Assessment and Diagnostic Guideline: ENT

Registered Nurses who hold **RN First Call** Certified Practice designation (RN(C)) are authorized to manage, diagnose, and/or treat the following ear, nose, and throat conditions:

- Acute otitis media (adults and children **6 months of age and older**)
- Pharyngitis (adults and children **1 year of age and older**)
- Dental abscess (adult only)

Note: In BC, the term pediatrics is often defined as an individual under the age of 19.[1] For the purposes of certified practice DSTs, pediatrics refers to individuals under the age of 19 unless otherwise specified.

Registered Nurses who hold **Remote Nursing** Certified Practice designation (RN(C)) are authorized to manage, diagnose, and/or treat the following ear, nose, and throat conditions:

- All of the above and Ceruminosis (adult only)

This *Assessment and Diagnostic Guideline* is for RN(C)s when conducting assessments, screening, and diagnostic tests related to ENT conditions that can be managed and/or treated under the Certified Practice framework. RN(C)s maintain an RN scope of practice, which is expanded for the RN(C) to diagnose and treat specific conditions listed above.

RN(C)s must ensure they complete and document their clinical reasoning through assessments according to BCCNM practice standards and their practice setting requirements. Upon arriving at a diagnosis, RN(C)s are required to follow the relevant *Care and Treatment Plans* to inform the management and treatment of the condition (per BCCNM limits and conditions for certified practice).

Note: A *consultation* refers to the RN(C) collaborating with members of the care team, such as a physician, nurse practitioner, or pharmacist, to support decision-making processes related to the diagnosis, treatment, and management of the diseases, disorders, and conditions that the RN(C) are authorized to diagnose, treat, and manage. A *referral* is when an RN(C) refers a patient to a medical care provider for further treatment, care, or management. This occurs when patients are presenting with symptoms outside of what is provided in this document, including symptoms that require urgent referral.

Visual Summary of Guideline

1

Ears, Nose and Throat: Physical Assessment and Review of System (page 2)

- Symptoms requiring urgent referral
- Associated systems assessments

2

Typical Findings of Acute Otitis Media (pages 2-4), **Pharyngitis** (pages 4-7), **Dental Abscess** (pages 7-8) **and/or Ceruminosis** (pages 8-9)

- Potential causes/risk factors
- History
- Physical assessment
- Diagnostic tests

3

Refer to the appropriate *Care and Treatment Plan* (page 9)

- DST 301 - Care and Treatment Plan: Acute Otitis Media
- DST 302 - Care and Treatment Plan: Pharyngitis
- DST 303 - Care and Treatment Plan: Dental Abscess (Adult)
- DST 304 - Care and Treatment Plan: Ceruminosis (Impacted Cerumen – Adult)

1) Ears, Nose and Throat: Physical Assessment and Review of System

*Refer to the 'Physical Assessment of the Ears, Nose and Throat' section of the *DST 100 Assessment and Diagnostic Guideline: General* as needed.

Symptoms Requiring Urgent Referral

The first step is to differentiate an ENT presentation that requires an urgent referral and those conditions that can be managed safely by an RN(C).

This *Assessment and Diagnostic Guideline* informs RN(C) practice for the diseases, disorders, and conditions they are authorized to diagnose, treat, and manage. Patients presenting with symptoms outside of what is provided in this document require referral to a physician or nurse practitioner.

Associated Systems

Respiratory System

If symptoms of systemic conditions such as viral URTI (upper respiratory tract infection) are present, complete the appropriate system assessment per Cardio-Respiratory DST 400.

Sexually Transmitted Infection

If symptoms of systemic STI (sexually transmitted infection) are present, complete the appropriate system assessment per BC Center for Disease Control STI DST 900. STI diagnosis and treatment require Certified Practice Designation in Reproductive Health: Sexually Transmitted Infections.

ENT Review of System Questions

See 'Review of Systems: Ears, Nose and Throat' section of the *DST 100* A*ssessment and Diagnostic Guideline: General* if not already done.

