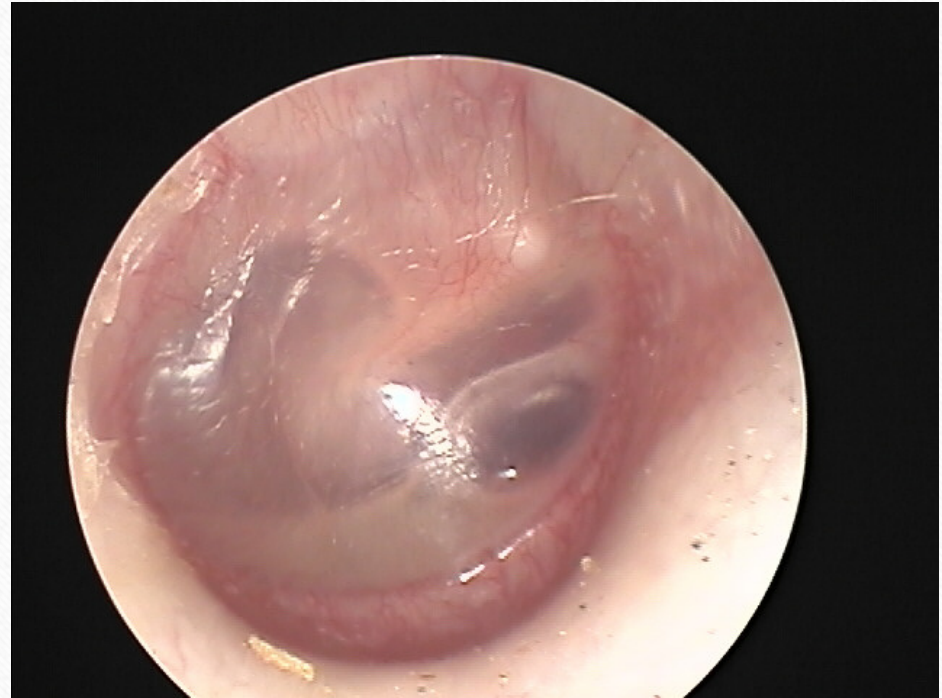


Guidelines, guidelines, guidelines

And where to find them

Guidelines

- Not meant to be a recipe
- Know them
- Know why you are not following them



Where do they come from?



CLINICAL PRACTICE GUIDELINE

The Diagnosis and Management of Acute Otitis Media

abstract

FREE

This evidence-based clinical practice guideline is a revision of the 2004 acute otitis media (AOM) guideline from the American Academy of Pediatrics (AAP) and American Academy of Family Physicians. It provides recommendations to primary care clinicians for the management of children from 6 months through 12 years of age with uncomplicated AOM.

In 2009, the AAP convened a committee composed of primary care physicians and experts in the fields of pediatrics, family practice, otolaryngology, epidemiology, infectious disease, emergency medicine, and guideline methodology. The subcommittee partnered with the Agency for Healthcare Research and Quality and the Southern California Evidence-Based Practice Center to develop a comprehensive review of the new literature related to AOM since the initial evidence report of 2000. The resulting evidence report and other sources of data were used to formulate the practice guideline recommendations.

The focus of this practice guideline is the appropriate diagnosis and initial treatment of a child presenting with AOM. The guideline provides a specific, stringent definition of AOM. It addresses pain management, initial observation versus antibiotic treatment, appropriate choices of antibiotic agents, and preventive measures. It also addresses recurrent AOM, which was not included in the 2004 guideline. Decisions were made on the basis of a systematic grading of the quality of evidence and benefit-harm relationships.

The practice guideline underwent comprehensive peer review before formal approval by the AAP.

This clinical practice guideline is not intended as a sole source of guidance in the management of children with AOM. Rather, it is intended to assist primary care clinicians by providing a framework for clinical decision-making. It is not intended to replace clinical judgment or establish a protocol for all children with this condition. These recommendations may not provide the only appropriate approach to the management of this problem. *Pediatrics* 2013;131:e964–e999

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KEY WORDS

acute otitis media, otitis media, otoscopy, otitis media with effusion, watchful waiting, antibiotics, antibiotic prophylaxis, tympanostomy tube insertion, immunization, breastfeeding

ABBREVIATIONS

AAFP—American Academy of Family Physicians
AAP—American Academy of Pediatrics
AHRQ—Agency for Healthcare Research and Quality
AOM—acute otitis media
CI—confidence interval
FDA—US Food and Drug Administration
LAIV—live-attenuated intranasal influenza vaccine
MEE—middle ear effusion
MIC—minimum inhibitory concentration
NNT—number needed to treat
OM—otitis media
OME—otitis media with effusion
OR—odds ratio
PCV7—heptavalent pneumococcal conjugate vaccine
PCV13—13-valent pneumococcal conjugate vaccine
RD—rate difference
SNAP—safety-net antibiotic prescription
TIV—trivalent inactivated influenza vaccine
TM—tympanic membrane
WASP—wait-and-see prescription

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The recommendations in this report do not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.

