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ERUPTION OF THE UPPER WISDOM TOOTH AMONG THE YOUNG PEOPLE OF ORADEA

Todor Liana*

*University of Oradea, Faculty of Medicine and Pharmacy, Department of Dental Medicine liana.todor@gmail.com

Abstract

Wisdom teeth have the highest chronological variability in their eruption, their appearance on the arcade being made between 16-25 years.

Less than 5% of adults with the full complement of teeth have sufficient space for the complete eruption of the third molars. Thus, it play a predominant role in the incidence of retention. With retention can be connected infections, cysts, tumours, neuralgiform pain, anomalies of tooth position, masticatory dysfunction, disturbances of occlusion and myoarthropathies.

A study based on gender was made on the number of erupted upper wisdom teeth in the oral cavity. Thus, an individual may present one, two or not even one upper wisdom tooth in the oral cavity. Upper wisdom teeth present in the oral cavity have also been studied in terms of eruption progress: fully erupted or in eruption, as well as in terms of the eruption axis: on the axis or protruded.

Key Words: rash, upper wisdom tooth, protruded.

INTRODUCTION

Eruption of permanent teeth is usually easy without any occuring disorders in the incisors, canines and premolars, while spontaneous exfoliation of deciduous teeth occurs through progressive root resorption. Also, the eruption of the first two molars generally does not cause accidents. The most common accidents are related to the lower wisdom teeth eruption and to a lesser extent to the upper wisdom teeth eruption. The most cases of tooth inclusion are those implying the wisdom tooth.

MATERIAL AND METHODS

Since most authors consider that the wisdom tooth eruption onset is around the age of 18, I studied two groups of young people aged 17-18 years and 19-25 years respectively.

The first group comprises 734 students aged from 17-18 years, 161 males and 574 females, which have had investigated 346 upper wisdom teeth present in the oral cavity.

The results were expressed by percentage in the graphs below (fig.1, fig.2, fig.3):



Fig.1: Not a single upper wisdom tooth erupted in the oral cavity.



Fig.2: A single upper widsom tooth erupted in the oral cavity.



Fig.3: Both upper wisdom teeth erupted in the oral cavity.

It was found that there is a higher percentage in boys when it comes to having both upper molars erupted in the oral cavity and a higher percentage in girls when having no upper widom tooth erupted.

When it comes to the presence of a single upper wisdom tooth in the oral cavity, the percentage is balanced.

Of the 346 upper wisdom teeth, there are 104 erupted molars in males and 242 in females, meaning that in males, of all potential upper third molars, 32.5% have erupted, while only 21.8% erupted in females. Upper wisdom teeth present in the oral cavity were studied regarding the eruption stage: fully erupted or whitin eruption; and regarding the axis of the eruption: erupted on the axis or protuded. A comparative study by gender was made, expressed by percentage in the graphs below (fig.4a,b; 5):



a b Fig.4: Upper wisdom teeth with a complete eruption (a), and whitin eruption (b).



Fig.5: Protuded upper wisdom teeth.

Wisdom tooth eruption can be facilitated by creating space as a result of another molar extraction from the same arch, followed by dental mezialization. Thus, we observed, through extraction, the lack of another molar on the same arcade in 19.23% of upper wisdom teeth erupted in young male and 28.1% of them erupted in young females.

The second group comprises 294 young people, aged 19-25 years, 115 males and 179 females, have had investigated 366 upper wisdom teeth present in the oral cavity.

We conducted the same comparative study by gender (fig.6, 7, 8):



Fig.6: The percentage of young people without any upper wisdom teeth erupted.



Fig.7: The percentage of young people with one upper wisdom tooth in the oral cavity.



Fig.8: The percentage of young people with both upper wisdom teeth erupted.

Of the 366 upper wisdom teeth, 129 are erupted in males and 237 in females.

Group II is subdivided as follows:

	- IIA: 19 - 21 years
GROUP II	- IIB: 22 - 23 years
	- IIC: 24 - 25 years

In each subgroup we determine, by gender, the percentage of upper wisdom teeth erupted in the oral cavity of the total potential upper wisdom teeth.

The obtained data, together with similar ones from group I, are presented in the graph figure no.9. While comparing the groups, a faster eruption pace is observed in females.



Fig.9: Eruption pace

Upper wisdom teeth present in the mouth have also been studied in terms of eruption progress: fully erupted or erupting; and regarding the axis of eruption: on the axis or protuded. The comparative study is presented in the graphs below (fig.10, fig.11, fig.12):



Fig.10: The percentage of upper widom teeth with a complete eruption.



Fig.11. The precentage of upper wisdom teeth within eruption (incomplete).



Fig.12. The percentage of protuded upper wisdom teeth.

Comparing the two groups of young people regarding the number of the upper wisdom teeth present in the oral cavity we obtain the following graphs (fig.13, fig.14a, fig.14b):



Fig.13: The percentage of young people who do not present upper wisdom teeth in the oral cavity.



Fig. 14a Fig. 14b Fig. 14: The percentage of young people presenting one (a) or two (b) upper wisdom tooth in the oral cavity.

Comparing the two groups of young people regarding eruption stage of the upper wisdom teeth present in the oral cavity we obtain the following graphs (fig.15, fig.16, fig.17):



Fig.15: The percentage of upper wisdom teeth with a complete eruption.



Fig.16: The percentage of upper wisdom teeth within eruption.



Fig.17. The percentage of protuded upper wisdom teeth.

RESULTS AND DISCUSSION

Comparing group I (17-18 years) with group IIC (24-25 years), that is the beginning with the end of the eruption, regarding the number of erupted upper wisdom teeth and axis of the eruption, we obtain the data shown in the table1:

Table1

UPPER WISDOM TEETH	Group I (17–18 years)	Group IIC (24–25 years)
None erupted	68,94%	21,21%
One erupted	14,98%	18,18%
Both erupted	16,08%	60,61%
Protuded	19,65%	28,26%

Comparation between group I and group IIC

We observe that more than one third (39.39%) of young people aged 24-25 years are missing at least one wisdom tooth on the upper arch, as a result of anodontia or dental impaction (the lack molars by tooth extraction being excluded).

Group IIC (24-25 years) has 28.26% of upper wisdom teeth protuded, as opposed to 19.65% in group I. Thus, once the eruption of the upper wisdom tooth is completed, the percentage of molars with a protuded axis grows higher as a consequence of shortage of space for the eruption.

CONCLUSION

The percentage of upper wisdom tooth erupted in the oral cavity increases simultaneously with somatic development, yet nearly 40% of subjects are missing at least one wisdom tooth on the upper arch.

Upper wisdom tooth eruption is accelerated in males at the beginning of the eruption and in females towards the end of the eruption.

In females, there is a greater percentage of protuded upper wisdom teeth as well as a greater percentage of molars erupted in the place where the first or second molar was extracted (on the same arch). So there is o shortage of space required for the upper wisdom tooth eruption, being more pronounced in females.

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