

THE EAR











Head and neck

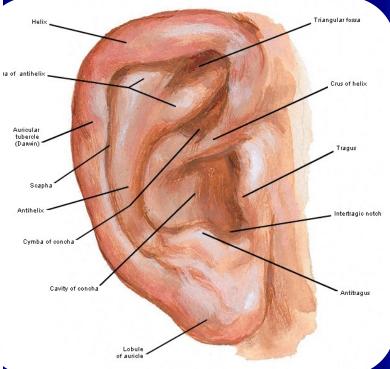
Human ear consists of:

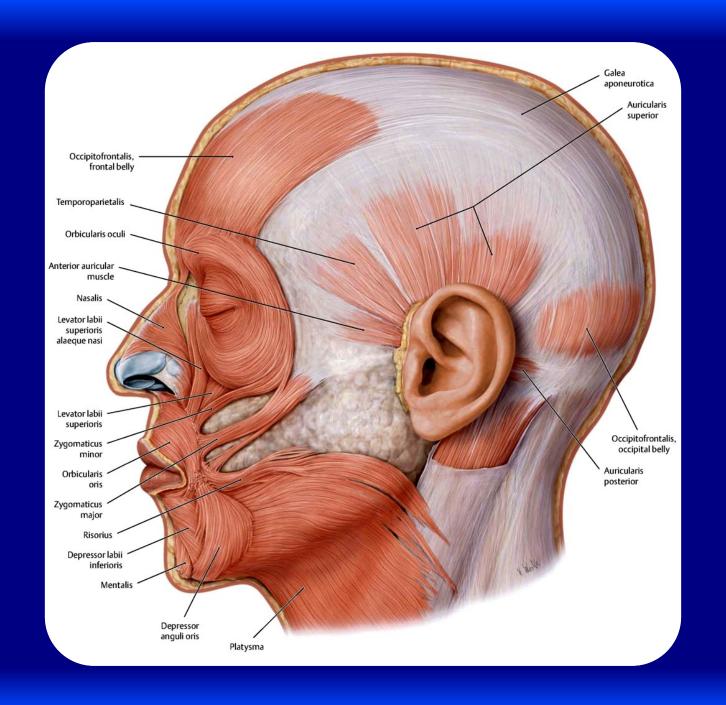
- external ear
- middle ear
- internal ear

