Anthem

Clinical UM Guideline

Subject: Tonsillectomy with or without Adenoidectomy for Adults
Guideline #: CG-SURG-113
Status: Reviewed

Publish Date: 09/27/2023
Last Review Date: 08/10/2023

Description

This document addresses tonsillectomy in adults with or without adenoidectomy. This surgery has been widely accepted as a treatment for recurrent or chronic throat infections, tonsil hypertrophy, and obstructive sleep apnea (OSA).

Note: For information regarding related procedures, please see:

- CG-SURG-30 Tonsillectomy for Children with or without Adenoidectomy
- CG-SURG-36 Adenoidectomy
- SURG.00129 Oral, Pharyngeal and Maxillofacial Surgical Treatment for Obstructive Sleep Apnea or Snoring

Clinical Indications

Medically Necessary:

Tonsillectomy is considered **medically necessary** for individuals 18 years of age and older who meet one or more of the criteria below:

A. A history of recurrent acute throat infection with a frequency of at least:
   1. Three or more episodes in the previous 6 months; **or**
   2. Four or more episodes in the previous 12 months;
      and
   3. Documentation in the medical record for each episode of sore throat which includes at least one of the following:
      a. Temperature greater than 38.3 °C (100.9 °F); **or**
      b. Cervical adenopathy; **or**
      c. Tonsillar exudate or erythema; **or**
      d. Positive test for Group A ß-hemolytic streptococcus (GABHS);
         or

B. A history of recurrent acute throat infections not meeting criteria above, but individual has additional factors that favor tonsillectomy, including but not limited to:
   1. Multiple antibiotic allergy/intolerance; **or**
   2. One or more peritonsillar abscess; **or**
   3. One or more parapharyngeal abscesses;
      or

C. A history of chronic throat infections, as indicated by 1 or more of the following:
   1. Chronic tonsillitis with all of the following:
      a. Inflammation or infection (symptoms may include pain and discomfort, airway obstruction, and dysphagia); **and**
      b. Persists for 3 or more months; **and**
      c. Resistant to medical treatment;
         or
   2. Infectious mononucleosis with all of the following:
      a. Failure to respond to corticosteroid; **and**
      b. Tonsillar hypertrophy causing airway obstruction or dysphagia;
         or

D. A diagnosis of obstructive sleep apnea (OSA) with documentation of all of the following:
   1. Tonsillar hypertrophy; **and**
   2. Polysomnographic evidence of OSA with either:
      a. AHI or RDI greater than or equal to 15 events per hour;
         or
      b. AHI or RDI greater than or equal to 5 events per hour, and less than 15 events per hour with documentation demonstrating any of the following symptoms:
         i. Excessive daytime sleepiness, as documented by either a score of greater than 10 on the Epworth Sleepiness scale or inappropriate daytime napping, (for example, during driving, conversation or eating) or sleepiness that interferes with daily activities; or
         ii. Impaired cognition or mood disorders; or
         iii. Hypertension; or
         iv. Ischemic heart disease or history of stroke; or
         v. Cardiac arrhythmias, or
         vi. Pulmonary hypertension;
            or

E. IgA nephropathy;
   or
F. Known or suspected tonsillar malignancy.

Not Medically Necessary:

Tonsillectomy is considered **not medically necessary** for individuals 18 years of age and older when the criteria above have not been met, and in all other circumstances.

Coding

The following codes for treatments and procedures applicable to this guideline are included below for informational purposes. Inclusion or exclusion of a procedure, diagnosis or device code(s) does not constitute or imply member coverage or provider reimbursement policy. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.

When services are Medically Necessary:

CPT	
42821	Tonsillectomy and adenoidectomy; age 12 or over
42826	Tonsillectomy, primary or secondary; age 12 or over

ICD-10 Procedure	
0CBP0ZZ	Excision of tonsils, open approach
0CBP3ZZ	Excision of tonsils, percutaneous approach
0CBPXZZ	Excision of tonsils, external approach
0CTP0ZZ	Resection of tonsils, open approach
0CTPXZZ	Resection of tonsils, external approach

ICD-10 Diagnosis	
C09.0-C09.9	Malignant neoplasm of tonsil
D00.08	Carcinoma in situ of pharynx
D10.4	Benign neoplasm of tonsil
D37.05	Neoplasm of uncertain behavior of pharynx
D49.0	Neoplasm of unspecified behavior of digestive system
N02.B1-N02.B9	Recurrent and persistent immunoglobulin A nephropathy

When services may be Medically Necessary when criteria are met:
For the procedure codes listed above for the following diagnoses

ICD-10 Diagnosis	
B27.00-B27.99	Infectious mononucleosis
G47.33	Obstructive sleep apnea (adult) (pediatric)
J02.0-J02.9	Acute pharyngitis
J03.00-J03.91	Acute tonsillitis
J31.2	Chronic pharyngitis
J35.01-J35.03	Chronic tonsillitis and adenoiditis
J35.1	Hypertrophy of tonsils
J36	Peritonsillar abscess
J39.0-J39.1	Retropharyngeal and parapharyngeal abscess, other abscess of pharynx

When services are Not Medically Necessary:
For the procedure and diagnosis codes listed above when criteria are not met or for all other diagnoses not listed.

