



KCGMH

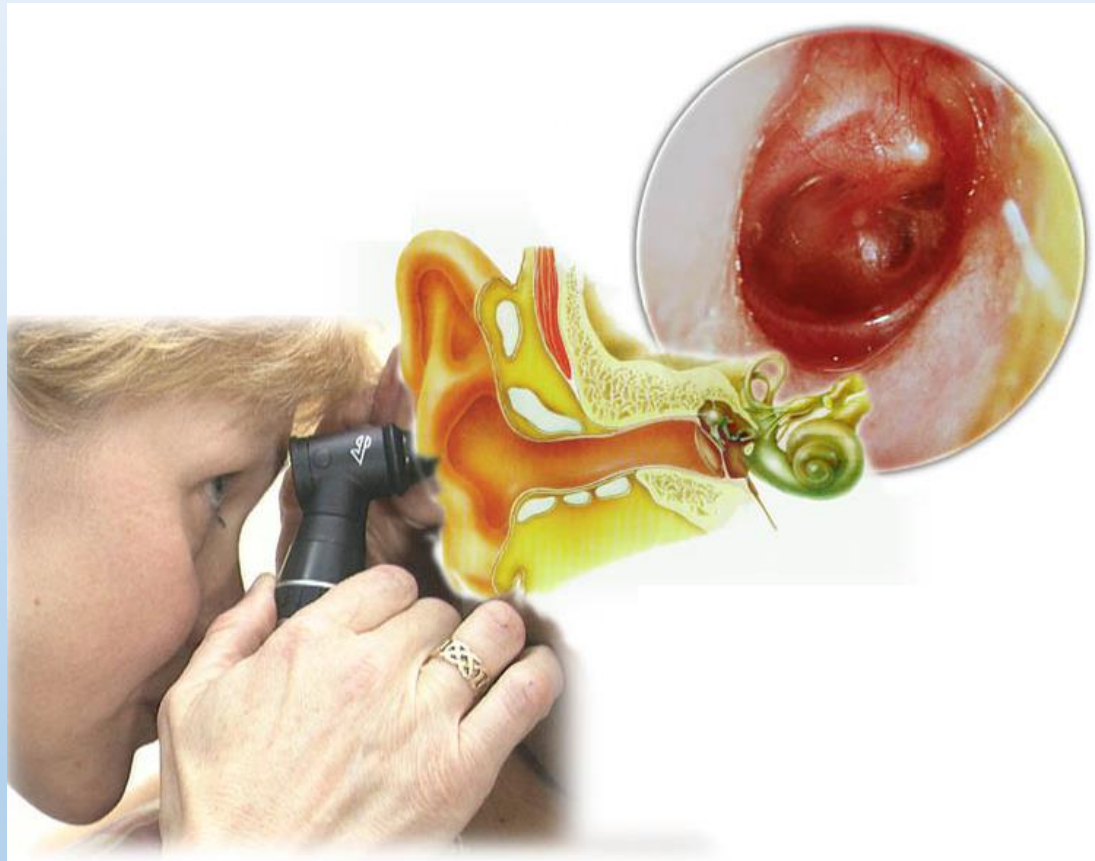
Otoscopy Examination

KCGMH ENT

OTOSCOPY



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