Common ENT Conditions

Gretchen Curtis, MS, RN, FNP-BC
APRN Manager, Section of Otolaryngology
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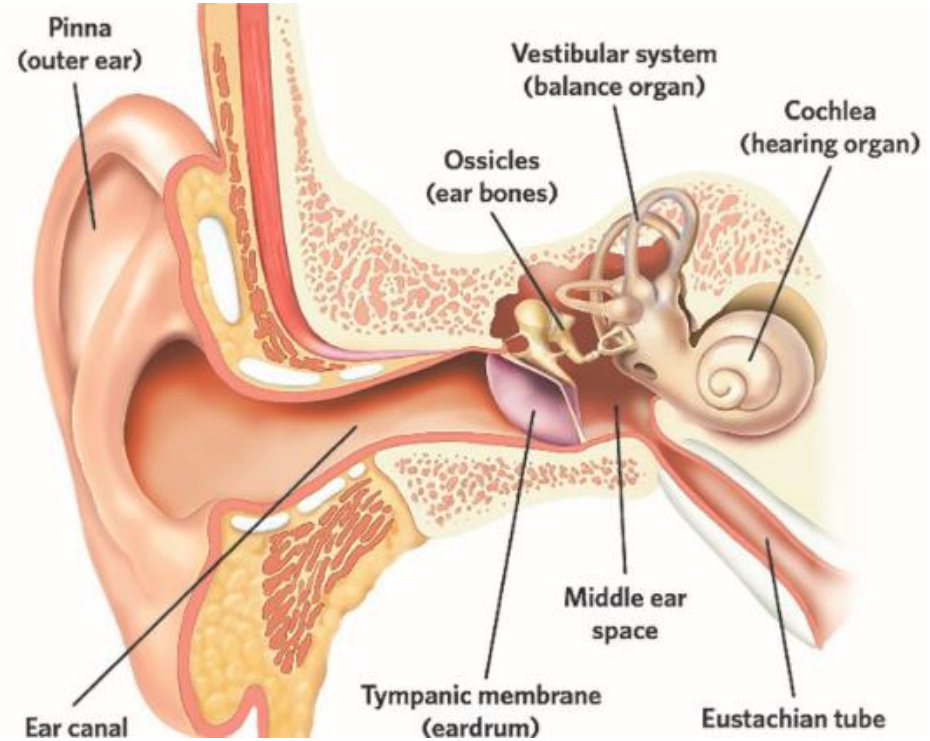
Common ENT Conditions

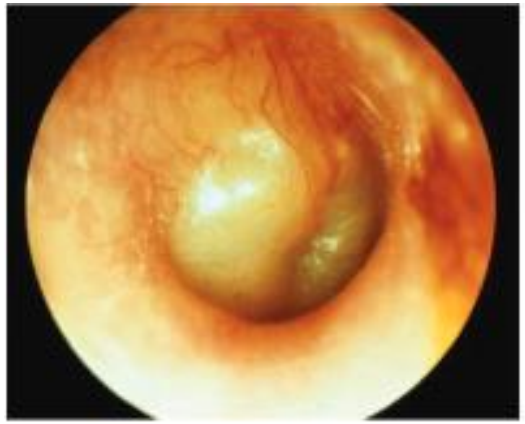
- EARS: Diagnosis and treatment of otitis media, otitis externa, otorrhea, and foreign body
- NOSE: Diagnosis and treatment of epistaxis, nasal fracture, and foreign body
- TONSILS: Indications for tonsillectomy, post-op care, and complications
- Q&A