Discussion/General Information

Tonsillectomy completely removes the tonsil, including its capsule, by dissecting the peritonsillar space between the tonsil capsule and the muscular wall. It may be performed with or without adenoidectomy. The most common indication for tonsillectomy in adults is recurrent acute pharyngitis and chronic tonsillitis. Other indications include infections, sleep-disordered breathing (SBD), suspected malignancy, and IgA nephropathy.

The American Academy of Otolaryngology-Head and Neck Surgery (AAO-HNS) has a clinical practice guideline addressing the use of tonsillectomy in children (Mitchell, 2019). The AAO-HNS currently does not have a clinical practice guideline for adults. Although many recommendations for adult tonsillectomy indications are derived from these guidelines for children, published studies have not addressed the generalizability of these pediatric guidelines to adults. Burton and associates produced a systematic review and meta-analysis on tonsillectomy or adenotonsillectomy versus non-surgical treatment for chronic/recurrent acute tonsillitis (Burton 2014). They found only two trials with low or moderate risk of bias addressing this topic for adults. They concluded that there is insufficient information to form firm conclusions on the effectiveness of these procedures for adults.

Alho and others (2007) conducted a randomized control trial to determine the efficacy and safety of tonsillectomy for recurrent streptococcal pharyngitis in adults. The participants included 70 adults with documented recurrent episodes of streptococcal group A pharyngitis and were randomly placed in either a waiting list (control) group (n=34) or immediate tonsillectomy group (n=36). Eligible participants had 3 or more pharyngitis episodes in the previous 6 months or 4 in the previous 12 months. Each episode must have been typical for streptococcal infection and severe enough that the participant sought medical care. Results after 90 days showed 8 participants in the control group experienced an episode of group A streptococcal pharyngitis while this only occurred in 1 in the tonsillectomy group (21% difference; 95% CI); 14 participants in the control group experienced an episode of pharyngitis with medical consultation and 4 in the tonsillectomy group (30% difference, 95% CI). Although the generalizability of these results to large populations is limited by the small size of this trial, this study showed that adult subjects who underwent tonsillectomy were less likely to have recurrent streptococcal pharyngitis and less likely to seek medical consultation for sore throat.

In 2013, Koskenkorva et al. published a randomized, controlled, parallel group trial with 86 participants 13 years or older referred for tonsillectomy because of recurrent pharyngitis. Subjects were randomly assigned to either a control (watchful waiting) group (n=40) or tonsillectomy group (n=46). The clinical entry criteria for the study was 3 or more episodes of disabling pharyngitis within 12 months. The episodes had to be severe enough for the participants to seek medical attention. The authors reported that 17 participants in the control group (43%) and 2 participants in the tonsillectomy group (4%) consulted a physician for pharyngitis. During a 5-month follow-up, 32 participants in the control group (80%) and 18 participants in the tonsillectomy group (39%) had an episode of pharyngitis. The authors noted that participants in the tonsillectomy group had fewer episodes of pharyngitis and fewer days with sore throat.

A review was completed by Chan et al. in 2001 which included 36 individuals who were admitted with a diagnosis of infectious mononucleosis. Of the 36 individuals, 9 presented with upper airway obstruction and 27 without upper airway obstruction. In the upper airway obstruction group, 8 (89%) underwent tonsillectomy and in the without upper airway obstruction, 6 (22%) underwent tonsillectomy. The authors noted that tonsillectomy could influence the course of infectious mononucleosis when upper airway obstruction is present, and that tonsillectomy should be considered during the early course of admission.

Obstructive Sleep Apnea

Obstructive sleep apnea (OSA) is a common disorder affecting at least 2% to 4% of the adult population. According to the American Academy of Sleep Medicine (AASM), the diagnosis of OSA is confirmed if the number of obstructive sleep events on the polysomnography is greater than 15 events/hour or greater than 5/hour in individuals who report any of the following: unintentional sleep episodes during wakefulness; daytime sleepiness; unrefreshing sleep; fatigue; insomnia; waking up breath holding, gasping, or choking; or the bed partner describing loud snoring, breathing interruptions, or both during the individual's sleep.

