An unusual presentation of right mandibular fourth molar: A case report

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Abstract

The occurrence of an impacted fourth mandibular molar is not very common and it is even more rare when it is impacted very distally along the vertical ramus. A search of PubMed for any documentation on mandibular fourth molar impaction revealed only four publications. We present an unusual case of a forty eight year old female who present with a fourth molar impacting against the right mandibular foramen thereby causing a neurosensory disturbance.

Keywords: Impacted tooth; Supernumerary fourth molar; Mandibular foramen; Neurosensory symptoms

Introduction

Supernumerary teeth are most frequently seen in the maxillary anterior and molar regions. The supernumerary teeth that occur between or just posterior to the central incisors are referred to as “mesiodens”, those in the molar area are called “paramolar”, and more specifically, those that erupted distally in the third molar area are “distomolar” teeth. Supernumerary molars occur more frequently in the maxilla i.e., 79.7% and often were impacted (88.7%) and found bilaterally (23.9%). They are divided into supplemental (normal size and shape) or rudimentary (abnormal shape and smaller size) type. Supernumerary teeth have been found in the maxillary sinus, spheno-maxillary fissure, soft palate, nasal cavity, and in dentigerous cyst. This paper reports an unusual case of impacted supernumerary fourth molar on the right side involving mandibular canal and foramen causing neurosensory changes of the right hemi-mandible.

Case Report

A forty eight year old black female presented to the oral surgery outpatient clinic at the Unity Health Care (DCGH) with history of pain associated with impacted lower left third molar and intermittent pricking sensation of the right hemi-mandible. History revealed that the patient has been experiencing mild to moderate pain in the lower left jaw for about five weeks and the pricking sensation had been felt for two to three years duration intermittently.

Clinical examination revealed a healthy looking female who is in mild/moderate distress. There is facial symmetry with no regional lymphadenopathy. No restrictions or deviation of the mandible was noted upon opening and closing. Oral hygiene is good and the soft tissue appears healthy except for a moderately inflamed pericoronal tissue around tooth number 17. No carious teeth/teeth were detected, neither was any other abnormalities noted intra orally that might be contributory to the pricking sensation that was part of the patient initial complaint.

Radiographically, there is a radio-opaque mass impacting against the mandibular canal, which has morphology of a rudimentary molar (Figure 1). A diagnosis of soft tissue impaction of the lower third molars and a vertical ramus supernumerary impaction of a fourth molar was made (Figure 2) shows a symmetrical facial profile. Patient was informed of the clinical and radiographic findings and the possible correlation between the distomolar and the intermittent prickling sensation the patient was experiencing. The pericoronitis associated with tooth number 17 was also discussed. The complete surgical management envisaged along with possible complications was then explained to the patient and she consented to have the third molars extracted but declined the treatment of the fourth molar. Patient did not return to us for treatment and attempt to contact the patient was not successful.

Discussion

Patient with an ectopic tooth impaction can remain asymptomatic over the course of their lifetime. But when such a tooth migrates, particularly one that is accompanied by a cyst, patient can experience significant morbidity and require intervention. Ectopic dentition in general have been reported to cause severe headache, epistaxis, pain, swelling, trismus and temporomandibular joint syndrome. Paresthesia and anesthesia to the terminal branches of the fifth nerve arising from variety of pathological conditions have also been reported. But sensory disturbance based on an impacted fourth molar against a mandibular foramen is very rare.

The case we are presenting according to our knowledge will be the first to be reported. In the absence of any other clinical or radiographic findings that may be possible causative factor for the neurosensory disturbance, it became highly probable that the fourth molar is the likely cause of our patient’s clinical symptoms. We planned a CT scan to further evaluate any degree of nerve compression if any, had our patient returned. Surgical management according to the literature will include intraoral, endoscopic and extra-oral extraction methods. Our patient was consented for surgery our preference could then be the first to be reported. In the absence of any other clinical or radiographic findings that may be possible causative factor for the neurosensory disturbance, it became highly probable that the fourth molar is the likely cause of our patient’s clinical symptoms. We planned a CT scan to further evaluate any degree of nerve compression if any, had our patient returned. Surgical management according to the literature will include intraoral, endoscopic and extra-oral extraction methods. But sensory disturbance based on an impacted fourth molar against a mandibular foramen is very rare.

Conclusion

Fourth molar occurrence is extremely rare and will not be often symptomatic or detected on routine dental examination. Whenever it is detected and found to be symptomatic however management will have to be determined on case-by-case basis.
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References

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