



Educando para a paz

Tipo	Periódico
Título	Activity of Carbonic Anhydrase VI is Higher in Dental Biofilm of Children with Caries
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Programa/Curso (s)	Programa de Pós-Graduação Stricto Sensu em Ciências da Saúde
DOI	10.3390/ijms20112673
Assunto (palavras chaves)	carbonic anhydrase VI; biofilms; dental care for children
Idioma	Inglês
Fonte	Título do periódico: International Journal Of Molecular Sciences ISSN: 1422-0067 Volume/Número/Paginação/Ano: v. 20, p. 1-9, 2019
Data da publicação	30 May 2019
Formato da produção	Impressa
Resumo	This study investigated pH, activity and concentration of carbonic anhydrase VI (CA VI) in dental biofilm of caries and caries-free children of 7–9 years old. Seventy-four children were selected and divided into two groups. The caries diagnosis was performed according to the WHO criteria, including the early caries lesion. After biofilm collection and pH determination, CA VI concentration and activity were determined by ELISA and Zimography respectively. The data were submitted to a Mann-Whitney test and to Pearson and Spearman correlation analyses. Means and standard deviations of dental caries for the caries group were of 3.162 ± 1.385. The biofilm pH was significantly higher in the caries-free group. The CA VI activity was significantly higher in biofilm of children with caries. The CA VI concentration was significantly higher in biofilm of caries-free children. In caries-free children, there was a moderate negative correlation between CA VI activity and concentration in dental biofilm as well as between pH and CA VI activity. A negative correlation between biofilm pH and CA VI concentration was found in the caries group. In conclusion, CA VI was shown to be more active in the biofilm of school children with caries in order to contribute to neutralization of biofilm acid.
Fomento	