2) Typical Findings

Acute Otitis Media

Potential Causes[2–4]

Viral:

- Respiratory syncytial virus (RSV)
- Influenza viruses
- Coronaviruses
- Adenovirus

Bacterial:

- *Streptococcus pneumoniae*
- *Haemophilus influenzae*
- *Moraxella catarrhalis*
- *Staphylococcus aureus*
- Group A streptococcus

Note: The above lists reflect only the most common pathology of acute otitis media based on the evidence reviewed; if rarer causes are suspected, further investigations or referral may be required.[2,4]

Predisposing Risk Factors[2,3]

- Eustachian tube dysfunction or obstruction
- Immune dysfunction or immunocompromise

- Upper respiratory infections or chronic sinusitis
- Allergies or allergic rhinitis
- Cleft palate, Down syndrome, cochlear implants, or other cranio-facial conditions
- Smoking or passive smoke exposure
- Family history of acute otitis media
- Race and ethnicity[3]

Additional pediatric considerations [3–5]

- Age: most frequent between six and twelve months of age, with decreasing incidence after the first year of life
- Daycare environment or frequent contact with other children
- Short duration of breastfeeding or prolonged bottle feeding while lying down
- Socio-economic risk factors or limited health access
- Male sex
- Gastroesophageal reflux
- Use of pacifiers
- Fall and winter months are most common for illness

History[2,4,6]

- Otalgia (ear pain not always present in pediatric cases)
- Decreased/muffled hearing

Note: In adults, fever, severe pain or facial paralysis are unusual complications of acute otitis media.[2]

Additional pediatric considerations [4,6]

- Irritability
- Rubbing/tugging at ears
- Ear drainage
- Fever
- Young children and infants:
  - Restless or disturbed sleep
  - Anorexia
- Vomiting or diarrhea

Note: Fever occurs in up to two-thirds of pediatric clients. However, temperatures above 40 Celsius are uncommon in the absence of bacteremia or other sources of infection.[6]

Note: Recurrent, persistent, or inadequately treated episodes of Acute Otitis Media (AOM) may develop into Chronic Otitis Media (COM). COM is defined as "recurrent or chronic ear infections in the setting of a tympanic membrane perforation." In the context of concurrent persistent otorrhea, it is defined as Chronic Suppurative Otitis Media (CSOM). These diagnoses must be differentiated from Acute Otitis Media and are not within the RN(C) scope of practice.[7]

Key Physical Assessment Findings[2,4,6]

*Refer to Appendix A – Otoscopic evaluation of the tympanic membrane.

- Tympanic membrane: erythema (redness), dullness, bulging
- Decreased mobility of the tympanic membrane assessed with pneumatic otoscope
- Bullae, retraction pockets, or atrophic areas on the tympanic membrane
- Purulent discharge may be noted, especially in the case of a ruptured tympanic membrane (see note below)

Note: Fluid or air bubbles behind the tympanic membrane are evidence of Otitis Media with Effusion (OME), not Acute Otitis Media, and must be differentiated and referred to a higher level of care.[2,8]

Note: Management of a ruptured (perforated) tympanic membrane requires follow-up and referral that does not fall within the RN(C) scope (including water precautions, otic antibiotic drops, audiology, and primary care follow-up).[9]

Note: If cerumen is obstructing the otoscopic view, removal should be attempted *without* irrigation due to the increased risk of tympanic membrane rupture. If cerumen cannot be safely removed, referral is required.[2,6]

Additional pediatric considerations:

- Redness of the tympanic membrane in the absence of other signs may be due to crying, agitation, other ongoing conditions, or manipulation of the ear canal (such as for cerumen removal).

Note: Pneumatic otoscopy is not required in children with bulging tympanic membranes, as all bulging tympanic membranes have decreased or absent mobility.[6]

Diagnostic Tests

None.

