

Eyes, Ear, Nose and Throat

Anna Dick, CPNP-PC

Objectives

- Identify common complaints
- Review exam findings
- Identify treatment options and resources

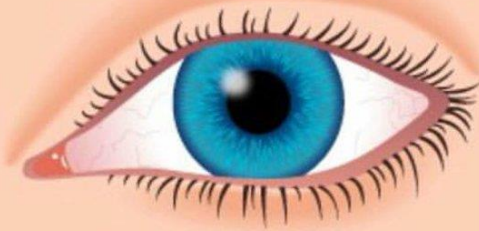
Overview

- Eyes
- Frequently seen ENT conditions
- ENT emergencies
- Pediatric ENT differences

Conjunctivitis

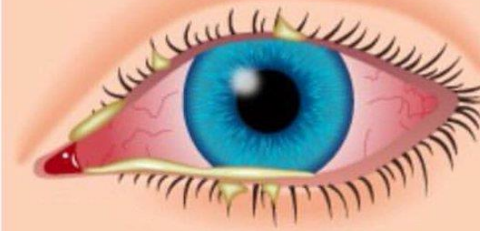
- “Pink eye”
 - Inflammation of the conjunctiva
 - Various causes including bacterial, viral, allergic, chemical and herpetic
- **History is vital in making diagnosis**
 - **Length of symptoms**
 - **Other symptoms – Runny nose? Sneezing? Coughing?**
 - **Medical history**

Viral vs. Bacterial



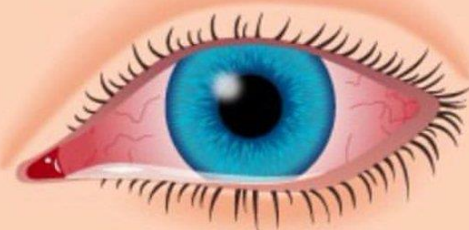
Normal eye

In a healthy eye, the sclera is essentially white with only a few small blood vessels visible. There is an adequate tear film, with no significant discharge or watering.



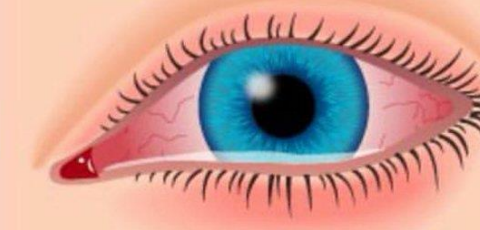
Bacterial conjunctivitis

A red eye with a sticky yellow or yellow/green discharge. Eyelids may be stuck together upon waking. Can affect one or both eyes. Usually spread by direct contact only.



Viral conjunctivitis

The type of conjunctivitis most commonly associated with the term "pink eye." Appearance: red, itchy, watery eye. Can affect one or both eyes. Highly contagious.



Allergic conjunctivitis

Very similar in appearance to viral conjunctivitis, but accompanied by nasal congestion, sneezing, eyelid swelling and sensitivity to light. Both eyes are affected. Not contagious.

Conjunctivitis

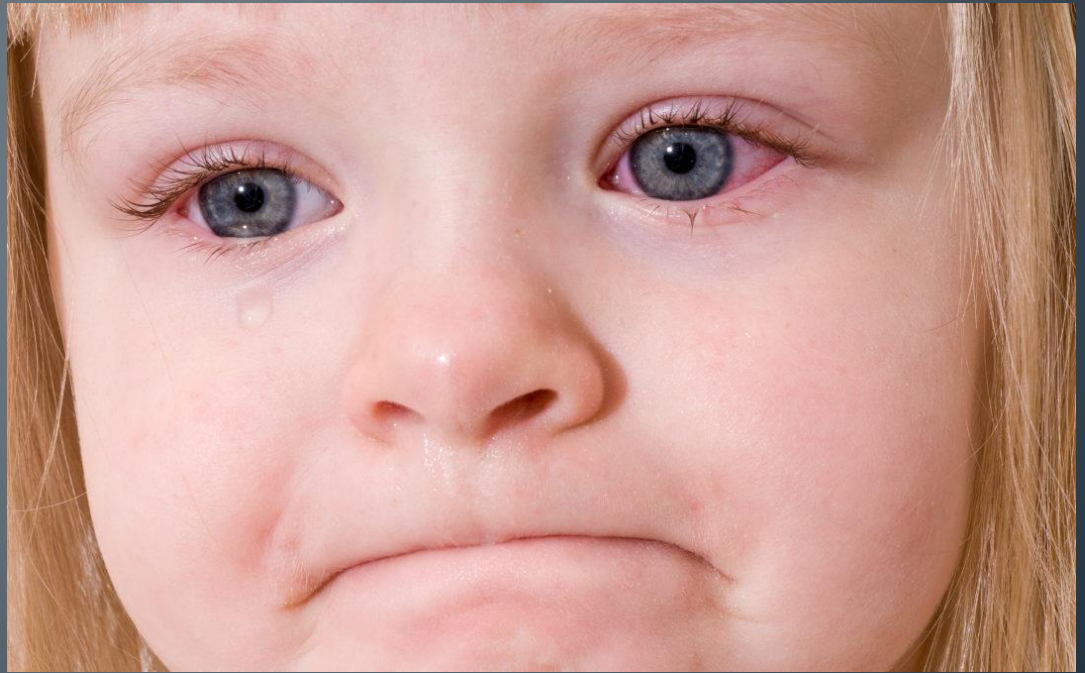
- History Questions
 - Length of symptoms
 - Other symptoms?
 - History of Trauma – Rule out any corneal abrasion vs. chemical
- Appointment needed
 - Viral vs. Bacterial – Perhaps, can be video visit
 - Allergic – No
 - Trauma or chemical – YES!!!

