

# COMMON ADENO- TONSILLAR DISEASE

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V. August 2023



THE UNIVERSITY OF  
JORDAN

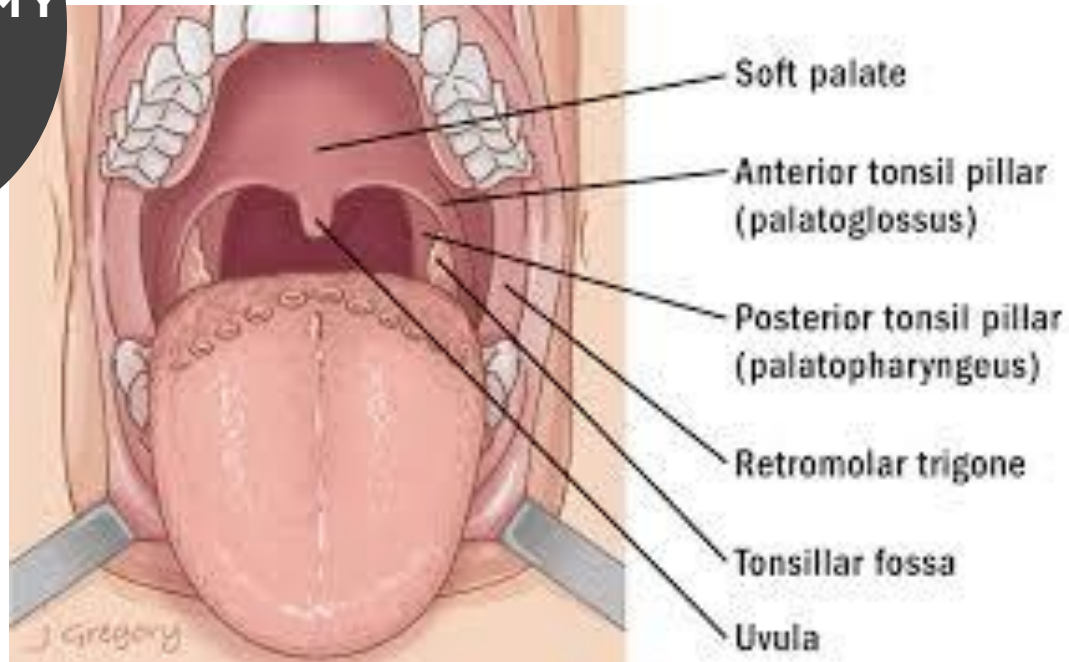


## UPPER RESPIRATORY SYST

### Sore throat

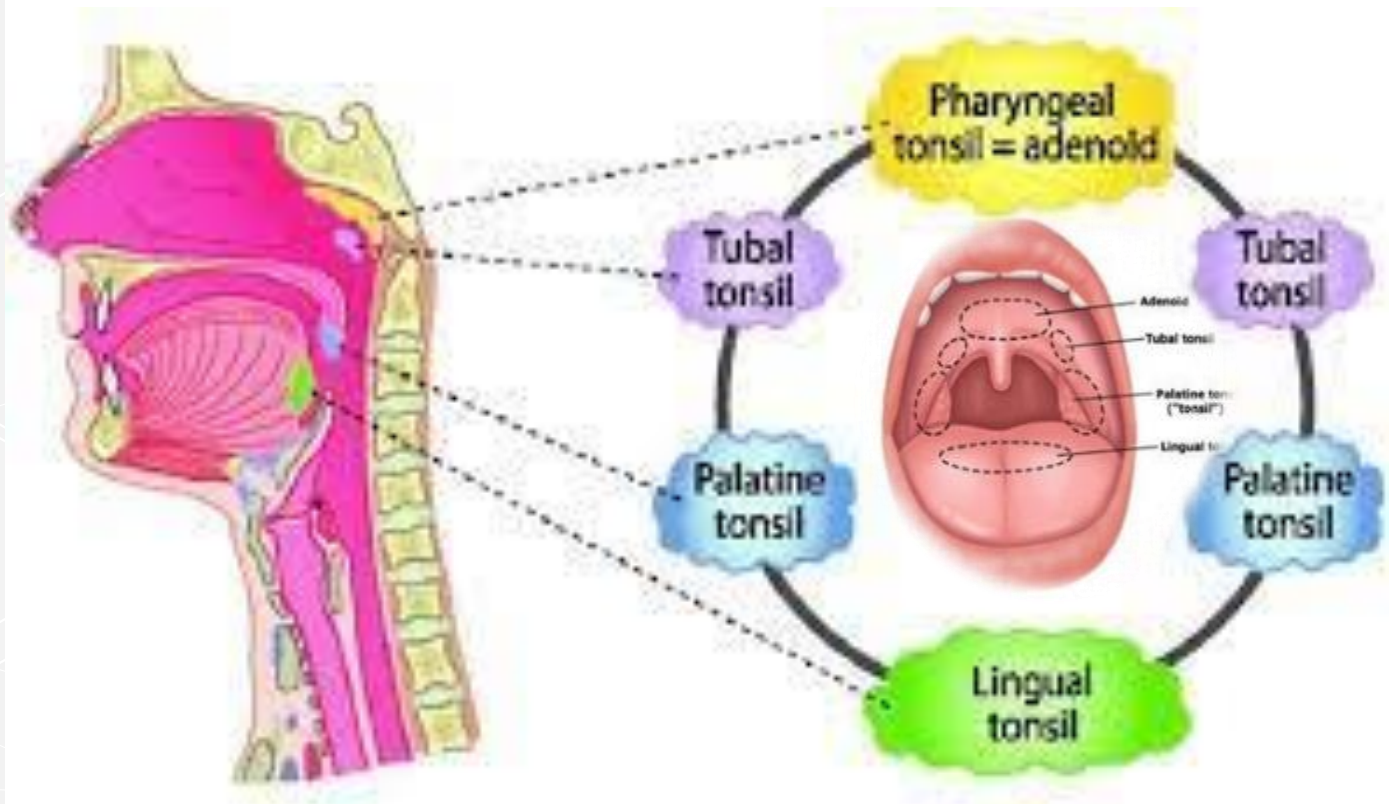
- It refers to any painful sensation localized to the pharynx or surrounding anatomy.
- Could be acute or chronic.
- Commonest causes:
  - ▶ Pharyngitis
  - ▶ Tonsillitis
  - ▶ Adenoiditis
  - ▶ Laryngitis

# ANATOMY



## WALDEYER'S RING

An interrupted circle of protective lymphoid tissue at the upper ends of the respiratory and alimentary tracts