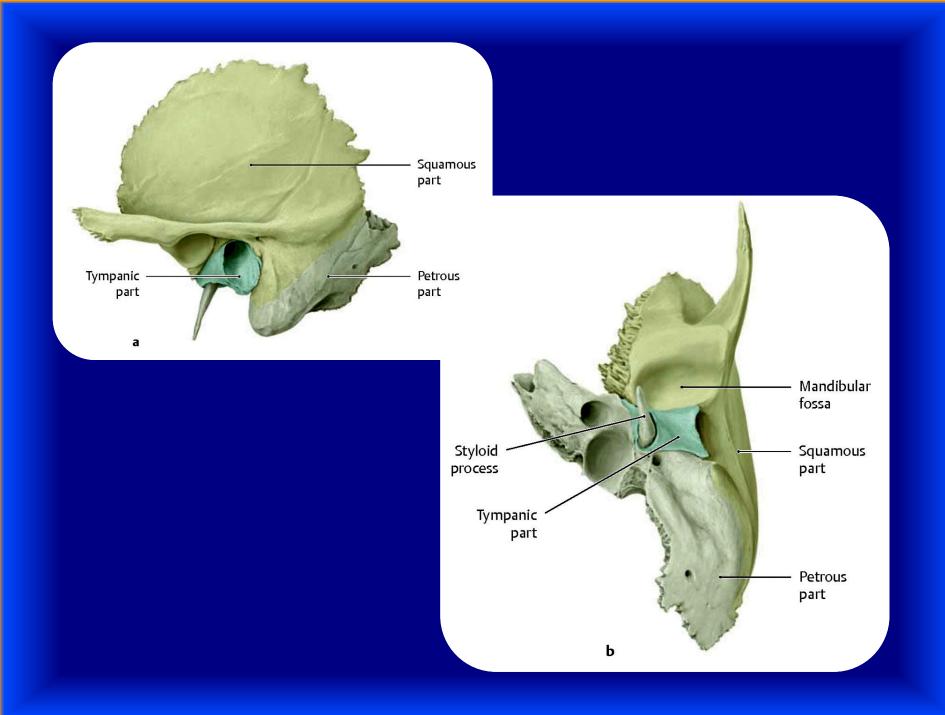
External ear

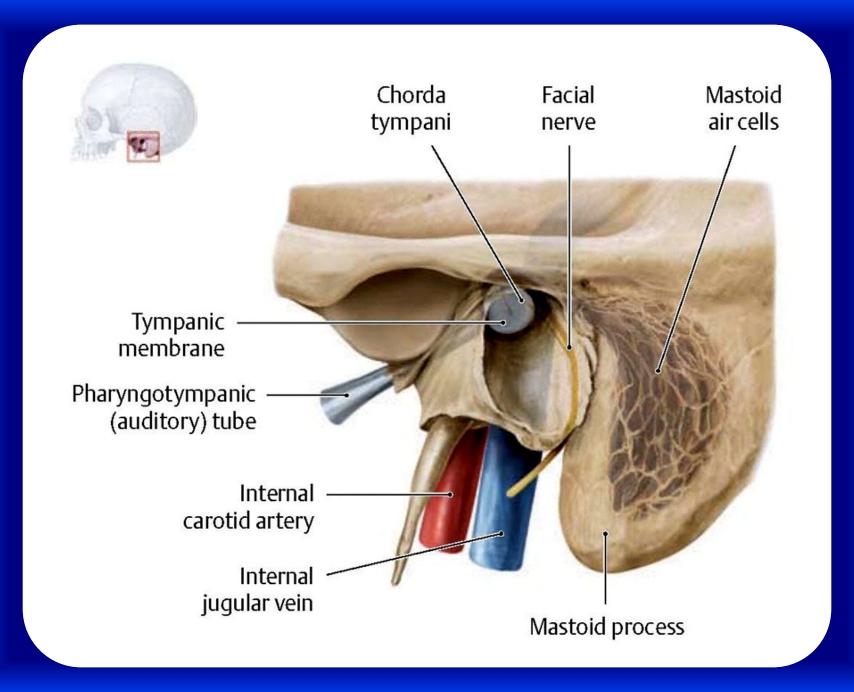


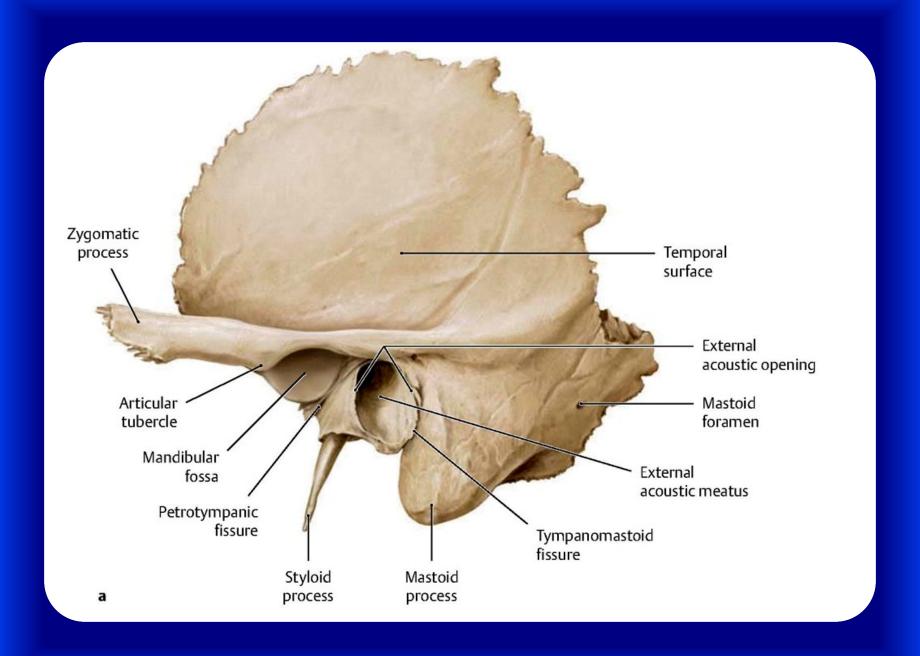


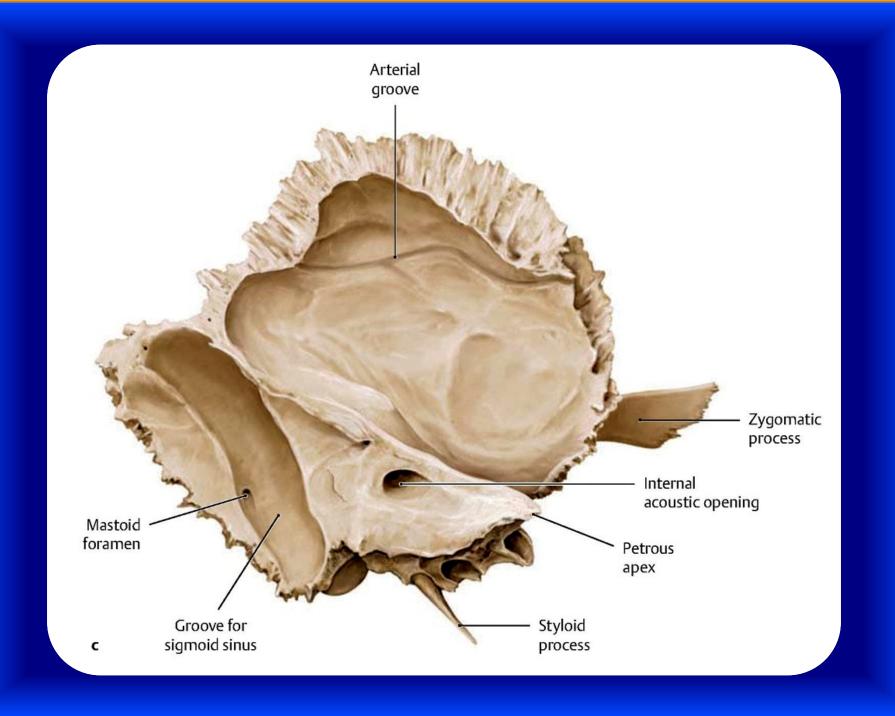


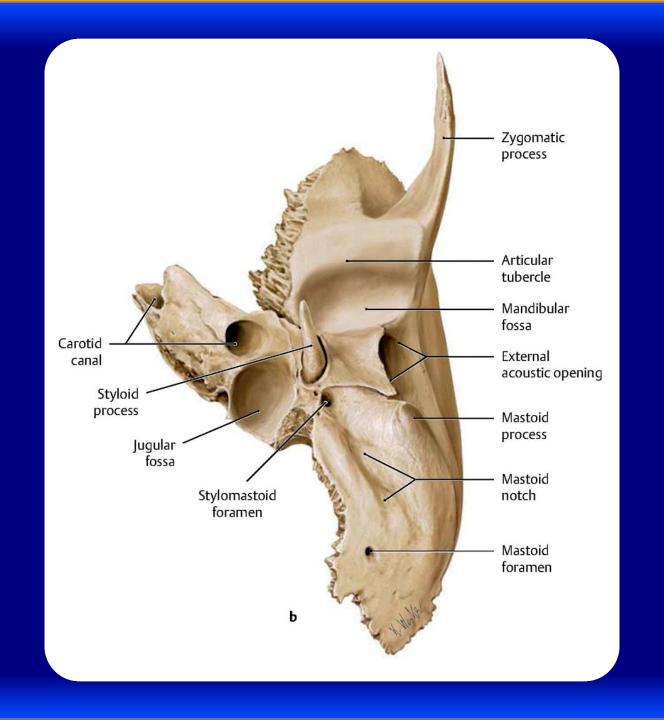


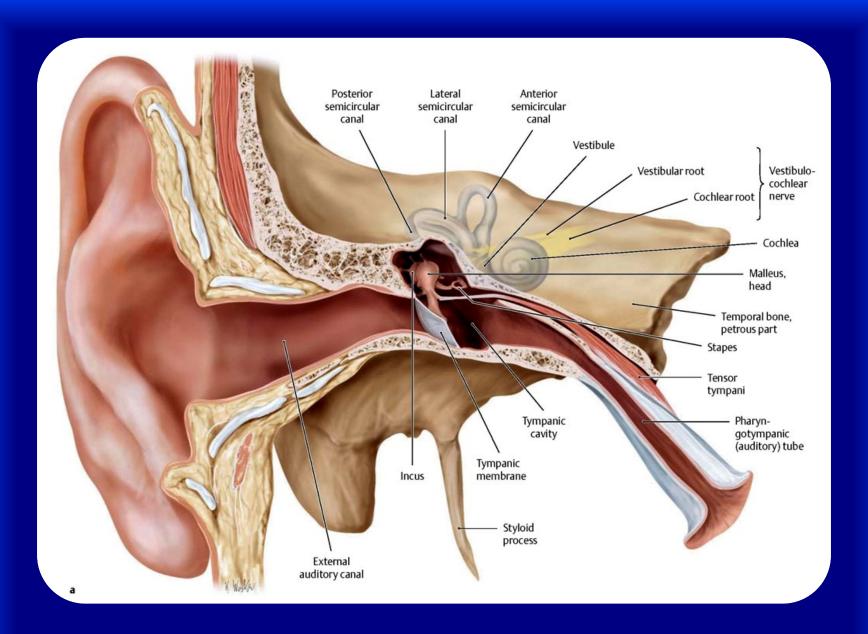




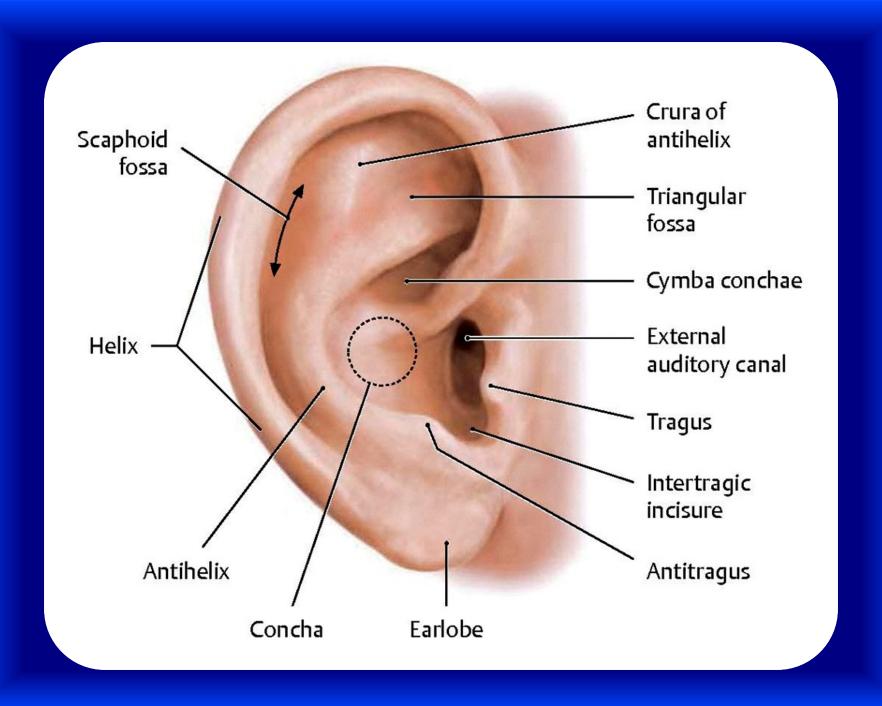


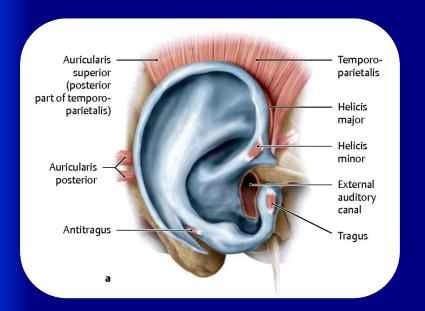


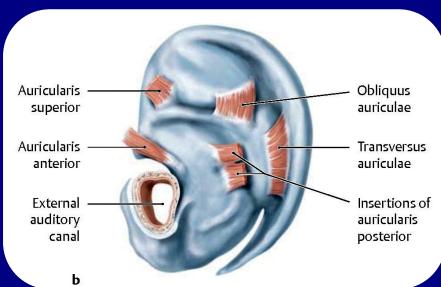




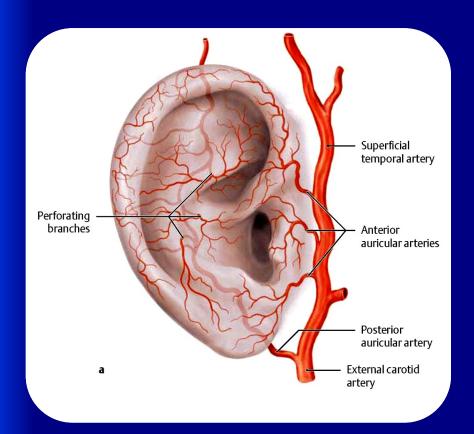
Auditory and vestibular apparatus in situ