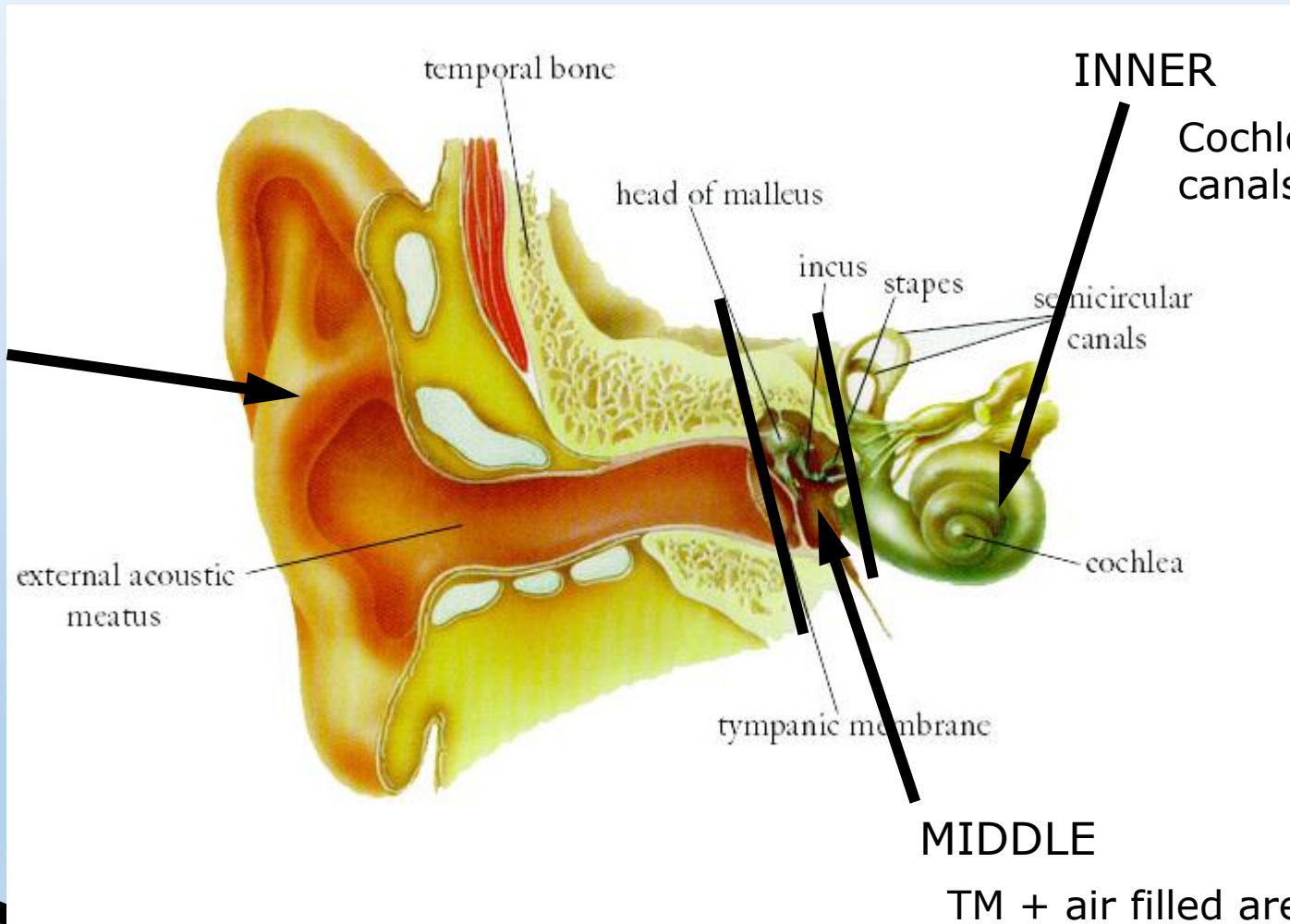


Examination of Ear

ANATOMY



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EXTERNAL
Outer ear
& canal
until TM