**Healthy Throat**



**Pharyngitis**



**Tonsillitis**

## PHARYNGITIS VS TONSILITIS



**PHARYNGITIS**



ACUTE  
PHARYNGITIS



PHARYNGITIS



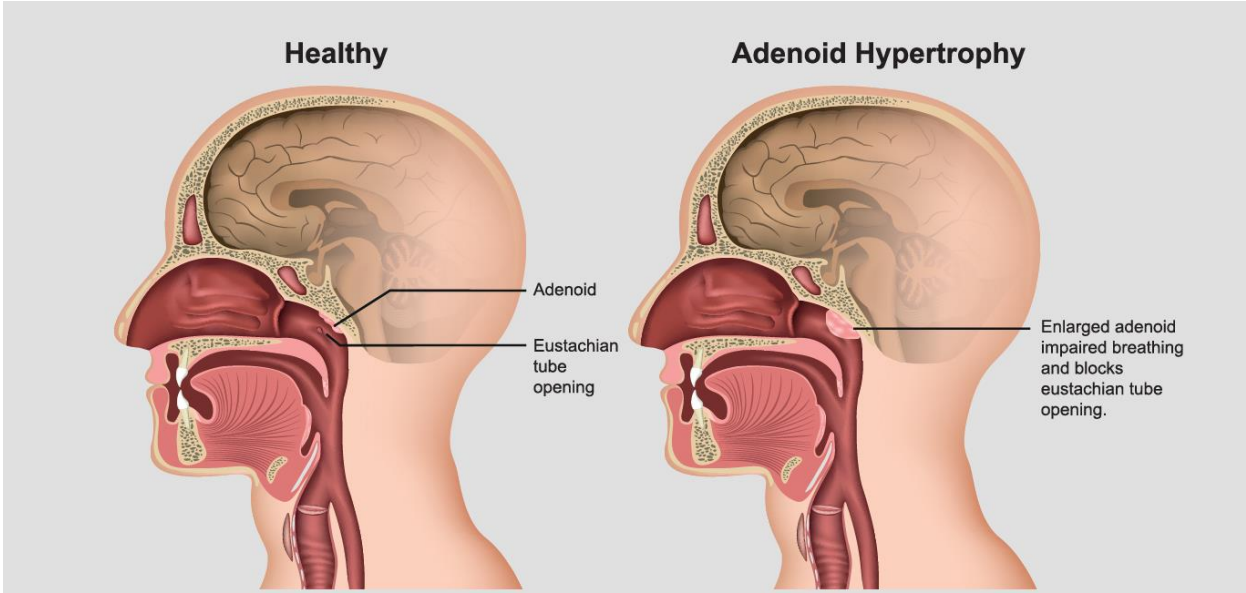




TONSILITIS

# ADENOIDITIS





# ADENOID HYPERTROPHY

# PHARYNGITIS

- Pharyngeal infection is the most common cause of sore throat.
- The common cause is respiratory viruses (rhinovirus, influenza, adenovirus, coronavirus, and parainfluenza).
- Streptococcus is the most common bacterial cause.

Viral pharyngitis

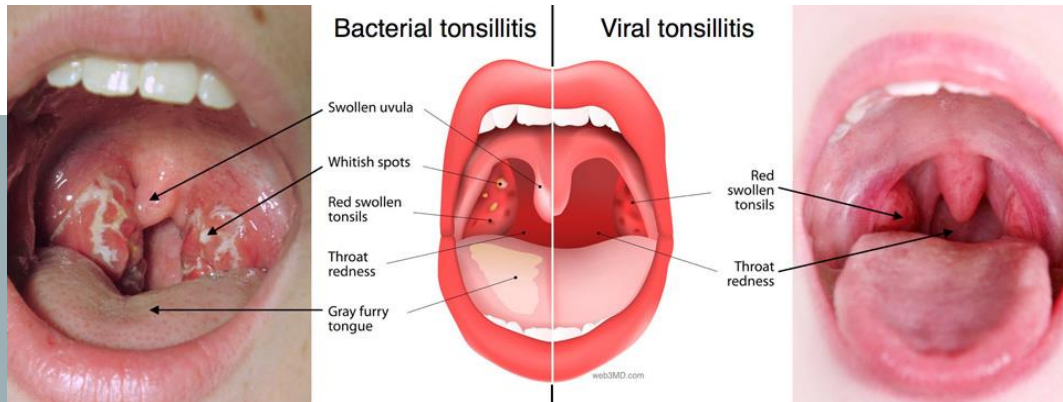


bacterial pharyngitis



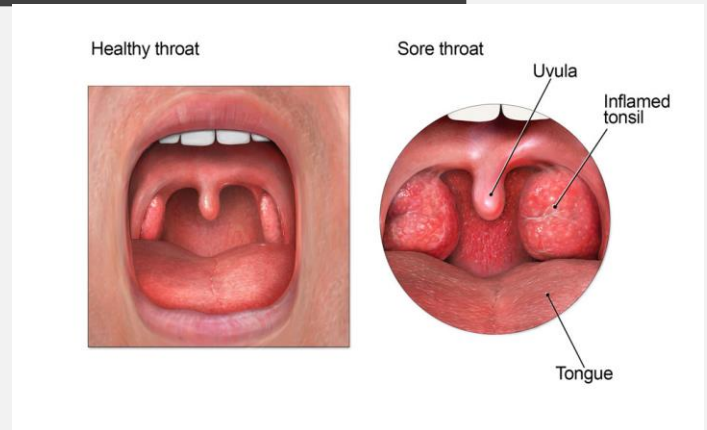
# TONSILLITIS

- Mainly a disease of childhood but is also seen in adults. Tonsillitis peaks around the age of 3-7 years.
- May occur primarily as infection of the tonsils themselves or may secondarily occur as a result of URTI following viral infection.
- Organisms: respiratory viruses are the most common cause like pharyngitis. Bacterial causes include (beta-haemolytic streptococcus, staphylococcus, haemophilus influenza, pneumococcus).