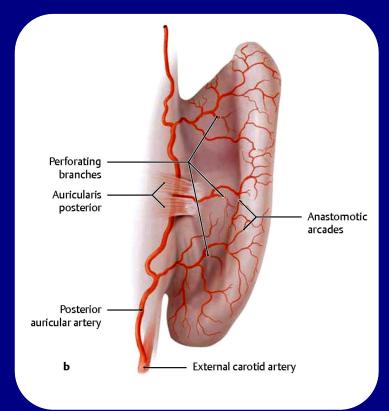




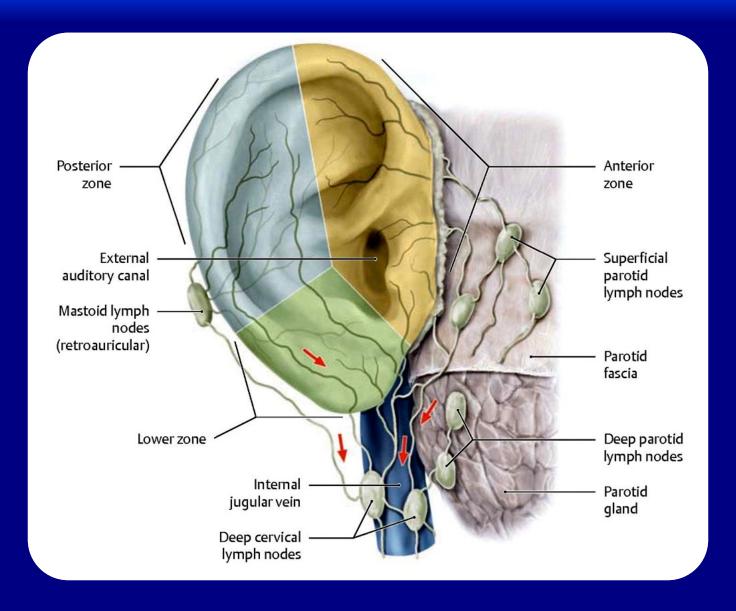


Cartilage and muscles of the auricle

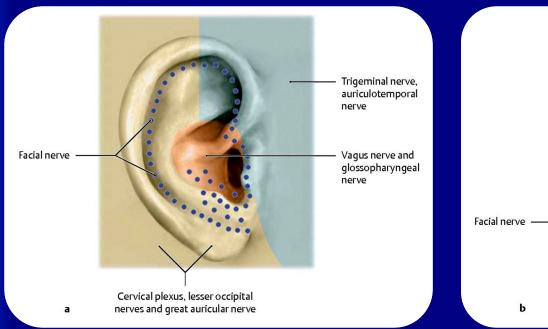


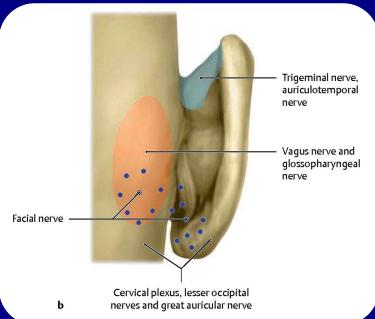


Arterial supply of the right auricle



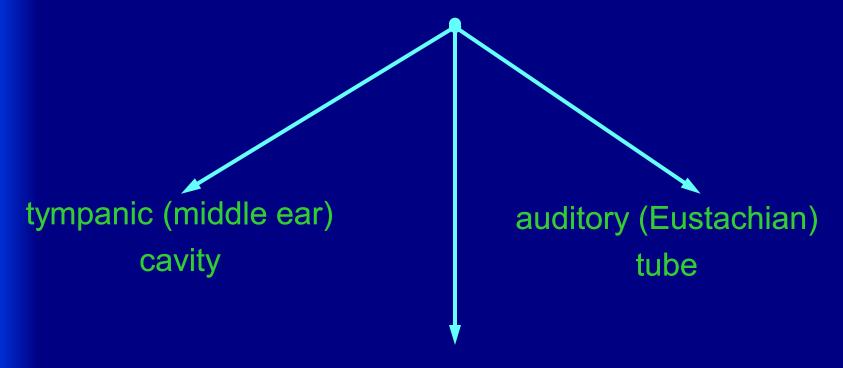
Auricle and external auditory canal: lymphatic drainage and regional groups of lymph nodes



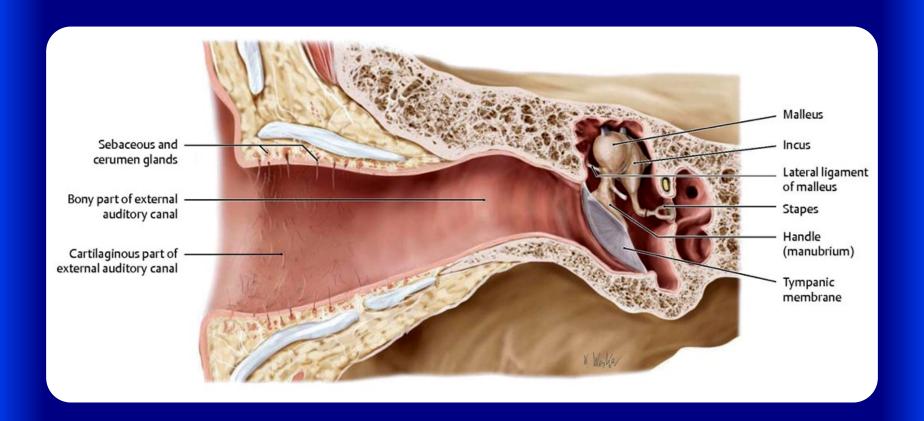


Sensory innervation of the auricle

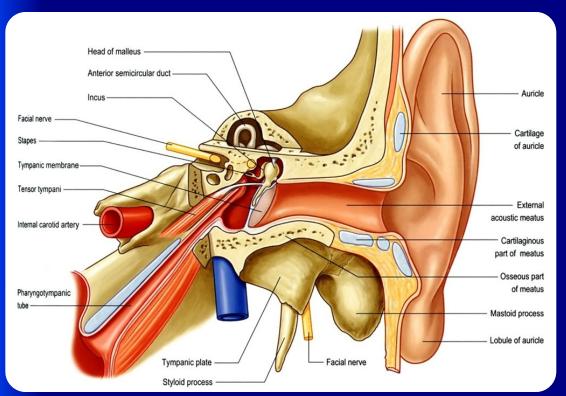
Middle ear consists of:

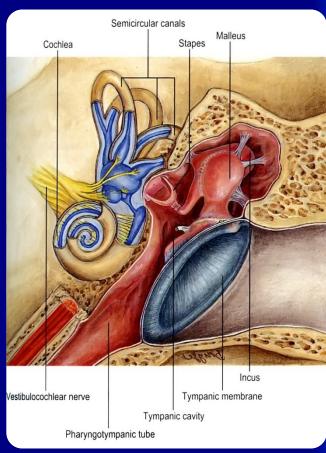


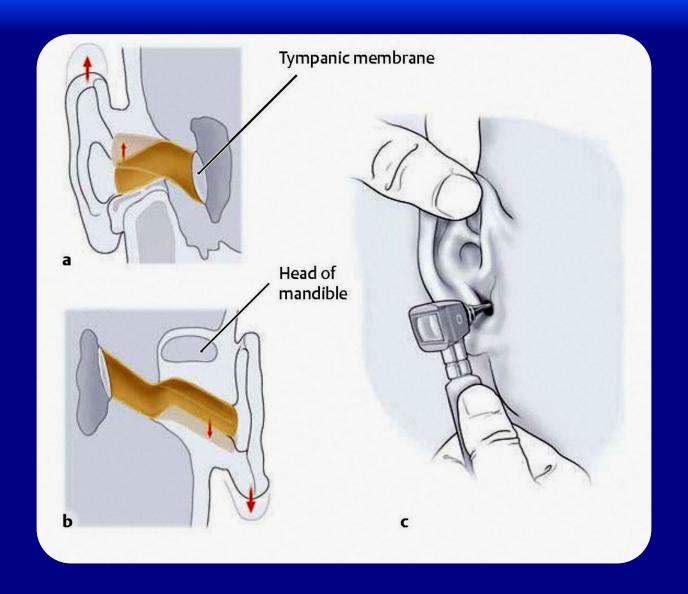
mastoid air cells with mastoid antrum



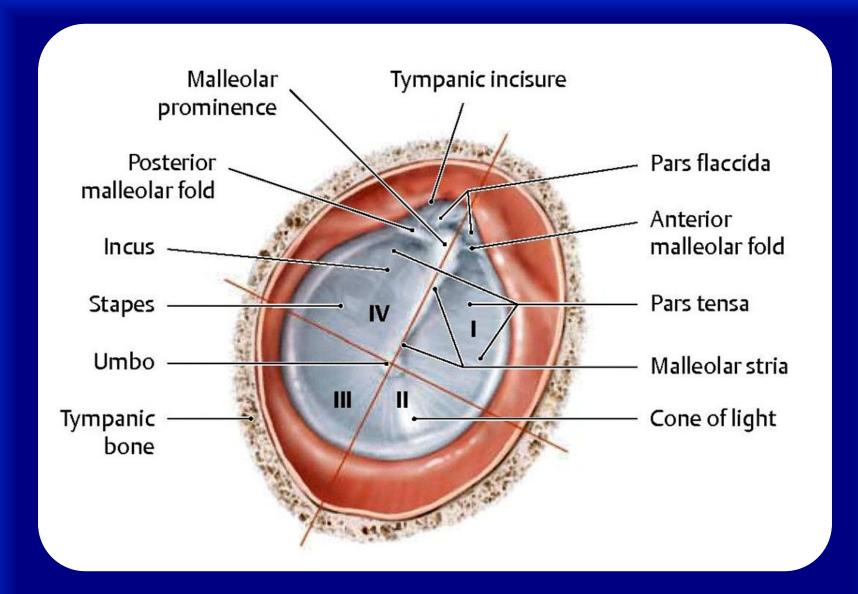
External auditory canal, tympanic membrane, and tympanic cavity



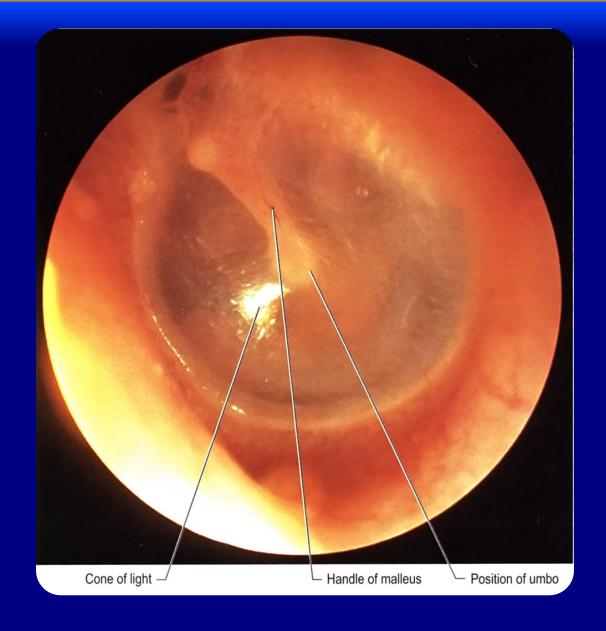




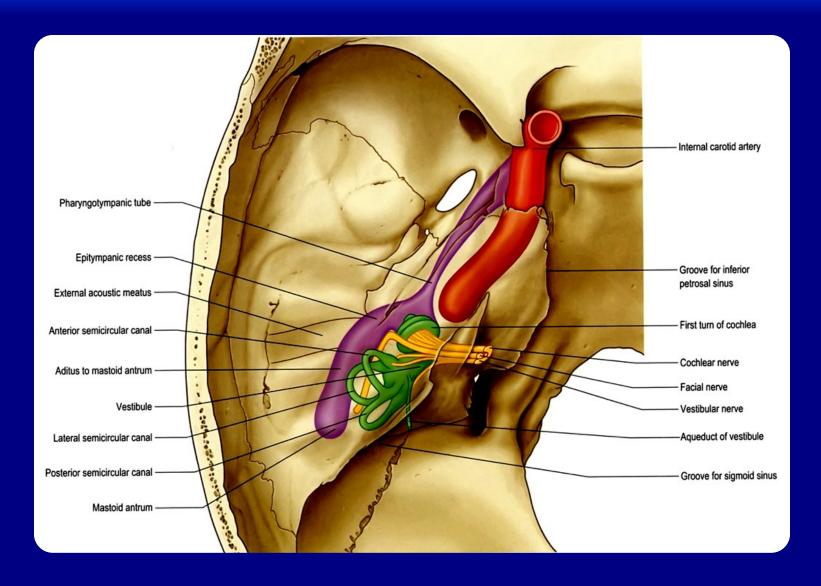
Curvature of the external auditory canal



Tympanic membrane

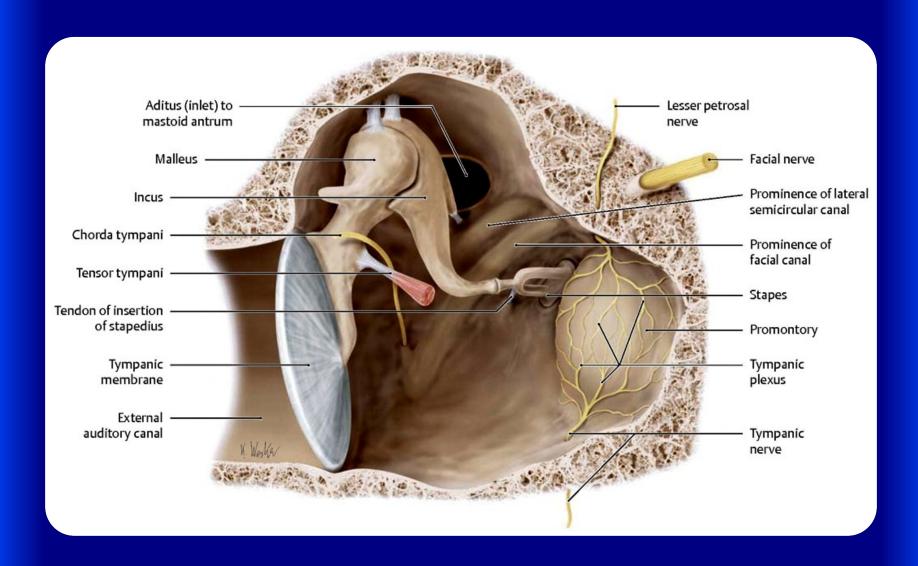


Auroscopic view of left tympanic membrane. Note that a bright cone of light is seen in the anteroinferior quadrant of the membrane when it is illuminated.

