

ABSTRACT

A Comparison of Salivary Properties and Caries Status between Beta-Thalassemia Major Patients and Healthy Patients in Hospital Wanita dan Kanak-Kanak Sabah

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Introduction: Thalassaemia is the most common inherited blood disorder in Malaysia, and the majority of patients are from Sabah. The disease itself poses significant morbidities, and its management is costly. Previous studies showed increased caries prevalence among these patients attributed to possible changes in saliva properties. The objective was to investigate the prevalence of saliva properties and caries among patients with thalassaemia compared to healthy individuals. **Methods:** Thirty-nine patients from each group aged between 13 – 16 years were recruited for the study. Oral hygiene was scored using the OHI-S tool, while the caries prevalence was scored by measuring DMFT. Saliva properties were measured using the saliva buffering kit, including salivary flow (resting and stimulated), pH, consistency, and buffering capacity. The chi-square test was used for statistical analysis for all categorical variables, and the t-test to compare continuous data. **Results:** There were no significant differences in the mean age (mean age = 14.4 years) and salivary properties ($p > 0.05$) between these two groups. However, the median DMFT score for thalassaemia is 1.00, and for the healthy patient is 3.00. Therefore, more healthy patients have good oral hygiene ($p = 0.001$). **Conclusion:** Our study showed no significant difference in DMFT in patients with thalassaemia. This could be attributed to these patients already being under our regular care. This study supports the null hypothesis that patients with thalassaemia have no changes in saliva properties. We did notice better oral hygiene among healthy patients; hence, continuous preventive measures must be emphasized among patients with thalassaemia.