CHEMISTRY OF ORAL SALIVA RELATED TO DENTAL CARIES IN A GROUP OF EGYPTIAN TURNER SYNDROME CHILDREN

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ABSTRACT

Background/Aim: Research on salivary functions and the underlying molecules has been intensive for the last three decades. Saliva acts as an ocean of anions, cations, nonelectrolytes, amino acids, proteins, carbohydrates, and lipids flowing in waves against and into the plaque. There are only a few references on caries prevalence in patients with Turner syndrome with the majority of investigators observing the low incidence of dental caries among the permanent teeth of Turner syndrome children. This study was undertaken to assess the chemistry of saliva in relation to caries in a group of Egyptian Turner syndrome children.

Subjects and Method: Caries index was recorded and 5 ml saliva was collected from thirty children aged 8 to 14 years. Samples analyzed for pH, viscosity, immunoglobulin A, electrolytes and streptococcus mutans counts.

Results: Caries incidence in Turner children was lower than that of the control ones. Salivary electrolytes, pH and immunoglobulin A have significant higher values in Turner group; the reverse occurred for viscosity and Streptococcus mutans count.

Conclusion: Low caries index in Turner syndrome children can attribute to lower viscosity, lower streptococcus mutans count, alkaline pH and rise in immunoglobulin A.

Keywords: Turner syndrome, Saliva, Dental caries.