Supernumerary maxillary lateral incisor: Review of the literature and a case report

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Abstract
A supernumerary tooth describes the supplemental teeth that can develop in a person's mouth. They may be single or multiple and unilateral or bilateral in distribution and can occur in any region of the dental arch. A mesiodens is a supernumerary tooth in the maxillary anterior incisor region, paramolar is a supernumerary molar and distomolar is a fourth molar or distomesiodens. These can affect primary and permanent dentition. Supernumerary teeth are more common in males. The aim of this case report is to described a rare case of supernumerary maxillary lateral incisor in patient without any syndrome. The etiology, possible complications and treatment methods for supernumerary tooth are discussed.

Keywords: Lateral incisor, supernumerary teeth, treatment

1. Introduction
Meighani G, Pakdaman A [1]. Described diagnosis and management of supernumerary teeth (mesiodens). According to them supernumerary tooth is one of the developmental problems in children. Mesiodens is a supernumerary tooth located between the two central incisors. It usually lead to oral problems such as malocclusion, food impaction, poor aesthetics, and cyst formation. The prevalence of mesiodens ranges from 0.09% to 2.05%. The supernumerary teeth can lead to failure of eruption, displacement or rotation (tuberculate types of mesiodens produce delayed eruption, conical types cause displacement of the adjacent tooth), crowding or abnormal diastema (supernumerary lateral incisor may increase the crowding potential and may cause an aesthetic problem in the upper anterior region), root abnormalities (root resorption of the adjacent teeth), eruption into the nasal cavity.

Kumar DK, Saraswathy Gopal K [2]. Were examined 5000 patients for a period of 1 year’s duration. The distribution of the samples according to the jaw showed a higher prevalence in the upper jaw [78 (69.6%)] as compared to that in the lower jaw [34 (30.4%)]. Distribution of the supplemental teeth according to the types: 29 (25.8%) teeth were found to be mesiodens, 27 (24.1%) teeth were found to be paramolars, 14 (12.5%) teeth were found to be distomolars and 42 (37.5%) teeth were found to be supplementary teeth. Distribution of the supplemental teeth according to their positions: Twenty four (21.4%) teeth were present in the arch, 36 (32.1%) teeth were found to be palatally/lingually displaced to the arch, 30 (26.7%) teeth were found to be labially/buccally displaced to the arch, 7 (6.2%) teeth were positioned at the distal end and 15 (13.3%) teeth were found to be impacted. Dealing out of the supernumerary teeth according to their eruptions: Among the 100 supernumerary teeth, 97 (86.7%) teeth were found to erupt into the oral cavity, while 15 (13.3%) were found to be impacted within the bone.

According to Parolia A, Kundabala M, Dahal M, Mohan M, Thomas MS [3]. Orthodontic treatment needs to be carried out to align the teeth; its presence would compromise alveolar bone grafting and implant placement and there is compromised esthetic and functional status. Extraction should be performed carefully to prevent damage to adjacent permanent teeth, which may cause ankylosis and maleruption of these teeth. The clinician should be careful to avoid complications such as damaging nerve and blood vessels during manipulation of the tooth, perforation of maxillary sinus, pterygomaxillary space, orbit and fracture of maxillary tuberosity.

Wedrychowska-Szulic B, Janiszewska-Olszowska J [4]. Reported a 18 patients with 20 supernumerary lateral incisors. Their study revealed: supernumerary teeth were causing midline shift in 10 patients, significant space deficiency - in 4, ectopic eruption - in 1 and
excessive overjet - in 4. In 3 patients the permanent supernumerary incisors were not yet erupted and in 1 patient the tooth was retained.

2. Case Report
An 13-year-old male, V. K. № 574; 24.11.16 child reported to the Department of Oral Surgery, Dental Faculty, Medical University – Plovdiv, with a chief complaint of an supernumerary tooth. The intraoral examination confirmed the patient's chief complaint and an erupted supplemental tooth, located palatally, conical in shape was located (Fig. 1). The adjacent maxillary lateral incisor characterized by moderate rotation. The medical history of the child was inessential. The treatment plan included removal of supernumerary tooth with palatal location after taking parent consent. On the second stage orthodontic treatment should be performed to facilitate correction and alignment of maxillary lateral incisor with rotation. The child was undergo local anesthesia (nasopalatine nerve block and intraligamentary anesthesia). The palatally erupted supernumerary lateral incisor was extracted without mucoperiosteal flap (Fig. 2). Hemostasis was performed. Postsurgical instructions were given to the patient and he was kept on analgesic coverage. Patient was instructed to keep a good oral hygiene using a soft toothbrush and chlorhexidine mouthwash once daily. The patient is on follow-up for 1 week following (Fig. 3).

3. Discussion
Supernumerary teeth are the most commonly in child. Clinically, the hyperodontia should be suspected if there is a delay in eruption of an adjacent teeth. According to Anil P [5], Supernumerary lateral incisor is rare, only few cases having been reported in the literature. The management depends upon the type and position of these teeth and their effects on adjacent teeth. Kini A, Manjunatha M, Shubhashini N, Shija, Sunil Kumar VC, Jayashankar DN [6]. Reports a case of single unilateral supernumerary tooth adjacent to maxillary left lateral incisor with associated periapical pathology and following endodontic treatment. According to Wedrychowska-Szulic B, Janiszewska-Olszowska J [4], the supernumerary laterals incisor seem to occur as some aesthetic problem with the same prevalence in boys and girls, were more prevalent in maxilla than in mandible, appearing more often in maxilla, cause not only bigger aesthetic disturbances but also – as the derivative factor – they lead to forming malocclusion. Removal of a supernumerary tooth preventing permanent tooth eruption usually results in the eruption of the tooth, provided adequate space. In the present case supernumerary lateral incisor caused moderate rotation of adjacent permanent lateral incisor, poor aesthetics and difficulty to maintain good oral hygiene. Extraction of supernumerary tooth followed by orthodontic correction and alignment of adjacent lateral incisor provide good aesthetics and occlusion.

4. Conclusion
Early determination and appropriate treatment options are mandatory for the management of supernumerary teeth.

5. References