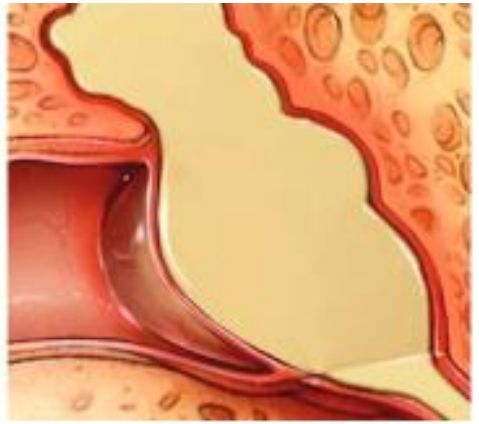
EARS

- Otitis Media
- Otitis externa
- Otorrhea (ear drainage)
- Foreign Body



ACUTE OTITIS MEDIA



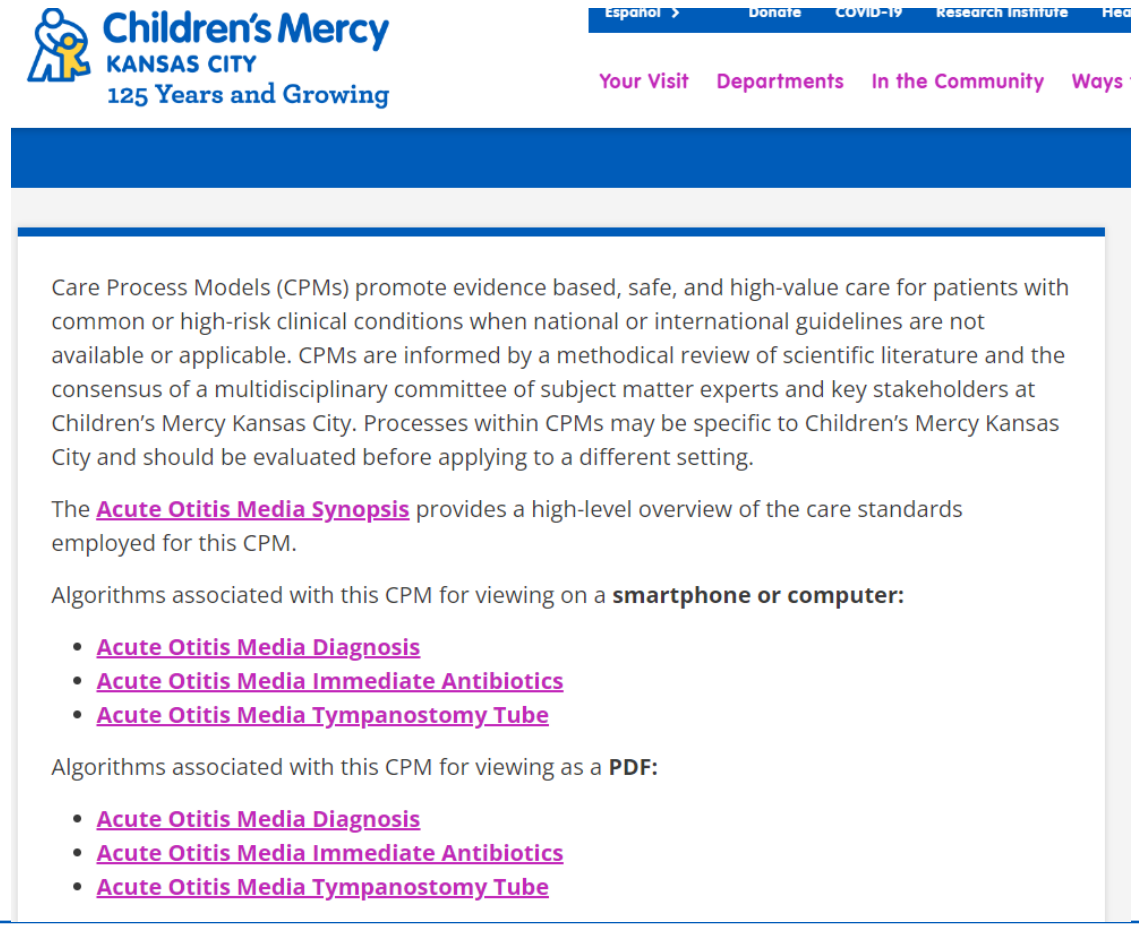


ACUTE OTITIS MEDIA

- Acute Otitis Media (AOM) = middle ear infection
- Treatment:
  - Antibiotics
  - Observation = option for unilateral AOM in child > 2 years without severe symptoms
  - AOM Care Process Model on CMH Website
  - AOM complications: TM rupture, mastoiditis
- When to see ENT for recurrent AOM: if you have had 3 AOM in 6 months and want to discuss ear tubes