The frequency of obstructive events is reported as an apnea + hypopnea index (AHI) or respiratory disturbance index (RDI). AASM defines the severity of OSA as following:

- Mild OSA: AHI or RDI of 5-15;
- Moderate OSA: AHI or RDI of 15-30;
- Severe OSA: AHI or RDI of more than 30.

AAO-HNS position statement on the treatment of obstructive sleep apnea indicates tonsillectomy alone has shown to be effective in adults with enlarged tonsils.

Senchak and colleagues (2015) conducted a prospective multi-institutional study assessing adults with tonsillar hypertrophy scheduled to undergo tonsillectomy alone. The study included 19 participants with OSA. All participants were male ≥ 18 years of age with tonsil size 2 to 4 and body mass index (BMI) of 29.9 ± 6.0. Before surgery, the AHI ranged from 5.4 to 56.4 events per hour. After surgery, the mean AHI decreased from 18.0 to 3.2 evens per hour, a reduction of 82%. Every participant had a lower AHI after the procedure. The researchers concluded adult tonsillectomy alone has beneficial effect in the treatment of OSA, especially in young overweight men with large tonsils and moderate sleep apnea.

In 2016, Camacho et al. completed a systematic review and meta-analysis to determine if AHI and lowest oxygenation saturation improved following tonsillectomy for adult OSA. Of the resulting searches, 47 studies were potentially relevant. Reduced AHI after tonsillectomy was demonstrated in 17 studies (203 participants). The pooled mean AHI fell from a mean ± standard deviations of 40.5 ± 28.9 to 14.1 ± 17.1 events per hour (65% decrease). The authors noted isolated tonsillectomy could be successful for treatment in adults with large tonsils and mild to moderate OSA.

IgA Nephropathy

Immunoglobulin A (IgA) is an antibody made by the immune system to protect the body from foreign substances. IgA nephropathy is a kidney disease that occurs when deposits of the protein immunoglobulin (IgA) builds up inside the filters in the kidney.

Kawamura and colleagues (2014) completed a multicenter randomized controlled trial to evaluate the effect of tonsillectomy in individuals with biopsy-proven IgA nephropathy, proteinuria, and low serum creatinine. Individuals were randomly assigned to tonsillectomy with steroid pulses (Group A; n=35) or steroid pulses only (Group B; n=39). During the 12 months from baseline, the percentage decrease in urinary protein excretion was larger in Group A than in Group B (coefficient estimate -1.316, 95% confidence interval [CI], -2.617 to -0.015; p=0.047). Researchers concluded whether this antiproteinuric effect from tonsillectomy and steroid pulses improves renal outcome remains to be clarified.

In 2016, a multicenter, randomized, controlled trial completed by Katafuchi et al. analyzed the effects of tonsillectomy with steroid pulses therapy versus steroid pulses therapy alone in subjects with IgA nephropathy. A total of 59 subjects were included in the study and randomly allocated into tonsillectomy with steroid pulses therapy (Group A; n=26) or steroid pulses therapy alone (Group B; n=33). The subjects in Group A had a 6.75-fold (95% CI, 1.32-34.6) greater benefit of the disappearance of proteinuria than in Group B.

Suspected Malignancy

After thyroid and larynx carcinoma, tonsillar carcinoma is the third most common head and neck malignancy. Theodoraki and colleagues (2017) completed a systematic review of literature and recommends bilateral tonsillectomy for adults with unilateral tonsillar carcinoma or in cases where the primary cancer is unknown.

Sunkaraneni et al. (2006) conducted a retrospective case-note review of all tonsillectomies performed for histological examination at one facility over a 5-year period and reviewed the histological findings in those with unilateral tonsillar enlargement alone and those with unilateral tonsillar enlargement with other clinical features. The other clinical features included chronic pain, dysphagia, the presence of tonsillar or peritonsillar mucosal abnormality, and cervical lymphadenopathy. There were 53 individuals who had unilateral tonsillar enlargement, 33 had unilateral tonsillar enlargement alone and 20 had other clinical features. In the unilateral tonsillar enlargement alone group, none of the individuals were found to have malignancy. In the group with other clinical findings, 9 (45%) individuals had a malignancy. The authors concluded that a 'watch and wait' policy is initially appropriate and if signs or symptoms are progressive, tonsillectomy should then be advised.

Other Considerations

For tonsillectomy for psoriasis, the evidence is insufficient and additional research is recommended. Thorleifsdottir and colleagues conducted a randomized controlled trial to analyze the effects of tonsillectomy on individuals with streptococcal-associated psoriasis exacerbations. A total of 29 individuals were randomly assigned to tonsillectomy (n=15) or control (n=14) and were followed for 24 months. The Psoriasis Disability Index (PDI) and Psoriasis Life Stress Inventory (PLSI) were used at 12 and 24 months to assess the individual's health related quality of life (HRQoL). A positive connection was noted between increased HRQoL and clinical improvement (r=0.297, p=0.008). Researchers noted that more robust trials and long-term follow-up of tonsillectomized individuals with plaque psoriasis is needed.

