



Relationship Between Streptococci Mutants and Lactobacillus in Saliva with Tooth Decay in Children

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ABSTRACT

Introduction: Tooth decay is one of the most common chronic infectious diseases in childhood, caused by many factors, including incorrect health habits, social factors, diet, and oral microbial flora. Streptococcus mutans and lactobacillus are microorganisms that play a role in causing tooth decay. This study investigates the relationship between streptococcus mutans and lactobacillus in saliva and tooth decay in children.

Search Strategy: This study will be conducted in 2024 as a review and through searching in reliable databases such as Scopus, Google Scholar, SID, and PubMed. It was done with keywords such as dental caries, streptococcus mutans, lactobacillus, and their Latin equivalents based on MeSH. Then, related studies from 2008 to 2022 were identified after screening the title, abstract, and full text with the help of the Strobe checklist. Among 24 studies, 11 studies were selected to announce the results.

Results: According to what was mentioned in 11 articles, Pearson's correlation test showed a significant relationship between people's caries experience and the amount of streptococci mutans, but this relationship did not exist in the case of lactobacillus. The number of streptococci mutans in children with dental caries has been higher than in other oral bacteria. It should be noted that some studies have overlapped with each other.

Conclusion and Discussion: According to the results obtained from this study and other studies, and also considering that Streptococcus mutans is the most important microbial agent and the initiator of tooth decay, it is recommended to use fluoride mouthwashes in kindergartens. Schools and schools should be given to children to prevent tooth decay; in health centers and schools, every year at the beginning of the school year, the necessary tests to measure the amount of Streptococcus mutans should be performed. If necessary, care programs should be implemented.

Keywords: Child, Lactobacillus, Streptococcus mutans