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## Multiple Mandibular Supernumerary Supplemental Premolars – A Non-Syndromic Bilateral Presentation in a Female Libyan Patient

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**Karthikeyan Ramalingam**

Department of Oral Pathology & Microbiology  
Faculty of Dentistry,  
Sebha University, Sebha, **Libya**

**Sathya Sethuraman**

Surendera Dental College and Research Institute,  
Sriganganagar, **India**

**Khaled Awidat**

Department of Orthodontics,  
Faculty of Dentistry,  
Sebha University, Sebha, **Libya**

**Omar Basheer**

Department of Oral and Maxillofacial Surgery,  
Faculty of dentistry,  
Sebha University, Sebha, **Libya**

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### ABSTRACT

Extra set of teeth called supernumerary teeth is a well-known entity. Supplemental tooth are tooth that resemble a tooth of normal series. The presence of bilateral supernumerary premolars in absence of any associated syndromes or systemic conditions is extremely rare. Our case reports such a unique presentation.

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**Keywords:** Supernumerary premolars, Supplemental, Bilateral, Female Patient, Libyan

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## 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.<sup>[1,2]</sup>

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%.<sup>[3]</sup> Multiple SN teeth occur in less than 1% of all cases.<sup>[2,4]</sup>

## Case Report

A 19 year old female patient of Libyan origin reported to the Faculty of Dentistry, Sebha University, Sebha, Libya for filling her decayed tooth. Past medical history was non-contributory. Past dental history revealed uneventful extraction of decayed lower tooth, 4 years ago.

On intra-oral examination, there was a proximal carious lesion on 34 and occlusal caries on 35. There was an additional premolar which had erupted into the edentulous space of 36. It was rotated mesially and had not reached the occlusal plane. Similarly, 44 and 45 had erupted completely. There was additional premolar that had erupted lingually in relation to 45 and 46. (Figure 1)

Intra-oral periapical radiograph revealed unerupted 4<sup>th</sup> premolar on the left side of the mandible. (Figure 2)

The patient was advised surgical removal of unerupted premolar in the left side and lingually erupted premolar on the right side. But, the patient has not returned for further treatment.

## Discussion

Supernumerary teeth are usually associated with Gardner'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<sup>[5, 6]</sup>. But, our patient did not have any syndromes or associated systemic symptoms and presented with bilateral multiple supernumeraries in premolar region.

SN premolars are usually of normal form and 75% are impacted and generally unerupted.<sup>[7]</sup> In the present case, left SN premolar was unerupted and of supplemental type. The right SN premolar and one of the left SN premolar had erupted.

The etiology of SN teeth appears to multifactorial with a complex interplay between environmental and genetic factors.<sup>[8]</sup> Supplemental premolars may be from the extension of dental lamina or accessory buds and may represent members of post permanent dentition.<sup>[4]</sup>

There may be no associated symptoms with the SN teeth discovered either as a chance radiographic finding or following their eruption.<sup>[2]</sup> Various complications associated with the presence of SN tooth have been described in literature.<sup>[1]</sup>

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.<sup>[1]</sup> 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<sup>[9]</sup>. We present a case of SN premolars bilaterally in a non-syndromic Libyan female patient.

It is advised to remove these SN teeth as soon as they are discovered.<sup>[3, 10]</sup> 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.<sup>[12]</sup> If left untreated, regular follow-up is mandatory.<sup>[11, 13, 14]</sup>



## Conclusion

Bilateral occurrence of mandibular supernumerary premolar 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.

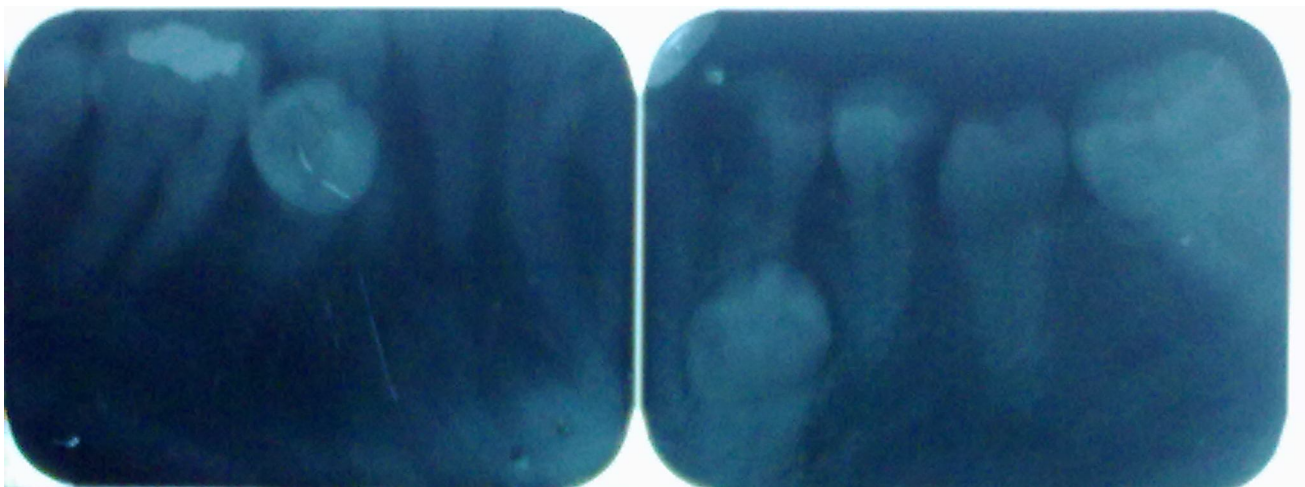
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**Figure: 1**



**Figure 2:**



**Legends:**

Figure 1: Clinical intra-oral picture showing bilateral supernumerary premolars

Figure 2: Intra-oral Periapical radiographs revealing the supernumerary premolars

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