Reaksi radang pada lidah dengan tongue piercing (kajian in vitro pada lidah tikus jantan sprague dawley)

Abstrak

Today tongue pierching has become increasingly popular in the society. Several case reports associated with tongue pierching have presented various complications, such as tooth fracture, viral infection (HIV, Hepatitis B and C, herpes simplex, Epstein Barr), fungal infection (Candida spp), pain, altered taste, edema, paresthesis, gingival recession, prolonged bleeding, contact dermatitis. However, there is no scientific evidence to reveal histopathological change in tongue pierching. The aim of this study is to investigate the inflammation response to tongue pierching in Sprague Dawley rats. Eighteen Sprague Dawley rats were divided into one control group of 3 untreated rats and three experimental groups of 5 rats each, according to the duration of tongue pierching until the end of 1st week (A), 6th week (B), and 12th week (C). At the end of treatments, the rats were anesthetized and sacrificed. Paraffin embedded tongue specimens were prepared for histological examination with H&E staining. The number of on inflammatory cells (PMN leukocytes, lymphocytes, macrophages) was counted under light microscope. All experimental procedures were carried out under approval of study protocol by the Health and Medical Research Ethics Committee, Faculty of Medicine, Gadjah Mada University, Yogyakarta. The results of this study indicated that the number of PMN leukocytes, lymphocytes, and macrophages was increasing to the 1st week after tongue piercing, but the number of PMN leukocytes and macrophages was still increasing after 6th untul 12th weeks of piercing, but the numbers of PMN leukocytes was decreasing. One way ANOVA ($p<0.05$) showed significant differences in the numbers of PMN leukocytes, lymphocytes and macrophages between the groups of 1st, 6th and 12th weeks after piercing. It was concluded that tongue piercing induce inflammatory response for 12 weeks in Sprague Dawley rats.