Treatment

- Bacterial
 - Antibiotic Ointment or Drops
 - Can return to school 24 hours after starting antibiotics EVEN if still red/discharge
- Viral
 - Supportive care: artificial tears
 - Decongestants/antihistamines for moderate symptoms
- Allergic
 - Oral antihistamines
 - Cool rag for itching/discomfort

Case Studies

- 6 year old with eye redness and some clear discharge.
 - Some runny nose and sneezing



Case Study

- 8 year old male with bilateral eye redness and yellow discharge.
 - No additional symptoms
 - No medical history



Bonus

- Eye redness without discharge or pain
 - No other symptoms



Bonus #2

- Eye discharge and rash
 - No additional symptoms
- ALWAYS refer to PCP for IMMEDIATE/URGENT evaluation



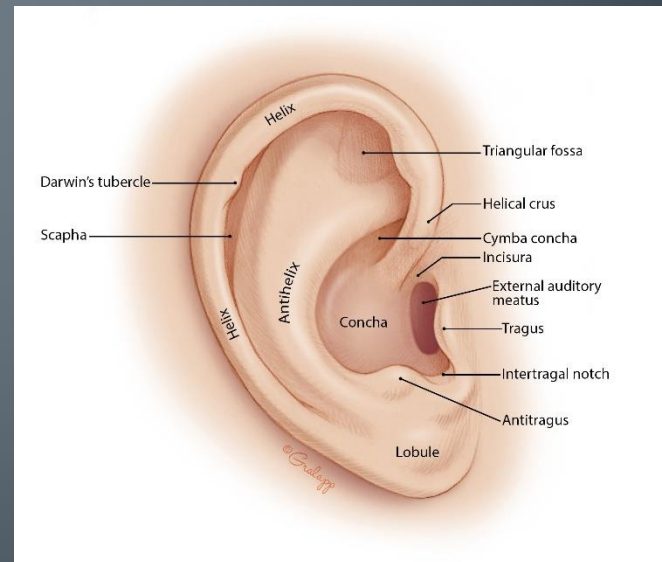
EARS

- Otitis Externa
- Otitis Media
- Ear tubes



Otitis Externa

- Etiology
 - “Swimmer’s ear” – inflammation of external auditory canal
 - Protective barrier is damaged – mechanical or chemical
 - Usually caused by *S. aureus* and *Strep pyogenes*
 - Mycotic – caused by fungus or chronic otitis externa
- Physical Exam Findings
 - Pain with movement of tragus
 - Swollen external canal
 - Dry canal with no cerumen – chronic





Otitis Externa

- Treatment
 - Eardrops – 7 days or until symptoms resolved (sometimes up to 2 weeks)
 - Consider PET or TM perforation (ototoxic drops)
- Education
 - Water precautions – no swimming for at least 7 days
 - Consider ear plugs if chronic or recurrent
 - Acidic drops (vinegar or alcohol)
 - Avoid excessive cleaning



Immediate Attention

- Pain that is moving down the jaw or behind the ear
 - Consider Mastoiditis and needs follow up with provider within 24 hours