(Continued on last page)

Pediatric Acute Otitis Media Treatment Guideline

Diagnosis Criteria

New onset of otorrhea(not related to AOE)	PLUS Presence of middle ear effusion
Mild TM bulging and recent (less than 48°) onset of ear pain	
Moderate to Severe TM bulging	
Intense erythema of the TM	

Treatment vs Observation

Age	Otorrhea with AOM	Unilateral/ Bilateral AOM with Severe Symptoms	Bilateral AOM without Otorrhea	Unilateral AOM without Otorrhea
6 months - 2 years	Antibiotic Therapy	Antibiotic Therapy	Antibiotic Therapy	Antibiotic Therapy or Observation
>2 years	Antibiotic Therapy	Antibiotic Therapy	Antibiotic Therapy or Observation	Antibiotic Therapy or Observation

Severe symptoms: toxic-appearing child, persistent otalgia > 48 hrs, temp $\geq 39\text{C}$ (102.2F) in past 48 hrs

Infants <6 months old: antibiotic therapy

Antibiotic Therapy

Initial		Treatment Failure (48-72 hrs after initial abx failure)	
First-line Treatment	Alternative Treatment (PCN allergic)	First-line Treatment	Alternative Treatment (PCN allergic)
Amoxicillin (80-90mg/kg/day in 2 divided doses) or Augmentin 600 ES (90mg/kg/day in 2 divided doses)	Cefdinir (14mg/kg/day in 1-2 divided doses) or Cefuroxime (30mg/kg/day in 2 divided doses) or Ceftriaxone (50mg/kg IM or IV daily for 1-3 days)	Augmentin 600 ES (90mg/kg/day in 2 divided doses) or Ceftriaxone (50mg/kg IM or IV daily for 3 days)	Ceftriaxone (50mg/kg IM or IV daily for 3 days) or Clindamycin (30-40mg/kg/day in 3 divided doses) or Clindamycin plus (cefuroxime, cefdinir or ceftriaxone)

**Consider ENT referral if no sign of improvement after 48-72 hours with alternative failure agent*

Use Augmentin if patient received amoxicillin within last 30 days, or has a history of AOM unresponsive to amoxicillin or has purulent conjunctivitis

Additional Recommendations:

- PO Analgesics
- Vaccinations

Observation criteria:

1. Patient must have communication and access to healthcare provider
2. Caregiver agrees with option

Duration of Therapy


<2 years old (severe symptoms)	10 days
2-5 years old (mild to moderate symptoms)	7 days
>6 years old (mild to moderate)	5 days

Antimicrobial Stewardship Program Committee approved February 2014

Reference: Pediatrics 2013; 131 (3): e964-e999.

Clinical Practice Guideline: Tympanostomy Tubes in Children

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Abstract

Objective. Insertion of tympanostomy tubes is the most common ambulatory surgery performed on children in the United States. Tympanostomy tubes are most often inserted because of persistent middle ear fluid, frequent ear infections, or ear infections that persist after antibiotic therapy. Despite the frequency of tympanostomy tube insertion, there are currently no clinical practice guidelines in the United States that address specific indications for surgery. This guideline is intended for any clinician involved in managing children, aged 6 months to 12 years, with tympanostomy tubes or being considered for tympanostomy tubes in any care setting, as an intervention for otitis media of any type.

Purpose. The primary purpose of this clinical practice guideline is to provide clinicians with evidence-based recommendations on patient selection and surgical indications for and management of tympanostomy tubes in children. The development group broadly discussed indications for tube placement, perioperative management, care of children with indwelling tubes, and outcomes of tympanostomy tube surgery. Given the lack of current published guidance on surgical indications, the group focused on situations in which tube insertion would be optional, recommended, or not recommended. Additional emphasis was placed on opportunities for quality improvement, particularly regarding shared decision making and care of children with existing tubes.

