

EMC 340 Intro to Clinical Medicine

Ears, Nose, and Throat

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Outcomes

At the end of this lecture the learner will be able to:

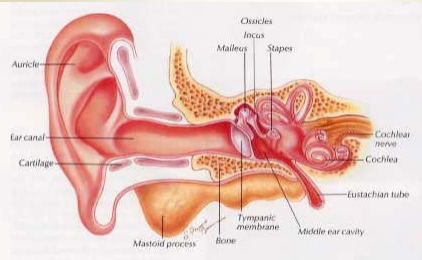
- Describe the anatomy of the ear, nose, sinuses, and oropharynx.
- Explain (and later demonstrate) the technique of examining the ear, nose, sinuses, and oropharynx.
- Explain the significance of abnormal findings on the physical exam of the above.

External Ear



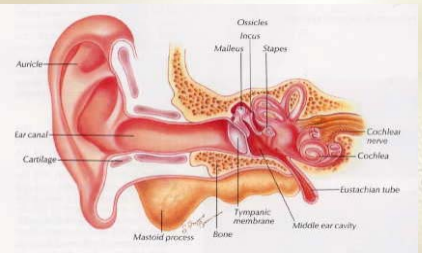
- Pinna (auricle)
- External auditory canal (EAC) (acoustic meatus)
- Bony mastoid process
- Tympanic membrane (ear drum)

Middle Ear



- Tympanic membrane
- Air
- Ossicles (malleus, incus, stapes)
- Eustachian tube

Inner Ear

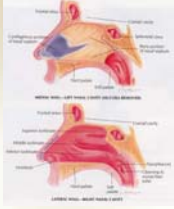


- Not visible on PE
- But function can be tested / assessed
 - Vestibular
 - Auditory

Physical Exam Utility

- Prehospital and ED
 - Post-auricular bleeding (Battle's Sign)
 - Blood or fluids from ear
 - Appearance of TM
 - Gross hearing
- Ambulatory care
- Almost all resp. patients

Nose



- Bony nose attaches to the frontal bone
- Cartilaginous extension
- Cartilaginous septum
- Nasal cavity
 - Hard and soft palate
 - Medial- thin bony roof : cribriform plate
 - Lateral-floor of the orbit (above maxillary sinus)
- Sinuses
 - Frontal
 - Maxillary
 - Ethmoid

Mouth



Anatomy


- Uvula (nicely illustrated on PC p71)
- Tonsils
- Nasopharynx
- Oropharynx
- Submandibular gland
- Sublingual gland
- Parotid gland

Techniques Of Examination




- TM
 - Pull the auricle up+back
 - Grasp the otoscope (Bates p 196; NOT as on PC2 p 68 !)
 - Loss of landmarks ("12:00": malleus/pars flaccida)
 - ("6:00": light reflection) (Bates)
 - Erythema (compare Bates illustrations)


- Ear
 - Blood and fluids
 - Erythema and swelling
- Hearing loss
 - Weber and Rinne tests
 - (compare BC > AC with AC > BC, see Bates)




Techniques Of Examination




- Sinuses
 - Tenderness
 - On palpation (Bates)
 - Percussion





Techniques Of Examination

- Lip Abnormalities
(see table PC p72)
 - Dry, cracked
 - Dehydration
 - Edematous
 - Allergic reaction; burns
 - Pallor (pale)
 - Shock; anemia
 - Cyanosis
 - Shock; respiratory failure
- Mouth
 - Odors
 - FBs
 - Obvious lesions
 - Ambulatory care
 - Cancer screening
 - Infectious changes



Summary

We have;

- Reviewed the anatomy of the ear, nose, sinuses, and oropharynx.
- Discussed the technique of examining the ear, nose, sinuses, and oropharynx.
- Discussed the significance of abnormal findings on the PE of the above.
