

Hubungan Antara Kadar Insulin-Like Growth Factor-1 (IGF-1) Dalam Serum Dan Derajat Keparahan Akne Vulgaris

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Abstract

Background Acne vulgaris is a skin disease that is commonly found in the community. Acne vulgaris has been known had a complex pathogenesis and IGF-1 was allegedly had a role in the pathogenesis of acne vulgaris. IGF-1 can enhance keratinocyte cell proliferation and increase sebum production. However, the role of IGF-1 in the various degree of acne vulgaris severity remains unclear. Objective To determine the correlation between the serum IGF-1 level and the severity degree of acne vulgaris Method The study was conducted with cross sectional method starting from January until June 2010. In this study, we recruited 21 acne vulgaris patients consisting of 7 patients had a mild severity degree of acne vulgaris, 7 patients had a moderate severity degree of acne vulgaris, 7 patients had a severe severity degree of acne vulgaris and 21 patients as the control group. We measured the serum IGF-1 level of each patients and then analyzed statistically the measurement result correlation with the various degree of acne vulgaris severity. Result We found that the mean IGF-1 serum level in the mild acne vulgaris severity group was $232,43 \pm 116,27$ ng/ml, in the moderate acne vulgaris severity group was $328 \pm 123,50$ ng/ml, in the severe acne vulgaris severity group was $249,29 \pm 83,2$ ng/ml, and in the control group was $246,38 \pm 95,19$ ng/ml with p value= 0,272. Statistical analyzes with Spearman Correlation Test revealed that there is no correlation between the serum IGF-1 level and the severity degree of acne vulgaris. ($r=0,039$; $p=0,868$) Conclusion In this study we found no correlation between the serum IGF-1 level and the severity degree of acne vulgaris. Joice Sonya Panjaitan