Practice Guidelines

Tonsillectomy in Children: AAO-HNS Updates Guideline

Key Points for Practice

- Watchful waiting is recommended over tonsillectomy for recurrent throat infections in the absence of having seven infections in one year, five annually for two years, or three annually for three years.
- Physicians should ask about growth retardation, enuresis, asthma, poor school performance, or behavioral problems when considering tonsillectomy for obstructive sleep-disordered breathing.
- Polysomnography is recommended in patients with sleep-disordered breathing without comorbidities and in patients younger than two years or with specific disorders such as obesity, Down syndrome, or craniofacial disorders.

From the AFP Editors

Tonsillectomy is one of the most common surgical procedures in the United States. It involves complete removal of each tonsil and capsule and is performed with or without adenoidectomy. The American Academy of Otolaryngology—Head and Neck Surgery (AAO—HNS) has updated its 2011 guideline on tonsillectomy indications and perioperative care in children one to 18 years of age.

The purpose of this update is to identify quality improvement opportunities in managing children undergoing tonsillectomy and to create clear and actionable recommendations to implement these opportunities into clinical practice based on more recent evidence. This guideline mainly addresses indications for tonsillectomy based on obstructive and infectious causes.

Coverage of guidelines from other organizations does not imply endorsement by *AFP* or the AAFP.

This series is coordinated by Sumi Sexton, MD, Editor-in-Chief.

A collection of Practice Guidelines published in *AFP* is available at https://www.aafp.org/afp/practquide.

CME This clinical content conforms to AAFP criteria for continuing medical education (CME). See CME Quiz on page 271.

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Tonsillectomy for Recurrent Throat Infections

STRONGLY RECOMMENDED

Based on a systematic review of limited randomized controlled trials (RCTs) and observational studies showing benefit, watchful waiting is strongly recommended for recurrent throat infection if there have been less than seven episodes in the past year, five episodes per year for the past two years, or three episodes per year for the past three years.

RECOMMENDED

Children with recurrent throat infection who meet the watchful waiting criteria but have certain modifying factors may benefit from tonsillectomy. These factors include multiple antibiotic allergies or intolerance, PFAPA (periodic fever, aphthous stomatitis, pharyngitis, and adenitis), and a history of more than one peritonsillar abscess. RCTs and observational studies show more benefit than harm from tonsillectomy if these modifying factors are present.

OPTION

Tonsillectomy may be recommended for recurrent throat infection if there have been seven episodes in the past year, at least five episodes per year for two years, or at least three episodes per year for three years with documentation in the medical record for each episode and at least one of the following: temperature above 101°F (38.3°C), cervical adenopathy, tonsillar exudate, or positive test for group A beta-hemolytic streptococcus. Systematic reviews of this option show a mix of benefits and harms.

Tonsillectomy for Sleep-Disordered Breathing

RECOMMENDED

Physicians should ask caregivers of children with obstructive sleep-disordered breathing and tonsillar hypertrophy about comorbid conditions that may improve after tonsillectomy. These include growth retardation, poor school

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performance, enuresis, asthma, and behavioral problems. These conditions are often overlooked when assessing for tonsillectomy, but systematic reviews, RCTs, and observational studies suggest that these children might benefit from surgery.

Children with obstructive sleep-disordered breathing should be referred for polysomnography if they are younger than two years or if they have any of the following conditions: obesity, Down syndrome, craniofacial abnormalities, neuromuscular disorders, sickle cell disease, or mucopolysaccharidoses. Observational studies show benefit of polysomnography for these patients.

Polysomnography should be done before tonsillectomy in children who have obstructive sleep-disordered breathing without any of the comorbid conditions listed above when the need for tonsillectomy is uncertain or when physical examination does not support the severity of disordered breathing. Observational and casecontrol studies suggest that polysomnography can limit unnecessary tonsillectomy in these patients.

Physicians should recommend tonsillectomy in children with obstructive sleep apnea documented by overnight polysomnography because RCTs and observational studies show that tonsillectomy is beneficial for proven obstructive sleep apnea.

Counseling patients and caregivers about how sleep-disordered breathing may persist or recur after tonsillectomy and may require further management is recommended based on RCTs and observational studies.

Perioperative Care for Tonsillectomy STRONGLY RECOMMENDED

Based on systematic reviews of RCTs showing improved recovery without harm, a single intraoperative dose of intravenous dexamethasone is strongly recommended for children undergoing tonsillectomy.

Based on systematic reviews and RCTs showing safe, effective analgesia, ibuprofen, acetaminophen, or both should be used for pain control after tonsillectomy. They can potentially prevent the need for opioids for pain control.

RECOMMENDED

Based on limited RCTs showing benefit, it is recommended to counsel patients and caregivers on effective strategies for preventing and treating

Based on observational studies showing detection of oxygen desaturation overnight, children should have inpatient monitoring after tonsillectomy if they are younger than three years or have severe obstructive sleep apnea.

Based on observational postoperative studies, surgeons are recommended to follow up with patients and caregivers after tonsillectomy and document any bleeding following surgery. Each surgeon's rate of primary (within 24 hours) and secondary (after 24 hours) postoperative bleeding should be determined at least annually.

STRONGLY RECOMMENDED AGAINST

Based on RCTs and systematic reviews showing no benefit, perioperative antibiotics should not be prescribed to children undergoing tonsillectomy without other indications.

Based on observational studies showing severe complications, codeine or any medication containing codeine should not be prescribed after tonsillectomy.

Guideline source: American Academy of Otolaryngology-Head and Neck Surgery

Evidence rating system used? Yes

Systematic literature search described? Yes

Guideline developed by participants without relevant financial ties to industry? No

Recommendations based on patient-oriented outcomes? Yes

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Endorsed by the AAFP, November 2018:

https://www.aafp.org/patient-care/clinicalrecommendations/all/tonsil.html

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