Effect Of Adhesin Protein Induction Of Lymphocyte Cell Count And Fibroblasts On Aggressive Periodontitis

ABSTRACT

Background: the prevalence of aggressive periodontitis patients in clinical Dentistry University Airlangga periodontia appear to continue to experience increased, in 1991 amounted to 9% to 13% in 2002. Observations made in January - December 2006 showed that there are 288 people with periodontitis and 57 of them with aggressive periodontitis. Periodontitis-causing bacteria is bacteria Actinobacillus actinomycetemcomitans which are attached to the teeth. Dominant aggressive periodontitis Actinomycetemcomitans with frequencies of 90% compared to 21% of chronic periodontitis and in healthy individuals by 17%. Bacteria Actinobacillus actinomycetemcomitans on dental plaque is associated with aggression of periodontal tissue destruction and compounded by the existence of genetic and environmental factors. Fibroblasts was instrumental in the process of fibroplasia. The main function of lymphocytes is releasing antibodies. Purpose: Prove a. actinomycetemcomitans adhesin protein can cause tissue damage so that the body does the healing response with increasing the number of lymphocytes and fibroblasts cells in animals try rats wistar. Materials and methods: the bacteria a. actinomycetemcomitans, wistar rats were divided into 4 groups, each group of 10 rats. Group 1 is the control group induced by NaCl 0.9%, the Group 2,3 and 4 were group of treatment to 2 to 4 to be induced with adhesin and whole cell of a. actinomycetemcomitans. Results: the mean value preferential treatment on fibroblasts and lymphocytes are cells of the group is greater than the mean value of the control. There was no significant difference in the groups of lymphocytes and fibroblasts (p>0.05). Conclusion: Actinobacillus actinomycetemcomitans induced adhesin protein can cause inflammation that causes cells to lymphocytes increased devastation then accompanied an increase in fibroblasts cells.

Keywords: Actinobacillus actinomycetemcomitans, Limfosit, Fibrobas.