

عنوان مقاله:

Salivary Streptococcus mutans and Lactobacilli Levels as Indicators of Dental Caries Development in Iranian Patients with Systemic Sclerosis

محل انتشار:

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خلاصه مقاله:

Background and Objective: Systemic sclerosis is an autoimmune disorder with orofacial manifestations, including tooth decay. Lactobacilli can inhibit biofilm formation and growth of cariogenic pathogens, such as Streptococcus mutans. We aimed to assess the salivary levels of S. mutans and Lactobacilli as indicators of dental caries development in patients with systemic sclerosis. **Methods:** In this cross-sectional study, 80 patients with systemic sclerosis were assigned into 2 groups, anti-centromere antibody (ACA) positive (n=42) and ACA-negative (n=38). Besides, 80 age- and gender-matched healthy individuals were enrolled as control. Unstimulated saliva was collected in sterile tubes. Blood agar and tomato juice agar were used to cultivate S. mutans and Lactobacilli. The number of colony-forming units per milliliter (CFU/mL) was calculated and compared between the groups. **Results:** S. mutans in patients (median=1.6×10⁷ CFU/mL; interquartile range (IQR): 1.1-3.1 ×10⁷ CFU/mL) was significantly higher than control group (median=5.1×10⁶ CFU/mL; IQR: 5.1-7.9 ×10⁶ CFU/mL) (P<0.0001, Mann-Whitney U-test); however, the median Lactobacilli levels was similar between these groups (3.4×10⁶ vs. 2.2×10⁶ CFU/mL; P=0.095). The median concentrations of S. mutans (1.3×10⁷ vs. 2.4×10⁷ CFU/mL; P=0.342) and Lactobacilli (4.1×10⁶ CFU/mL vs. 3.1×10⁶ CFU/mL; P=0.515) in the ACA-positive and ACA-negative patients had no significant differences. There were no significant correlation coefficients between S. mutans and Lactobacilli levels in the study groups (P>0.05). **Conclusion:** Our findings suggest the higher levels of salivary S. mutans in patients with systemic sclerosis might increase the likelihood of dental caries over time; however, it was not affected by the ACA status

کلمات کلیدی:

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