EFEK PEMBERIAN LAKTOFERIN TERHADAP ADAPTASI USUS HALUS PADA KASUS *SHORT BOWEL SYNDROME* PASCA OPERASI ENTEREKTOMI EKSTENSIF

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INTISARI

Penelitian ini bertujuan untuk mengetahui manfaat laktoferin terhadap adaptasi usus halus pada kasus *Short Bowel Syndrome* pasca enterektomi ekstensif. Sebagai hewan model digunakan anjing kampung sebanyak 9 ekor, jenis kelamin betina, umur 3-4 bulan, berat badan 4-5 kg. Anjing percobaan secara acak dibagi dalam tiga kelompok. Kelompok I menerima perlakuan enterektomi 75% tanpa pemberian laktoferin. Kelompok II menerima perlakuan enterektomi 75% +pemberian laktoferin dosis rendah 0,05mg/g berat badan/hari. Kelompok III menerima perlakuan enterektomi 75% + pemberian laktoferin dosis tinggi 0,5mg/g berat badan/hari. Penelitian berlangsung selama 30 hari. Gejala klinik, lebar vili, kadar elektrolit serum, kadar lipid serum diamati dan diukur selama penelitian berlangsung.

Data yang diperoleh dianalisa secara statistik dengan *Analysis of Varian (*ANOVA) yang dilanjutkan dengan dengan uji *Duncan Multiple Range Test* (DMRT). Hasil penelitian menunjukkan pemberian laktoferin signifikan ($p<0,05$) meningkatkan kadar elektrolit dan lipid dalam serum, meningkatkan lebar vili usus, serta mengurangi gejala klinik yang timbul. Dengan demikian dapat disimpulkan bahwa laktoferin dapat memperbaiki absorbsi usus sekaligus juga memperbaiki adaptasi usus pada kasus *Short Bowel Syndrome* pasca enterektomi ekstensif.

Kata Kunci :. *Short Bowel Syndrome,* laktoferin, adaptasi usus halus, enterektomi ekstensif

EFFICACY OF LACTOFERRIN FOR INTESTINAL ADAPTATION IN SHORT BOWEL SYNDROME FOLLOWING EXTENSIVE SMALL BOWEL ENTERECTOMY

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ABSTRACT

The aim of this study was to evaluate the effect of lactoferrin on intestinal adaptation after 75% enterectomy of the small intestine and consider its potential application in **Short Bowel Syndrome (SBS).** Dogs as animal models using in this study with specification female, 3-4 months old, 4-5kg body weight. These animals were randomised into three groups (n=3 in each group), as follow : 1) underwent 75% enterectomy of the small intestine without lactoferrin,2) underwent 75% enterectomy of the small intestine and received lactoferrin peroral with lower dose 0,05mg/g body weight /day, 3) underwent 75% enterectomy of the small intestine and received lactoferrin peroral with high dose 0,5mg/g bodyweight /day. Animals were assigned to 30 days of treatment. Symptoms, villi width, electrolyte and lipid serum, were analysed and measured.

Statistical Analysis was carried out by Analysis of Varians (ANOVA), continued with Duncan Multiple Range Test (DMRT). The results of these experiment define lactoferrin treatment significantly ($p<0,05$) increased value of electrolyte and lipid serum, villi width, and reduced symptoms. Finally, the author conclude that lactoferrin improve intestinal absorption thus enhance intestinal adaptive respons to extensive enterectomy.

Keywords : Lactoferrin, Short Bowel Syndrome, Intestinal Adaptation, Extensive Small Bowel Enterectomy.