The Effect of Giving Single Strain Probiotics

Abstrak:

Introduction: Sepsis as a result of bacterial translocation from the gastrointestinal tract (GIT) is a known associate of morbidity and mortality in patients with severe burns. This translocation is influenced by the GIT flora. A less investigated mechanism that seems to contribute to sepsis in burns is bacterial translocation the passage of microorganisms and/or their products from the gastrointestinal tract (GIT) lumen. Retrospective study of burn injured patients admitted in the burn care unit Dr. Soetomo Hospital Surabaya, 14.1% patients were died. Within periode June 2009-June 2011 about 60% of mortality rate from burn patients (10.38%) due to sepsis. In burn injury, there is an increase of intestinal permeability reperfusion resulted in an increased risk of bacterial translocation and endotoxemia, histological lesions in mucosa and decreased levels of IgA and mucin. Oral consumptions of Bifidobacteria supplement can reduce the ratio of the balance of aerob bacteria, endotoxemia and mucosal lesions and reduce the symptoms of digestive disorders such as diarrhea in burn patients. Several treatment options were investigated to decrease bacterial translocation, among them a per os supplement of lactobacillus bacteria.

Objective: Our study aimed to assess the effect of the probiotic single strain Lactobacillus and Bifidobacteria supplementation to increased the secretory IgA in intestines in burn patients.

Method: An experimental study, double blind clinical trial. Clinical trial was carried out in minimal 16 burn patients. They were divided into 2 groups, 1 group ingested daily Lactobacillus supplement probiotic and the other took Bifidobacteria supplement probiotic, both for 14 days. Treatment was started on day 4 post burn injury. The degree of secretory IgA was evaluated on day 4 (before treatment) and day 14 from faecal specimen. Data will be compared with results from previous research.

Keyword:

probiotics, sIgA, Lactobacillus, Bifidobacteria, Sepsis

Daftar Pustaka:

Koren L. et al The Effect of Lactobacillus Bacteria Supplement on Sepsis and Its Complications in Patients with acute Burns J Burns 2007 USA