Note: No diagnostic testing is required for Acute Otitis Media, as assessment via signs and symptoms is accurate enough for diagnosis and initiation of empiric treatment.[2,6,8]

Pharyngitis (Sore Throat)

Potential Causes

Infectious:[10,11π]

- **Bacterial**
  - Group A *streptococcus* (GAS)
  - Group C and G *streptococcus*
  - *Arcanobacterium haemolyticum*
  - *Fusobacterium necrophorum*
  - *Corynebacterium diphtheriae* (diphtheria)
  - *Treponema pallidum* (causative agent of syphilis)
  - *Neisseria gonorrhoea, teponema pallidum and chlamydia trachomatis* (related to sexual activity)
- **Viral**
  - Influenza A and B
  - Respiratory syncytial virus (RSV)
  - Epstein-Barr virus and other herpes viruses, including cytomegalovirus
  - Coronaviruses, including SARS-CoV-2 (COVID-19)
- **Fungal**
  - *Candida albicans* (more common in the immunocompromised or after a course of systemic antibiotics)

Non-infectious:[10,11]

- Allergic rhinitis or sinusitis
- Active or passive smoke exposure
- Trauma or vocal strain
- Medication side effects, including angiotensin-converting enzyme (ACE) inhibitors and some chemotherapeutics

π *Interdisciplinary Consultation*

- Gastroesophageal reflux disease (GERD)

Note: The above lists reflect only the most common pathology of pharyngitis based on the evidence reviewed; if rarer causes are suspected, further investigations or referral may be required.[10,11]

Note: Other primary illnesses may cause secondary pharyngitis, including acute HIV infection (acute retroviral syndrome), peritonsillar abscesses, retropharyngeal abscesses, epiglottitis, and Kawasaki disease. Approximately 40% of symptomatic patients with acute HIV infection also have pharyngitis.[10,12]

History – Bacterial[12–16]

- Abrupt/acute onset of sore throat
- Pain with swallowing
- Absence of cough
- Fever or chills
- Malaise
- Headache
- May have nausea, vomiting and abdominal pain

Key Physical Assessment Findings – Bacterial[10,13,15]

- Fever
- Elevated pulse
- Client appears ill
- Red or swollen posterior pharynx, or palatial petechiae
- Tonsils enlarged, may be asymmetric (significant asymmetry may be indicative of tonsillar abscess)
- Purulent exudate may be present
- Tonsillar and anterior cervical nodes may be enlarged and tender
- Erythematous "sandpaper" rash of scarlet fever (may be present with streptococcal infection)
- Liver/spleen enlargement +/- tenderness (may be indicative of mononucleosis)

History – Viral[10,15,16]

- Slow progressive onset of sore throat
- Signs and symptoms of an upper respiratory tract infection[10]
  - Fatigue
  - Nasal congestion
  - Cough
  - Coryza
  - Conjunctivitis
  - Sneezing
  - Hoarseness
  - Ear pain
  - Sneezing
  - Sinus discomfort
  - Oral ulcers
  - Viral exanthem (rash)
- Diarrhea and vomiting
- Oropharyngeal erythema

Note: Patients should also be assessed for sexual history to determine the risk of pharyngitis caused by sexually transmitted infections (STIs). STIs commonly associated with pharyngitis include HIV, gonorrhea, and syphilis.[10]

Key Physical Assessment Findings– Viral[12,15,16]

- Temperature elevated
- Posterior pharynx red and swollen

- Purulent exudate may be present
- Tonsillar and anterior cervical nodes may be enlarged and tender
- Palatal petechiae
- Oral ulcers or vesicles (may indicate herpes or mononucleosis infections or Stevens-Johnson syndrome)
- Hepatomegaly and splenomegaly (may indicate Epstein-Barr or mononucleosis infection)

Note: Fever is more commonly present in patients with COVID-19 or influenza infections.

Note: Most pharyngitis is caused by viral organisms and, therefore, does not require antibiotic treatment. Of pharyngitis caused by bacterial organisms, Group A Streptococcus is the most common.[10,12,16]