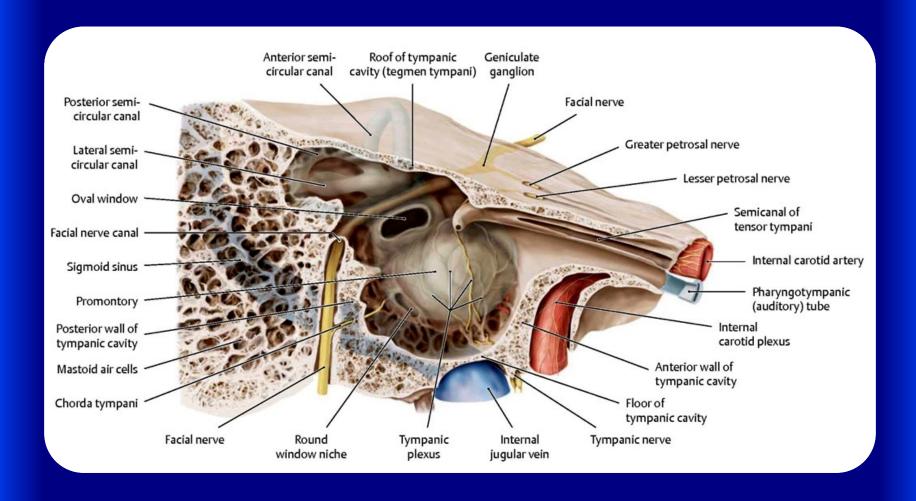


The left auditory apparatus as if viewed through a semi-transparent temporal bone.

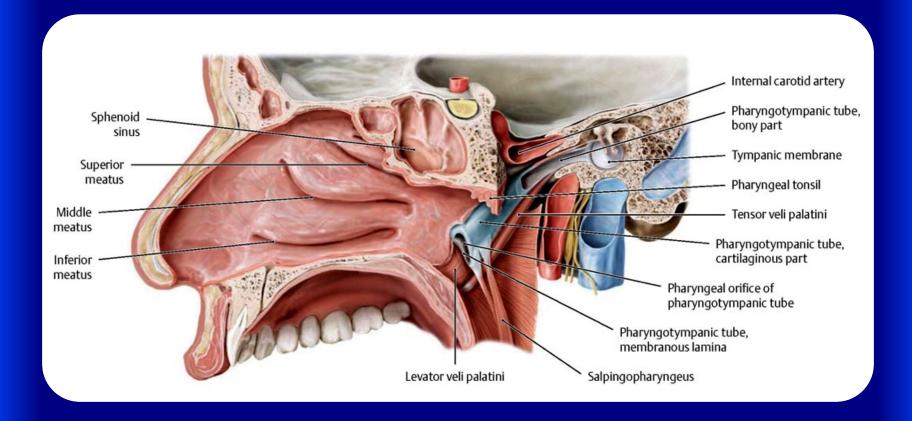
Note the genu in the facial nerve at the site of the geniculate ganglion.



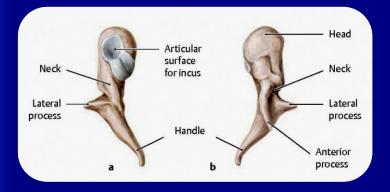
Walls of the tympanic cavity

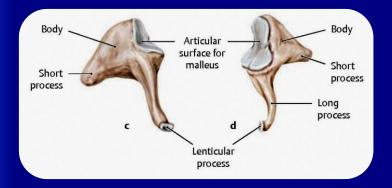


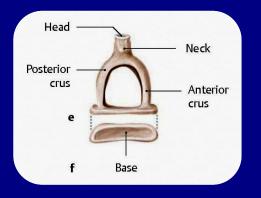
Tympanic cavity: clinically important anatomical relationships