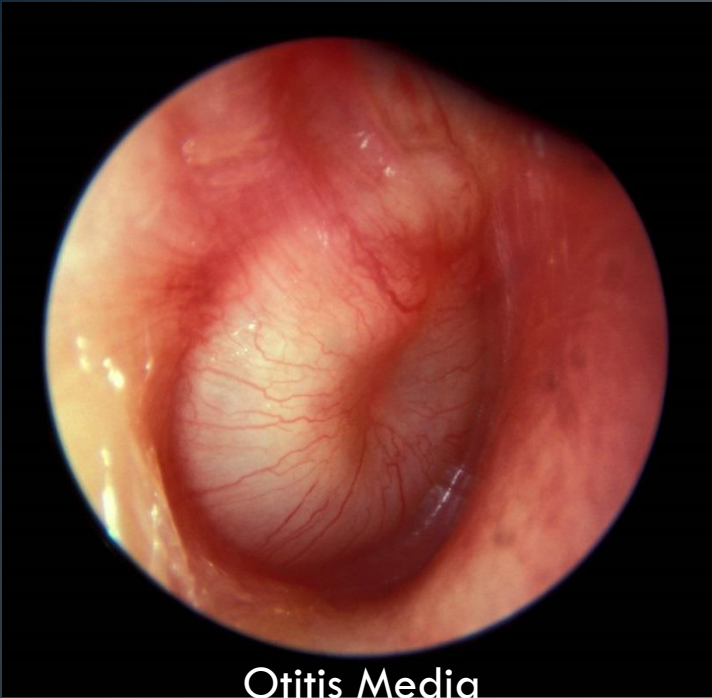


Otitis Media

- Etiology
 - Acute infection of the middle ear
 - Often follow Eustachian tube dysfunction (ETD) – URI, allergies or smoke exposure
 - Most occur in the first 24 months of life
 - Current AAP guidelines for diagnosis – must have all three!
 - Abrupt onset of symptoms (ear pain, irritability, fever)
 - Middle ear effusion (bulging TM)
 - Middle ear inflammation (erythema of TM or otalgia interfering with sleep/activity)

Otitis Media

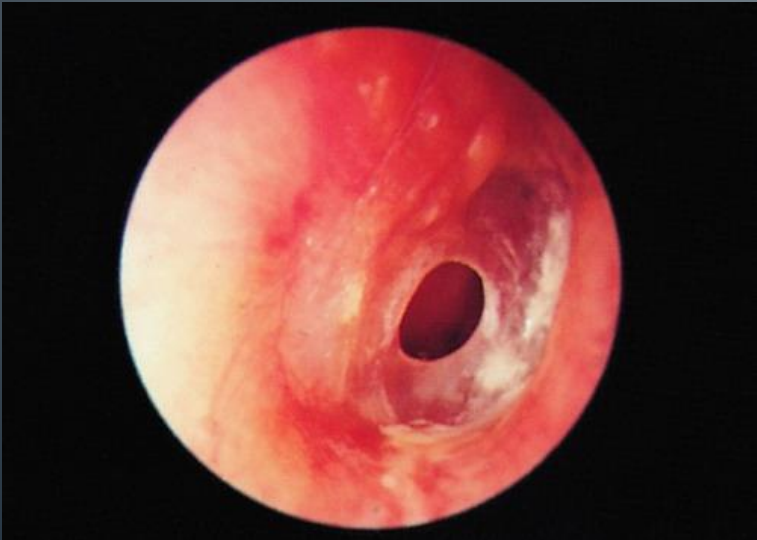
- Physical Exam
 - History
 - Ear pain/fussiness
 - Fever
 - Exposure to risk factors
 - Disrupted sleep
 - Middle ear effusion
 - Middle ear inflammation
 - Straw-colored fluid (Bullous myringitis)