## SYMPTOMS OF ACUTE PHARYNGITIS AND TONSILITIS (UNCOMPLICATED)

- Sore throat.
- Dysphagia.
- Fever, weakness & fatigability.
- Poor appetite.
- Dehydration.
- Otolgia (tympanic branch of IX nerve).





# ACUTE TONSILITIS

Parenchymatous



Follicular



Membranous



MEMBRANOUS  
TONSILITIS

INFECTIOUS  
MONONUCLEOSIS

- Contagious disease.
- It is common among teenagers and young adults.
- Epstein-Barr virus (EBV) is the most common cause.
- Commonly misdiagnosed as strep throat, which doesn't get better after treatment with antibiotics.



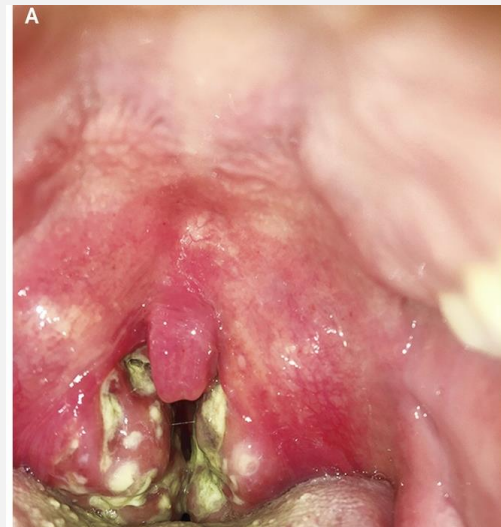
MEMBRANOUS  
TONSILITIS

INFECTIOUS  
MONONUCLEOSIS

- Sore throat not responding to antibiotics.
- Patient will be obviously toxic.
- More systemic manifestations than tonsillitis.
- Splenomegaly in 50%. Hepatomegaly & jaundice in 10%.
- Enlarge jugulodigastric LN.
- Serology: heterophile abs (agglutinins to sheep and horse RBCs) called Monospot or Paul Bunnell test.
- Blood workup: lymphocytosis with atypical lymphocytes/ monocytes.
- Avoid ampicillin (skin rash in 10%).
- Oral or systemic steroids may be given (in case of obstruction).

# MEMBRANOUS TONSILITIS SCARLET FEVER

- Infectious disease caused by *Streptococcus pyogenes*, a group A strep.
- It most commonly affects children
- Rash/ strawberry tongue.



# Diphtheric patch



## MEMBRANOUS TONSILITIS DIPHTHERIA

- Serious bacterial infection.
- Diphtheria is extremely rare in developed countries thanks to widespread vaccination against the disease.
- A thick, grey membrane covering the throat and tonsils
- Difficulty breathing.



## MEMBRANOUS TONSILLITIS VINCENT ANGINA

- Pharyngitis and tonsillitis are caused by infection with two types of bacteria; fusiform and spirochaetes.



# COMPLICATIONS OF TONSILITIS

1. Peritonsillar abscess (quinsy). Most common.
2. Airway obstruction.
3. Otitis media.
4. Parapharyngeal abscess.
5. Retropharyngeal abscess.
6. Rheumatic fever.
7. Glomerulonephritis.

## PERITONSILLAR ABSCESS

- Accumulation of pus between the tonsillar capsule and the lateral pharyngeal wall.
- Unilateral.
- Usually preceded by an attack of tonsillitis.
- The affected tonsil will be pushed medially toward the midline with bulging above and lateral to it.
- Enlarged jugulodigastric LN.



# PERITONSILLAR ABSCESS

Complicated infection can lead to:

- Very high fever.
- Inability to open the mouth completely (trismus).
- Enlarged Jugulodigastric lymph nodes.
- Drooling of saliva.
- Airway obstruction
- Hot potato sign Inability to talk properly.

# PERITONSILLAR ABSCESS

- Admission.
- IV abx (crystalline penicillin, augmentin, benz penicillin or cephalosporins for 24-48 hrs).
- Followed by oral abx for 10 days.
- IV fluids, analgesia, antipyretics and mouthwashes.
- Incision & drainage (dramatic improvement immediately).
- Tonsillectomy (after 6 wks of the 2nd attack).
- \* Other causes of quinsy: dental infections/ foreign bodies).

