Managing Impacted Third Molars

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KEYWORDS

• Third molars • Asymptomatic • Disease free • Retention • Management strategies

KEY POINTS

- Clinicians can be reasonably certain about some, but not all, things related to the behavior of third molars.
- There is a tangible, measurable, but not totally predictable risk for future extraction among patients with retained third molars that were asymptomatic and disease free at the time of baseline examination.
- Based on an analysis of relevant historical, clinical, and imaging information, findings can be organized based on the presence or absence of symptoms and disease, which helps simplify decision making.
- Oral and maxillofacial surgeons should educate their patients and the community about the benefits and consequences (short and long term) of different third molar management strategies, including active surveillance.

One of the most common decisions made by oral and maxillofacial surgeons is how best to manage third molars. Most of these decisions are straightforward owing to the presence of symptoms and/or disease. Recently these decisions have come under increased scrutiny. Commonly cited areas of concern include when surgical management is indicated (particularly in the case of asymptomatic teeth), the optimal timing for treatment, the cost of treatment, and what should be done when a decision is made to retain a third molar.

There are differences of opinion when it comes to what constitutes best practice in the area of third molar management. In an effort to develop consensus on best-practice approaches to any clinical dilemma, attention should be given to evidence-based clinical practice and its role in the decision-making process. This process is characterized by merging the best available evidence (ideally from practice-based research) with the results of a comprehensive and focused clinical and imaging examination. As a result, recommendations can be made to the patient.

This article reviews what is known about third molar behavior and advocates an organized approach to the clinical problem. Such an approach begins with the collection of relevant clinically generated data followed by review of this information in light of what is known about the behavior of third molars. The last part of the process is formulation of a management strategy with implementation after an informed discussion.

OBSTACLES TO CONSENSUS

As is the case in many areas of clinical practice, some clinicians may disagree with any proposed management strategy.

DESIRES AND PERSPECTIVES OF PARTIES OF INTEREST

Patients and families focus their attention on risks, convenience, and limiting out-of-pocket

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expenses and red tape. Clinicians value the freedom to provide what they think is the best treatment and to be fairly compensated. Third parties and government agencies focus on cost management and quality measures. Consumer groups and media outlets focus on risks of operative treatment and the potential for overtreatment. This lack of unanimity in part represents honest disagreement but also reflects the bias of self-interest (Fig. 1).

Uncertain Terminology

"Asymptomatic" does not indicate the absence of disease, but merely the absence of symptoms. It is well understood that disease precedes symptoms and that disease often progresses in the absence of symptoms. Effective management strategies should take into account the likelihood of the development of disease.

Misconceptions

In the eyes of many clinicians, third molar decision making consists of either tooth removal or retention. Management may also include partial removal (coronectomy), retention with active clinical and radiographic surveillance, surgical exposure, tooth repositioning, transplantation, surgical periodontics, and marsupialization of associated soft tissue disorder with observation and possible secondary treatment.

Unlike medicine, the dental profession in the United States is made up of about 80% general practitioners, with most of the remaining 20% practicing in disciplines other than surgery. Most patients seeking consultation have been referred from other different dental professionals who have nothing at stake other than the well-being of the patient.

RELATED ORGANIZATIONAL POLICY STATEMENTS

Several professional organizations have developed policy statements on third molar management.

Fig. 1. Agenda bias and self-interest are obstacles to arriving at the best care.

American Association of Oral and Maxillofacial Surgeons

The American Association of Oral and Maxillofacial Surgeons[1] (AAOMS) "Parameters of Care 2012: Clinical Practice Guidelines for Oral and Maxillofacial Surgery (ParCare 2012)" lists more than 20 specific indications for removal of categories of third molars along with goals for therapy. It recognizes the benefit of removal to prevent disease and the role of the treating surgeon as the person best qualified to determine care for an individual patient. Therapeutic goals listed include "prevention of pathology," "preservation of periodontal health of adjacent teeth," and "optimization of prosthetic rehabilitation." Along with specific indications are the following statements: "Given the following and the desire to achieve therapeutic goals, obtain positive outcomes, and avoid known risks and complications, a decision should be made before the middle of the third decade to remove or continue to observe third molars knowing that future treatment may be necessary based on the clinical situation. There is a growing body of knowledge suggesting that retention of third molars that are erupted or partially erupted contribute to a higher incidence of periodontal disease. This persistent periodontal disease has both dental and medical consequences for the host and therefore, may be an indication for prophylactic removal."[1]

The AAOMS also offers so-called anchor statements, best represented by the following: "Predicated on the best evidence-based data, impacted teeth that demonstrate pathology, or are at high risk of developing pathology, should be surgically managed. In the absence of pathology or significant risk of pathology, active clinical and radiographic surveillance is indicated."

The American Dental Association

The American Dental Association offers statements that are less detailed but support in principle the guidelines contained in the AAOMS ParCare document. Comments include that, "Your dentist or specialist may also recommend removal of teeth to prevent problems or for others reasons, such as…" "In addition, the condition of your mouth changes over time. Wisdom teeth that are not removed should continue to be monitored, because the potential for developing problems later on still exists. As with many other health conditions, as people age, they are at greater risk for health problems and that includes potential problems with their wisdom teeth."