

CHRONIC PERIODONTITIS IN OBESE AND NON-OBESE PATIENTS

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Introduction: Obesity is a multisystem condition that may develop due to reasons such as excessive energy intake, physical inactivity and genetic susceptibility. An increase in body mass index (BMI) has been suggested to increase susceptibility to periodontitis.

Objective: The objective of this study was to compare the periodontal status between obese and non-obese Malaysian adults aged 25 to 65 years having chronic periodontitis at Dental Clinic Hospital Universiti Sains Malaysia (Hospital USM).

Methods: A total of 60 patients were selected and equally divided into two groups; 1. The test group which included obese patients with BMI ≥ 30 and diagnosed with chronic periodontitis and 2. control group which consisted of normal weight patients with BMI ≤ 25 and diagnosed with chronic periodontitis. Periodontal parameters such as periodontal pocket depth (PPD), clinical attachment level (CAL), gingivitis and plaque scores were measured and recorded in both test and control groups.

Results: The subjects comprised 50% males and 50% females. The test group had significantly greater PPD 5.32 ± 0.80 as compared to control group 4.58 ± 0.71 . Similarly, CAL was high 5.21 ± 0.95 in test group than that of control group 4.66 ± 0.31 ($p < 0.05$). The gingivitis and plaque scores in test group 35.96 ± 24.13 , 37.85 ± 24 were not different as compared to control group 35.97 ± 27.03 and 42.90 ± 25.49 ($p > 0.05$) respectively.

Conclusions: Obese patients had worse clinical periodontal conditions despite similar oral hygiene status. These findings also suggest that there is an association between obesity and periodontitis among Malaysian adults attending dental clinic Hospital USM.

Keywords: Gingivitis, Obesity, Oral hygiene, Periodontitis, Plaque

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