Definitions

Apnea-Hypopnea index (AHI) or Respiratory Disturbance index (RDI): A measure of apnea severity defined by the total number of episodes of apnea or hypopnea during a full period of sleep divided by the number of hours asleep.

Cervical adenopathy: Enlargement of the cervical lymph nodes, located on both sides of the neck.

Group A β-hemolytic streptococcus (GABHS): A bacteria commonly associated with serious throat infections in children.

Infectious mononucleosis: An infection usually caused by the Epstein-Barr virus that often occur in teens and young adults with symptoms including fever, sore throat, and swollen lymph glands.

IgA Nephropathy: A chronic kidney disease that occurs when deposits of the protein immunoglobulin (IgA) builds up inside the filters in the kidney.

Obstructive sleep apnea (OSA): A condition that is characterized by cessation of breathing during sleep, caused by temporary

collapse of the upper airway.

Pharyngitis: The medical term for a “sore throat.”

Polysomnography: Also known as a “sleep study.” A test used to diagnose sleep disorders.

Tonsils: Organs of the lymphatic system located at the back of the throat. The purpose of the tonsils is to capture germs entering the body through the mouth and nose.

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2. Camacho M, Li D, Kawai M, et al. Tonsillectomy for adult obstructive sleep apnea: A systematic review and meta-analysis. Laryngoscope. 2016 Sep; 126(9):2176-2186.
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13. Thorleifsdottir RH, Sigurdardottir SL, Sigurgeirsson B, et al. Patient-reported outcomes and clinical response in patients with moderate-to-severe plaque psoriasis treated with tonsillectomy: a randomized controlled trial. Acta Derm Venereol. 2017 Mar 10; 97(3):340-345.

Government Agency, Medical Society, and Other Authoritative Publications:

1. American Academy of Otolaryngology - Head and Neck Surgery. Position Statement: Treatment of Obstructive Sleep Apnea. April 22, 2021. Available at: https://www.entnet.org/resource/position-statement-treatment-of-obstructive-sleep-apnea/. Accessed July 7, 2023.
2. Burton MJ, Glasziou PP, Chong LY, et al. Tonsillectomy or adenotonsillectomy versus non-surgical treatment for chronic/recurrent acute tonsillitis. Cochrane Database Syst Rev. 2014 Nov 19;2014(11):CD001802.
3. Chan J, Edman JC, Koltai PJ. Obstructive sleep apnea in children. Am Fam Physician. 2004; 69(5):1147-1154, 1159-1160.
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    - Head and Neck Cancer (V2.2023). Revised May 15, 2023.

Websites for Additional Information

1. National Institute of Diabetes and Digestive and Kidney Disease. IgA Nephropathy. Available at: https://www.niddk.nih.gov/health-information/kidney-disease/iga-nephropathy. Updated November 2015. Accessed on July 7, 2023.
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The use of specific product names is illustrative only. It is not intended to be a recommendation of one product over another, and is not intended to represent a complete listing of all products available.

History

Status	Date	Action

Reviewed	08/10/2023	Medical Policy & Technology Assessment Committee (MPTAC) review. Updated References and Websites sections. Updated Coding section with 10/01/2023 ICD-10-CM changes, added N02.B1-N02.B9 replacing N02.0-N02.A (no longer applicable); also added ICD-10-CM J02.0-J02.9, J03.00-J03.91.
Reviewed	08/11/2022	MPTAC review. Updated References and Websites sections.
New	08/12/2021	MPTAC review. Initial document development.

Federal and State law, as well as contract language, and Medical Policy take precedence over Clinical UM Guidelines. We reserve the right to review and update Clinical UM Guidelines periodically. Clinical guidelines approved by the Medical Policy & Technology Assessment Committee are available for general adoption by plans or lines of business for consistent review of the medical necessity of services related to the clinical guideline when the plan performs utilization review for the subject. Due to variances in utilization patterns, each plan may choose whether to adopt a particular Clinical UM Guideline. To determine if review is required for this Clinical UM Guideline, please contact the customer service number on the member's card.

Alternatively, commercial or FEP plans or lines of business which determine there is not a need to adopt the guideline to review services generally across all providers delivering services to Plan’s or line of business’s members may instead use the clinical guideline for provider education and/or to review the medical necessity of services for any provider who has been notified that his/her/its claims will be reviewed for medical necessity due to billing practices or claims that are not consistent with other providers, in terms of frequency or in some other manner.