

Molar-incisor Hypomineralization in Masal-Shanderman, Guilan

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Abstract

Background and Aims: This study aimed to evaluate the prevalence of molar incisor Hypomineralization (MIH) in 6-13 year old rural children in Masal and Shanderman (Guilan, Iran) and also the possible predictive factors.

Materials and Methods: Participants in the study included 553 children from public primary schools. In the first stage the frequency of MIH was determined based on clinical examination according to the introduced index by Weerheijm and then 204 children were divided into case and control groups for evaluation of possible causative factors. A questionnaire was used to collect data such as late pregnancy problems, problems at birth and neonatal diseases in the first three years. Data analysis was performed by SPSS-19. Chi-square test, t-test and regression were used to examine the relationship between different factors.

Results: The prevalence of MIH among the study population was 13.5%. Among factors examined, "increased breastfeeding duration" had a significant impact on MIH. No significant difference was observed between the pattern of lesions of and the prevalence of MIH in different age groups. Most lesions were mild. The severe type (grade 3) was often observed in mandibular molars. The dental caries in MIH group was not significantly different from the control group.

Conclusion: The prevalence of MIH is high in Masal and Shanderman. Breastfeeding duration may be considered as a risk factor in medical history, to seek an early examination of the first molars and incisors for early intervention.

Keywords: Molar Incisor Hypomineralization (MIH), Prevalence, Etiology