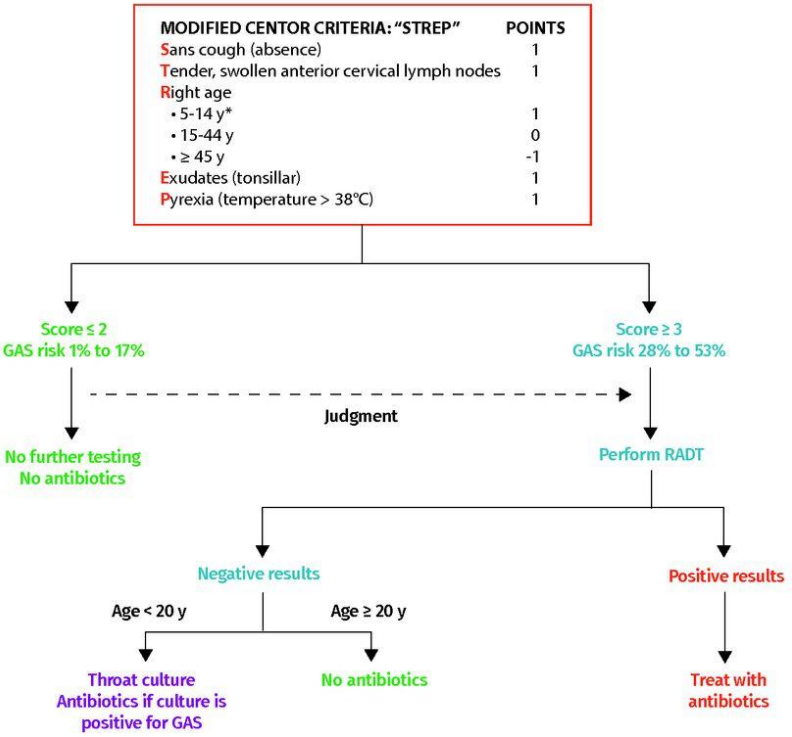
Evaluating the Risk of Group A Streptococcus

Antibiotic therapy may be warranted regardless of the Modified Centor scoring criteria. Thorough assessment and evaluation of all significantly ill patients and those suspected of GAS is warranted.[10,15]

Adults:

The Modified Centor scoring criteria may be used to evaluate the risk to adults for Group A Streptococcus (GAS). This score can be used to inform the decision whether strep testing is required using Rapid Antigen Detection Testing (RADT).[17] For clients who do not fit within the Modified Centor scoring parameters, GAS testing is recommended. If unsure or clinical decision making is unclear, consult with or refer to a physician or nurse practitioner.

Figure 2. Modified Centor scoring system: *Used to calculate the risk of streptococcal pharyngitis and to decide whether RADT and antimicrobial therapy should be initiated in patients presenting with sore throat. Clinicians should consider performing RADT for those with scores of 2 if they are pediatric patients, if they are at risk of complications (immunocompromised or frail), or if they appear clinically unwell.*



GAS—group A streptococcus, RADT—rapid antigen detection testing.
*The decision matrix has been defined for ages 5-14 y, as those aged younger than 3 y require backup validation with throat culture regardless of scoring.
Values from McIsaac et al.[18]

Sykes E, Wu V, Beyea M, Simpson M, Beyea J. Pharyngitis: Approach to diagnosis and treatment. *Canadian Family.*

Additional pediatric considerations[15,18]

- Rash occurring on the hands, feet, and mouth is consistent with cocksackievirus infection (Hand, Mouth, and Foot Disease).

Diagnostic Tests

- Throat swab for culture and sensitivity (C&S)
- Rapid antigen detection testing (RADT)

Note: Because of the significant overlap between pharyngitis caused by viruses and other pathogens and GAS, empiric treatment without microbiologic confirmation is not recommended.[10]

Note. RN(C)s are authorized to initiate a client-specific ordering for screening and diagnostic tests only when outlined in the decision support tools for their certified practice designation(s) and, according to employer policies, processes, and resources are in place, as outlined by BCCNM.[19,20]

Dental Abscess

Potential Causes[21]

Progressive dental decay contributing to pulpal infection, pulpitis, periapical abscess, periodontal abscess, cracked tooth, or failed root canal treatment.

