

# A Commentary on the First Permanent Molar in Children and its Importance

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## Commentary

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## ABSTRACT

The First Permanent Molar (FPM) is the first permanent tooth to be erupted in the oral cavity of a child and its eruption is not preceded by the exfoliation of any deciduous tooth. It is also observed to be one of the most commonly decayed permanent teeth in the oral cavity. Hargreaves and Chester had shown that over 80% of occlusal surfaces of FPM were carious within 2 years of eruption. Early eruption of FPM, its posterior position in the oral cavity, along with faulty eating habits in children makes the FPM highly susceptible to dental decay.

**Keywords:** First permanent molar; Oral cavity; Children; Exfoliation; Endodontic management

## ABOUT THE STUDY

The FPM has a broad occlusal table, it is considered a key to occlusion and hence plays an integral part in mastication and the growth and development of the jaws and face. Parents often ignore the FPM considering them to shed off akin to other deciduous teeth. Dental treatment is sought only when the teeth become symptomatic. This leads to cavitation and subsequent restorative or endodontic management or need to extract these teeth at an early age [1].

In a study amongst 380 parents 75.0% and 72.4% of the parents were aware about the number of deciduous and permanent teeth present in the human dentition. Only 21.6% parents knew the right age of eruption of the FPM. 73.9% of parents considered the mandibular incisors to be the first permanent teeth to erupt in the oral cavity as it can be observed easily and it is associated with mobility and exfoliation of its corresponding deciduous tooth [2].

Parents often disagreed for the preventive (67.9%) and restorative treatment (53.2%) for the FPM, while agreeing to extract it (44.5%) considering it to be a deciduous tooth. Early detection of dental caries in the form of discoloration (11%) and food lodgement (28.7%) in the teeth was ignored and parents responded they would consider pain (82.54%), swelling (61.1%), and difficulty in chewing (65.8%) as reasons for seeking dental treatment. 92.1% parents felt that loss of FPM will lead to alteration in function due difficulty in chewing. Problems associated with tooth position like drifting of teeth, supra eruption of opposing tooth and malocclusion was selected by 57.4%, 32.1% and 39.2% respectively.

Frazao has reported that 44.2% of children had at least one FPM erupted as early as 60 to 65.9 months of age. Ignorance of the parents, limited motor abilities to perform oral hygiene and cariogenic food choices makes the FPM susceptible to dental caries. Hargreaves have shown that over 80% of FPM were found to be carious as early as 2 years after eruption. Ebrahimi concluded that the high level of caries experience and the need for fillings in FPM shows a low level of parental awareness about the importance of FPM. Similarly, a low level of awareness may lead to higher caries experience in FPM [3,4].

After early extraction of FPM, Saber reported a decrease in post extraction space, accelerated development and eruption of second permanent molars and third molars, a decrease in caries and/or fillings on the proximal surfaces of adjacent teeth, lingual tipping and retrusion of incisors and counter clock wise rotation of the occlusal plane [5].

In a study 30% parents knew the number of deciduous teeth while 47% believed all permanent teeth erupted by replacing a preceeding tooth [6]. Lakhani in Udaipur, India and Luca in Romania reported 28% and 20.93% parents being aware about eruption of FPM [7,8]. The parents need to be counselled on eruption age of teeth in general and the eruption of the FPM in particular as it is most likely to be confused as a deciduous tooth. Since low level of parental awareness about FPM may cause higher caries experience in children, all medical professional have an obligation to inform parents about eruption and reinforce the importance or the FPM.

## REFERENCES

1. Hargreaves JA, et al. Clinical trial among Scottish children of an anti caries dentifricecontaining 2 percent sodium monofluorophosphate. *Community Dent Oral Epidemiol.* 1973;1:47-51.
2. Jetpurwala AM, et al. Parental Perception of the Importance of the First permanent molar in their children. *J Dent Child.* 2020;87:26-30.

3. Frazao P. Emergence of the first permanent molar in 5-6 year old children: implications from a longitudinal analysis for occlusal caries prevention. *Rev Bras Epidemiol.* 2011;14:338-346.
4. Ebrahimi M, et al. Dental treatment needs of permanent first molars in Mashhad school children. *J of Den Res Dent Clin Dent Prospect.* 2010;4:52-55.
5. Saber AM, et al. Consequences of early extraction of compromised first permanent molar: a systematic review. *BMC Oral Health.* 2018;18:59.
6. Setty JV, et al. Knowledge and awareness of primary teeth and their importance among parents in Bangalore city, India. *Int J of Clin Pediatr Dent.* 2016;9:56-61.
7. Lakhani PM, et al. Assessment of mother's knowledge regarding importance of eruption of first permanent molar and child oral hygiene practices: A correlation study. *Jour of Appl Dent and Med Sci.* 2016;2:7-11.
8. Luca R, et al. Knowledge of the first permanent molars-audit on 215 Romanian mothers. *Oral health and dental management.* 2003;2:27-32.