INCIDENCE OF SIMPLE CARIE AT THE 6 YEARS OLD MOLAR

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Abstract

6 years old molar occupies a special position in the permanent teeth category due to its particular vulnerability at caries. Purpose of the study:assess the degree of damage by assessing the first permanent molar dental status for children between 6 - 10 years of both sexes. Material and method: we conducted a study on a group of 150 children, with ages between 6 – 10 years, living in urban and rural areas , coming from families with different levels of training and education, with varying levels of living and with various social situations. Results:It has been noticed that 37,7% from the children in rural area has no caries at the 6 years old molar comparative to 21,6% in urban area. The affectation of simple caries simple of the 6 years old molar ascertained at 59.79% of children in urban areas compared to 45.28% in rural areas.

Key words: molar, decay, obturation, oclusal

INTRODUCTION

Dental caries represents a problem in many countries, even if oral health conditions have improved in recent decades (Fejerskov, 1997, Kolavic, et al.2009. Lakshmappa, et al. 2011). 6 years old molar occupies a special position in the category of permanent teeth due to its outstanding vulnerabilities at caries. 6 years old molars are the first teeth which erupt at this age. They are completing teeth which are distally erupting to the two temporary molars and serve the ascension of the occlusion and improve masticatory efficiency (Bratu, 1998, Căpâlna, 1996, Harris, 1992).The importance of this tooth for the evolution of occlusion elations is in proportion to the receptivity of caries influenced receptivity by some data such as: the onset of calcification - at birth; fully formed crown at - 2/1 / 2-3 years; eruption - 6-7 years; the root completely built - 9 to 10 years. Due to the role that it has the 6 years old molar is considered the Angle, the occlusion key (Iliescu, 2011, Luca, 2003). The damage by caries of the first molars erupted during mixed dentition is highlighted by epidemiological studies in a 87% (Pilar, et al.2003, Loesche et al. 1984).. The studies from other countries concerning the prevalence of caries lesions presents only visible caries with cavitation (Ismail, et al. 2007, Ismail, 2004). In the case of obese children, as a result of a study conducted by Toivo in 1989, has be found that 65-70% have more cavities (Amir, et al. 2008). Some epidemiological studies have been initiated in order to evaluate the relationship between the caries in primary and mixed dentition (Hill, et al.

1967; Adler, 1968; Klein, et al. 1981; Varpio 1981; Heidmann and Poulsen 1986 quoted Deanna, Greenwell et al., 1990).

MATERIAL AND METHOD

Objectives proposed for the study

The study has proposed the following:study of the morbidity by caries of the 6 years old molar comparative in rural and urban areas, given the particular vulnerability of this tooth at caries on the one hand, and on the other hand the importance of keeping it on his arch; assess the level of knowledge of students regarding the 6 years old molar and the importance of the periodical control at the dentist.

The goal of the study:assess the degree of damage by evaluation of the first permanent molar dental status for children between 6 - 10 years of both sexes who visited the dental office during 2015-2016.

Material and method:

In order to study the morbidity by caries of the 6 years old molar, we conducted a study on a group of 150 children, with ages between 6 – 10 years, living in urban and rural areas distributed as follows (Figure 1,2).

In order to have the best possible representation in both rural and urban areas, we choose a squad comprising students of classes I-II because:

- the age corresponding period of increasing 6 years old molar;
- they form a collectivity;
- their location both in rural and urban areas allows a comparative study;
- schools are attended by a large number of children;
- children are coming from families with different levels of training and education, with varying levels of living and with various social situations;
- their attitudes are formed during this period, same as habits and related behaviors to preserve oral health, integrity maxillary device and oral hygiene.

Within each study schools we work with one class of students for each level of schooling.The study group consists of 150 children, 74 girls and 76 boys, 97 from urban area and 53 from rural area.