Action Statements. The development group made a *strong recommendation* that clinicians should prescribe topical antibiotic

eardrops only, without oral antibiotics, for children with uncomplicated acute tympanostomy tube otorrhea. The panel made *recommendations* that (1) clinicians should not perform tympanostomy tube insertion in children with a single episode of otitis media with effusion (OME) of less than 3 months' duration; (2) clinicians should obtain an age-appropriate hearing test if OME persists for 3 months or longer (chronic OME) or prior to surgery when a child becomes a candidate for tympanostomy tube insertion; (3) clinicians should offer bilateral tympanostomy tube insertion to children with bilateral OME for 3 months or longer (chronic OME) and documented hearing difficulties; (4) clinicians should reevaluate, at 3- to 6-month intervals, children with chronic OME who did not receive tympanostomy tubes until the effusion is no longer present, significant hearing loss is detected, or structural abnormalities of the tympanic membrane or middle ear are suspected; (5) clinicians should not perform tympanostomy tube insertion in children with recurrent acute otitis media (AOM) who do not have middle ear effusion in either ear at the time of assessment for tube candidacy; (6) clinicians should offer bilateral tympanostomy tube insertion to children with recurrent AOM who have unilateral or bilateral middle ear effusion at the time of assessment for tube candidacy; (7) clinicians should determine if a child with recurrent AOM or with OME of any duration is at increased risk for speech, language, or learning problems from otitis media because of baseline sensory, physical, cognitive, or behavioral factors; (8) in the perioperative period, clinicians should educate caregivers of children with tympanostomy tubes regarding the expected duration of tube function, recommended follow-up schedule, and detection of complications; (9) clinicians should not encourage routine, prophylactic water precautions (use of earplugs, headbands; avoidance of swimming or water sports) for children with tympanostomy tubes.

ENT Ear Tube Request Form

* PCP Requesting Services
(MD/OD/ANP/PA/Aud)

Requestor (if different from
Provider, above)

* Requestor's Location (clinic)

* Requestor's phone number

Indications

The following guidelines are indications for a tympanostomy tube placement in an otherwise healthy child. Patients meeting these criteria can be directly referred to us. We will contact them and arrange a surgery date.

* Please select all that apply

☐

Recurrent acute otitis media defined as 3 or more well documented and separate AOM episodes in the past 6 months OR at least 4 well documented and separate AOM episodes in the past 12 months with at least 1 in the past 6 months.

[please enter a label]

☐

Otitis media with effusion defined as middle ear effusion that is present for at least three months. Documentation of hearing loss or abnormal tympanometry is preferred when possible.

Pertinent History

* 1. Is patient health without preexisting medical problems that might complicate anesthesia delivery and/or the surgical procedure?

☐

YES

☐

NO

* 2. Does patient desire procedure in the next four weeks?

☐

YES

☐

NO

* 3. Does patient desire direct referral for surgery forgoing evaluation in regional clinic?

☐

YES

☐

NO

Pertinent Information

1. Adenoidectomy in the setting of a history of middle ear disease may be considered on a case by case basis by the otolaryngologist

2. Severe retractions of the tympanic membrane or retraction pockets should have a telemedicine case which includes images of the Tympanic Membrane sent to ENT

3. Patients with otitis media and speech or language delay, other developmental delays, or other sensory deficiencies may be candidates for ear tubes with less stringent criteria. Please refer these patients to ENT for evaluation.

NOTE: Decisions for direct referral and ultimately, surgical intervention must be individualized for each patient. Patients with ear or hearing problems not meeting these criteria should be referred to ENT clinic.

Clinical Practice Guideline: Tonsillectomy in Children

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Abstract

Objective. Tonsillectomy is one of the most common surgical procedures in the United States, with more than 530 000 procedures performed annually in children younger than 15 years. Tonsillectomy is defined as a surgical procedure performed with or without adenoidectomy that completely removes the tonsil including its capsule by dissecting the peritonsillar space between the tonsil capsule and the muscular wall. Depending on the context in which it is used, it may indicate tonsillectomy with adenoidectomy, especially in relation to sleep-disordered breathing. This guideline provides evidence-based recommendations on the preoperative, intraoperative, and postoperative care and management of children 1 to 18 years old under consideration for tonsillectomy. In addition, this guideline is intended for all clinicians in any setting who interact with children 1 to 18 years of age who may be candidates for tonsillectomy.

Purpose. The primary purpose of this guideline is to provide clinicians with evidence-based guidance in identifying children who are the best candidates for tonsillectomy. Secondary objectives are to optimize the perioperative management of children undergoing tonsillectomy, emphasize the need for evaluation and intervention in special populations, improve counseling and education of families of children who are considering tonsillectomy for their child, highlight the management options for patients with modifying factors, and reduce inappropriate or unnecessary variations in care.

