**IL-17 Expression in Oral-Candidiasis-Immunosuppressed-Models treated with Acanthus Ilicifolius Extracts**

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**ABSTRACT**

**Objective(s)**. Immunosuppressed conditions are susceptible for fungal invasion. *Candida albicans* (*C.albicans*) are the most prevalent species that caused oral candidiasis. IL-17 pathway play role in antifungal immunity. *Acanthus ilicifolius* (*A.ilicifolius*)’s leaves chloroform extracts has antifungal agent against *C.albicans* growth. Nystatin is regularly used for oral candidiasis. The aim of this study was to compare treatment effect of *A.ilicifolius*’s leaves extracts with nystatin on IL-17 expression in oral candidiasis immunosupressed model.

**Method(s)**. This study was true experimental with post test only control group design. Sixteen male *Ratus Novergicus Wistar* strain, aged 12 weeks, average 250g weight and healthy were immunosupressed with dexamethasone (0,5mg/day) and tetracycline (1mg/day) orally for 7 day, after that induced by *C.albicans* (ATCC-10231) 6x10⁸ on the tongue of rats for 2 weeks (3 times/week). Rats divided into four groups (n=4/group): no-treatment(G1), nystatin-treatment(G2), A.Ilicifollius(8%)-Treatment-2(G3), and A.Ilicifolliu(16%)- Treatment(G4). The rats was treated for 14 days. After treated the tongue were biopsied and IL-17 expression were examined by immunohistochemistry. The result observed using microscope(400x magnification) and statistically analyzed (One-way ANOVA, LSD-test, p<0,05).

**Result(s)**. IL-17 expression of G2(11,5±1,29), G3(13,7±2,06) and G4(13,5±2,08) are higher than G1(3,5±1,29).There was no significant differences between G2 to G3 and G4(p>0,05).

**Conclusion(s)**. A.ilicifolius extract can increase expression of IL-17 in oral-Candidiasis-immunosupressed-model. A.ilicifolius extract has the same effect compare with nystatin.

**Key words** : immunosupressed, oral candidiasis, candida albicans, achanthus ilicifolius, IL-17

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