**EKSPRESI INTERLEUKIN -1 ALFA (IL-1α) PADA HIPERSENSITIF KONTAK AKIBAT TONGUE PIERCING**

(INTERLEUKIN -1 ALFA EXPRESSION IN CONTACT HIPERSENSITIVITY CAUSED BY TONGUE PIERCING)

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Abstract

Tongue piercing is increasingly used by teenagers lately. Studies have reported the tongue piercing's side effects on oral health such as poor oral hygiene, tooth and periodontal destruction and taste bud destruction. Tongue piercing may cause hypersensitivity which may be caused by the components of tongue piercing. Interleukin (IL)-1α expression may increase in sensitization and elicitation phase of contact hypersensitivity. The aim of this study was to know the IL-1α expression induced by tongue piercing. This study used fifteen two-months year old male Wistar rat (Rattus norvegicus) which was divided into two group, control group treated by vaseline (I) and treatment group. Treatment group divided into three groups, named tongue piercing treatment until sensitization phase (IIA), elicitation phase for 24 hours (IIB), and 48 hours (IIC). Inteleukin-1α expression using immunohistochemistry (IHC) staining from tissue specimen was taken from the tongue. The result of this study showed that IL-1α expression in sensitization phase was higher than elicitation phase and was a significant difference of IL-1α expression between sensitization and elicitation phase (p<0.05). LSD test result showed there was a significant difference between sensitization phase and 24 hours elicitation phase, between sensitization phase and 48 hours elicitation phase. In conclusion, there was a difference of IL-1α expression between sensitization and elicitation phase of contact hypersensitivity induced by tongue piercing.

Key words: tongue piercing, contact hypersensitivity, interleukin -1 alfa