

Exchange Roundtable

[Question: Wisdom teeth: what is the optimal age for removal, and should all wisdom teeth be removed?](#)

by Kathleen Herb Brower, DMD, MD; Elizabeth A. Kutcipal, DDS; Mark A. Egbert, DDS; Michael R. Sesemann, DDS



Dr. Brower

What is the optimal age for surgery? The NIH study found that the lowest morbidity was associated with third molar removal in patients aged 15 to 25 or when the roots are two-thirds formed. Reasons for this included: more favorable root form, greater distance to the inferior alveolar nerve, softer/more pliable bone, and more rapid healing. My personal experience is consistent with these findings.

How young is too young? I do occasionally see a need for mandibular third molar removal in 12- to 13-year-old patients due to blockage of second molar eruption. To wait longer in such cases can severely compromise second molar position, functionality, and health. As age does not always correspond to development, there have been instances when I have deferred tooth removal for a year or two due to patient immaturity, either physical or psychological.

How old is too old? Many studies have shown risk to significantly increase after age 25. The patient may have co-morbid medical conditions. The presence of periodontal disease, caries, or other dental pathology certainly makes the decision for removal (but not the surgery) easier. When it is necessary to proceed with removal of pathologic impacted teeth in the adult, I will consider performing a coronectomy to preserve the function of an at-risk inferior alveolar nerve.

It is recommended that patients who choose not to have elective removal of impacted third molars be made aware of the future risk and be periodically monitored for pathologic changes.

References

1. NIH Consensus Development Conference for Removal of Third Molars. *J Oral Surg.* 1980; 38:235-236.



Drs. Kutcipal and Egbert

Third molar removal has been a long-time controversy in the oral and maxillofacial circles. Most surgical practices see multiple referrals for this procedure on a daily basis.

The answer to this question is ill-defined. The accepted

observation is that teenagers and young adults have fewer complications following third molar removal. The technical aspects of third molar surgery generally favor removal when at least a portion of the root has developed. The timing for third molar extractions is multifactorial, minimally based on the patient's dental and skeletal development.

Should all third molars be removed? The easy answer is "no." There are, however, many indications for third molar extraction, possibly too many to list in this short piece.

- Symptomatic teeth, including third molars with acute or chronic issues, including dental caries, pericoronitis, odontogenic abscess, etc.
- Any impacted tooth with associated pathology is indicated for extraction, and would include cyst and tumors. If pathology is suspected, a biopsy of the associated tissue should be planned.
- Periodontal compromise of adjacent teeth.
- If orthognathic surgery is planned-specifically a bilateral sagittal-split osteotomy-removal of the third molars should be planned for a more predictable surgical outcome.
- Second molars that have failed to erupt often have the developing third molars just distal to them. Once this is recognized, the second molars are effectively "pinned" into place. Extraction of the third molars often allows these teeth to erupt.
- Arch length deficiency.
- There are many special cases when third molar extractions are indicated, including fractures, complex medical issues, or behavioral issues.



Dr. Sesemann

Thirty years ago while in dental school, I was taught to observe wisdom teeth in patients to see if the teeth would erupt and position themselves as a legitimate member of the adult functioning dentition before deciding if they should be removed. If they were to ever appear problematic, such as causing repeat pericoronitis or presenting with an angle of eruption that could endanger a valuable second molar, then they were scheduled for extraction, almost begrudgingly. Though we know that the capacity of the human form, specifically the oral environment, could not have anatomically evolved significantly over a short 30-year period to change my paradigm, I can assure you that what I have observed has.

In answering the second part of the question first, I offer that unless the patient has congenitally missing teeth in an arch, has had adult teeth removed for orthodontics, or has an unusually large jaw structure, it is my opinion to recommend the removal of all wisdom teeth. The possibility of complete eruption and, favorable positioning of the tooth in the occlusal scheme of the complete dentition without detriment to the functioning masticatory system and having the patient have access to the tooth for optimal hygiene is so remote in the average human skeleton that recommending someone to keep their wisdom teeth without possessing the aforementioned conditions is as normal as a total solar eclipse.

In general, except for freakish extremes, my decision-making for when is the optimum time for surgery is not related as much to the age of the patient as it is to the amount of mineral maturation of the root dentin. I want to see the root dentin formation provide as much coronal migration as possible; however, I would like to have the tooth scheduled for extraction before the roots are more than half mineralized. Because of the easy luxation of the partially mineralized tooth, scheduling surgery at that time allows for notably improved surgical experiences and significantly better postoperative outcomes with less complications than when a fully mineralized tooth is surgically removed.

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