

THE EFFECT OF LACTOFERRIN ON THE INCREASE OF HEIGHT AND WIDTH OF VILLI OF JEJUNUM SMALL INTESTINE POST 75% EXTENSIVE ENTERECTOMY

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ABSTRACT

The purpose of this research is to investigate the effects of Lactoferrin on the height and width of villi jejunum small intestine post 75 % extensive enterectomy. Sample consisting of 12 local adult female cats aging of one year old and 2-2,5 kg of body weight. All experimental animals were placed in the individual cage and adapted to environmental condition for two weeks. All experimental animals were subject to 75 % extensive enterectomy. Sampling at operation day is 2 cm from jejunum small intestine was threw away. One week after 75 % extensive enterectomy, Lactoferin were orally administered 2 times daily by 1 mg/kg bw, 5 mg/kg bw, and 10 mg/kg bw respectively for group 1, group 2, group 3 and 0 mg/kg bw for control group. At day 30 after final treatment, experimental animal were secrified and 2 cm at proximal small intestine anastomosis (jejunum) was drawn for histological examination. Data were tested by using ANOVA-SPSS, according to Santoso (2001). The result of this research indicated that there were highly significant differences ($p < 0,01$) between control group and all three treatment groups on width of villi of jejunum small intestine, but no significant differences ($p > 0,05$) between control group and three treatment groups of the height of villi of jejunum small intestine post 75 % extensive enterectomy. Although, the increase of width of villi of jejunum small intestine post 75 % extensive enterectomy, has not establish yet that Lactoferrin increased of width of villi of jejunum small intestine. This fact is caused on the enclosure-2, the width of villi of jejunum small intestine before the 75 % extensive enterectomy there is significant differences ($p < 0,05$).

Key words : Lactoferrin, enterectomy, small intestine adaptation, small intestinal villi