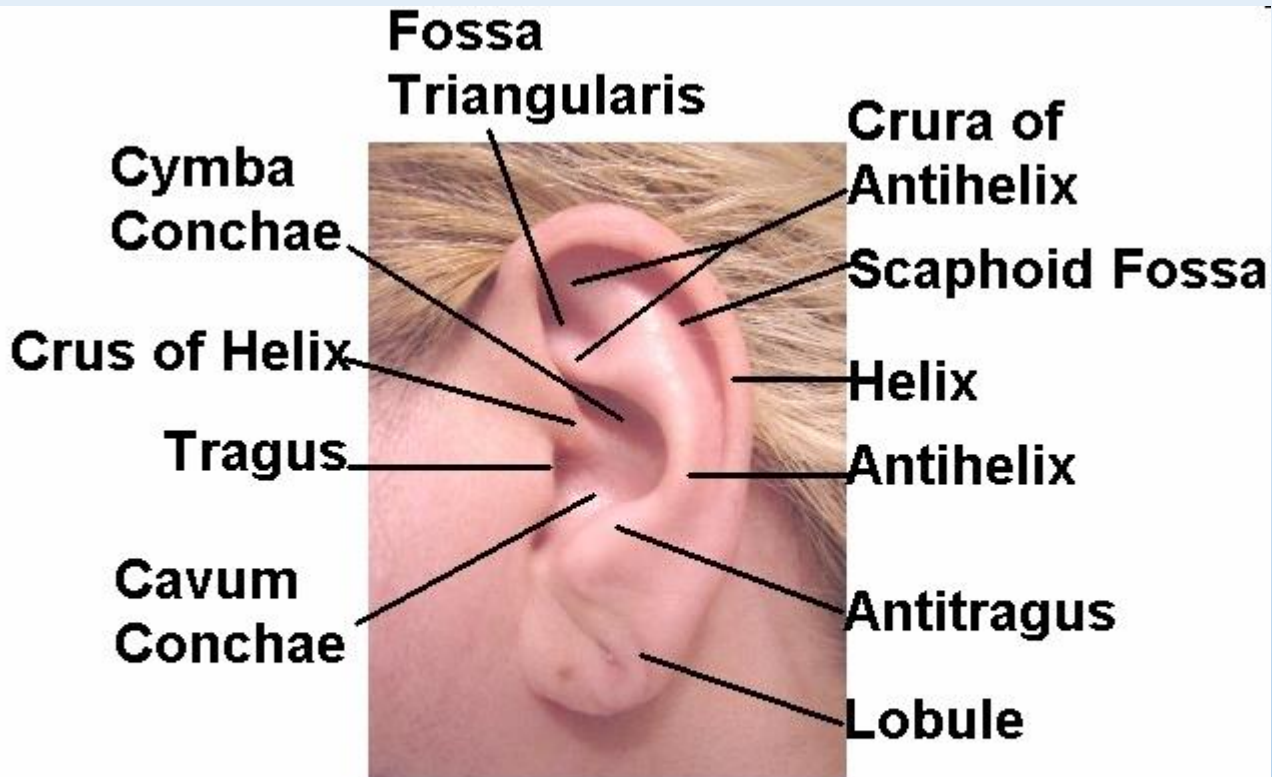
INNER
Cochlea, SC
canals, vestibule

MIDDLE
TM + air filled area
behind, including ossicles

EXTERNAL EAR



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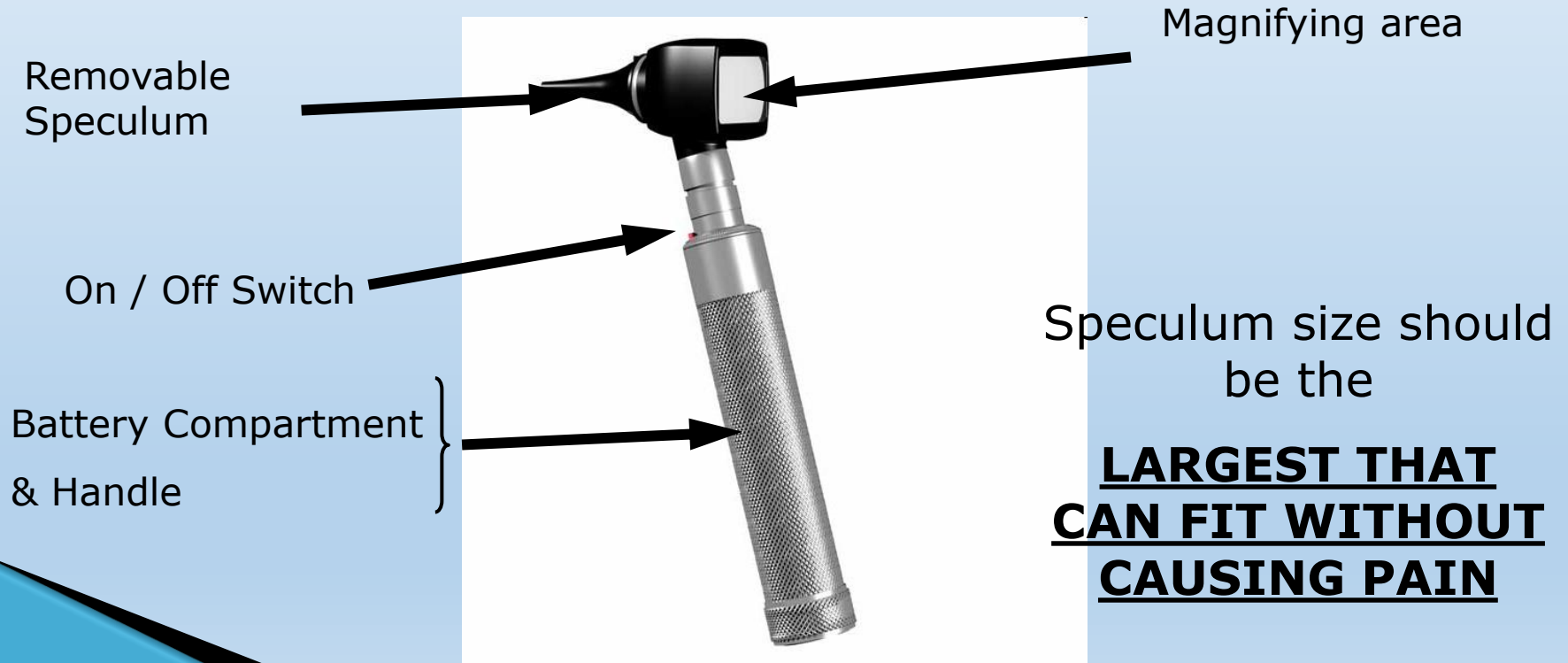
Anatomy of the Pinna

OTOSCOPE



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- In primary care we use otoscope
 - Clean speculum & functioning batteries (BRIGHT light is important!!)



