

Letter to the Editor

Impacted lower third molars: another evidence against prophylactic removal

Prophylactic surgical removal of non-symptomatic impacted lower third molars (ILTM) has generated a lot of controversies in oral surgical practice in the last two decades. Previously, prophylactic surgery has been justified on the basis that third molars have no role in the mouth, notwithstanding that few people would contemplate the prophylactic removal of their appendix, which, unlike many unerupted third molars, communicates with the alimentary tract throughout life⁷. Other justifications for prophylactic removal are increased risk of cysts and tumors development^{1–3}, increased risk of mandibular angle fracture^{7,4–6,8,10} and increased difficulty of surgery with age^{1,9}.

There exists overwhelming evidence in the literature supporting the fact that patients with ILTM are more likely to have an angle fracture than those patients without impacted mandibular third molars^{7,4–6,8,10}. One mechanism by which third molars have been hypothesized to increase the risk of angle fractures is by occupying osseous space and thereby weakening the angle region by decreasing the cross-sectional area of bone⁴. Based on this evidence, some investigators have advocated removing unerupted mandibular third molars to prevent angle fractures^{4,8}.

In a recent retrospective study conducted by ZHU et al.¹¹, in addition to confirming the findings of other previously published reports that the frequency of angle fractures is significantly higher in patients with unerupted third molars than in those patients without unerupted third molars; interestingly, they found that the absence of unerupted mandibular third molars was significantly

associated with higher incidence of condylar fractures ($P < 0.001$). They also found that there were significantly more symphysis and condyle combination fractures in the unerupted third molar absent group than in the third molar present group ($P < 0.001$). For nine patients who had a symphysis and bilateral condyle combination fractures, all of them had no unerupted third molars. In 2004, IIDA et al.⁵ also reported a significant relationship between absence of ILTM and higher incidence of condylar fractures ($P < 0.001$). These two findings provide solid clinical evidence that incompletely erupted mandibular third molars help to prevent condylar fractures.

These recent findings have a lot of clinical implications in view of earlier overwhelming evidence in favour of prophylactic extraction of ILTM, especially in those prone to having maxillofacial injury^{4–6,8,10}. Presently in many centres across Europe and America, one symptomatic lower third molar is a definitive indication for the removal of other third molars. For those of us who believed that lower third molars, impacted or not impacted, have no role in the mouth except to cause pathoses, is this the time to have a rethink in view of the current evidence? One can only agree with ZHU et al.¹¹ that it might not be appropriate to strengthen the mandibular angle region and to make the mandible more vulnerable to condylar fractures by means of removing an asymptomatic ILTM, because the treatment of condylar fractures is more challenging and may be associated with more complications than that of angle fractures.

In conclusion, surgeons should be more cautious in taking a decision regarding prophylactic removal of ILTM in the light of new accumulating evidence

regarding proness of condylar region to fracture in the absence of incompletely erupted or unerupted mandibular third molars.

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