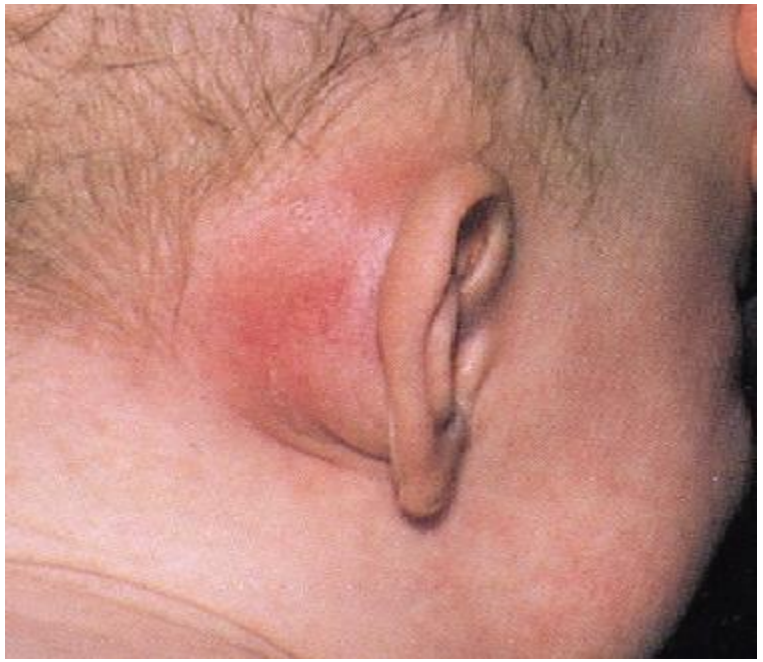
AOM Care Process Model

https://www.childrensmercy.org/health-care-providers/evidence-based-practice/

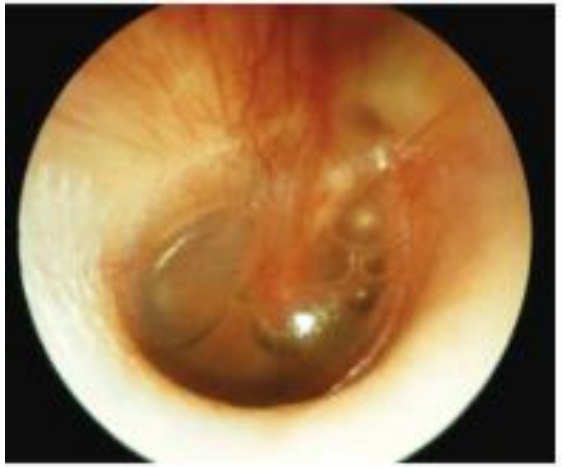


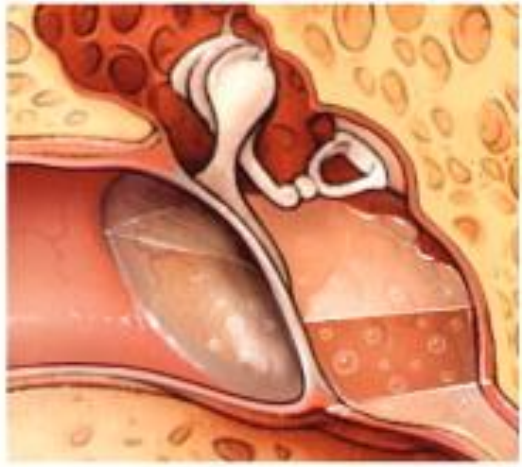
MASTOIDITIS

- Infection of the mastoid bone (located behind the ear)
- Possible complication from acute otitis media
- Would see swelling and redness behind the ear, protrusion of ear forward
  - Usually evaluated in the ED (not clinic due to need for labs, imaging)
- Treatment: admission, IV antibiotics, and possible surgery with ENT



OTITIS MEDIA WITH EFFUSION



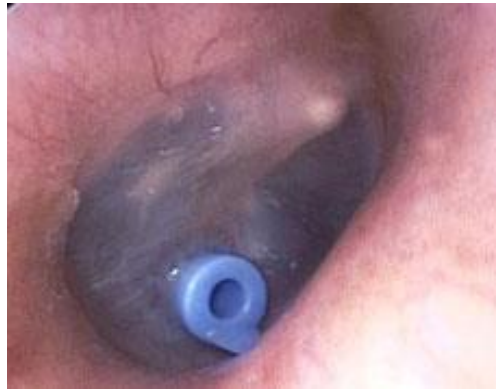


OTITIS MEDIA WITH EFFUSION

- Otitis Media with Effusion (OME) or Serous Otitis Media (SOM) = fluid in middle ear
- Common after an ear infection or with eustachian tube dysfunction
- Antibiotics are not indicated
  - OME usually resolves on its own
- OME complications: hearing loss, discomfort
- When to see ENT: OME present for more than 3 months, hearing concerns
  - Treatment: discuss PE tubes when OME has been present more than 3 months, hearing loss

TYMPANOSTOMY or PRESSURE EQUALIZATION TUBES
(EAR TUBES)

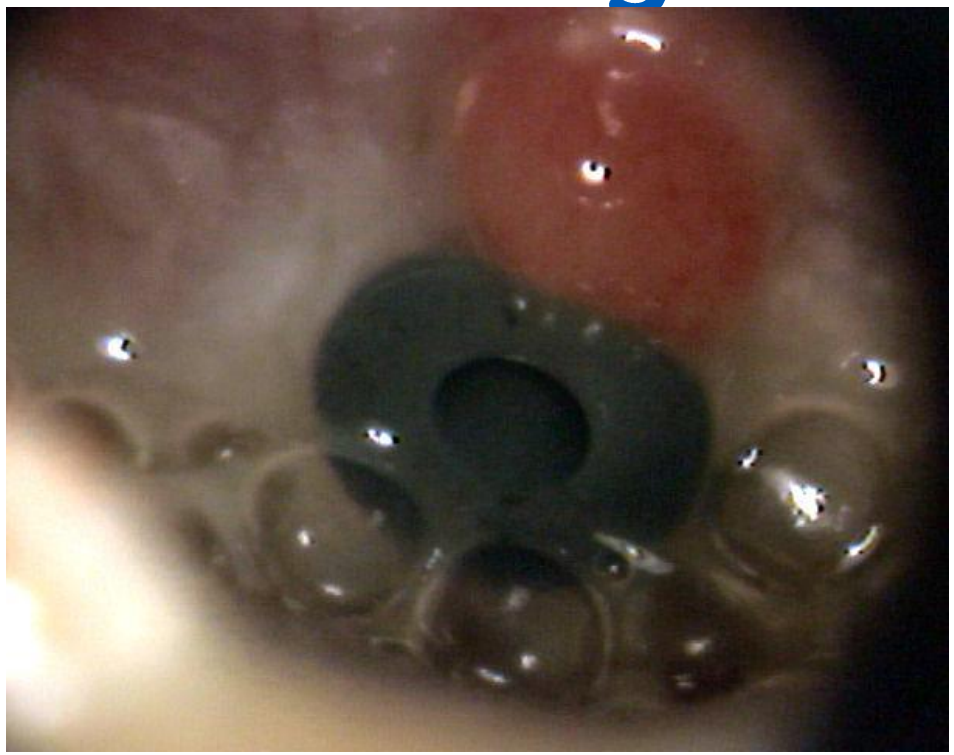
- Procedure under anesthesia – incision made in eardrum and PE tube is placed to hold the hole open and aerate the middle ear
  - Reduces number of ear infections
  - Allows direct treatment of infection with antibiotic ear drops
- Post-op: +/- drainage
  - Ear drops – may use for 7 days after surgery
  - Should warm the drops in hand/pocket before placing in canal to decrease discomfort

