Tipo	Periódico
Título	Contribution of *Streptococcus Mutans* Virulence Factors and Saliva Agglutinating Capacity to Caries Susceptibility in Children: A Preliminary Study
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Programa/Curso (s)	Programa de Pós-Graduação Stricto Sensu em Ciências da Saúde
DOI	10.17796/1053-4628-42.3.4
Assunto (palavras chaves)	Indisponível
Idioma	Inglês
Fonte	Título do periódico: The Journal Of Clinical Pediatric Dentistry ISSN: 1053-4628 Volume/Número/Paginação/Ano: v. 42, p. 188-194, 2018
Data da publicação	1 January 2018
Formato da produção	Digital https://doi.org/10.17796/1053-4628-42.3.4
Resumo	Background: Many factors contribute to caries development in humans, such as diet, host factors – including different saliva components – and the presence of acidogenic bacteria in the dental biofilm, particularly Streptococcus mutans (S. mutans). Despite the influence of S. mutans in caries, this bacterium is also prevalent among healthy individuals, suggesting the contribution of genetic variation on the cariogenic potential. Based on this hypothesis, the present work investigated the influence of S. mutans virulence factors and saliva agglutinating capacity on caries susceptibility in children. Study design: Saliva samples of 24 children from low income families (13 caries-free and 11 caries-active individuals) were collected and tested for their ability to agglutinate S. mutans. The bacteria were isolated from these samples and analyzed for the presence of the gene coding for mutacin IV (mut IV). Biofilm formation and acid tolerance were also investigated in both groups (caries-free and caries-active). Results: Saliva samples from caries-free children showed an increased capacity to agglutinate S. mutans (p=0.006). Also, bacteria isolated from the caries-free group formed less biofilm when compared to the caries-active group (p=0.04). The presence of mut IV gene did not differ between bacteria isolated from caries-free and caries-active individuals, nor did the ability to tolerate an acidic environment, which was the same for the two groups. Conclusions: Altogether, the results suggest that the adhesive properties of S. mutans and the agglutinating capacity of the saliva samples correlated with the presence of caries lesions in children.
Fomento	