-positive level of 1mg/dl(9.0%), and 2 cows were in positive level of 2 ~ 10mg/dl. Therefore proportion of cow to need medical examination of veterinarian was 11.2%.

As a result of analyses for the Urea Nitrogen content of 54 cows, 27 cows were in16.1mg/dl, a cow was 13.8mg/dl. And in the bulk milk, 32 tests of 41 tests were in 16.1mg/dl. Therefore these results are thought that can be used to compare with the aspects of metabolic diseases and for prevention and prediction of metabolic diseases we need more study from now on.

* Corresponding author: lriisryu@rda.go.kr