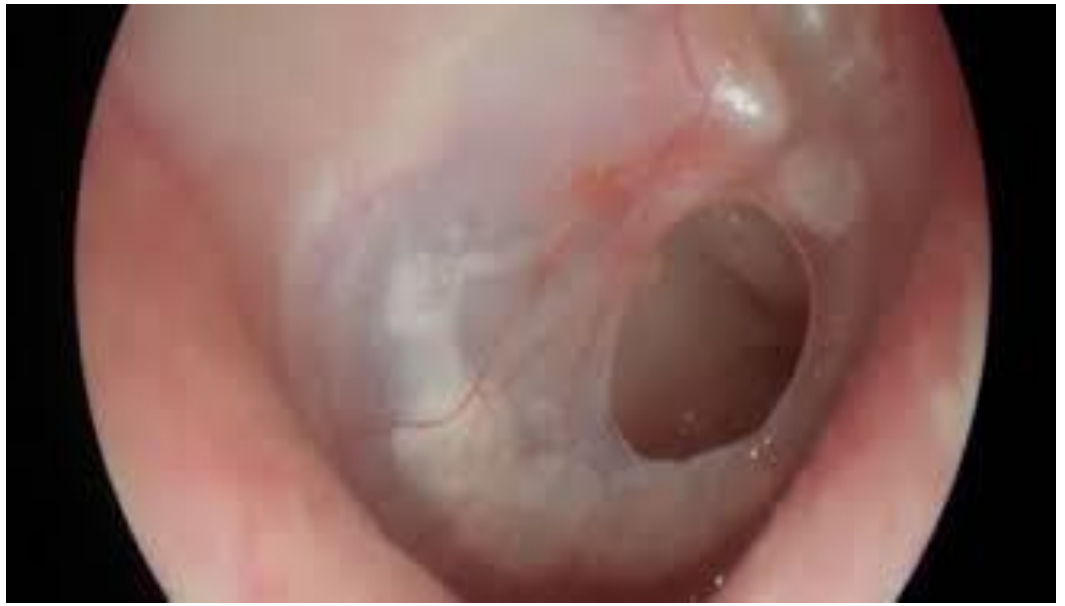


OTORRHEA (EAR DRAINAGE)

- Always want to think about why the ear is draining:
  - Ear infection with TM rupture
  - Ear infection with ear tubes
  - Ear tubes with granulation tissue
  - TM perforation (hole in the ear drum)
- The reason why it is draining will guide treatment
- Otorrhea can be yellow, green, white, brown, or bloody
  - Can also have foul smell

PE tube with granulation/TM perforation





OTORRHEA TREATMENT

- Acute OM with TM rupture: oral antibiotic
  - TM heals quickly, can use antibiotic ear drops, not required.
- PE Tube Otorrhea: **always** treated with antibiotic drops
  - ciprofloxacin or ofloxacin (ophthalmic or otic) or Ciprodex
- Aural hygiene - remind family to wick out drainage prior to instilling drops.
  - If canal is full of drainage, drops cannot get to tube and into middle ear. Then pump tragus to push drops through tube lumen.
- Known TM Perforation – antibiotic drops

Otorrhea With PE Tubes Handout

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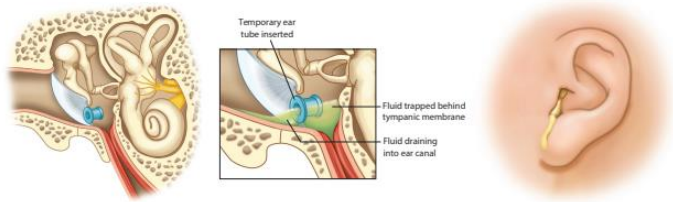
CARING FOR YOUR CHILD WITH EAR TUBES

Did you know your child can still get ear infections with ear tubes?

The infection will look different. You should see drainage coming out of their ear(s). It will be a liquid that looks like mucus or yellow/green pus. It can have some blood mixed with it. It can also smell bad.



If you see ear drainage, this is an ear infection and you should do the following to treat:

1. Wash your hands.
2. Clean all ear drainage from the cheek/face with warm soapy water.
3. Remove drainage from the ear canal by "ear wicking." Take a tissue or paper towel, roll it up at the end and place it approximately 1 inch into the ear canal. Turn the tissue or paper towel, then pull it out. Repeat if needed.
4. Treat with antibiotic ear drops.
   - Warm the ear drop bottle in your hand.
   - Help your child lay on their side.
   - Pull the ear back, place the drops in the ear canal, and pump the flap of skin in front of the ear canal.
5. During an ear infection, keep the ear dry by using a cotton ball with petroleum-based ointment when bathing.
6. Treat with antibiotic ear drops that are ordered by your ENT provider or PCP. If you need a refill on the antibiotic ear drops, contact the provider who ordered them. If your ear drops were prescribed by the ENT Clinic, call (816) 234-3040 or send us a message through the patient portal.

continued on next page

When to call the ENT Clinic:

- If ear drainage lasts longer than 7 days while using antibiotic ear drops.
- For antibiotic ear drop refills.
- General questions or concerns regarding ear tubes.