Bacteria:

- **Severe Dental Cavities:** *Prevotella, Porphyromonas, Fusobacterium, Veillonella, Peptostreptococcus Eubacterium, and Actinomyces*
- **Suppurative Odontogenic Infections (abscesses):** *Fusobacterium nucleatum, pigmented Bacteroides, Peptostreptococcus, Actinomyces, and Streptococcus*

Predisposing Risk Factors[21,22]

- Poor dental hygiene
- Periodontitis (severe periodontal disease)
  - Increased risk in combination with diabetes mellitus, genetic or acquired disorders that impair neutrophil function, rheumatoid arthritis, and obesity
- Dental cavities
- Dental trauma
- Low socioeconomic groups with limited or no access to oral healthcare

History[21]

- Localized, constant, deep, throbbing pain (toothache) that can spread to the jaw, neck or ear (trismus is possible)
  - Pain worsens with mastication or exposure to extreme temperatures (hot or cold)
  - Pain is worse when lying down
- Known damage or deterioration to one or multiple teeth
- Fever or malaise
- Pus from the tooth or the surrounding periodontal tissue
- Tooth mobility
- Foul breath odour or bad taste in the mouth

Note: Dental infections can lead to orofacial tissue infections or osteomyelitis of the jaw, which RN(C)s are not authorized to diagnose, treat, or manage as per BCCNM limits and conditions.

Key Physical Assessment Findings

- Gingival or facial swelling and tenderness
  - Swelling can spread to the neck, making it difficult to breathe or swallow
- Lymphadenopathy in the submandibular and/or submental lymph nodes
  - Cervical and preauricular nodes may be involved if infection has spread
- Gingival edema and erythema
- Pain on palpation of the surrounding periodontal tissue
- Pain on palpation of the offending tooth

Diagnostic Tests

None.

Ceruminosis

Potential Causes[23,24]

Ear canal disease, including bony obstructions, bony growths, and infectious or dermatologic diseases

- Narrowing of the ear canal due to anatomic variation, soft tissue stenosis, tumors, excessive hair, or trauma
- Change in cerumen texture due to aging, skin and gland changes, or foreign objects placed in the ear canal
- Overproduction may occur due to local trauma or retained water in the ear canal

Predisposing Risk Factors[23,24]

- Foreign objects placed in the ear, including hearing aids, ear plugs, or swim molds
- Attempts at cerumen removal using instruments such as cotton tip applicators (Q-tips)
- Unusual or narrow ear canal anatomy
- History of overproduction or cerumen retention
- Other ongoing disorders of the ear, local soft tissues, and skin

History[24]

- Ear fullness
- Hearing loss
- Dizziness
- Reflex cough
- Itchiness
- Tinnitus

Key Physical Assessment Findings[24]

- Hardened cerumen in the canal
- Obscured tympanic membrane
- The ear canal may be reddened or edematous
- Partial or complete obstruction of the ear canal by cerumen, visualized with otoscopy
- Urgent consult if necrotic tissue noted[25]

Note: Impacted cerumen is diagnosed by the presence of uncomfortable symptoms for the client and/or if cerumen accumulation precludes necessary assessments of the ear canal or tympanic membrane.[24]

Diagnostic Tests

None.

3) Refer to the Appropriate Care and Treatment Plan

Based on the differential diagnosis established with assessment and diagnostic tests above, proceed to the appropriate care and treatment plan:

- **DST 301 -** Care and Treatment Plan: Otitis Media
- **DST 302 -** Care and Treatment Plan: Pharyngitis
- **DST 303 -** Care and Treatment Plan: Dental Abscess Adult
- **DST 304 -** Care and Treatment Plan: Ceruminosis (Impacted Cerumen: Adult)

References

1. Coughlin KW. Medical decision-making in paediatrics: Infancy to adolescence. Canadian Paediatric Society. January 24, 2024. Accessed June 27, 2025. https://cps.ca/en/documents/position/medical-decision-making-in-paediatrics-infancy-to-adolescence

2. Limb C, Lustig L, Durand M. Acute otitis media in adults. UpToDate. November 15, 2024. Accessed February 23, 2025. https://www.uptodate.com/contents/acute-otitis-media-in-adults?search=otitis%20media&source=search_result&selectedTitle=4%7E150&usage_type=default&display_rank=4

