Evaluation of dental calculus prevalence in primary and mixed dentition periodin Tehran (2011-2012)

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Abstract

Background and Aim: Clinical experience suggests that occurrence of calculus in primary dentition is rare while it increases with the eruption of permanent teeth particularly the anterior mandibular teeth. It seems several factors effect on this difference. So we decided to evaluate these factors such as tongue trust, crowding, interdental space,black stain and theirs relationship with formation of calculus in primary and mixed dentition period.

Materials and Methods: during an epidemiological and cross sectional study, the evaluation of dental calculus prevalence in 3-5 years old (120 people) and 8-10- year -old children (120 people) who settled at Tehran with unremarkable medical history was done. We evaluated tongue trust, crowding, interdental space and black stain with disposable mirror (Feiz Teb, Iran) under room light.Data were analyzed with Chi-square tests.

Results: There were significant statistical differences in this epidemiologic study in calculus prevalence, tongue trust, crowding and interdental space (P-value‹0.05) but not for black stain. There wasn't significant statistical difference about above-mentioned factors in mixed dentition period between people with and without calculus(P-value›0.05).

Conclusion: The epidemiologic study determined the occurrence of dental calculus in mixed dentition was more than in primary dentition. Factors such as tongue trust, crowding, interdental space and black stain don't have effect on calculus prevalence

Key words: Dental calculus, Primary dentition, Mixed dentition