Other information

- Please use ear plugs in dirty water (lakes, rivers, ponds, ocean) or if diving into pools or swimming at least 3 to 4 feet under pool water.
- Ear plug recommendations include Putty Buddies® (silicone ear plugs) or an Ear Band-It®. Both can be found online or in some stores.
- We typically see children with ear tubes in the ENT clinic every 12 months. However, we also offer urgent appointments as needed.

If you have concerns about your child's ears or ear tubes in between appointments, please call the Children's Mercy ENT Clinic (816) 234-3040.

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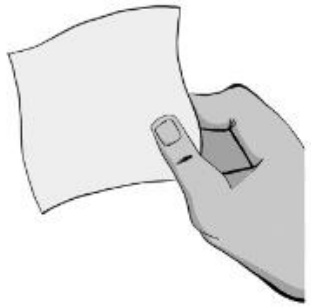
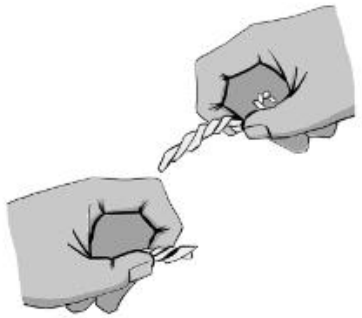
AURAL HYGIENE

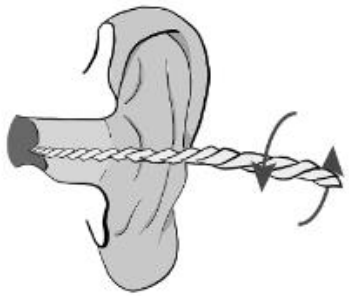


1. Tissue spears can be made with toilet paper or facial tissue.

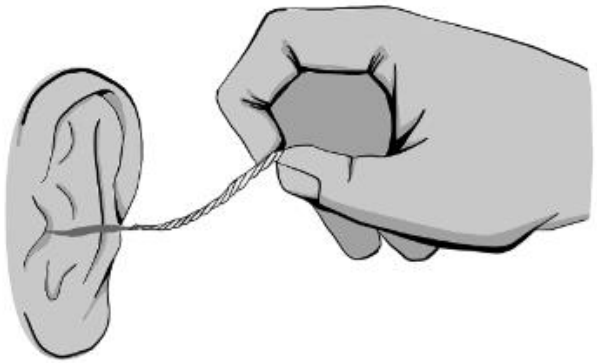
2. Twist - do not roll - the corner of the tissue. Use thumbs and first fingers of both hands to twist spear tight.



3. Break off about 1" of the top of the spear (too floppy to use).



4. Push tissue spear into ear with a slight twist; stop pushing when it stops going in (about 1" or if child cries or coughs).



5. If possible, leave in a minute to absorb pus; remove slowly and discard; repeat until spear comes out dry.

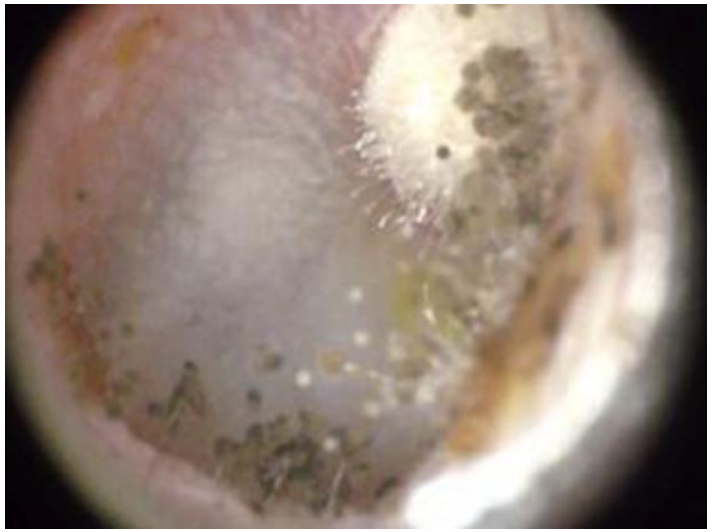
OTORRHEA COMPLICATIONS

- No improvement after using drops?
  - Water precautions (keep water out of draining ear)
  - Wicking/Aural hygiene education = removing otorrhea from ear canal so drops can get to the PE tube
  - Resistant bacteria – may need culture, history of MRSA?
- When to see ENT: need for suction/debridement of ear canal
- Fungal infection = Otomycosis
  - Can occur after frequent use of antibiotic ear drops

OTOMYCOSIS

Treatment:

- Evaluate in ENT
- Clean ear canal
- Antifungal (cream or drops)
- Keep ear dry!



ACUTE OTITIS EXTERNA (Swimmer's Ear)

- Acute Otitis Externa (AOE) = infection of ear canal
- Symptoms: pain, swelling of ear canal, +/- drainage
- Besides water exposure, otitis externa can occur in patients with chronic otorrhea.

