

Asymptomatic Impacted Supernumerary Maxillary Parapremolar

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ABSTRACT

A case of unilateral impacted supernumerary premolar has been reported. Supernumerary premolars are usually asymptomatic and most cases are diagnosed by a chance during inspection of radiographs.

Keywords: Supernumerary teeth, Impacted maxillary premolar

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INTRODUCTION

Supernumerary teeth are defined as the presence of excessive number of teeth/tooth in relation to normal dental formula i.e. 20 deciduous and 32 permanent teeth. Their reported prevalence ranges between 0.3–0.8% in the primary dentition and 0.1–3.8% in the permanent dentition (1-3). Males are affected approximately twice as often as females. Supernumerary teeth can occur as singles, multiples, unilaterally or bilaterally and in the maxilla, the mandible or both (1).

Supernumerary teeth may erupt normally, remain impacted, appear inverted or assume an abnormal path of eruption (4). However, only 13–34% of all permanent supernumerary teeth are erupted, compared with 73% of primary supernumerary teeth (1). The most frequent location for supernumerary teeth are the midline of maxilla, palatal area of upper incisors, lower premolar area and distal of upper and lower third molar (5).

Supernumerary teeth are estimated to occur in the maxilla 8.2 to 10 times more frequently than the mandible, (2, 3, 6) and most commonly affect the

premaxilla (1).

Supernumeraries can be classified according to morphology or location.

BASED ON MORPHOLOGY

Conical

They have conical or triangular-shaped crowns and complete root formation. Mostly found as isolated single cases and are usually located between the maxillary central incisors (mesiodens) (7, 8).

Tuberculate

They have a barrel-shaped appearance and a crown consisting of multiple tubercles (7). Tuberculate types have either incomplete or absent root formation (7). They are usually found in a palatal position relative to the maxillary incisors (1, 7). Tuberculate supernumeraries are often bilateral. It has been suggested that tuberculate supernumeraries may represent a third dentition (7).

Supplemental

Supplemental supernumerary teeth resemble their respective normal teeth. The most common supplemental tooth is the permanent maxillary lateral inci-

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sor, although supplemental premolars and molars also occur (1).

Odontomes

There are two different types of odontome: compound and complex. Compound odontomes comprise many separate, small tooth-like structures. A complex is a single, irregular mass of dental tissue that has no morphological resemblance to a tooth.

BASED ON LOCATION

Mesiodens

Typically, a mesiodens is a conical supernumerary tooth located between and palatally the maxillary central incisors (1, 8, 9).

Paramolar

A paramolar is a supernumerary molar, usually rudimentary, situated buccally or lingually/palatally to one of the molars or in the interproximal space buccal to the second and third molar.

Distomolar

A distomolar is a supernumerary tooth located distal to a third molar and is usually rudimentary

Parapremolar

This is a supernumerary tooth that forms in the premolar region and resembles a premolar.

The most useful radiographic investigation is the rotational tomography (OPG) and occlusal or periapical radiographs are also helpful.

CASE REPORT

A 22 year old male patient reported to dental clinic complaining of pain in relation to upper anterior region and also has pain in lower right back region in the jaw with difficulty in mouth opening. An OPG was taken and it revealed, a supernumerary impacted tooth found unilaterally in relation to upper left premolar region, access opened upper left lateral incisor and distoangular impaction of lower right third molar. (Figure 1)

The patient has been informed for impaction but he refused for the removal of any impacted supernumerary impacted premolar and impacted third molars in both the mandible and maxilla (3). In literature, some medical conditions associated with supernumerary teeth include (1, 2) Cleft lip and palate; Cleidocranial dysostosis; and Gardner's syndrome and so on. This supernumerary discovered by chance as a radiographic finding with no associated complications. However, the patient has been informed for complications. Supernumerary premolars are usually asymptomatic and most cases are diagnosed by chance during inspection of radiographs. Bodin *et al.* (10) have reported that only 2% of the supernumerary premolars are likely to undergo pathological changes. Nevertheless, the most commonly encountered complications with these teeth are dentigerous cyst and root resorption at the adjacent tooth (1). On the basis of morphological and location classification this supernumerary tooth can be classified as tuberculate and parapremolar respectively. The dentist must weigh between risks and benefits of removal of impacted supernumerary tooth and explain them thoroughly to the patient.

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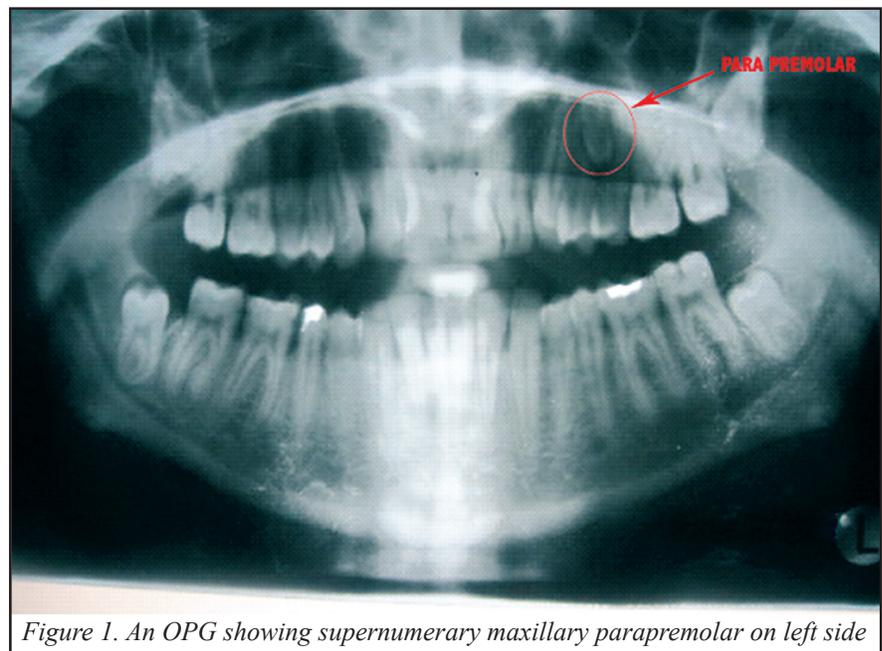


Figure 1. An OPG showing supernumerary maxillary parapremolar on left side