

Effects of Lactoferrine Administration With Different Dosages on Blood Glucose and Total Lipid Serum Levels at Some Observation Times of the Post Extensive Enterectomy Operation

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ABSTRACT

The aim of this study was to evaluate an effects of lactoferrine with different dosages on blood glucose levels and total lipid serum levels on some observation times of the post-extensive enterectomy operation. Cats as animal model used in this study. After two-week adaptation, they were subjects to enterectomy 75%. The study used a factorial complete random designs with two factors and three repetitions. The first factor was the administration of lactoferrine dosages consisting of 0 mg (P0), 1 mg (P1), 5 mg (P2), 10 mg (P3). The second factors included the blood sampling times (from chepalica veins) for blood glucose (Trinder P methods) and total lipid serum observation (Phospho vanillin method) at day 15 (H0) and 30 (H1). The data collected were analyzed using ANOVA test and then proceeded with Duncan Multiple Range Test based on significance 5 %. The results did not show an interaction between the lactoferrine dosages administration and observation times of the blood glucose and total lipid serum levels. The blood glucose observation indicated that P3H0 reached the highest blood glucose level ($96 \pm 22,61$ mg/dl) which did not significantly differ from P1 and P2 both at day 15 and 30 . The control group without lactoferrine treatment at day 15 and 30 indicated the lowest blood glucose level ($72 \pm 2,83$ mg/dl and $282 \pm 60,81$ mg/dl). Total lipid serum observation demonstrated that P1H0 reached the highest total lipid serum level ($500,67 \pm 125,38$ mg/dl) which did not significantly differ from P2 and P3 at day 15 and 30. P0 at day 15 and 30 indicated the lowest total lipid level ($350 \pm 33,94$ mg/dl and $282 \pm 60,81$ mg/dl). Conclusion, the lactoferrine administration at post extensive enterectomy operation could increase the blood glucose and total lipid serum levels.

Key words: Lactoferrine, Extensive enterectomy, blood glucose, total lipid serum.