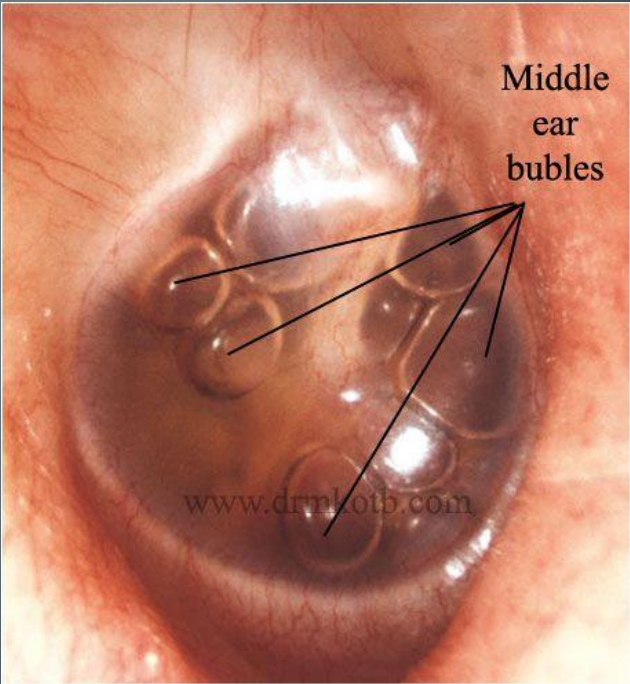
Otitis Media



Bullous Myringitis



TM perforation



Middle ear bubbles

Middle Ear Effusion



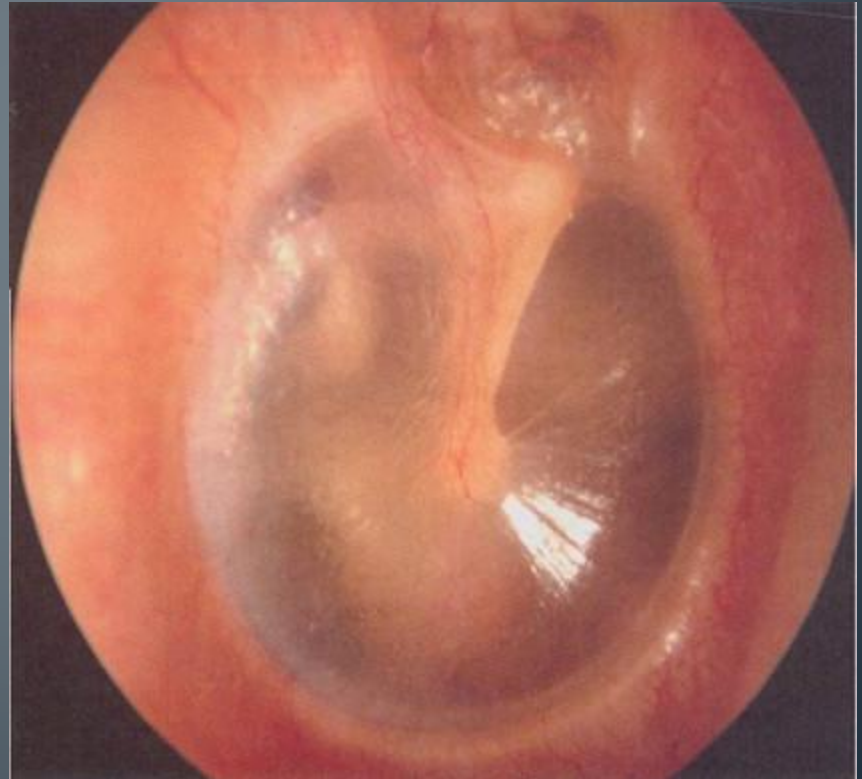
PET in place

PET scaring



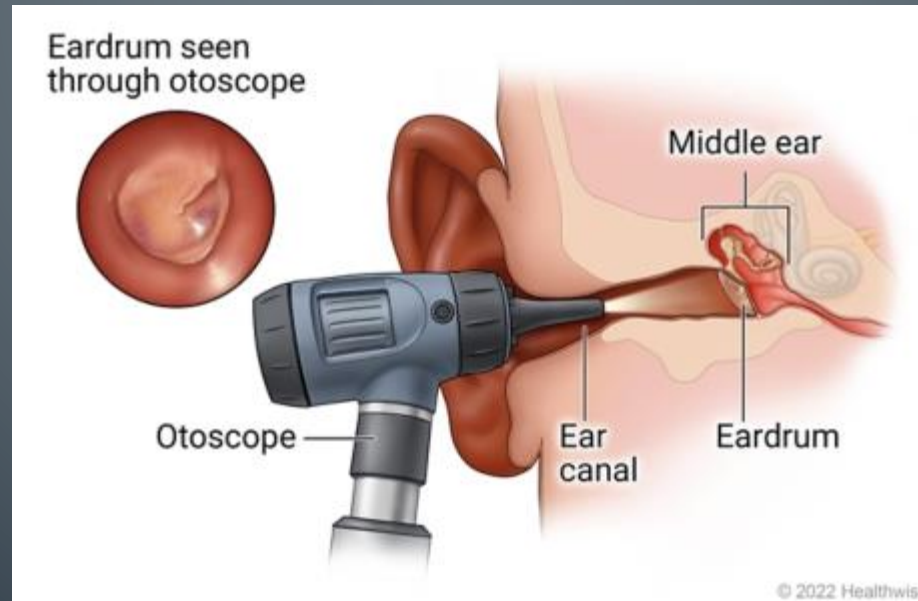
Case Study

- 4 year old female who complains of ear pain. She has cough and congestion for the past few weeks. No fever.