# PARAPHARYNGEAL ABSCESS

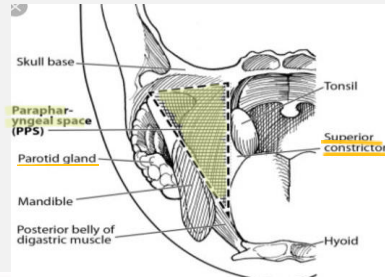
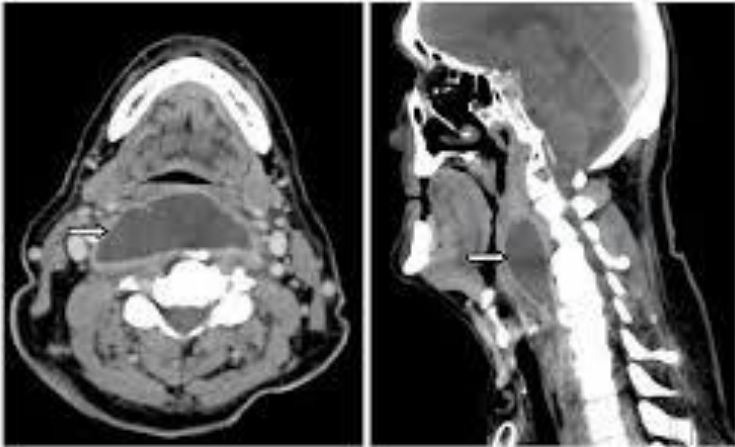


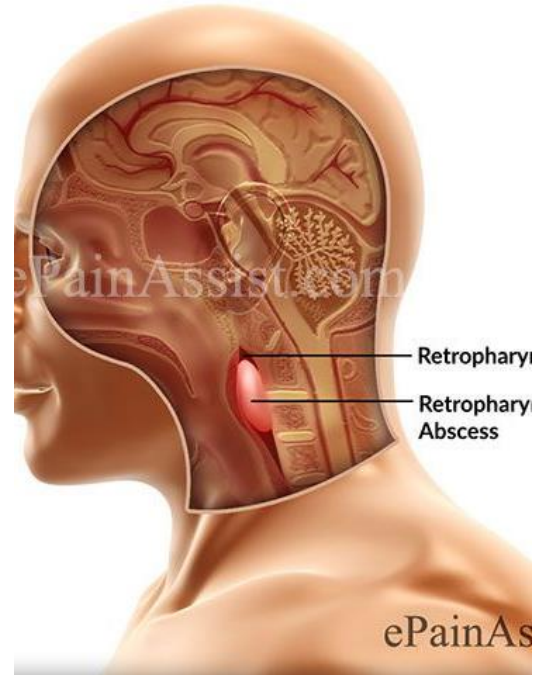
Fig.2. CECT scan showing left-sided parapharyngeal abscess (arrow) with airway compression (patient 13 in the Table).

- Rare but serious medical condition.
- Diagnosis of a parapharyngeal abscess involves a combination of clinical evaluation, medical history, and CT scan.
- Admission, Abx, Drainage.
- 1 Complications: airway obstruction, thrombosis of the internal jugular vein, carotid artery rupture, injuries to lower cranial nerves (IX, X, XI, XII), mediastinitis, septicemia.

