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Original article

The effect of the primary tooth extraction on the growth and development of

3-6 year old children

Alireza Heidari¹, Mahdi Shahrabi¹, Somayeh Samavati²

1: Department of Pediatric Dentistry, School of Dentistry, Tehran University of Medical Science

3: Dentist

Corresponding Author: dr.m.shahrabi@gmail.com

Abstract

Background and aims: Considering the role of the teeth on chewing and optimal nutrition, early loss of the primary teeth can have destructive effects on the child growth and development. Thus, the aim of the present study was to evaluate the effect of early primary tooth extraction on growth and development of the children aged 3 to 6 years in the kindergartens.

Materials and methods: In this study, 44 children, 30 with extracted teeth and 14 without extracted teeth participated. The children's height and weight were measured every 2.5 months for one year. The participants had no systemic or congenital disease. The results were analyzed using repeated measures ANOVA.

Results: According to the statistical analyses the children who had no tooth extracted had significantly more weight gain(p-value=0.008) compared to the children who had some of their teeth extracted. The children without extracted teeth had also significantly more height gain(p-value=0.003) compared to the children with extracted teeth. However, based on the growth curves, the two groups showed no significant difference.

Conclusion: considering the results of the present study, in addition to space control issues, the nutritional problems and their consequences such as height and weight problems should be taken into consideration while extracting the teeth of the children less than six years of age.

Keywords: primary tooth extraction, growth. Development, height, weight.