

# **SUBJECT: Clinical Guidelines for Tonsillectomy in Children, Issued by the American Academy of Otolaryngology – Head and Neck Surgery Foundation**

INFORMATIONAL MEMORANDUM

From: Robert M. Mason, DMD, PhD

This informational memo is intended to inform you of current clinical practice guidelines regarding the factors involved in the decision to perform a tonsillectomy in children along with, in some instances, an accompanying adenoidectomy. The Foundation of the American Academy of Otolaryngology – Head and Neck Surgery, issued the guidelines shown below, which were published on January 3, 2011, on the website Medscape Medical News. Medscape is a leading online destination and is part of WebMD that healthcare professionals can go to for timely and trusted medical information that provides support for them at the point-of-care.

As you know, orofacial myologists and dentists, especially orthodontists, are keenly interested in the status of the faucial tonsils and adenoids. Myofunctional clinicians routinely examine the faucial isthmus area whenever a tongue thrust swallow or anterior rest posture of the tongue is noted. OFMs know that an OMD involving the anterior oral area is a “clue”, signaling the need to look at the posterior airway for a possible explanation of the cause of the OMD. Orthodontists have identified enlarged tonsils and adenoids as a factor that can negatively impact facial growth. Where tonsils and adenoids are enlarged, a recommendation may follow for surgical removal of either tonsils or adenoids, or both.

While orofacial myologists do not make recommendations for surgical management of tonsils and adenoids, they can play an important role in identifying for physicians and surgeons those children whose chronically enlarged tonsils may need to be removed or otherwise treated with a drug regimen. In the evaluation process with OMDs, it is recommended that orofacial myologists routinely record Mallampati scores as part of an initial evaluation, and also to include the scores in reports to professionals in other fields. As you will recall, Mallampati scores reflect an assessment of the area of the faucial isthmus. Such evaluations are routinely obtained in pre-operative descriptions of patient airways.

As a brief review, although the soft palate has been termed the “traffic cop of the pharynx”, the tonsils also serve this role in the early years of life, helping the body to learn what is foreign by filtering whatever passes by the tonsils and through the oral isthmus during respiration. The tonsils serve an important role in the development of the body’s immunologic system up to around age 6, helping to make antibodies to fight infections. In young children, lymphoid tissues (glands in the neck, and the tonsils and adenoids) can quickly become enlarged from a cold or a simple infection.

The surgical removal of tonsils and adenoid was a routine procedure 40 years ago, but physicians since then have become increasingly conservative about removing the tonsils and adenoids. The surgery is not typically conducted during the time that an infection or tonsillitis is present. As well, there are concerns about morbidity and mortality associated with the operation. Post-operative bleeding is a key concern.

The guidelines to follow represent an ENT perspective about the management of enlarged tonsils and adenoids. These guidelines reflect the current conservative view regarding their disposition. When orofacial myologists become concerned about the size or medical status of the tonsils, a referral is appropriate either to the child’s family physician, a pediatrician, or an ENT specialist. At present, a recommendation for removal of tonsils and adenoids is not appropriate based on an OMD, and also continues to be a questionable recommendation by orthodontics where facial growth is thought to be negatively impacted by enlarged tonsils.

It is good practice to stay abreast of developments and perspectives in fields other than our own; especially those fields where referrals are made and received. An excellent way to keep up with current thinking and advances in other fields is to sign up to receive free informational emails from our medical colleagues. Such information from the Medscape Medical News reported on here can be received free of charge.

Just visit: <http://mp.medscape.com/cgi-bin/1/DM/t/eDCwl0Yc6Bw0bwm0BcOz0EC> to learn more about this resource. Also, you are encouraged to visit PubMed and other similar resources as often as you can.

From Medscape Medical News

## **Clinical Practice Guideline Issued for Tonsillectomy in Children**

Laurie Barclay, MD

January 3, 2011 — The prevalence of tonsillectomy, the associated morbidity, and the availability of hundreds of randomized clinical trials evaluating associated interventions create a pressing need for evidence-based guidance to aid clinicians, according to the multidisciplinary Clinical Practice Guideline: Tonsillectomy in Children, published online January 3, 2011, in Otolaryngology–Head and Neck Surgery.

“Over half a million tonsillectomies are done every year in the United States,” said guideline coauthor Richard M. Rosenfeld, MD, MPH, from SUNY Downstate Medical Center and Long Island College Hospital in Brooklyn, New York, in a news release. “The tonsillectomy guideline will empower doctors and parents to make the best decisions, resulting in safer surgery and improved quality of life for children who suffer from large or infected tonsils.”