# RETROPHARYNGEAL ABSCESS



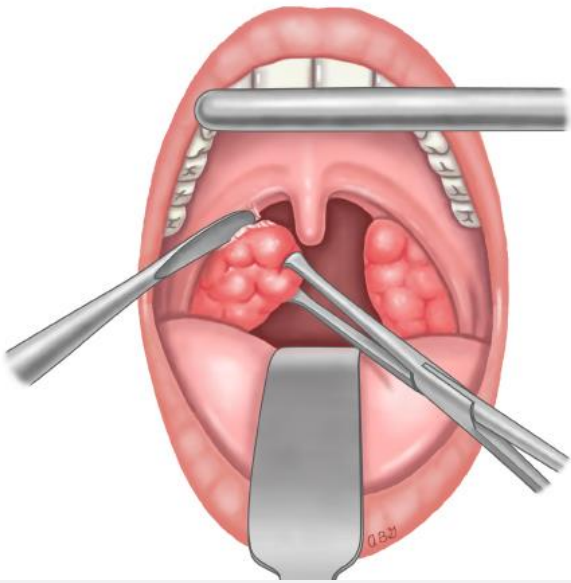
## retropharyngeal Abscess





# MANAGEMENT OF SORE THROAT

- Supportive therapy: painkillers, antipyretics, local soothing agents and antiseptics, good hydration.
- Antibiotics: for bacterial infections of the pharynx or tonsils. (amoxicillin-clavulanic acid, or cephalosporins for 10 days)
- For complicated cases and toxic manifestations:
  - Admission, IV fluids, IV antibiotics if bacterial (penicillin).
  - Swab culture and EBV test.
  - Drainage for abscesses.



## TONSILLECTOMY

- **Recurrent Tonsillitis**
- **Obstructive sleep apnoea**
- **Febrile convulsions**
- **Second attack of Quinsy**
- **Dysphagia and failure to thrive**
- **Suspicion of malignancy**



## COMPLICATIONS OF TONSILLECTOMY

- **Bleeding (primary or secondary)**
- **Tonsillar remnants.**
- **Damage to nearby structures**
- **Infection at the tonsillar bed**

## Etiology of sore throat by age

Cause	Infants and young children	Older children and adolescents
Viral pharyngitis*	Respiratory viruses Herpangina (enterovirus)* SARS-CoV-2	Epstein-Barr virus (infectious mononucleosis)* Respiratory viruses* HIV Herpangina (enterovirus) HSV SARS-CoV-2
Bacterial pharyngitis	Group A <i>Streptococcus</i> <i>Fusobacterium necrophorum</i> and other anaerobic bacteria (±Lemierre syndrome <sup>¶</sup> ) Other bacteria <sup>Δ</sup>	Group A <i>Streptococcus</i> * <i>Neisseria gonorrhoeae</i> <i>Fusobacterium necrophorum</i> and other anaerobic bacteria (±Lemierre syndrome <sup>¶</sup> ) Other bacteria <sup>Δ</sup>
Other infections	Retropharyngeal abscess <sup>¶</sup> Lateral pharyngeal abscess <sup>¶</sup> Epiglottitis <sup>¶</sup>	Peritonsillar abscess <sup>¶</sup> Retropharyngeal abscess <sup>¶</sup> Lateral pharyngeal abscess <sup>¶</sup> Epiglottitis <sup>¶</sup>
Miscellaneous conditions	Steven-Johnson syndrome Kawasaki disease Behçet syndrome PFAPA syndrome	Psychogenic pharyngitis Referred pain Steven-Johnson syndrome Kawasaki disease Behçet syndrome PFAPA syndrome
Traumatic injury	Foreign body Chemical exposure	Irritation of the mucosa*

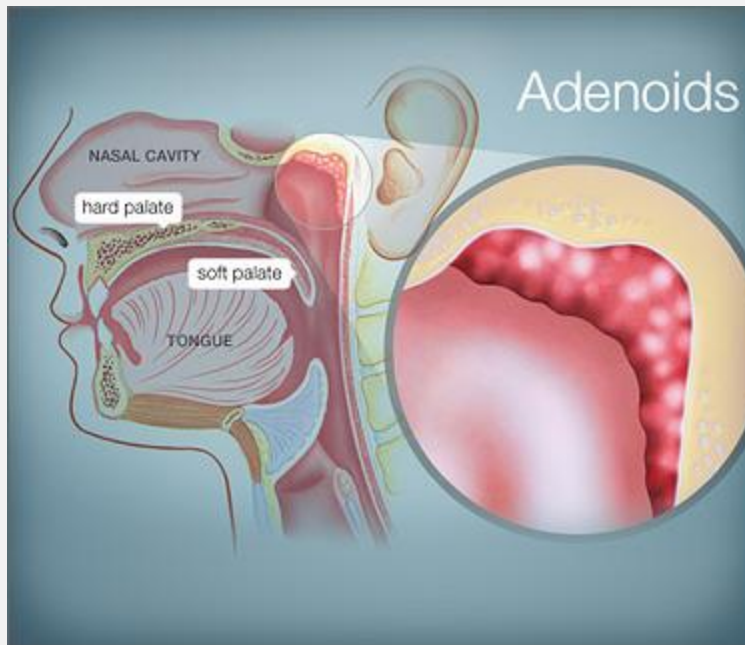
HIV: human immunodeficiency virus; HSV: herpes simplex virus; SARS-CoV-2: severe acute respiratory coronavirus 2; PFAPA: periodic fever with aphthous stomatitis, pharyngitis, and adenitis.