Results. The panel made a *strong recommendation* that clinicians should administer a single, intraoperative dose of intravenous dexamethasone to children undergoing tonsillectomy. The panel made a *strong recommendation against* clinicians routinely administering or prescribing perioperative antibiotics to children undergoing tonsillectomy. The panel made *recommendations* for

(1) watchful waiting for recurrent throat infection if there have been fewer than 7 episodes in the past year or fewer than 5 episodes per year in the past 2 years or fewer than 3 episodes per year in the past 3 years; (2) assessing the child with recurrent throat infection who does not meet criteria in statement 2 for modifying factors that may nonetheless favor tonsillectomy, which may include but are not limited to multiple antibiotic allergy/intolerance, periodic fever, aphthous stomatitis, pharyngitis and adenitis, or history of peritonsillar abscess; (3) asking caregivers of children with sleep-disordered breathing and tonsil hypertrophy about comorbid conditions that might improve after tonsillectomy, including growth retardation, poor school performance, enuresis, and behavioral problems; (4) counseling caregivers about tonsillectomy as a means to improve health in children with abnormal polysomnography who also have tonsil hypertrophy and sleep-disordered breathing; (5) counseling caregivers that sleep-disordered breathing may persist or recur after tonsillectomy and may require further management; (6) advocating for pain management after tonsillectomy and educating caregivers about the importance of managing and reassessing pain; and (7) clinicians who perform tonsillectomy should determine their rate of primary and secondary post-tonsillectomy hemorrhage at least annually. The panel offered *options* to recommend tonsillectomy for recurrent throat infection with a frequency of at least 7 episodes in the past year or at least 5 episodes per year for 2 years or at least 3 episodes per year for 3 years with documentation in the medical record for each episode of sore throat and 1 or more of the following: temperature $>38.3^{\circ}\text{C}$, cervical adenopathy, tonsillar exudate, or positive test for group A β -hemolytic streptococcus.

Keywords

tonsillectomy, adenotonsillectomy, tonsillitis, sleep disordered breathing, pediatric guideline

Received August 2, 2010; revised September 10, 2010; accepted September 15, 2010.

ENT Direct Referral Appointment Form for Tonsillectomy

ENT Direct Referral Appointment Form for Tonsillectomy

* PCP Requesting Services
(MD/OD/ANP/PA/Aud)

Requestor (if different from
Provider, above)

* Requestor's Location (clinic)

* Requestor's Phone Number

The following guidelines are indications for tonsillectomy in an otherwise healthy patient. Patients meeting these criteria can be directly referred to us. We will contact them and arrange a surgery date.

Patients who you would like evaluated for tonsillectomy but who do not meet these criteria should be seen for an evaluation in ENT clinic either in your region or in Anchorage.

Diagnostic Criteria

☐ Recurrent throat infections with a frequency of 7 episodes in past year or 5 episodes per year for 2 years or 3 episodes per year for 3 years. A throat infection is defined as a complaint of a sore throat plus at least one of following documented in the medical record: Temperature >38.3, cervical adenopathy, tonsillar exudate, or positive test for group A beta hemolytic strep.

☐ Recurrent tonsillitis when complicated by peritonsillar abscess, febrile seizures, abscesses lymph nodes, or acute airway obstruction. Repeat episodes of severe tonsillitis requiring hospitalization should also be considered for direct surgical referral

☐ Sleep Disordered Breathing (SDB) secondary to tonsillar and/or adenoid hyperplasia. This may be manifested by chronic mouth breathing, nasal obstruction, severe snoring, apnea, daytime fatigue, dysphagia, dental arch maldevelopment, adenoid facies and dysphonia. Failure to thrive, renal and cardiac complications are seen only in the most severe cases and warrant a full medical work-up and subsequent evaluation in the ENT Clinic

Pertinent History

* Is patient health without preexisting medical problems that might complicate anesthesia delivery and/or the surgical procedure?

☐ YES ☐ NO

* Does patient desire procedure in the next six weeks?

☐ YES ☐ NO

* Does patient desire direct referral for surgery foregoing evaluation in regional clinic?

☐ YES ☐ NO

* In cases of suspected Sleep Disordered Breathing does the patient have enlarged tonsils on exam? (Please refer to the tonsil sizing guide.)

