Supplemental Mandibular Mesiodens: A Diagnostic Challenge

MANJUNATH NAGANAHALLI¹, ADARSH HONNAPPA², NALLAN CSK CHAITANYA²

ABSTRACT
Developmental anomalies affecting the number of teeth are occasionally encountered clinically. The incidence of supernumerary teeth is approximately 1–3%. Among these are the maxillary anterior teeth, the maxillary molars, and the maxillo-mandibular premolars, in terms of descending order of occurrence. Supernumeraries occur rarely in the mandibular anterior teeth region. They may be either supplemental or rudimentary. We are reporting case of a supplemental type of supernumerary tooth in the mandibular anterior region and steps which were followed to distinguish supernumerary tooth from the normal series.

CASE REPORT
A 34-year-old man reported to the Department of Oral Medicine and Radiology, Educare Institute of Dental Sciences, Malappuram, Kerala, India, with chief complaints of bad breath and mobile lower front teeth, which were there since 2 years.

The family and medical histories were non-contributory. There were no signs of any identified syndrome.

On intra–oral examination, he was found to have severe calculus, generalized cervical abrasion and generalized periodontitis, with mobility with respect to lower incisors. A careful examination revealed five incisors in the mandibular anterior region. All five incisors were separate, with well formed morphologies [Table/Fig-1, 2] show five mandibular incisors which are well formed and separate – frontal and occlusal views respectively.

To distinguish between them, the following steps were adopted. During examination, the median area was defined positionally by the inferior labial frenum and radiographically by the genial tubercle; it appeared that the supernumerary tooth was more towards the right side from the midline. Upon carefully examining all 5 incisors clinically and radiographically, a conclusion was drawn that the distal most incisors on either side of midline were normal lateral incisors, as their crown measurements were greater than those of the remaining 3 incisors. Distinguishing the supernumerary tooth among the 3 incisors was quite challenging, as crown measurements of all the 3 were found to be roughly the same. Since the second incisor from left showed a marked rotation and thereby caused crowding, with the presence of labial frenum just in front of the incisor, it was concluded that the tooth positioned centrally was the supernumerary one. A final diagnosis of mandibular mesiodens of supplemental type and chronic generalized periodontitis was made.

As the tooth was grade II mobile and as the patient was also willing to get the tooth removed, it was extracted uneventfully [Table/Fig-4] shows extracted space of the mandibular mesiodens. Later, the same was replaced by a removable partial denture [Table/Fig-5] shows extracted mesiodens which was replaced by a removable partial denture.

DISCUSSION
Stafne reported that the incidence of supernumerary teeth in permanent dentition was 1-3% [1]. Most common supernumerary tooth is mesiodens, which is usually small and conical, placed between maxillary incisors [2]. This is generally followed by maxillary lateral incisor, maxillary fourth molar and mandibular third premolars, in descending order. Maxillary premolar, maxillary canine and mandible fourth molar are the least common ones. Approximately 90-98% of all supernumerary teeth occur in the maxilla, with a
CONCLUSION

Mandibular mesiodens is an uncommon occurrence and a supplemental type is an even rarer event. The above article focuses on the diagnosis and management of a supernumerary tooth, which may be overlooked due to its normal appearance. Given the condition where the identification of supernumerary tooth is difficult, careful observation of the alignment of all the teeth in the region for displacement, rotation, etc, along with measurements, is the key for the diagnosis. Knowledge on the existence of supplemental type of mandibular mesiodens is essential, as an early recognition could permit an interceptive orthodontic approach and allow early correction of arch crowding.

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REFERENCES