ACUTE OTITIS EXTERNA

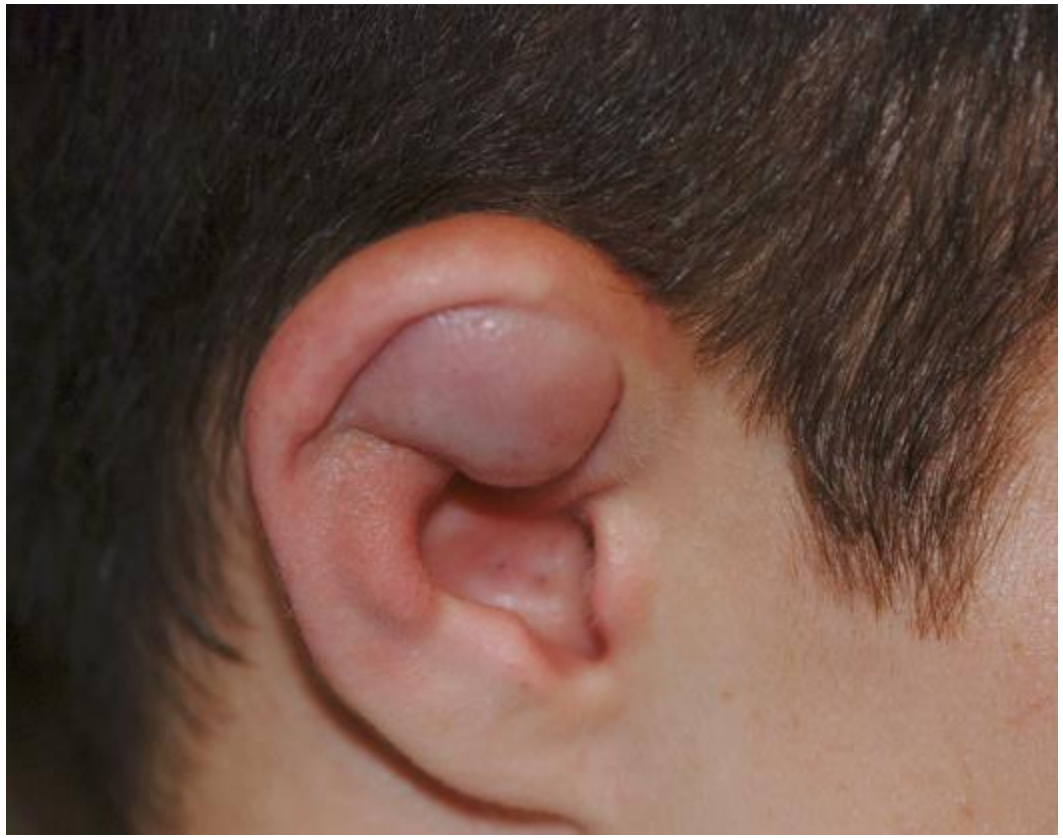
- Treatment: antibiotic/steroid ear drop, keep ear dry, pain medication prn
  - Ear wick should be placed in the ear canal if unable to get ear drops in due to canal swelling (can be done in ED, UCC, PCP, or ENT)
- When to see ENT: need for debridement of ear canal, use otomicroscope to suction debris, clean ear canal, place wick

EAR FOREIGN BODY

- Button battery – needs to be removed ASAP
  - DO **NOT** GIVE EAR DROPS OR GET EAR WET
- Organic items – beans, bugs – should be removed in the next few days
  - Ok to use viscous lidocaine to kill a live insect in ear
  - Otherwise, do **not** use ear drops with beans or food in the ear
- Nonorganic/everything else – beads, rocks, toys, etc. can be removed in the next week.

AURICULAR HEMATOMA

- Common wrestling injury.
- Can also occur in younger children who hit their ear just right.
- Drainage with ENT is recommended treatment – at CMH, usually completed in ED.

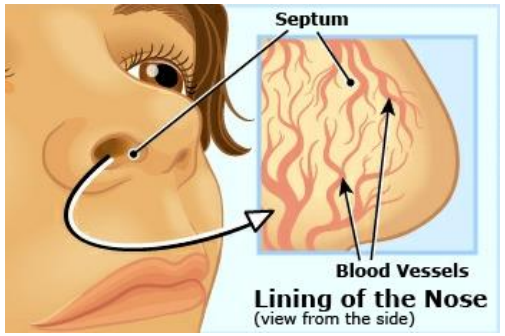


NOSE

- Epistaxis
- Nasal fracture
- Foreign body

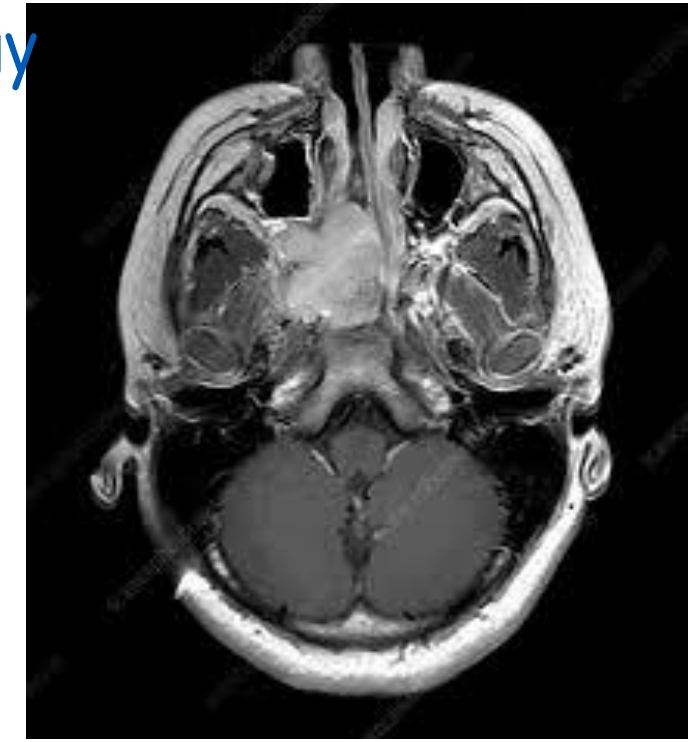
EPISTAXIS (NOSE BLEED)