☐ YES ☐ NO

If any of the above are NO, patient should be referred to ENT clinic for evaluation

Note: Decisions for direct referral and ultimately, surgical intervention must be individualized

for each patient. Patients with tonsil or other throat problems not meeting these criteria should be referred to ENT clinic. Direct referral should only be used for those patients WITHOUT underlying medical problems or other complicating factors.

Clinical Practice Guideline: Allergic Rhinitis

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Abstract

Objective. Allergic rhinitis (AR) is one of the most common diseases affecting adults. It is the most common chronic disease in children in the United States today and the fifth most common chronic disease in the United States overall. AR is estimated to affect nearly 1 in every 6 Americans and generates \$2 to \$5 billion in direct health expenditures annually. It can impair quality of life and, through loss of work and school attendance, is responsible for as much as \$2 to \$4 billion in lost productivity annually. Not surprisingly, myriad diagnostic tests and treatments are used in managing this disorder, yet there is considerable variation in their use. This clinical practice guideline was undertaken to optimize the care of patients with AR by addressing quality improvement opportunities through an evaluation of the available evidence and an assessment of the harm-benefit balance of various diagnostic and management options.

Purpose. The primary purpose of this guideline is to address quality improvement opportunities for all clinicians, in any setting, who are likely to manage patients with AR as well as to optimize patient care, promote effective diagnosis and therapy, and reduce harmful or unnecessary variations in care. The guideline is intended to be applicable for both pediatric and adult patients with AR. Children under the age of 2 years were excluded from the clinical practice guideline because rhinitis in this population may be different than in older patients and is not informed by the same evidence base. The guideline is intended to focus on a limited number of quality improvement opportunities deemed most important by the working group and is not intended to be a comprehensive reference for diagnosing and managing AR. The recommendations outlined in the

guideline are not intended to represent the standard of care for patient management, nor are the recommendations intended to limit treatment or care provided to individual patients.

Action Statements. The development group made a *strong recommendation* that clinicians recommend intranasal steroids for patients with a clinical diagnosis of AR whose symptoms affect their quality of life. The development group also made a *strong recommendation* that clinicians recommend oral second-generation/less sedating antihistamines for patients with AR and primary complaints of sneezing and itching. The panel made the following *recommendations*: (1) Clinicians should make the clinical diagnosis of AR when patients present with a history and physical examination consistent with an allergic cause and 1 or more of the following symptoms: nasal congestion, runny nose, itchy nose, or sneezing. Findings of AR consistent with an allergic cause include, but are not limited to, clear rhinorrhea, nasal congestion, pale discoloration of the nasal mucosa, and red and watery eyes. (2) Clinicians should perform and interpret, or refer to a clinician who can perform and interpret, specific IgE (skin or blood) allergy testing for patients with a clinical diagnosis of AR who do not respond to empiric treatment, or when the diagnosis is uncertain, or when knowledge of the specific causative allergen is needed to target therapy. (3) Clinicians should assess patients with a clinical diagnosis of AR for, and document in the medical record, the presence of associated conditions such as asthma, atopic dermatitis, sleep-disordered breathing, conjunctivitis, rhinosinusitis, and otitis media. (4) Clinicians should offer, or refer to a clinician who can offer, immunotherapy (sublingual or subcutaneous) for patients with AR who have inadequate response to symptoms with pharmacologic therapy with or without environmental controls.

The panel *recommended against* (1) clinicians routinely performing sinonasal imaging in patients presenting with symptoms consistent with a diagnosis of AR and (2) clinicians offering

ANMC Ambulatory Care Guideline for Allergic Rhinitis (AR) in Adults and Children 2015

AR: IgE mediated inflammatory response of the nasal mucosa after exposure to inhaled allergen

