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## **Response to APHA C3: Opposition to Prophylactic Removal of Third Molars (10/26/2008)**

I have come today on behalf of the American Association of Oral and Maxillofacial Surgeons, and on behalf of myself and my patients, to urge that the proposal “Opposition to Prophylactic Removal of Third Molars” be tabled or defeated on the grounds that it misrepresents the scientific literature and presents a biased perspective that would unfairly limit patients’ ability to make informed decisions about their own care. I would like to elaborate on these points.

First, while “evidence-based practice” as touted by the proposal’s author would be an appropriate approach, I know evidence-based practice and this is not evidence-based practice. The author has simply “cherry-picked” published facts from the literature to support his agenda while ignoring the context and intent of many distinguished authors in order to support a biased and misleading policy statement.<sup>1</sup>

For example, the author uses Huang et al’s study to project a risk of “tens of thousands” of TMJ injuries from third molar extractions.<sup>2</sup> In fact, neither of Huang’s studies shows a statistically significant risk of TMJ injury from third molar extraction and the proposal’s author cites an isolated subgroup risk that may be a spurious finding.<sup>2,3</sup> He selectively quotes from a Cochrane Review and concludes that “watchful monitoring” of asymptomatic impacted teeth may be more appropriate than extraction when in fact, the reviewers conclude that “. . . no evidence was found to support or refute routine prophylactic removal of asymptomatic impacted wisdom teeth in adults.”<sup>4</sup> The author uses my own study to imply, contrary to published findings, that periodontic status of the patient is always worse off after third molar extractions. He then applies these and other misstated risks globally across national unadjusted third molar spending patterns to promise massive cost savings to the health care system.

The most egregious oversight is that the author fails to examine the totality of third molar management by omitting all evidence and risk factors associated with non-operative management of wisdom teeth, and the importance of patient context, preferences and values in clinical decision-making. Much as a scientific investigator must report on all cases in a study group—whether or not they support his hypothesis—so must the evidence-based practitioner examine the risks of both operative and non-operative management of third molars.

A true evidence-based analysis would report the following:

- That there are no good predictors of which third molars will erupt into a useful functional position
- That third molars behave unpredictably and dynamically over the patient’s lifetime and are at risk for eruption even in older patients<sup>5-7</sup>
- That retained wisdom teeth require a lifelong commitment to management including regular visits and imaging with their associated costs and there is no guarantee that extraction will be avoided<sup>8</sup>

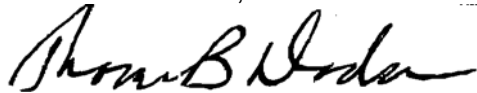
- That inflammatory dental disease is present in 25% of patients who perceive their third molars are asymptomatic and extraction improves the periodontal status 90% of the time <sup>9, 10</sup>
- That caries are present in 28% of patients with asymptomatic third molars <sup>11</sup>
- That in a sample of young adults (mean age – 20.3) with asymptomatic wisdom teeth at baseline, the four-year cumulative hazard for extraction due to subsequent inflammatory disease was 30% <sup>12</sup>
- That increasing age increases the risk for complications in third molar removal <sup>13, 14</sup>
- That increasing age is associated with increased operative difficulty <sup>15</sup>

Extraction is just one tool available for the management of third molars. Ultimately, the decision to remove third molars and the timing of the removal is a decision best left to the patient in consultation with his dentist.

We recommend:

- That the current proposal be tabled absent a randomized clinical trial comparing operative and non-operative management of impacted teeth,
- That the current proposal be tabled absent an evidence-based review supporting its recommendations
- That the current proposal be tabled until such time as it represents the totality of evidence on third molar management.
- That the AHRQ, NIH, and other researcher organization continue funding research enabling evidence-based management of third molars.
- That APHA acknowledges that third molar management involves the weighing of both short-term and long-term patient risks and benefits.
- That APHA recognizes that extraction of third molars, an elective procedure, should be chosen by the patient only when the perceived benefits outweigh the risks.
- That APHA avoids actions that, in the absence of compelling scientific evidence, would preempt or interfere with the patient's ability to choose.
- That we urge public health agencies and dental professional organizations to disseminate information explaining the known risks and benefits of both operative and nonoperative treatment of third molars, in keeping with their dedication to improving the health literacy of the public and its consequent ability to make informed health care decisions.

**Conclusion:** Based on available scientific evidence, it is unfounded at this time for the APHA to adopt a position against surgical management of third molars. The current proposal, with its associated therapeutic implications, ignores a fundamental EBM principle of including consideration of an individual patient's values, interests, and preferences. Furthermore, it reflects no rigorous comparison of operative versus non-operative management of third molars. For these reasons, I recommend that this proposal as currently drafted be tabled or defeated.



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