



Tipo	Periódico
Título	Children with a Higher Activity of Carbonic Anhydrase VI in Saliva Are More Likely to Develop Dental Caries
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Programa/Curso (s)	Programa de Pós-Graduação Stricto Sensu em Ciências da Saúde
DOI	10.1159/000470849
Assunto (palavras chaves)	Carbonic anhydrases; Dental caries; Saliva
Idioma	Inglês
Fonte	Título do periódico: Caries Research ISSN: 1421-976X Volume/Número/Paginação/Ano: v. 51, p. 394-401, 2017
Data da publicação	June 21, 2017
Formato da produção	Digital https://doi.org/10.1159/000470849
Resumo	<p>Objective: This study aimed to analyze the concentration and activity of carbonic anhydrase (CA) VI in the saliva of school children. We investigated the relationship among caries, CA VI concentration/activity, flow rate, pH, and buffering capacity. Materials and Methods: Seventy-four school children were divided into a caries-free group and a caries group. Clinical examinations were conducted by one examiner according to World Health Organization criteria + early caries lesions. Salivary flow rate, pH, and buffering capacity were analyzed. Salivary CA VI concentration and activity were evaluated by ELISA and zymography, respectively. The data were analyzed using Student's t test and the Mann-Whitney test, and Pearson and Spearman correlation analyses were also done. In multivariate modeling, associations between variables were expressed as odds ratios. Results: The results showed that salivary flow rate, salivary pH, and BC were significantly higher in the saliva of caries-free children. Also, the salivary CA VI concentration was significantly higher in the saliva of caries-free children. The salivary CA VI activity was higher in children with caries. We found a negative correlation between BC and dental caries. Also, in the caries group we found a positive correlation between the concentration and the activity of CA VI and a negative correlation between BC and CA VI activity. A negative correlation between salivary pH and CA VI concentration was observed in the caries-free group. A high activity of CA and a low salivary flow rate were associated with dental caries. Conclusion: These results support the conclusion that dental caries is highly affected by the activity of CA VI in saliva as well as by the salivary flow rate.</p>
Fomento	