Signs and Symptoms		Clinical Diagnosis
-Nasal congestion, rhinorrhea, sneezing and/or nasal itching		-History and physical exam consistent with an allergic cause <u>AND</u> 1 or more sign/symptom
Classification of Allergic Rhinitis		
Temporal Pattern of Exposure <ul style="list-style-type: none"> Seasonal AR (SAR): seasonal exposure Perennial AR (PAR): year round Episodic: specific exposure 	Frequency of Symptoms <ul style="list-style-type: none"> Intermittent: <4 days/week <4 weeks/year Persistent: >4 days/week, >4 weeks/year 	Severity of Symptoms <ul style="list-style-type: none"> Mild: do not interfere with quality of life Severe: interfere with quality of life
Risk Factors		
-Family history -Maternal smoking exposure in first year of life -exposure to indoor allergens, such as dust mites	-Early use of antibiotics -Birth during pollen season -Serum IgE >100 IU/mL before age 6	-Firstborn status -Male sex -Presence of allergen-specific immunoglobulin E (IgE)
Treatment: Clinical Scenarios*		
Nasal Congestion: Intranasal Steroid Spray <u>OR</u> Over-the-Counter (OTC) Decongestant Intermittent Sneezing, Nasal Itching, and Rhinorrhea: Antihistamine Tablet <u>OR</u> Antihistamine Nasal Spray Mild Symptoms: Antihistamine Tablet <u>OR</u> Nasal Steroid Spray Severe Symptoms: Nasal Steroid Spray <u>OR</u> Nasal Antihistamine <u>OR</u> (if no symptom relief) combo Nasal Steroid Spray plus Nasal Antihistamine		
Medication Treatment		
	Adults	Children
Intranasal Steroids (INS)**	Fluticasone 1 or 2 sprays each nostril once daily; <i>Alternative:</i> Flunisolide 2 sprays each nostril 2-3x/day	Triamcinolone 1 spray each nostril once daily (2-4y) <u>OR</u> Fluticasone 1 spray each nostril once daily (≥4y) <u>OR</u> Flunisolide 1 spray each nostril 3x/day (6-14y)
Oral Antihistamines	Loratadine 10mg by mouth once daily	Loratadine 5mg by mouth once daily (2-5y) Loratadine 10mg by mouth once daily (≥6y)
Intranasal Antihistamines	Azelastine 1 or 2 sprays each nostril twice daily or 2 sprays each nostril once daily	Azelastine 1 spray each nostril once daily (6-11y); Azelastine 1-2 sprays each nostril twice daily or 2 sprays each nostril once daily (≥12y)
Notes		
-If on INS DO NOT add oral antihistamine; if on oral antihistamine DO NOT add INS, can switch to INS -Can add INS to intranasal antihistamine as combo -For short term treatment of acute nasal obstruction, topical nasal decongestant (Oxymetazoline) can be used in combination or with INS for up to 7 days with minimal risk of tachyphylaxis -Onset: INS 3-5H to 36 hours after first dose, intranasal antihistamines 15-30mins, oral antihistamines 150mins -Oral leukotriene receptor antagonist (Montelukast) SHOULD NOT be offered as primary AR therapy -INS can be given prophylactically prior to symptoms of SAR -Fluticasone has no restrictions, Triamcinolone restricted to 2-4y, Flunisolide last line due to tolerability -Nasal obstruction refractory to medical management or AR with nasal symptoms alone may be amenable to surgical turbinateplasty. Referral to ENT is appropriate.		

*Medications listed are on ANMC drug formulary. **INS considered first-line for symptom relief, especially nasal congestion. **Highlighted medications are preferred agents at ANMC.**

ANMC Ambulatory Care Guideline for Acute Sinusitis in Adults & Children 2015

Presentation

Signs & Symptoms →	Cardinal Criteria for Bacterial Sinusitis
<ul style="list-style-type: none"> - Persistent & not improving (≥10 days) - Symptoms worsen within 10 days <u>after</u> initial improvement (double worsening) 	<p style="text-align: center;">Must have purulent nasal discharge</p> <p style="text-align: center;">PLUS</p> <p style="text-align: center;">Nasal obstruction AND/OR facial pain-pressure-fullness</p>

Initial Management

Watchful waiting	EXCEPTIONS to Watchful Waiting
<ul style="list-style-type: none"> - Consider delaying the initiation of ABX for any severity of symptoms - Initiate tx if condition fails to improve by 3 days in children or 7 days in adults - Consider wait-and-see-prescription (WASP) - 1st line tx should be initiated if above criteria are met 	<p>Patients with <u>Chronic Rhinosinusitis</u> or <u>recurrent Acute Rhinosinusitis</u> in multiple chronic conditions such as:</p> <ul style="list-style-type: none"> - Asthma - Cystic Fibrosis - Immunocompromised state - Ciliary dyskinesia

Risk for Antibiotic Resistance

<ul style="list-style-type: none"> - Prior Abx in past 30 days - Prior hospitalization in past 5 days - Moderate to severe or prolonged signs and symptoms 	<ul style="list-style-type: none"> - Age <2 or >65 - Attend daycare - Failure of prior ABX tx 	<ul style="list-style-type: none"> - Comorbidities - Immunocompromised - Frontal or sphenoidal sinusitis
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Symptomatic Relief Medications—Adjunctive Treatment

