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Case Report

A Rare Case Series: Impacted Distomolars

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Abstract

BACKGROUND: The occurrence of multiple supernumerary teeth in individuals without any associated syndrome is rare. Supernumerary teeth may occur in any region of the dental arch and are frequently observed in the maxillary region. But the occurrence of distomolars is rare, particularly mandibular distomolars are extremely rare.

CASES PRESENTATION: In this paper, we present a series of case reports of maxillary and mandibular distomolars.

CONCLUSION: The occurrence of distomolars is rare, but when detected patients should be kept under observation.

Introduction

Supernumerary teeth are rare development alterations seen as a result of processes occurring during odontogenesis. They appear in all areas of dental arches and can affect any sector of said arches. Since they normally are asymptomatic, they are usually detected through routine x-ray examinations [1], [2]. The majority of supernumerary teeth are considered to develop as a result of horizontal proliferation or hyperactivity of the permanent or deciduous dental lamina [3], [4].

The dissimilar is a type of supernumerary tooth. They can be found unilaterally or bilaterally in both jawbones. The incidence of the fourth molar is very rare, from 0.02 to 0.16%, being 1.15% in the upper jaw and 0.021 in the lower jaw. Morphology and size of this distomolar can be similar to a normal tooth [5]. Distomolars are also called distomolars or retromolar due to their distal or posterior location concerning third molars [1], [6].

Distomolars can fully erupt and be in alignment in the dental arch, or they can undergo partial eruption or impaction. As the eruptive force of the tooth is not great most of the times, it does not cause any disorders within the dental arch remaining at the same time undiscovered until a routine radiological examination. On radiographs, distomolars can be seen as clear osteosclerotic foci. A ratio of erupted distomolars to impacted ones is 1 to 5 [7].

In this paper, we are presenting a series of case reports of distomolars.

Case Reports

Case 1

A 35-year male patient reported to the department with the complaint of pain at the mandibular left posterior area from 2 to 3 months. On examination, it was found that mandibular third molar of the left side was impacted and only some part of the crown visible in the oral cavity. To see the radiographic presentation of the impacted tooth, OPG was advised to the patient. In OPG, it was found that the mandibular third molar of the left side was impacted vertically. Another interesting finding was seen in the OPG that the patient was having distomolar in the maxillary left side (Figure 1). The patient does not have any other symptoms associated. This was an accidental radiographical finding and as a patient does not have any complaint; treatment was not done for the patient and kept on observation.

Figure 1: Distomolar in maxillary left side

Case 2

A 41-year-old female patient came to the department with a complaint of pain at the mandibular left posterior area from 5 to 6 months. On examination, it was found that the permanent mandibular third molar of the left side had deep occlusal caries and it was positive on pain and percussion. To study the root anatomy, an OPG was advised. On radiographical examination, it was found that deep caries approaching pulp was seen about the mandibular third molar of the left side. Also, bilateral distomolar was found in OPG in the forming stage (Figure 2). The patient does not have any other symptoms associated. A patient was not willing to extract the tooth, root canal treatment was carried out, and the patient was kept on observation.

Figure 2: Bilateral mandibular distomolar was found in OPG in the forming stage

Case 3

A 37-year male patient was reported to the clinics with a complaint of pain and swelling at the mandibular right posterior region from 4 to 5 months. On clinical examination, impacted mandibular third molar of the right side was seen. On radiographical examination, in OPG, it was found that permanent mandibular third molar was vertically impacted and also distomolar was seen at that side (Figure 3). The patient does not have any other symptoms associated. As radiolucency was seen on the side of distomolar, it was decided to extract both teeth under local anaesthesia.

Figure 3: Impacted distomolar on right side of mandible

Case 4

A 29-year-old male came to the clinics with a complaint of an over-retained deciduous tooth in the mandibular posterior region of the left side. On clinical examination, over-retained mandibular second deciduous molar was seen. In the radiographic examination, over-retained mandibular second molar was observed, and below this tooth, an impacted permanent mandibular second premolar was observed. Also, in the maxillary arch, bilateral impacted distomolars were seen (Figure 4). The patient does not have any other symptoms associated. As the patient did not have any complaints, it was kept on observation.

