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### Abstract

Supernumerary teeth are the teeth formed in excess of that found in the normal series. Prevalence of supernumerary teeth in primary dentition varies between 0.05% to 0.64% in different populations. This article presents a case of an 8 years 5months old boy with supplemental primary maxillary lateral incisor without its permanent successor, with no clinical features of any syndrome .

**Key Words:** Primary teeth, supernumerary teeth, supplemental lateral incisor

## INTRODUCTION

Supernumerary teeth or hyperdontia is defined as an excess number compared to the normal dental formula. These teeth may or may not mimic normal tooth morphology, and classification is dependent on their position and form. Hyperdontia may occur as a single tooth, multiple teeth, unilateral, bilateral and in one or both jaws<sup>1-5</sup>. The morphological classification can be subcategorized into eumorphic (supplemental) and dysmorphic (rudimentary) elements. Eumorphic teeth have morphology similar to a tooth of the normal dentition, while dysmorphic teeth are small and conical, tuberculate or odontome. A sex predominance of males over females (2.2:1) has been demonstrated<sup>4</sup>.

Supernumerary teeth in the primary dentition are often overlooked and undocumented. The occurrence of supernumerary teeth in primary dentition is a less common finding, one fifth of that seen in permanent dentition. The following reasons for this have been suggested:

1. Spacing often occurs in the primary dentition, which allows for extra teeth to be accommodated without producing irregularities.
2. They often erupt and exfoliate without being noticed by the parents.
3. They are often mistaken as germination or fusion anomalies.
4. At the time of the first dental examination the primary incisors have exfoliated.

## CASE REPORT

An eight years five month old boy reported to our private clinic with complaint of not shedding of upper front milk tooth. On examination, all primary deciduous maxillary and mandibular incisors are present and surprisingly,

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**Figure -1**



**Figure -2**



**Figure -3**



**Figure -4**

there was supplemental primary maxillary lateral incisor on right side (Figure - 1, 2, 3), all permanent first molar are also present. Familial and medical history was non-contributory. General examination and extra-oral examination showed no abnormality.

Radiographic examination with an orthopantomogram verified the presence of a right supplemental primary maxillary lateral incisor without its successor (Figure-4). Blood investigation including serum creatinine, calcium, alkaline phosphatase, inorganic phosphorus, T3, T4, TSH, vitamin D within normal limit.

## DISCUSSION

The cause of supernumerary teeth is poorly understood, although many theories have been already proposed, such as the phylogenetic process of atavism and the dichotomy of the tooth bud. The most accepted theory suggests that these teeth results from localized and independent hyperactivity of the dental lamina, which leads to the formation of additional tooth germs. Genetics is also thought to play a role, as recurrence within the same family is commonly reported. It is also believed that environmental factors along with hereditary factors are combined to cause the condition.<sup>6</sup> The occurrence of supernumerary teeth in the primary dentition is rare, reported by some authors as occurring in about 0.3-0.6%<sup>1,5,7</sup> and by others as 0.1-1%<sup>8</sup>. In contrast, supernumerary permanent successors are present in 1.5-3%<sup>1,9</sup> Approximately 90-98% of all supernumeraries occur in the maxilla with a strong predication (90%) for the premaxilla<sup>3,10</sup>. Rajab and Handan verified this point; and revealed that 25% of these teeth are located in the midline, and the most common supernumerary tooth is the lateral

maxillary incisor<sup>4</sup>. Males have shown a strong predilection to being affected with a sex ratio of 2.2:1<sup>4</sup>. The occurrence of supernumerary teeth in both the primary and permanent dentitions of the same child has been reported and may occur in approximately one third of the cases<sup>1</sup>. Clinical problems such as crowding, delayed eruption, diastema, rotations, cystic lesions, and resorption of adjacent teeth can occur due to supernumerary teeth<sup>1,4,5</sup>. Early clinical and radiographic assessment is an essential step in the diagnosis and treatment planning. Whenever a single supernumerary tooth is detected, an orthopantomogram is advisable in order to rule out the presence of multiple supernumerary teeth.

Different approaches to deal with these conditions have been reported in the literature. The best time for removal of supernumerary tooth depends on careful evaluation of each situation. Some authors suggest immediate removal of supernumerary teeth so as to prevent costly and time consuming long term orthodontic intervention; the others claim that the extraction of asymptomatic supernumerary teeth that do not affect the dentition may not be necessary. They should be periodically monitored.

## CONCLUSION

We as clinicians should be aware about the presence of extra teeth of any type. These can interfere with normal eruption, can cause various malocclusions i.e. rotations, diastema, proclination of permanent teeth. Early diagnosis of such condition is essential to prevent these problems and minimise complications.

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