	Adults	Children
Intranasal corticosteroids are recommended as adjunctive in patients with hx of allergic rhinitis	Flunisolide 2 sprays each nostril BID <i>Alternative: Mometasone</i> 2 sprays each nostril once daily	Flunisolide 1 spray each nostril TID <i>Alternative: Mometasone 2-11 years old:</i> 1 spray each nostril once daily
Intranasal saline irrigation	Non-formulary, available to purchase OTC saline rinse	Non-formulary, available to purchase OTC saline rinse
Pain/Fever	Ibuprofen 400-800mg PO Q 8 Hours PRN pain/fever Non-formulary— purchase OTC: Acetaminophen 325-650mg PO Q 4 Hours PRN pain/fever (max 3250mg/day)	Ibuprofen <u>age > 6 months old:</u> 5-10mg/kg/dose Q 8 Hours PRN pain/fever Non-formulary---purchase OTC: Acetaminophen 10-15mg/kg/dose PO Q 4 Hours PRN pain/fever
Nasal decongestant	Restricted to ENT pyxis: Oxymetazoline (Afrin ®) 2-3 sprays each nostril BID for up to 3 days max	

Antibiotics


Empiric Antibiotic Treatment	Adults	Duration	Children	Duration
1 st Line Tx	I. Amoxicillin/clavulanate 875mg/125mg PO BID	5 days	I. Amoxicillin/clavulanate: 45mg/kg/day PO divided BID	10 days
PCN allergic alternatives	I. Levofloxacin 500mg PO Q 24 Hours II. Clindamycin 300mg PO TID <u>plus</u> Cefpodoxime 200mg PO BID	5 days	I. Clindamycin 30-40mg/kg/day PO TID <u>plus</u> Cefdinir 14mg/kg/day PO divided BID II. Levofloxacin [max dose of 500mg] <u>6 months to 5 years old:</u> 16-20mg/kg/day PO divided BID <u>5 to 16 years of age:</u> 8-10mg/kg/day PO Q 24 Hours	10 days
At risk for ABX Resistance→ (See section above for criteria)	I. Amoxicillin/clavulanate 875mg/125mg PO BID <u>plus</u> Amoxicillin 1gm PO BID II. Levofloxacin 500mg PO Q 24 Hours	5 days	I. Amoxicillin/clavulanate (ES) 600mg/42.5mg/5mL: 90mg/kg/day PO divided BID II. Clindamycin 30-40mg/kg/day PO TID <u>plus</u> Cefdinir 14mg/kg/day PO divided BID III. Levofloxacin [max dose of 500mg] <u>6 months to 5 years old:</u> 16-20mg/kg/day PO divided BID <u>5 to 16 years of age:</u> 8-10mg/kg/day PO Q 24 Hours	10 days

Follow up

Worse or NO improvement at 7 days:	NOTES
<ul style="list-style-type: none"> - Reassess and confirm diagnosis, exclude other causes, and detect complications - If watch and wait management, initiate 1st line treatment - If 1st line tx, consider treatment from “At risk for ABX resistance” above 	<ul style="list-style-type: none"> - Approximately ¼ of <i>H. influenza</i> isolates produce beta-lactamases - Macrolides are NOT recommended for empiric therapy due to high rates of resistance among <i>S. pneumoniae</i> - Sulfamethoxazole/Trimethoprim is NOT recommended for empiric therapy due to high rates of resistance to <i>S. pneumoniae</i> and <i>H. influenza</i> - Routine coverage for MRSA is NOT recommended for initial empiric therapy - Oral decongestants or antihistamines are NOT recommended as adjunctive tx for acute sinusitis
If NO improvement from 2nd antibiotic: Refer to specialist; consider CT sinuses	

Clinical Practice Guideline: Tinnitus

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Abstract

Objective. Tinnitus is the perception of sound without an external source. More than 50 million people in the United States have reported experiencing tinnitus, resulting in an estimated prevalence of 10% to 15% in adults. Despite the high prevalence of tinnitus and its potential significant effect on quality of life, there are no evidence-based, multidisciplinary clinical practice guidelines to assist clinicians with management. The focus of this guideline is on tinnitus that is both bothersome and persistent (lasting 6 months or longer), which often negatively affects the patient's quality of life. The target audience for the guideline is any clinician, including nonphysicians, involved in managing patients with tinnitus. The target patient population is limited to adults (18 years and older) with primary tinnitus that is persistent and bothersome.

