

# Simultaneously-Impacted Mandibular 2<sup>nd</sup> and 3<sup>rd</sup> Molars; Which Should We Remove?

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Simultaneously - impacted mandibular 2<sup>nd</sup> and 3<sup>rd</sup> molar teeth are uncommon in clinical practice. With respect to management; the main question is which tooth should be removed (the 2<sup>nd</sup> molar or 3<sup>rd</sup>) and why. Controversy exists as to which tooth must go and which must stay; each option has its advantages and disadvantages. Simultaneously-impacted second and third mandibular molars are seen in patients with arch space deficiency (Figure 1). Dentists face problems when planning treatment because they must decide which tooth to remove.



Figure 1: Simultaneously impacted second and third molars of the mandible.

If the second molar is extracted aside from the difficulty of the procedure surgically - we must await mandibular third molar eruption (at age 18 years or later). Orthodontics to bring the mandibular third molar tooth into occlusion with the upper second molar is itself an issue of concern because it may not occlude. Additionally during this waiting period of several years or more (for eruption of the retained mandibular third molar at age 18 or above), we will encounter supraeruption of the upper second molar, which has no opposing tooth until the mandibular 3<sup>rd</sup> molar erupts. This problem (extrusion of the upper second molar) may be difficult to manage.

From the surgical point of view, removal of the impacted mandibular third molar is easier and obviates the aforementioned problems; but the retained impacted mandibular second molar needs surgical exposure for orthodontic bracketing and up righting But, exposure and apical repositioning of the gingiva of the second molar for orthodontic bracketing is difficult because the vestibular depth there is shallow and the external oblique ridge is prominent. One way to do this is to reflect a full-thickness triangular mucoperiosteal flap and after extraction of the impacted mandibular third molar, use a 704 fissure or rose bur to drill a hole is through the buccal cortex of the extracted third molar socket just behind the impacted second molar (Figure 2 and 3) and then, secure the flap to the lateral buccal cortex.

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**Figure 2:** Impacted 3<sup>rd</sup> molar is removed crown of the impacted 2<sup>nd</sup> molar. Is exposed and a hole is drilled through the buccal cortex of the extracted third molar just behind the impacted second molar.



Figure 3: 3-0 silk suture is passed through the superior part of the flap and then through the buccal cortex.



Figure 4: Radiograph 2.5 years post-treatment.

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Extraction of the lower 3<sup>rd</sup> molar instead of the 2<sup>nd</sup> molar in patients with double impactions together with our technique to apically reposition the attached gingiva of the second molar and expose it for bracket bonding and orthodontic treatment. This is an effective modality to treat such patients.

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