Tips when looking in ears!

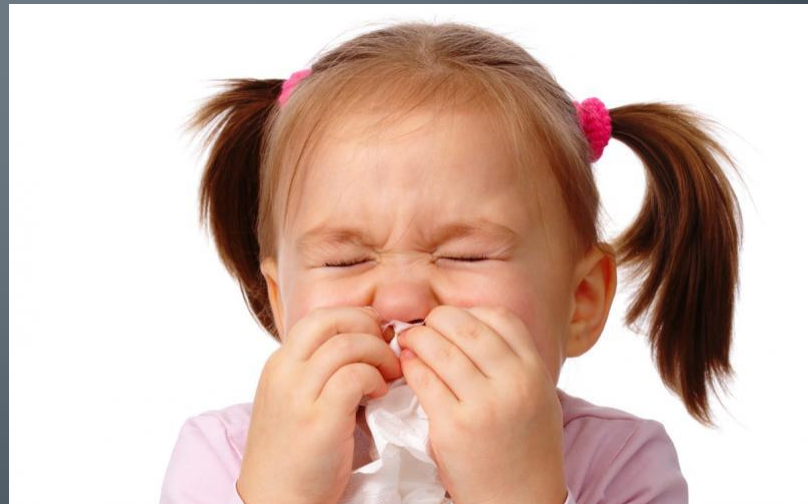
- Is that the TM?
- What if I can't see the TM?
- Positioning
 - Pull the child's ear back and UP





Throat

- Upper airway sounds
 - Stridor
 - Cough
- Know when it is emergency vs managing at home
- Know the difference between Croup and Epiglottitis!



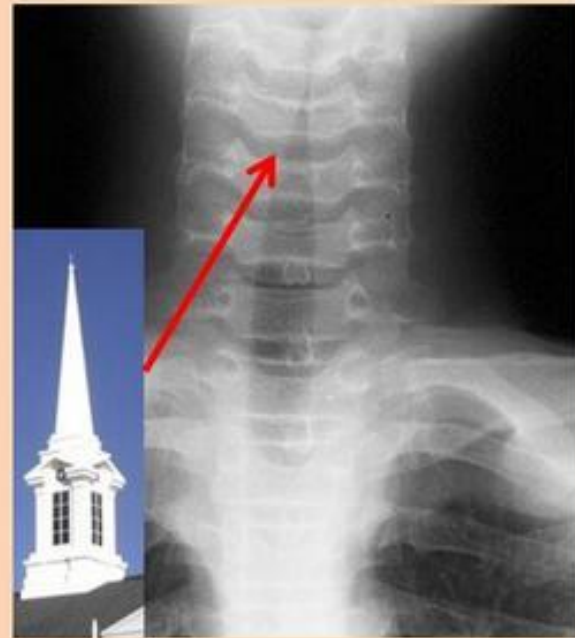
Croup

- Etiology
 - Viral infection – Parainfluenza
 - Inflammation of the Larynx
 - Younger children – 3 months to 6 years of age
 - Most common during the fall/winter time
- Physical Exam
 - Low grade fever, URI symptoms
 - “barky” cough that worsens at night
 - Inspiratory and/or expiratory stridor if severe symptoms
 - Lungs are clear
 - X-ray: Steeple sign

**Thumb sign
(Epiglottitis)**



**Steeple sign
(Croup)**



Croup

- Treatment
 - Mild – supportive care (cool air)
 - Moderate – Racemic epinephrine in clinic and Corticosteroid
 - PO/IM Decadron
 - Severe – Hospitalize for respiratory support and IV fluids