- Anterior nasal septum – most common site
- Lean forward to prevent blood from going down back of throat
- Apply firm pressure to front of nose for 10 minutes, additional 10 minutes if still bleeding
- When to see ENT: recurrent epistaxis
  - Epistaxis >30 minutes should go to ED
- Treatment:
  - moisturization (humidifier, ointment)
  - Cauterization

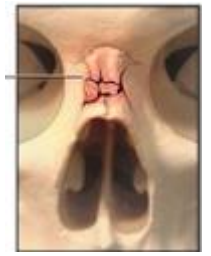


Juvenile Nasopharyngeal Angiofibroma (JNA)

- JNA – benign vascular tumor that may present with epistaxis
  - Adolescent Male
  - Recurrent, unilateral epistaxis
  - Nasal obstruction
  - Need flexible scope in ENT clinic
    - Imaging if indicated



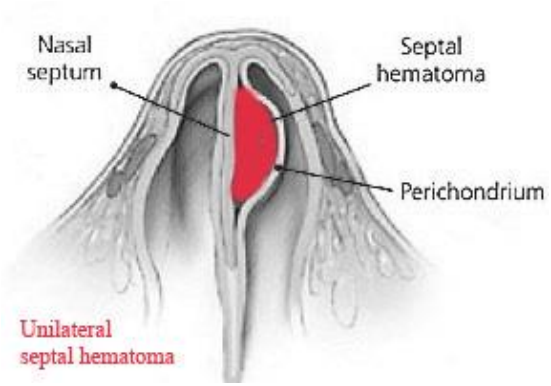
NASAL FRACTURE



- Imaging (x-ray or CT) not required for diagnosis, may be completed by ED/UCC provider if there are concerns for other fractures
- Not every nasal fracture requires treatment (closed reduction)
  - If fractured bones are nondisplaced and external nose appears straight, may choose to observe
  - Surgery to reduce nasal fracture should be done within 10 days of injury
- When to see ENT: 4-6 days after injury, want most of swelling to resolve to assess need for surgical repair

SEPTAL HEMATOMA

- Complication:
  - Septal hematoma = Collection of blood within septum
  - Requires immediate surgical intervention



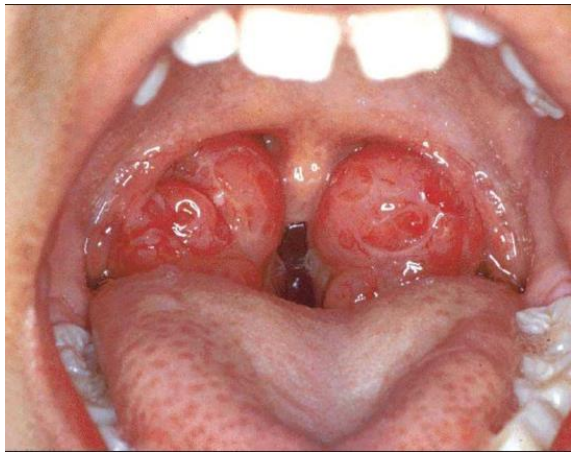
NASAL FOREIGN BODY

- Unilateral nasal drainage with a foul smell?
  - Usually unwitnessed, has been there for a while
  - Need to see ENT for probable nasal foreign body

- Witnessed placement of FB
  - BUTTON BATTERY is an emergency
  - Everything else we see within a few days

TONSILS

- INDICATIONS FOR TONSILLECTOMY
  - Obstructive sleep apnea/snoring/sleep disordered breathing
  - Recurrent tonsillitis
  - Tonsil stones



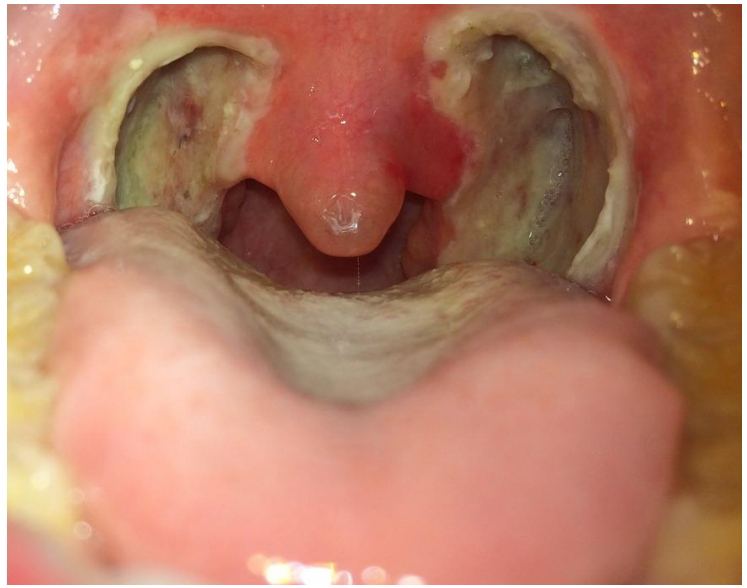
RECURRENT TONSILLITIS

- Paradise criteria: used to determine who is candidate for tonsillectomy for recurrent tonsillitis
  - 7 episodes of tonsillitis in one year
  - 5 episodes/year of tonsillitis for two years
  - 3 episodes/year of tonsillitis for three years