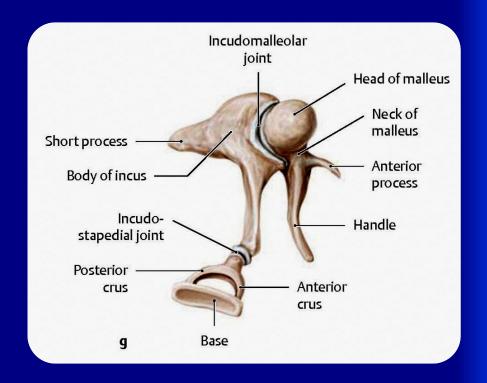


Pharyngotympanic (auditory) tube

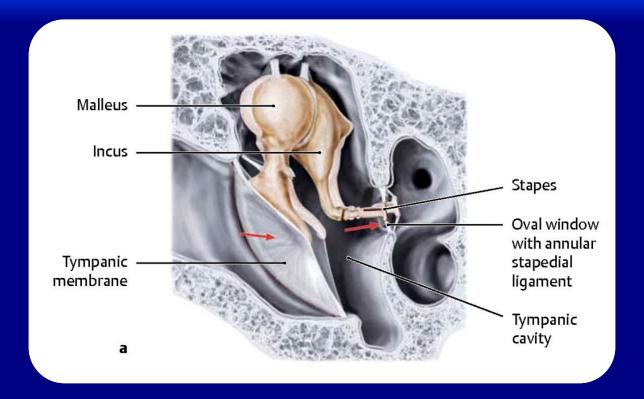


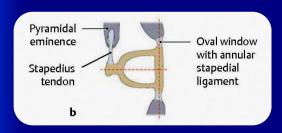




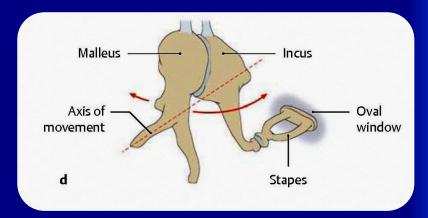


Auditory ossicles

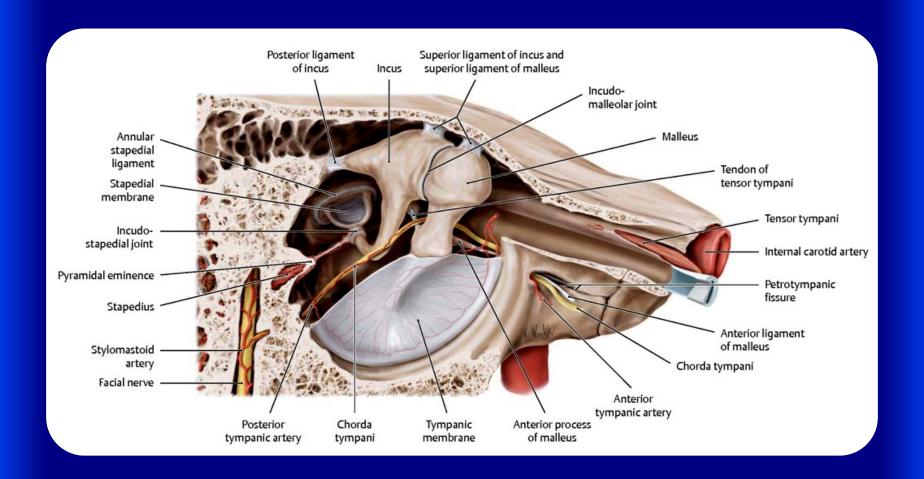




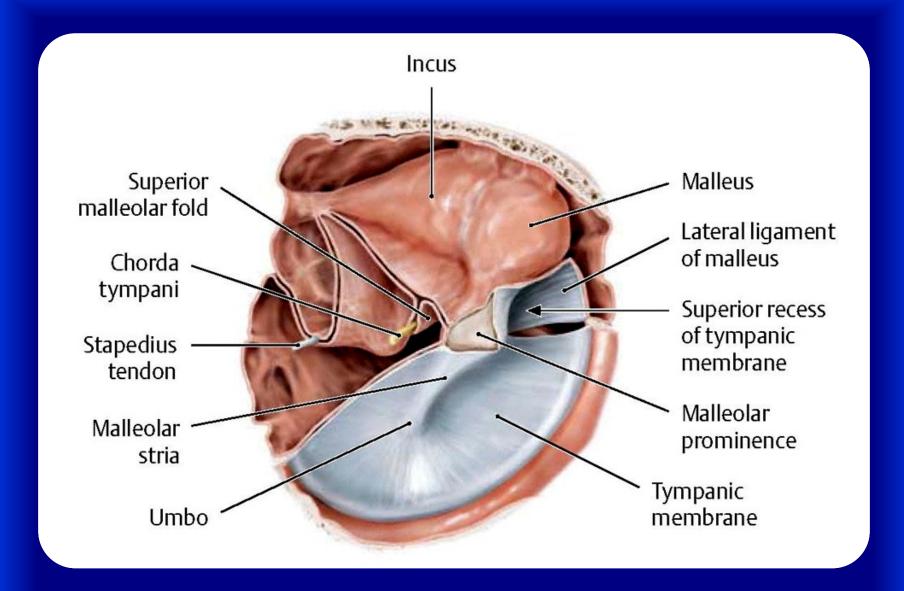




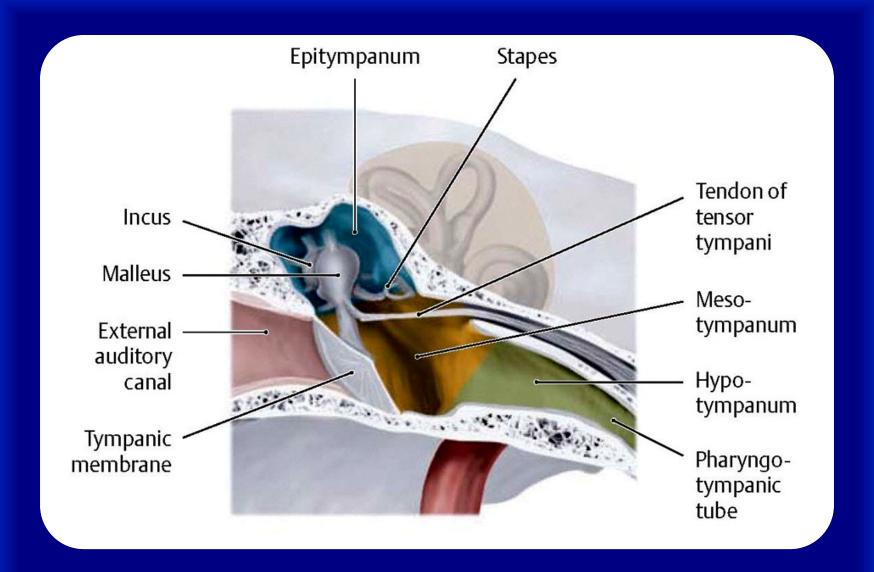
Function of the ossicular chain



Ossicular chain in the tympanic cavity

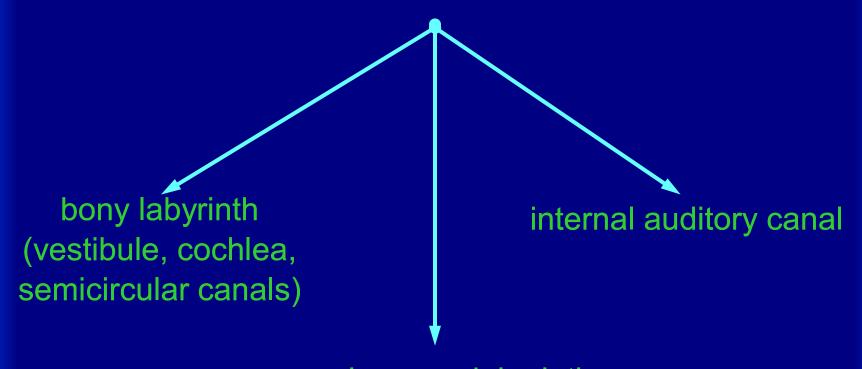


Mucosal lining of the tympanic cavity

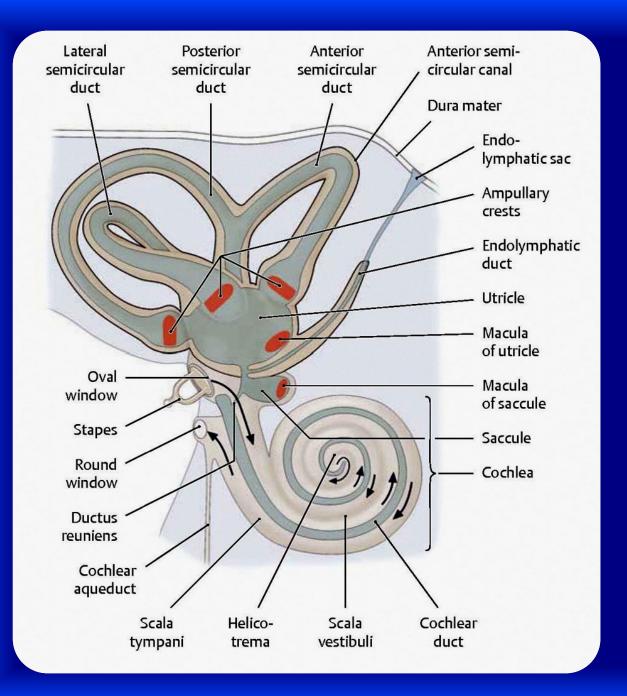


Clinically important levels of the tympanic cavity

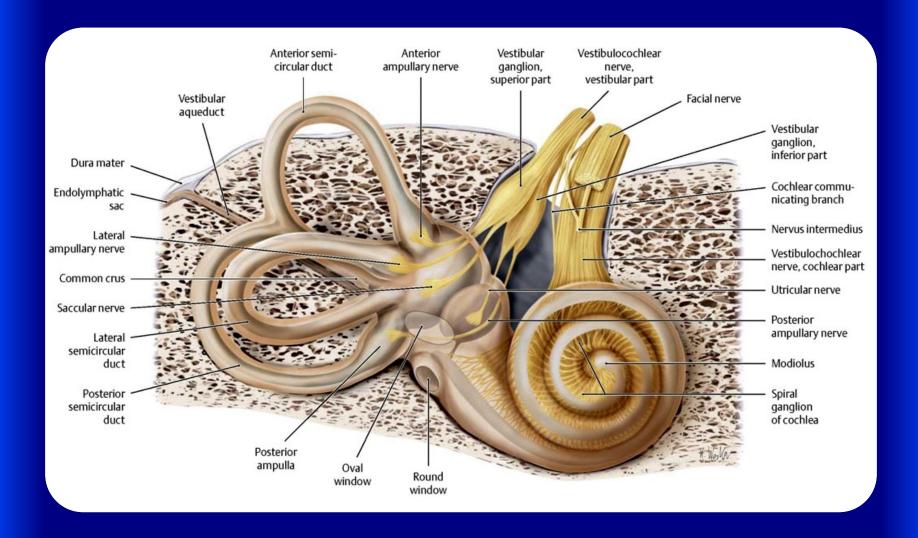
Internal (inner) ear consists of:



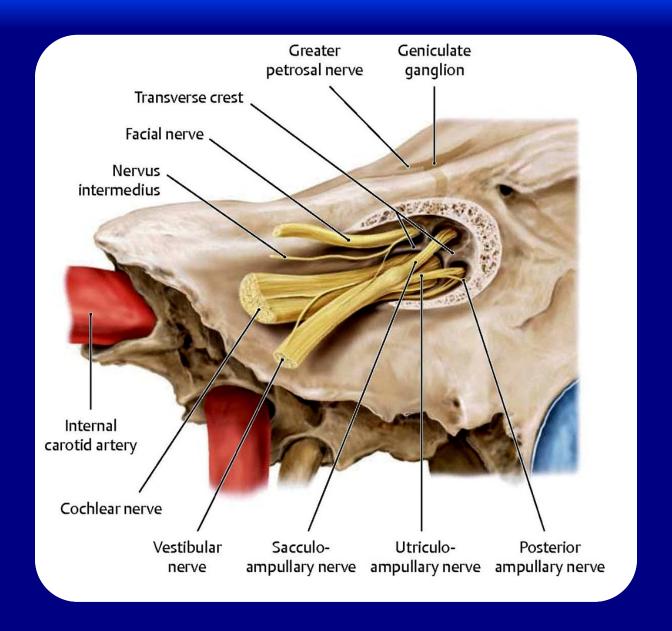
membranous labyrinth (utricule, saccule, cochlear duct, semicircular ducts)