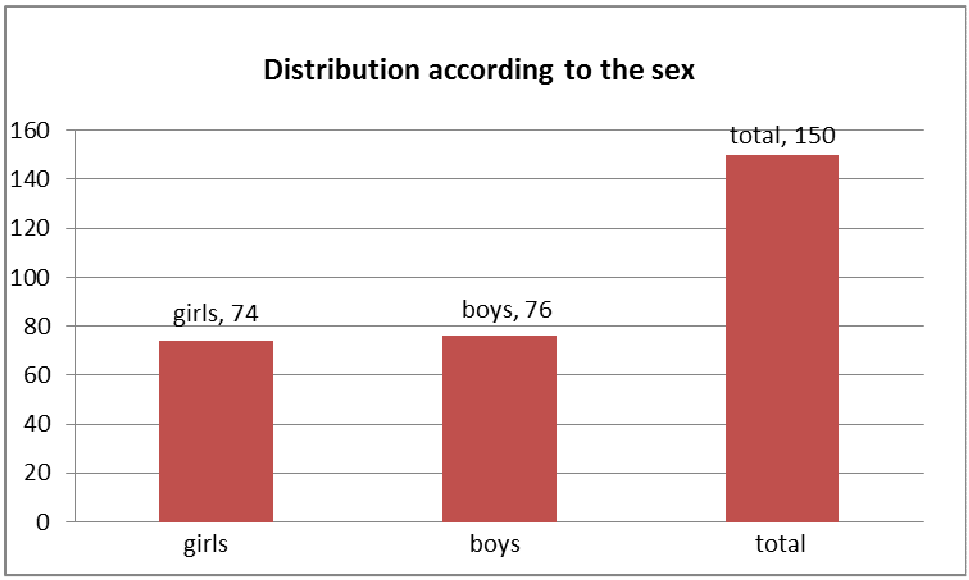

Figure1. Distribution according to the sex

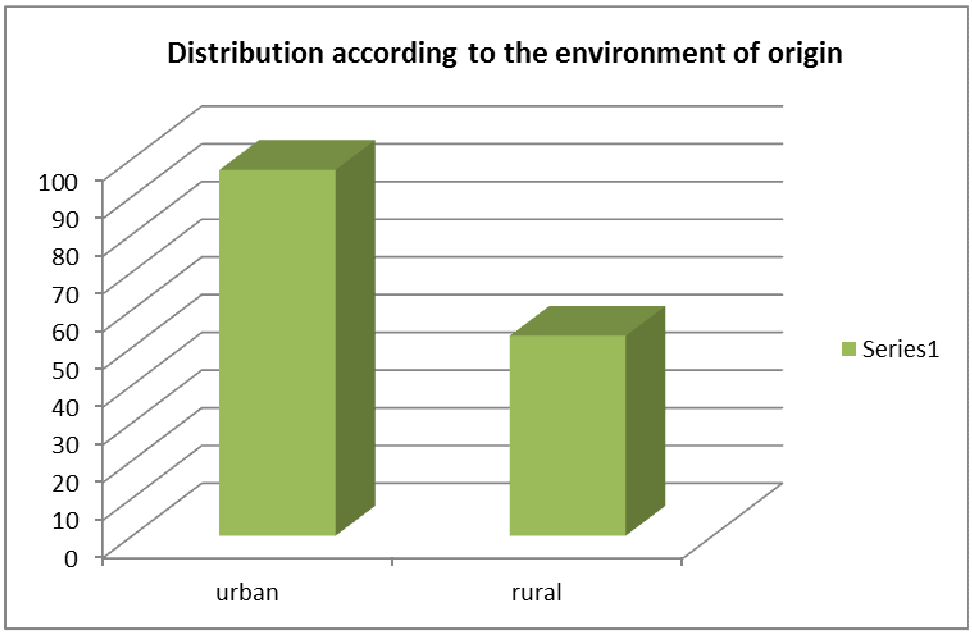

Figure 2. Distribution according to the environment of origin

Criteria for inclusion in the squad:children aged between 6 - 10 years; children with odontal diagnosed pathologies.
Criteria for exclusion from the squad:non-cooperating patients;children aged under 6 or over 10 years.
The introduction, processing and analysis of the computerized data.

Oral examination of patients was carried out in an organized way to each class and held in dental office at each school in optimal lighting conditions. The local oral clinical examination was performed with the help of dental mirror and probe, nitrile gloves, protection mask, gown, and consisted of inspection, palpation and percussion of the 6 years old molar. The clinical examination was carried out by a single examiner. Cavity lesions were evaluated on all the surface of the teeth examined (clusal,mesial, vestibular, lingual, distal).

RESULTS AND DISCUSSION

Identify the main issues of morbidity by caries of the 6 years old molar:

1. Noted that 37.73% of children in rural areas do not show caries at the 6 years old molar compared to only 21.6% of the children in rural areas.
2. The affectation of simple caries simple of the 6 years old molar ascertained at 59.79% of children in urban areas compared to 45.28% in rural areas.
3. Complicated cavities of the 6 years old molar ascertained at 16.98% of children in rural areas, while in urban areas the damage is 17.52% percentage.
4. Obturations were noticed at 11.3% of children in urban areas while in rural areas only one child showed an obturation at the level of the 6 years old molar.;
5. 13.2% of children in rural areas and 13.4% of urban children had scraps of root;
6. In rural areas we found a single molar extraction at a child attending the class III and in urban areas it was found only two children attending the class IV having a molar extraction;
7. Three children in the first class in urban areas were observed of having only two molars erupted. At a second grader was found present only three molars on the arch. In rural area only one child attending 1st class has three molars on the arch;
8. Most affected by caries were lower molars 36, 46 -54.1% compared to the superior ones 16, 26- 49.1%;
9. Regarding commonly affected areas revealed the following: 70% occlusal surface, vestibular face - 56%, mesial face -51.83%.

CONCLUSIONS

1. Children in urban area develop more caries then children in rural area;

2. Simple caries have been noticed more in urban area;

3. Deep caries (complex) have been noticed more in rural area then urban area;

4. The occlusal surface has been affected the most;

5. Inferior molars are more affected then the superior ones.

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