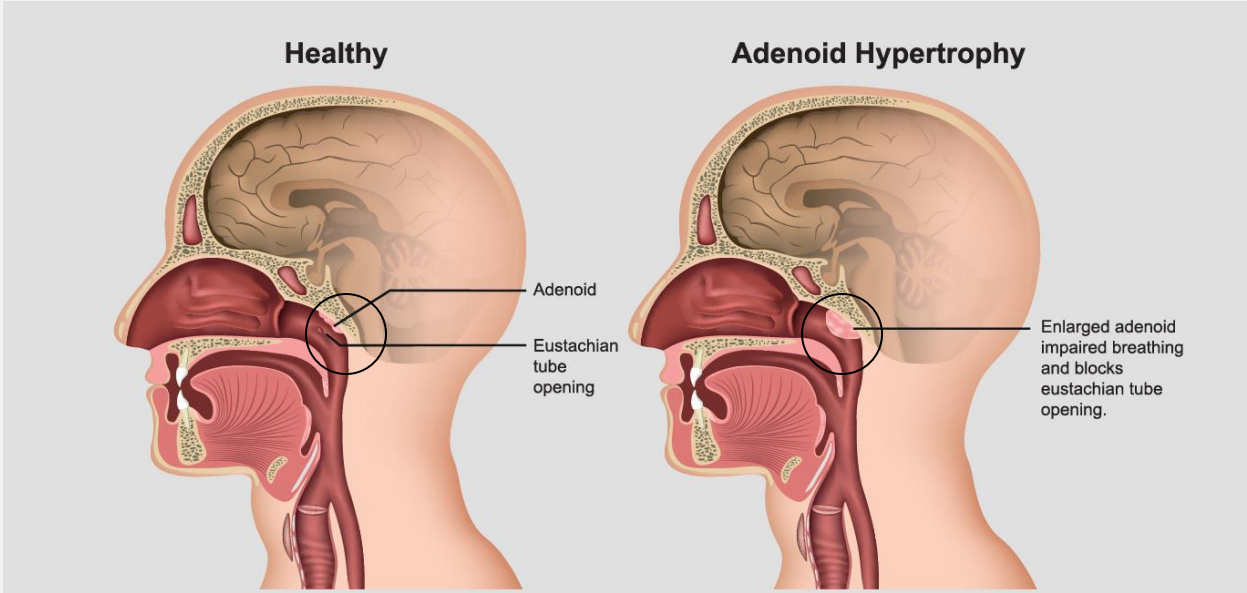
\* Common causes of sore throat in children.

¶ Life-threatening causes of sore throat in children.

Δ Other bacteria that can cause acute pharyngitis include group C and G *Streptococcus*, *Arcanobacterium hemolyticum*, *Mycoplasma pneumoniae*, *Chlamydophila pneumoniae*, *Francisella tularensis*, *Corynebacterium diphtheriae*, and *Neisseria gonorrhoeae*.

SIZE OF THE ADENOID INCREASES UP TO THE AGE OF 6 YEARS, THEN SLOWLY ATROPHIES AND COMPLETELY DISAPPEARS AT THE AGE OF 16 YEARS.





**ADENOIDAL DISEASE**

# ADENOIDAL DISEASE

- Adenoidal hypertrophy obstructing airflow or obstructing eustachian tube and middle ear ventilation.
- Adenoidal inflammation or infection.



# ADENOIDAL DISEASE

- Nasal congestion and rhinorrhea
- Snoring and mouth breathing
- Sore throat
- Middle ear infection and fluid accumulation
- Sleep apnea
- Voice changes
- Adenoid face (open mouth, protruded frontal teeth, hard palate)





# MANAGEMENT

- Nasal sprays- saline, steroids, decongestants.
- Antibiotics in infected.
- Adenoidectomy. (nasal obstruction, otitis media with effusion, recurrent acute OM, chronic rhinosinusitis, sleep apnea)

THANK YOU