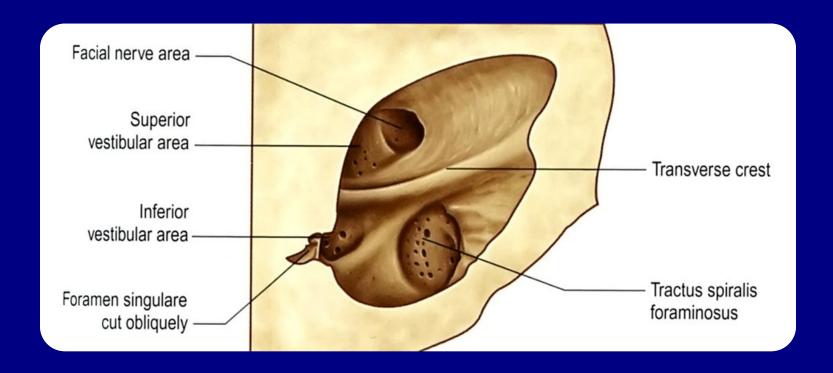
Schematic diagram of the inner ear



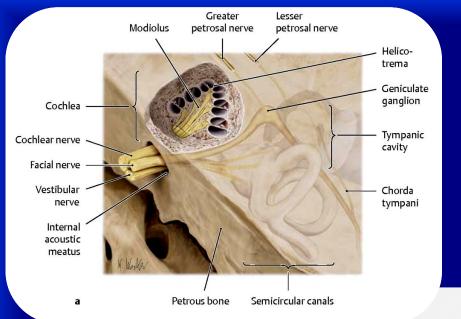
Clinically important levels of the tympanic cavity

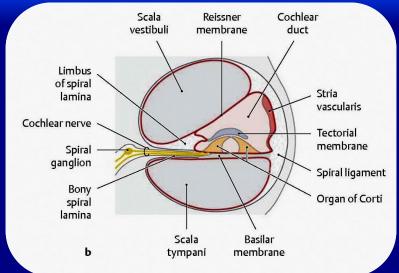


Passage of cranial nerves through the right internal acoustic meatus

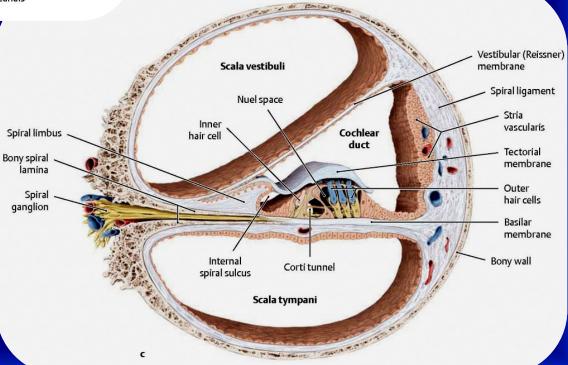


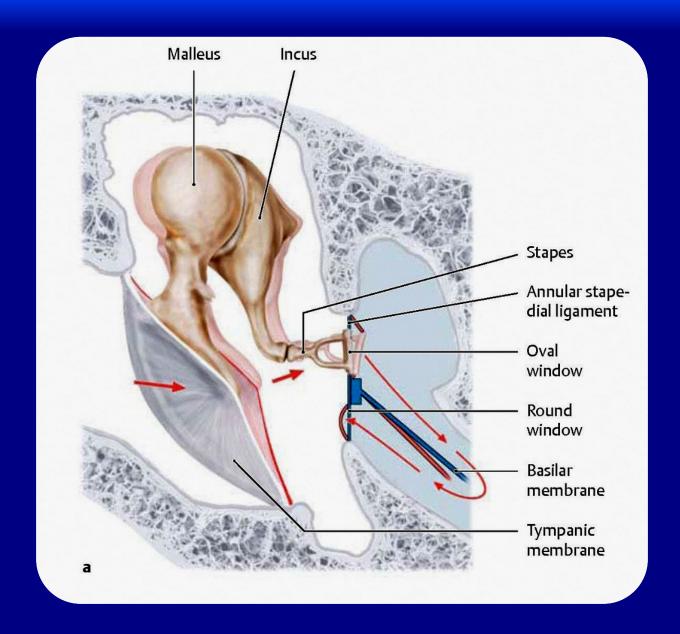
The fundus of the left internal acoustic meatus, exposed by a section through the petrous part of the left temporal bone nearly parallel to the line of its superior border.