The new guideline, which is intended for all clinicians in any setting who care for children 1 to 18 years old in whom tonsillectomy is being considered, offers evidence-based recommendations on identifying children who are the best candidates for tonsillectomy, and on preoperative, intraoperative, and postoperative care and management. Other objectives of this guideline include highlighting the need for evaluation and intervention in special populations, improving counseling and education for families, describing management options for patients with modifying factors, reducing inappropriate or unnecessary variations in care, and discussing the significant public health implications of tonsillectomy.

The definition of tonsillectomy is a surgical procedure in which the peritonsillar space between the tonsil capsule and the muscular wall is dissected to completely remove the tonsil, including its capsule. The term often refers to tonsillectomy with adenoidectomy, especially in relationship to sleep-disordered breathing (SDB) or other contexts where adenoidectomy is appropriate.

SDB refers to a continuum of obstructive disorders ranging in severity from primary snoring to obstructive sleep apnea (OSA). SDB is characterized by abnormalities of respiratory pattern or of the adequacy of ventilation during sleep, as well as by associated daytime symptoms such as excessive sleepiness, inattention, poor concentration, and hyperactivity.

Indications for tonsillectomy include recurrent throat infections and SDB, both of which can significantly impair childhood health and quality of life (QoL). Throat infection, which includes strep throat and acute tonsillitis, pharyngitis, adenotonsillitis, or tonsillopharyngitis, is defined as sore throat caused by viral or bacterial infection of the pharynx, palatine tonsils, or both, which may or may not be culture positive for group A streptococcus.

"The importance of tonsillectomy as an intervention relates to its documented benefit on child QoL," the guidelines authors write. "For example, when compared with healthy children, children with recurrent throat infections have more bodily pain and poorer general health and physical functioning. Tonsillectomy may improve QoL by reducing throat infections, health care provider visits, and the need for antibiotic therapy."

SDB in children is also associated with cognitive and behavioral impairment that usually improves after tonsillectomy, as do QoL, sleep disturbance, and vocal quality. The potential benefits of tonsillectomy must be weighed against possible surgical complications, including throat pain; postoperative nausea and vomiting; delayed feeding; voice changes; hemorrhage; and, rarely, death.

**Guideline Recommendations** Specific recommendations included in the clinical practice guideline are as follows:

Watchful waiting for recurrent throat infection is recommended if there have been fewer than 7 episodes in the previous year, fewer than 5 episodes per year in the previous 2 years, or fewer than 3 episodes per year in the previous 3 years (statement 1).

Tonsillectomy may be an option for recurrent throat infection with a frequency of at least 7 episodes in the previous year, at least 5 episodes per year for 2 years, or at least 3 episodes per year for 3 years, provided that the medical record documents each episode of sore throat and the presence of at least one of the following: temperature of more than 38.3°C, cervical adenopathy, tonsillar exudate, or positive test result for group A  $\beta$ -hemolytic streptococcus (statement 2).

- Children with recurrent throat infection who do not meet the criteria in statement 2 may have modifying factors favoring tonsillectomy, including but not limited to multiple antibiotic allergy/intolerance, periodic fever, aphthous stomatitis, pharyngitis and adenitis, or a history of peritonsillar abscess (statement 3).
- Clinicians should ask caregivers of children with SDB and tonsillar hypertrophy about comorbid conditions that might improve after tonsillectomy, such as growth retardation, poor school performance, enuresis, and behavioral problems (statement 4).
- Caregivers of children with abnormal polysomnography results who also have tonsillar hypertrophy and SDB should be counseled about tonsillectomy as a means to improve health issues related to SDB (statement 5).
- Caregivers should be informed that SDB may persist or recur after tonsillectomy and may require further management (statement 6).
- A single, intraoperative dose of intravenous dexamethasone should be given to children undergoing tonsillectomy (statement 7; strong recommendation).
- Clinicians should not routinely administer or prescribe perioperative antibiotics to children undergoing tonsillectomy (statement 8; strong recommendation).
- Clinicians should advocate for pain management after tonsillectomy and should educate caregivers about the need to manage and reevaluate pain (statement 9).
- At least annually, clinicians who perform tonsillectomy should determine their rate of primary and secondary posttonsillectomy hemorrhage (statement 10).
- The American Academy of Otolaryngology–Head and Neck Surgery (AAO-HNS) Foundation supported development of this guideline. Some of the guideline authors have disclosed various financial relationships with Proctor and Gamble, Anthem/Wellpoint, and/or Qualis