3. Pelton S, Tahtinen P. Acute otitis media in children: Epidemiology, microbiology, and complications. UpToDate. February 2, 2023. Accessed February 23, 2025. https://www.uptodate.com/contents/acute-otitis-media-in-children-epidemiology-microbiology-and-complications?search=otitis%20media&topicRef=6009&source=see_link

4. Danishyar A, Ashurts J. Acute Otitis Media. StatPearls. April 15, 2023. Accessed February 23, 2025. https://www.ncbi.nlm.nih.gov/books/NBK470332/#article-17163.s4

5. Robinson J, Le Saux N. Management of acute otitis media in children six months of age and older. Canadian Paediatric Society. November 21, 2024. Accessed June 5, 2025. https://cps.ca/en/documents/position/acute-otitis-media

6. Wald E. Acute otitis media in children: Clinical manifestations and diagnosis. UpToDate. June 25, 2024. Accessed February 23, 2025. https://www.uptodate.com/contents/acute-otitis-media-in-children-clinical-manifestations-and-diagnosis?search=otitis%20media&topicRef=6872&source=see_link

7. Levi J, O'Reilly R. Chronic suppurative otitis media (CSOM): Clinical features and diagnosis. *UpToDate*. Published online January 15, 2025. Accessed February 24, 2025. https://www.uptodate.com/contents/chronic-suppurative-otitis-media-csom-clinical-features-and-diagnosis

8. Tahtinen P, Frost H. Acute otitis media in children: Treatment. UpToDate. November 4, 2024. Accessed February 23, 2025. https://www.uptodate.com/contents/acute-otitis-media-in-adults?search=otitis%20media&source=search_result&selectedTitle=4%7E150&usage_type=default&display_rank=4

9. Evans A. Evaluation and management of middle ear trauma. UpToDate. January 24, 2024. Accessed February 23, 2025. https://www.uptodate.com/contents/evaluation-and-management-of-middle-ear-trauma?search=tympanic%20membrane%20perforation&source=search_result&selectedTitle=1%7E55&usage_type=default&display_rank=1

10. Chow A, Doron S. Evaluation of acute pharyngitis in adults. UpToDate. October 5, 2023. Accessed February 23, 2025. https://www.uptodate.com/contents/evaluation-of-acute-pharyngitis-in-adults

11. Duryea T. Acute pharyngitis in children and adolescents: Symptomatic treatment. UpToDate. September 6, 2024. Accessed February 23, 2025. https://www.uptodate.com/contents/acute-pharyngitis-in-children-and-adolescents-symptomatic-treatment

12. Wolford R, Goyal A, Yasin Belgam Syed S, Schaefer T. Pharyngitis. StatPearls. May 1, 2023. Accessed February 23, 2025. https://www.ncbi.nlm.nih.gov/books/NBK519550/

13. Aronson M. Patient education: Sore throat in adults (Beyond the Basics). UpToDate. July 14, 2023. Accessed February 23, 2025. https://www.uptodate.com/contents/sore-throat-in-adults-beyond-the-basics

14. Sauve L, Forrester M, Top K. Group A streptococcal (GAS) pharyngitis: A practical guide to diagnosis and treatment. Canadian Paediatric Society. July 29, 2021. Accessed February 23, 2025. https://cps.ca/documents/position/group-a-streptococcal

15. Woodward G, Drutz J. Evaluation of sore throat in children. UpToDate. April 23, 2024. Accessed February 23, 2025. https://www.uptodate.com/contents/evaluation-of-sore-throat-in-children

16. Sykes E, Wu V, Beyea M, Simpson M, Beyea J. Pharyngitis. National Library of Medicine (PubMed). Accessed February 23, 2025. https://pmc.ncbi.nlm.nih.gov/articles/PMC7145142/

17. Sykes E, Wu V, Beyea M, Simpson M, Beyea J. Pharyngitis: Approach to diagnosis and treatment. *Canadian Family Physician*. Published online April 2020:251-257. Accessed February 24, 2025. https://www.cfp.ca/content/66/4/251

18. Romero JR. Hand, foot, and mouth disease and herpangina - UpToDate. UpToDate. June 24, 2024. Accessed July 13, 2025. https://www.uptodate.com/contents/hand-foot-and-mouth-disease-and-herpangina?search=pharyngitis&topicRef=6457&source=see_link