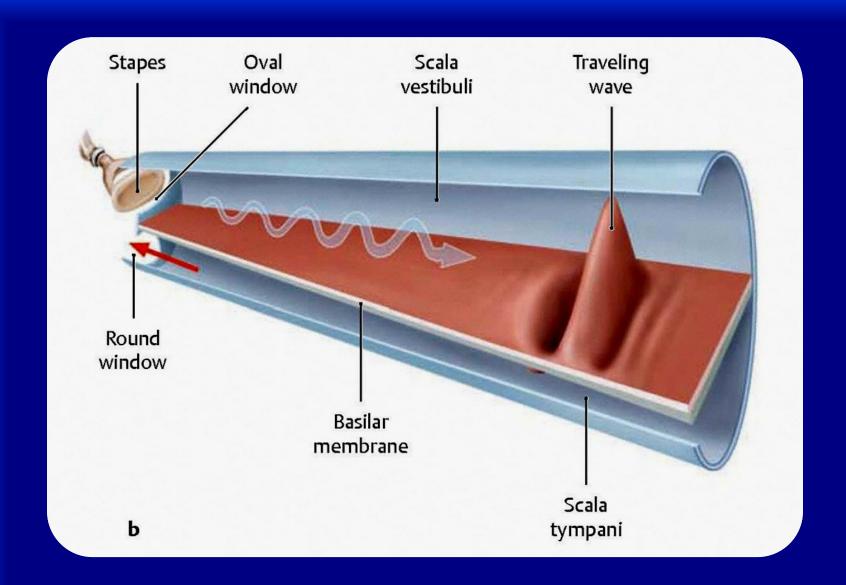


Location and structure of the cochlea

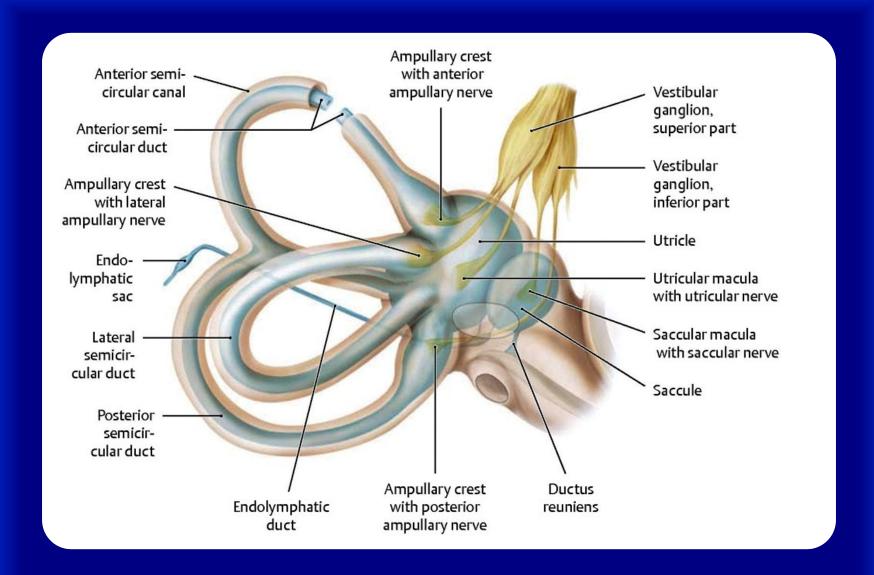




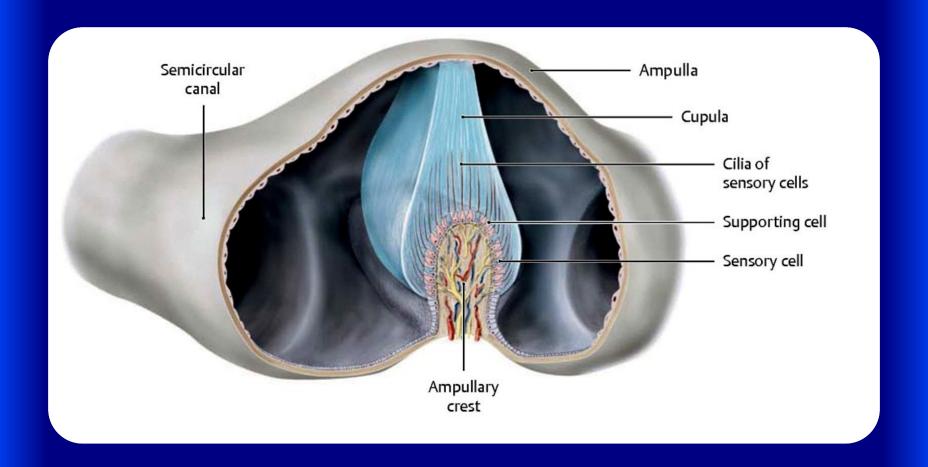
Sound conduction during hearing



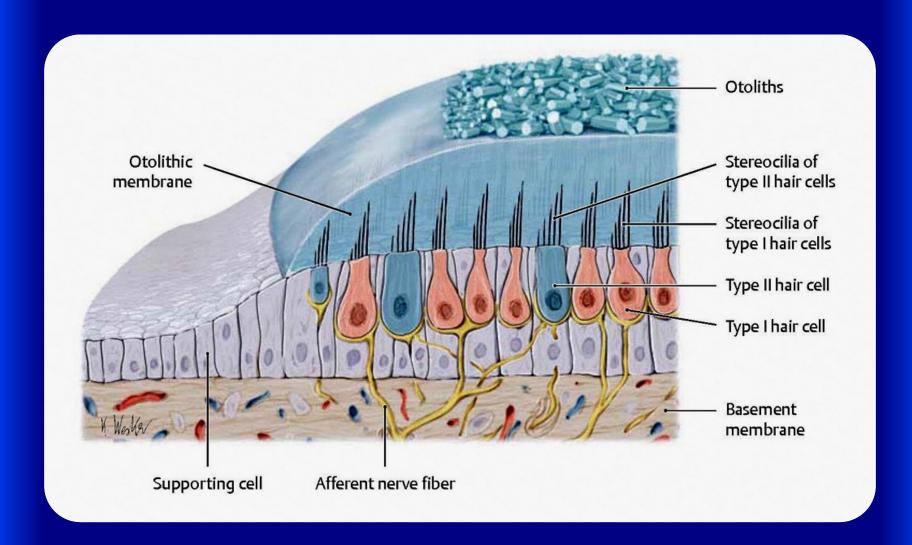
Sound conduction during hearing



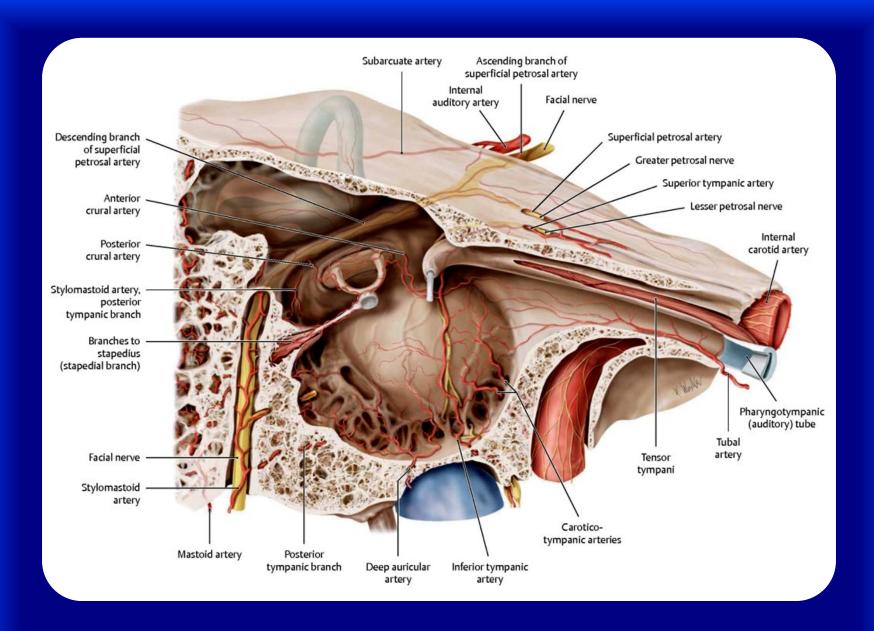
Structure of the vestibular apparatus



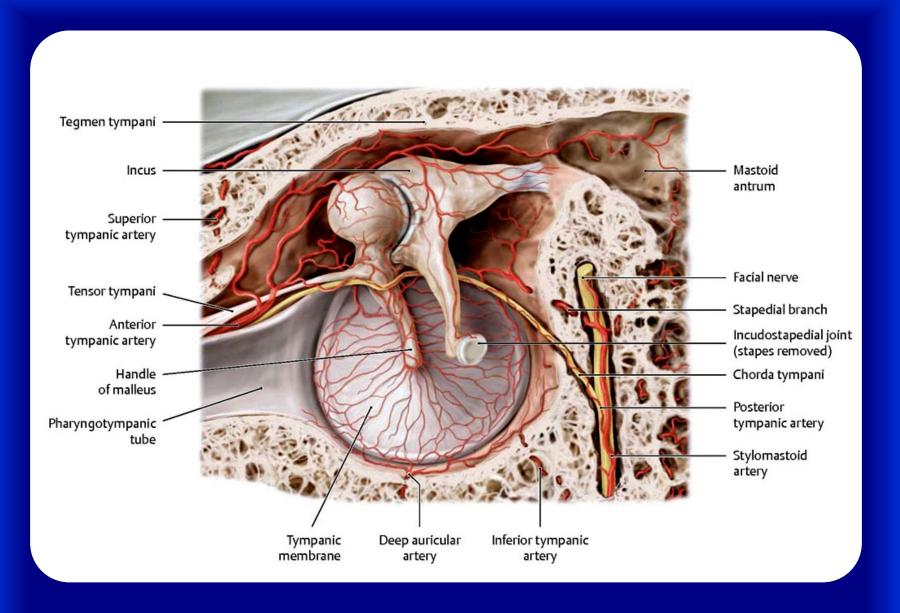
Structure of the ampulla and ampullary crest



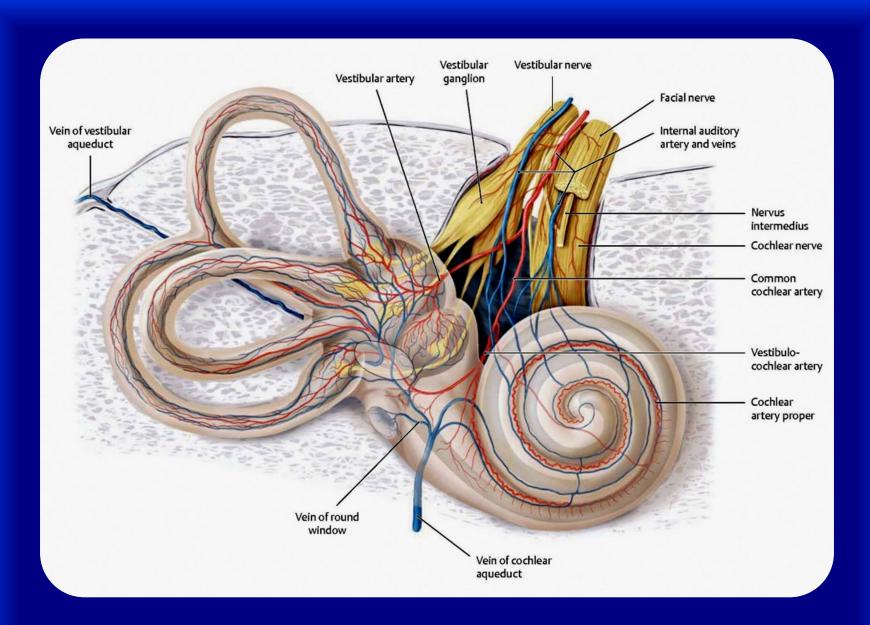
Structure of the utricular and saccular maculae



Arteries of the tympanic cavity and mastoid air cells



Vascular supply of the ossicular chain and tympanic membrane



Blood supply of the labyrinth