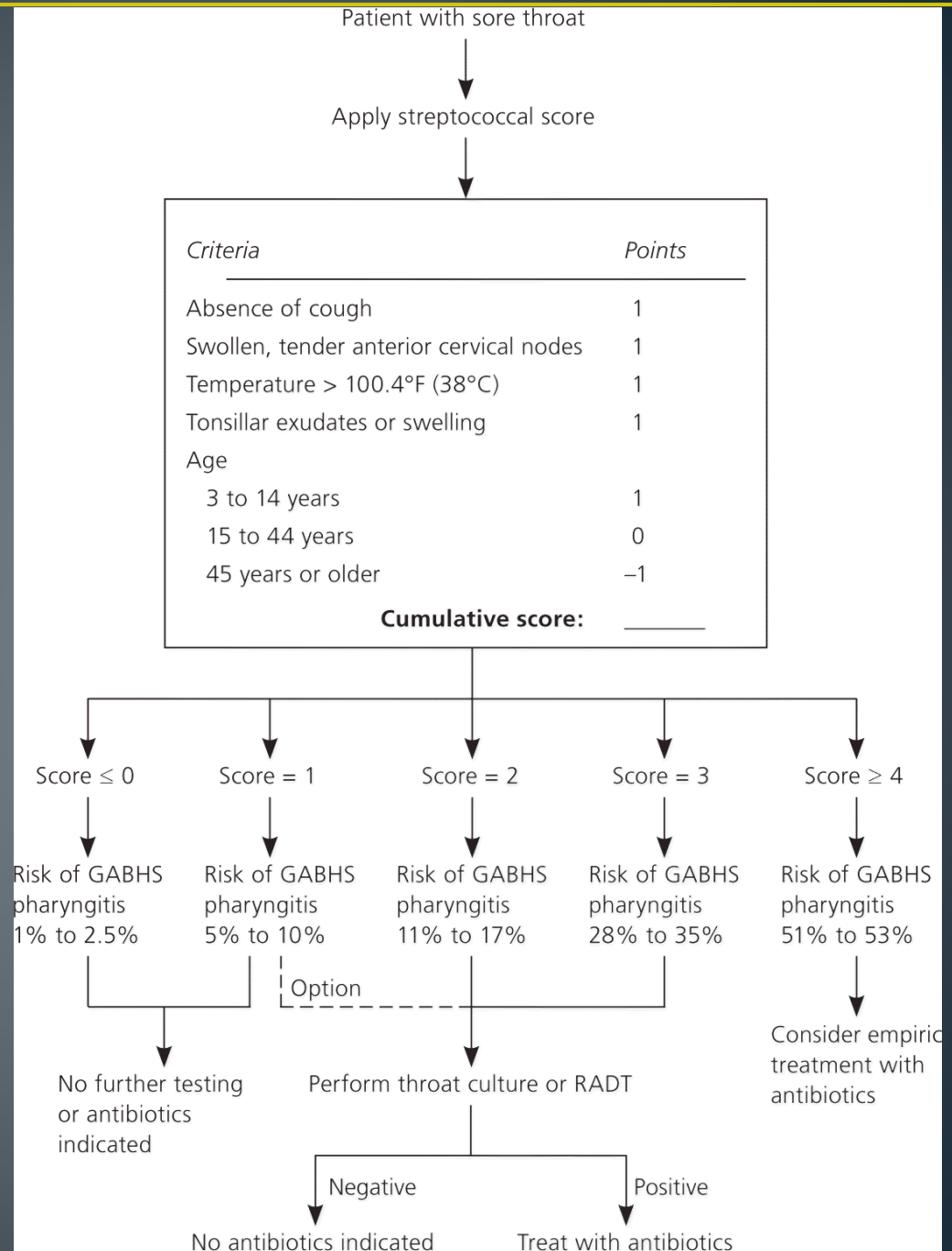


Sore Throat

- History Taking
 - Associated symptoms?
 - Fever, cough, congestion?
 - Time?
 - Has this been only for a few days?
 - Weeks?
 - Exposure?

Strep or Not?

- Centor Criteria



Physical Exam

- Tonsillar exam
 - Exudate or not?
 - Petechia?



Case Study

- 6 year old female presents with complaint of sore throat. She has had a cough and some congestion for the past few weeks. No fever on exam and no known exposure.
 - What would her Centor Criteria be?



Case Study

- 8 year old male with complaint of sore throat. He does have slight cough and fever.
 - Centor Criteria?
 - Physical Exam
 - Non-tender lymph nodes to anterior chain
 - Throat exam



Case Study

- 9 year old female with complaint of sore throat and fever. She does not have a cough or congestion.
 - Physical exam:
 - No lymph node enlargement
 - Ears are normal



Questions?