

Case Report

SUPERNUMERARY PREMOLARS AND FOURTH MOLARS – A NON-SYNDROMIC BILATERAL PRESENTATION IN A MALE LIBYAN PATIENT

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ABSTRACT

Extra set of teeth called supernumerary teeth is a well-known entity. To the best of our knowledge, this is the first such case report of supernumerary premolars and fourth molars in a Libyan patient. A 23-year old Libyan male patient reported with a chief complaint of decayed tooth. Intra-oral examination revealed a partially erupted supernumerary tooth in the left mandibular region. An OPG revealed multiple supernumerary premolars in left and right mandibular region along with fourth molars in the maxilla. The patient was advised surgical removal of the partially erupted supernumerary tooth but he has not reported for further treatment. The presence of bilateral supernumerary premolars and fourth molars in absence of any associated syndromes or systemic conditions is extremely rare. Surgical removal of these supernumerary teeth is recommended in the literature along with regular follow-up.

Keywords: Supernumerary Premolars, Fourth Molars, Bilateral, Male, Libyan

INTRODUCTION

Supernumerary (SN) teeth are defined as those teeth in addition to the normal series of deciduous or permanent dentition; they may occur anywhere in the mouth (Parolia *et al.*, 2011; Scheiner and Sampson, 1997).

Cases involving one or two SN teeth most commonly involve the anterior maxilla, followed by the mandibular premolar region. It has been reported that prevalence of SN premolars in permanent dentition is between 0.075% and 0.26% (Kaya *et al.*, 2011). Multiple SN teeth occur in less than 1% of all cases (Scheiner and Sampson, 1997; Bhardwaj *et al.*, 2012).

Some patients present with a partially erupted supernumerary tooth. It is prudent to investigate further to rule out multiple supernumeraries as it can complicate treatment planning for orthodontic, prosthodontic or surgical rehabilitation. We report the first case of multiple supernumerary teeth in a male patient of Libyan origin in English literature.

CASES

A 23 year old male patient of Libyan origin reported to the Faculty of Dentistry, Sebha University, Sebha, Libya for filling his decayed tooth. He had noticed the decayed tooth few months ago and was asymptomatic in nature. There was no associated pain, swelling or related symptoms. There was no related aggravating or relieving factors.

Past medical history and Past dental history was non-contributory. Family history did not reveal any abnormal findings.

On intra-oral examination, there was a carious lesion on 36. There was a partially erupted supernumerary tooth on the lingual aspect of 35 (Figure 1).

An orthopantomograph revealed three supernumerary premolars in the left mandible, three supernumerary premolars in the right mandible, and fourth molars on the left and right maxillary tuberosity region

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(Figure 2). Thus, the patient had 8 supernumerary teeth in total. He was diagnosed as Non-syndromic bilateral supernumerary premolars and fourth molars.

The patient was advised surgical removal of the lingually erupted premolar on the left side along with restoration of the carious molar. But, the patient has not returned for further treatment.

DISCUSSION

Supernumerary teeth are usually associated with Gardener's syndrome, Cleidocranial dysplasia, Trichorhinophalangeal syndrome, cleft lip and palate. Non-syndromic multiple supernumeraries are rare and majority of these occur in mandible, especially mandibular anterior region (Farahani and Zonuz, 2007; Yusof, 1990). But, our patient did not have any syndromes or associated systemic symptoms and presented with bilateral multiple supernumeraries in premolar region.



Figure 1: Clinical intra-oral picture showing partially erupted supernumerary premolar lingual to 36

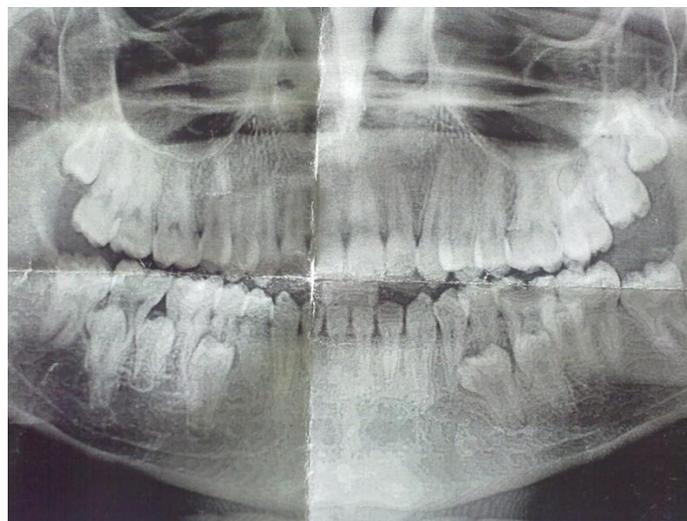


Figure 2: Orthopantomograph revealing the supernumerary premolars and fourth molars

SN premolars are usually of normal form and 75% are impacted and generally unerupted (Hall and Onn, 2006). In the present case, 3 right and 2 left SN premolars were unerupted and of supplemental type. The left SN premolar was partially erupted on the lingual aspect of 36. The bilateral fourth molars were unerupted. Most of the supernumerary teeth appear to be normal in tooth morphology.

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The etiology of SN teeth appears to multifactorial with a complex interplay between environmental and genetic factors (Solares and Romero, 2004). Supplemental premolars and fourth molars may be from the extension of dental lamina or accessory buds and may represent members of post permanent dentition (Bhardwaj *et al.*, 2012). The family history was irrelevant in our patient. It could be a combination of environmental and genetic factors responsible for this clinical presentation.

There may be no associated symptoms with the SN teeth discovered either as a chance radiographic finding or following their eruption (Scheiner and Sampson, 1997). Various complications associated with the presence of SN tooth have been described in literature (Parolia *et al.*, 2011). It is identical to our patient who was asymptomatic.

The incidence of SN teeth is considerably high in maxillary incisor region, followed by maxillary third molar and mandibular molar, premolar, canine, and lateral incisor (Parolia *et al.*, 2011). The prevalence of non-syndrome associated multiple SN teeth is less than 1%. The male to female ratio has been reported to be 9:2 (Ramakrishna and Rajashekarappa, 2013). We present a case of SN premolars and fourth molars bilaterally in a non-syndromic Libyan male patient.

It is advised to remove these SN teeth as soon as they are discovered (Kaya *et al.*, 2011; Kasat *et al.*, 2012). Surgical removal of supernumerary premolars should be done with care to avoid complications of damaging mental nerve and blood vessels. Recurrence of supernumerary premolars after being surgically removed has been reported in 8% of cases reviewed (Garvey *et al.*, 1999). If left untreated, regular follow-up is mandatory (Meighani and Pakdaman, 2010; Pasha *et al.*, 2013; Parinitha, 2013). The patient has not reported for us to initiate treatment.

Conclusion

Bilateral occurrence of mandibular supernumerary premolars and fourth molars is unusual. Appropriate follow-up with panoramic radiographs are extremely important as the recurrence of supernumerary premolars after being surgically removed has also been reported.

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