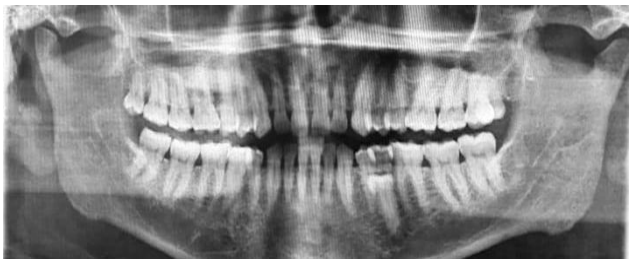

Figure 4: In the maxillary arch, bilateral impacted distomolars were seen

Case 5

A 35-year-old male patient came to the department with a complaint of carious teeth at maxillary right and left the posterior region and also pain in that region. On clinical examination, it was found that bilateral maxillary third molars were grossly carious. To see the morphology of roots before planning for extraction, an OPG was advised. In OPG, it was found that bilateral maxillary third molars were

carious. Another finding seen in the radiograph was the presence of bilateral maxillary distomolars and also the presence of distomolar in the mandibular right side (Figure 5). The patient had any other signs or symptoms associated. As the patient was symptomatic, the surgical removal of the bilateral third and at the same time distomolars was carried out.

Figure 5: Presence of bilateral maxillary distomolars

Case 6

A 42-year-old male patient was reported to the clinics with the complaint of pain and swelling at the mandibular left posterior region from 1 to 1 and a half months. On examination, it was found that permanent mandibular third molar of the left side was having deep disto-occlusal caries and was impacted. On radiographical examination, it was seen that the permanent mandibular third molar was deeply carious approaching pulp and the tooth was not fully erupted. Also, the OPG was showing bilateral impacted mandibular distomolars (Figure 6). Left side third and distomolar extraction was carried out, and the right side was kept under observation.

Figure 6: Bilateral impacted mandibular distomolars

Case 7

A 25-year-old female patient has come to the department for the orthodontic treatment. On clinical examination, mal-aligned teeth were present. For the analysis and case study, an OPG was done. The OPG had shown an interesting finding of the presence of bilateral maxillary distomolars (Figure 7). As the patient was asymptomatic, it was kept under observation.

Figure 7: Presence of bilateral maxillary distomolars and also presence of distomolar in the mandibular right side

Discussion

Supernumerary teeth may be classified according to chronology, morphology, topography and orientation. Chronologically, supernumerary teeth can be grouped as pre-deciduous, deciduous, permanent, post-permanent or complementary; morphologically (based on shape), as conical, tuberculate, supplemental and odontoma; topographically (based on location) as mesiodens, paramolar, distomolar and parapremolar; and according to orientation, as vertical, inverted and transverse [8].

Distomolars can be [1]:

1. Heteromorphic: they possess atypical morphology, also called rudimentary or dismorphic, cone-shaped (conical crown and rudimentary root) ortuberculated (crown with tubercles and single, curved root).

2. Eumorphic: similar to normal teeth, they also receive the name of inculormism the following can be observed: Infundibular (funnel-shaped) (with invaginations in the crown) or molariform (shaped as premolar or molar).

A distomolar can have a normal morphology with a completely developed crown, single root and distinct from the adjacent third molar or it can differ from in its normal morphology. These distomolars can erupt fully and align themselves in the dental arch, or they can show partial or complete impaction. In most cases, undiscovered distomolar does not cause any complications within the dental arch or oral cavity [8].

Peck [9] mentioned that the migration of unerupted teeth was most often observed in the case of premolars and canines. Baccetti [10] mentioned the possibility of a common genetic origin of four dental anomalies, such as aplasia of second premolars, the small size of maxillary lateral incisors, infraocclusion of primary molars, and palatal displacement of maxillary canines. However, no paper mention the reason for supernumerary distomolars in the bilateral maxillary or mandibular arch [2].

Among the supernumerary teeth, distomolar is relatively less commonly seen. Stafne [11] reports most of the upper distomolars are blunt, multicuspid, and much smaller than the third molars [1]. The present case reports shown presence of distomolar in all quadrants and all were impacted and seen as multicuspid teeth [4], [5].

Supernumerary teeth can pose problems for the eruption and alignment of normal dentition. Associated problems can include a range of conditions such as failure of eruption, displacement, crowding, adjacent teeth root resorption, and the formation of dentigerous cysts. In some cases, the supernumerary teeth can be asymptomatic, as in the present cases [2].

The indications for surgical distomolars extraction are inflammatory complications and chronic pains or due to orthodontic reasons. While planning a distomolars extraction a list of features should be taken under consideration, such as their location and access to the teeth during the surgery, potential problems with their removal and a possibility of complications that may occur during or after the surgery [5].

Treatment can take two forms: removal of the supernumerary tooth and in selected cases, maintenance of the tooth in the arch and frequent observation [12]. The decision as to whether supernumerary teeth require treatment is based on their position and the likelihood of their causing any pathological changes or disruption to the dental arch [12]. In our cases, only two patients had undergone surgery for the removal of distomolars.

In conclusion, distomolars can appear normal or abnormal in shape and size and may or may not be associated with potential complications. The occurrence of distomolar in the mandibular arch is less commonly seen and often remains undetected in routine dental examinations when situated distally to the third molar.

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