- Watchful waiting if above criteria not met

NORMAL POST-OP TONSIL EXAM

- There may be a lot of erythema, uvula may be swollen
- **This is normal**
- Eschar/scabs – yellow/white/green
- Bad breath!
- Sore throat
- Ear pain



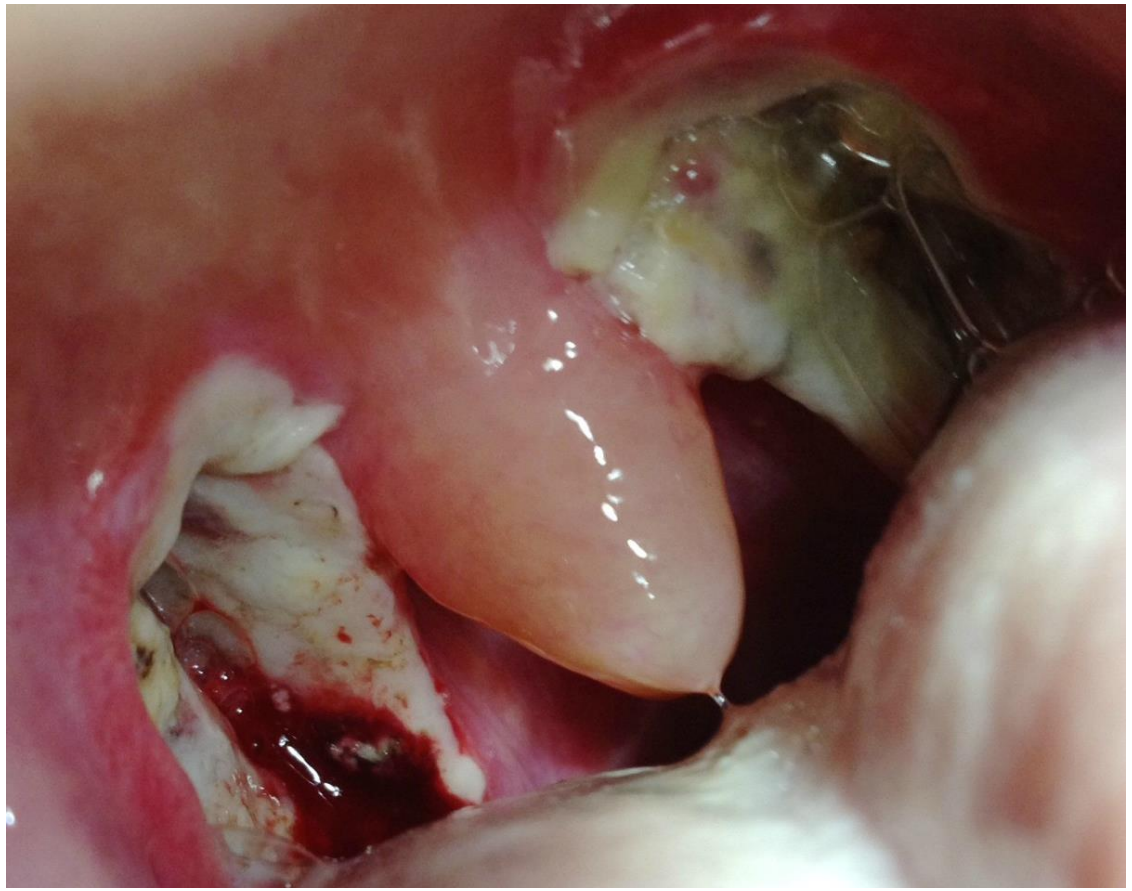
POST-OP TONSILLECTOMY CARE

- Pain medication – moved away from narcotics
  - Acetaminophen 10 – 15 mg/kg/dose every 4-6 hours, max 75 mg/kg/day, not to exceed 4000 mg/day
  - Ibuprofen 4 -10 mg/kg/dose every 6-8 hours, max 600mg/dose
  - Oxycodone – when needed
- Hydration:
  - 25 - 40 lbs. – 2 oz/hour
  - 41 - 99 lbs. – 2-3 oz/hour
  - 100 lbs. and up – more than 3 oz/hour
- Diet – soft foods
- Activity – quiet, no gym/recess/sports
- Tonsillectomy care booklet can be viewed here:
  - https://www.childrensmercy.org/departments-and-clinics/otolaryngology-ear-nose-and-throat/throat-and-airway/

TONSILLECTOMY COMPLICATIONS

- Pain
  - Take pain medication on regular basis
  - Review dosage with parent
  - Ask how much they are drinking – dehydration can worsen pain
- Dehydration
  - Encourage parents to be firm with drinking
  - May need IV fluids
- Bleeding

POST-OP TONSIL BLEED



Post-op Tonsil Bleed

- Adele Hall ED
  - Or local ED if >30 minutes away
- Treatment options depending on status:
  - Observe
  - Admit
  - OR – to cauterize active bleed
    - Possible blood transfusions

Questions?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