Purpose. The purpose of this guideline is to provide evidence-based recommendations for clinicians managing patients with tinnitus. This guideline provides clinicians with a logical framework to improve patient care and mitigate the personal and social effects of persistent, bothersome tinnitus. It will discuss the evaluation of patients with tinnitus, including selection and timing of diagnostic testing and specialty referral to identify potential underlying treatable pathology. It will then focus on the evaluation and treatment of patients with persistent primary tinnitus, with recommendations to guide the evaluation and measurement of the effect of tinnitus and to determine the most appropriate interventions to improve symptoms and quality of life for tinnitus sufferers.

Action Statements. The development group made a *strong recommendation* that clinicians distinguish patients with bothersome tinnitus from patients with nonbothersome tinnitus. The development group made a *strong recommendation against* obtaining imaging studies of the head and neck in patients with tinnitus, specifically to evaluate tinnitus that does not localize to 1 ear, is nonpulsatile, and is not associated with focal neurologic abnormalities or an asymmetric hearing loss. The panel made the following *recommendations*: Clinicians should (a) perform a targeted history and physical examination at the initial evaluation of a patient with presumed primary tinnitus to identify conditions that if promptly identified and managed may relieve tinnitus; (b) obtain a prompt, comprehensive audiologic examination in patients with tinnitus that is unilateral, persistent (≥ 6 months), or associated with hearing difficulties; (c) distinguish patients with bothersome tinnitus of recent onset from those with persistent symptoms (≥ 6 months) to prioritize intervention and facilitate discussions about natural history and follow-up care; (d) educate patients with persistent, bothersome tinnitus about management strategies; (e) recommend a hearing aid evaluation for patients who have persistent, bothersome tinnitus associated with documented hearing loss; and (f) recommend cognitive behavioral therapy to patients with persistent, bothersome tinnitus. The panel *recommended against* (a) antidepressants, anticonvulsants, anxiolytics, or intratympanic medications for the routine treatment of patients with persistent, bothersome tinnitus; (b) Ginkgo biloba, melatonin, zinc, or other dietary supplements for treating patients with persistent, bothersome tinnitus; and (c) transcranial magnetic stimulation for the routine treatment of patients with persistent, bothersome tinnitus. The development group provided the following *options*: Clinicians may (a) obtain an initial comprehensive audiologic examination in patients who present with tinnitus (regardless of laterality, duration, or perceived hearing status);

When to get MRI for Asymmetric Sensorineural Hearing Loss

- 15 dB or more asymmetry (right vs left) in 2 or more frequencies
- 15 dB asymmetry alone at 3000 Hz
- 15% difference in speech discrimination scores
- No other likely cause for asymmetry
 - Noise exposure
 - Trauma
 - Previous known or documented hearing loss

Create Case

Messages

Box (3)

On Hold (2)

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Acute Otitis Media (1)

Audiogram follow up review (1)

Bad case examples (1)

Bullous myringitis (1)

Canal inclusion cyst (1)

Cartilage grafts (2)

Cholesteatoma (1)

Cochlear implant

On Hold (2 Cases)

List cases by: Case Number

sort: Creation Date

Test, Patient (F)	10/19/2015
Test-ANMC-A-154171	
On Hold: John Kokesh MD	
keats, helen (F)	10/19/2015
MHC-OTZ-PB-236	
On Hold: John Kokesh MD	

Test Case

Test-ANMC-A-154171

Test, Patient (F)

10/19/1982 (32 Years Old)

View Patient Record

Cases (3)

Creator John Kokesh MD (10/19/2015)

Current Owner John Kokesh MD

You have this case on hold

Administrative Forms (0)

Case Options

Add Comment

ENT Telehealth Billing Form

Notify Other User

Add Form

Add Image / Video

Attach Document

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On Hold (2)

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Bullous myringitis (1)

Canal inclusion cyst (1)

Cartilage grafts (2)

Cholesteatoma (1)

Cochlear implant

List cases

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Test, P

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Movies | Bear Tooth...

http://www.thedaily...

John's Stuff

AFHCAN

The New York Times...

Other book

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AFHCAN Test (4)

ANMC FORMS (1)

ANMC-HIM (6)

Cardiology (7)

Care Coordination Center (5)

Central Registration Test (3)

Colorectal Cancer Screening (1)

Dental (2)

Dermatology (4)

Diabetes (4)

Endocrinology (3)

ENT (7)

GYN Oncology (1)

HIV ANMC EIS (5)

HIV Guidelines (13)

HIV Patient Education (19)

Internal Medicine (9)

Kas (1)

8:32