19. BCCNM. Screening and Diagnostic Tests & Imaging. BCCNM. Accessed June 27, 2025. https://www.bccnm.ca/RN/PracticeStandards/Pages/ScreeningDiagnosticTestsImaging.aspx

20. BCCNM. Acting Within Autonomous Scope of Practice (Certified Practice). BCCNM. Accessed June 28, 2025. https://www.bccnm.ca/RN/PracticeStandards/Pages/CPAutonomousSoP.aspx

21. Chow AW. Epidemiology, pathogenesis, and clinical manifestations of odontogenic infections. UpToDate. November 28, 2023. Accessed February 23, 2025. https://www.uptodate.com/contents/epidemiology-pathogenesis-and-clinical-manifestations-of-odontogenic-infections

22. Chow A. Complications, diagnosis, and treatment of odontogenic infections. UpToDate. April 21, 2024. Accessed March 2, 2025. https://www.uptodate.com/contents/complications-diagnosis-and-treatment-of-odontogenic-infections

23. Sevy J, Hohman M, Singh A. Cerumen Impaction Removal. StatPearls. March 1, 2023. Accessed February 25, 2025. https://www.ncbi.nlm.nih.gov/books/NBK448155/

24. Dinces E. Cerumen. UpToDate. January 10, 2024. Accessed February 24, 2025. https://www.uptodate.com/contents/cerumen

25. Grandis J. Necrotizing (malignant) external otitis. UpToDate. January 7, 2025. Accessed March 2, 2025. https://www.uptodate.com/contents/necrotizing-malignant-external-otitis?topicRef=6841&source=see_link

Appendix A

Otoscopic evaluation of the tympanic membrane

Component of examination	Description	Potential significance
Position	▪ Neutral	▪ Normal TM
	▪ Bulging or full	▪ Characteristic of AOM
	▪ Retracted	▪ Negative pressure in the middle ear (Eustachian tube dysfunction)
Mobility	▪ Normal	▪ Normal TM
	▪ Absent or decreased	▪ Fluid in the middle ear* ▪ Tympanosclerosis
	▪ Increased	▪ Atrophy of the TM ▪ Site of previous perforation or tympanostomy tube
Translucency	▪ Translucent	▪ Normal
	▪ Cloudy, opaque, or semi-opaque	▪ Fluid in the middle ear*
Color	▪ Pearly gray or pink	▪ Normal TM
	▪ White or pale yellow	▪ Pus in the middle ear (AOM)
	▪ Amber, gray, blue	▪ OME
	▪ Red or hemorrhagic	▪ Inflammation ▪ Vasodilation (eg, from manipulation of the ear canal, crying, or high fever)
Other findings	▪ Bubbles or air-fluid levels	▪ Middle ear fluid (more suggestive of OME than AOM unless the TM is bulging)
	▪ Perforation	▪ AOM if associated with purulent otorrhea and not caused by external otitis ▪ Injury to TM
	▪ Otorrhea	▪ AOM if associated with perforation and not caused by external otitis ▪ External otitis ▪ Chronic suppurative otitis media ▪ Tympanostomy tube drainage
	▪ Bullae	▪ Inflammation of TM, associated with AOM
	▪ Myringosclerosis	▪ Complication of frequent middle ear disease
	▪ Focal atrophy	▪ Possible sequela of AOM or tympanostomy tube
	▪ Retraction pocket	▪ Possible sequela of AOM or tympanostomy tube
	▪ Cholesteatoma	▪ Possible sequela of AOM

This table is meant for use with UpToDate content on AOM in children. Refer to UpToDate content for additional details and pictures.

TM: tympanic membrane; AOM: acute otitis media; OME: otitis media with effusion.

* This finding does not distinguish AOM from OME.

Adapted from: Kaleida PH. The COMPLETES exam for otitis. Contemp Pediatr 1997; 14:93.

UpToDate®

Wald E. Acute otitis media in children: Clinical manifestations and diagnosis. UpToDate.