- Hold close to eyepiece for more control
 - Pencil (or hammer grip)
 - Right hand right ear, left hand left ear



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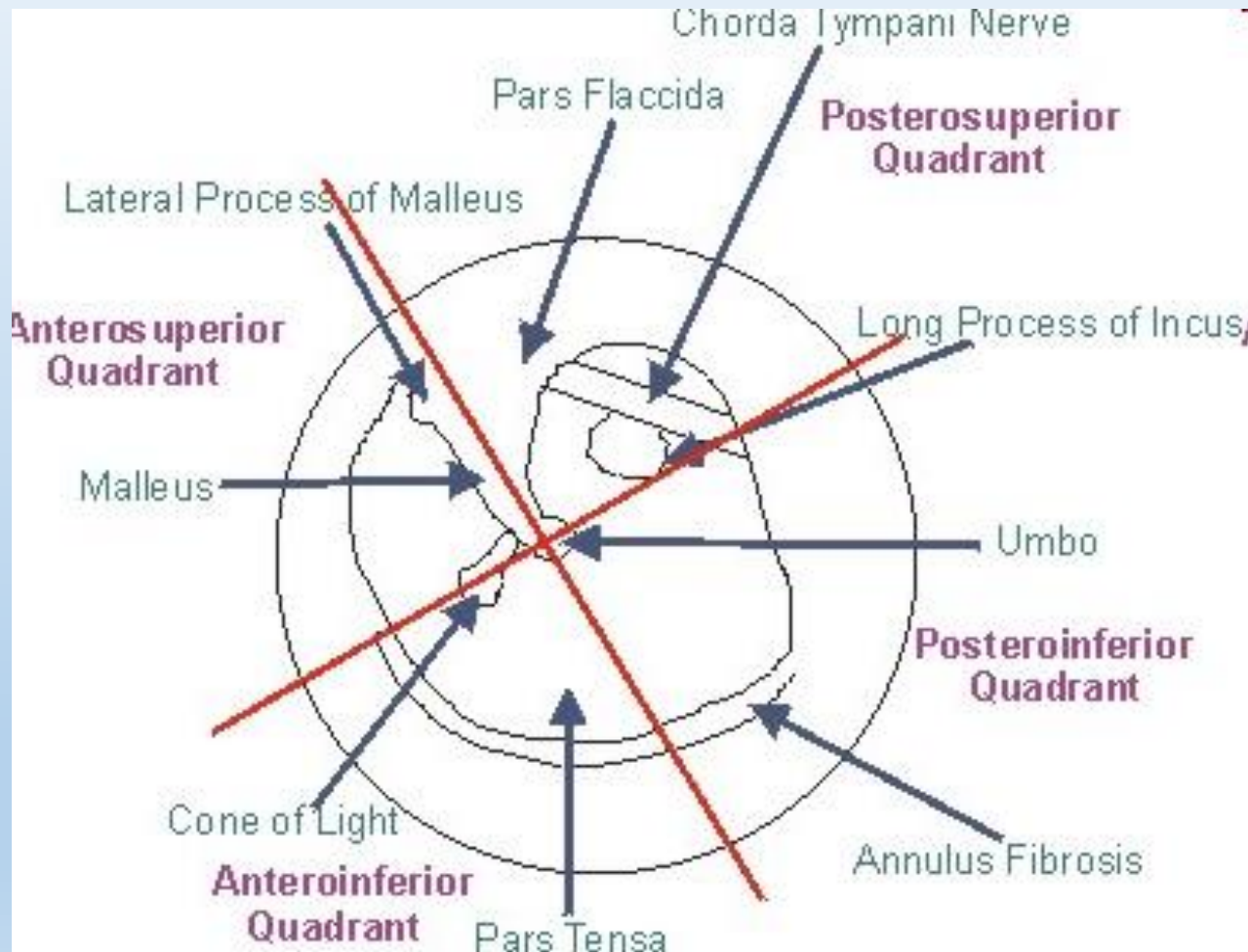


- Pull pinna back and up to straighten ear canal
 - To make speculum insertion easier
- Examine good ear first

QUADRANTS



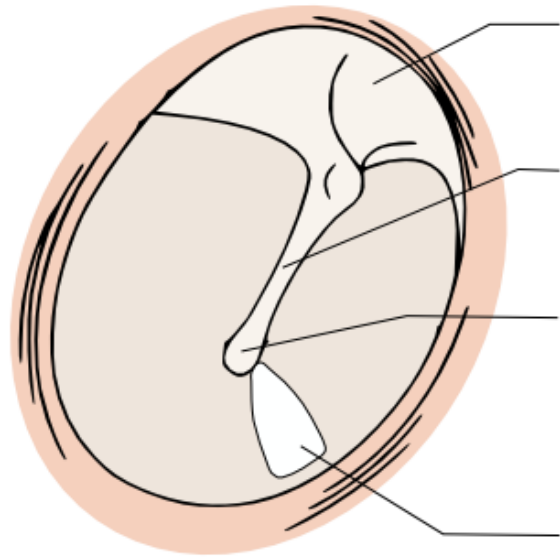
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TYMPANIC MEMBRANE

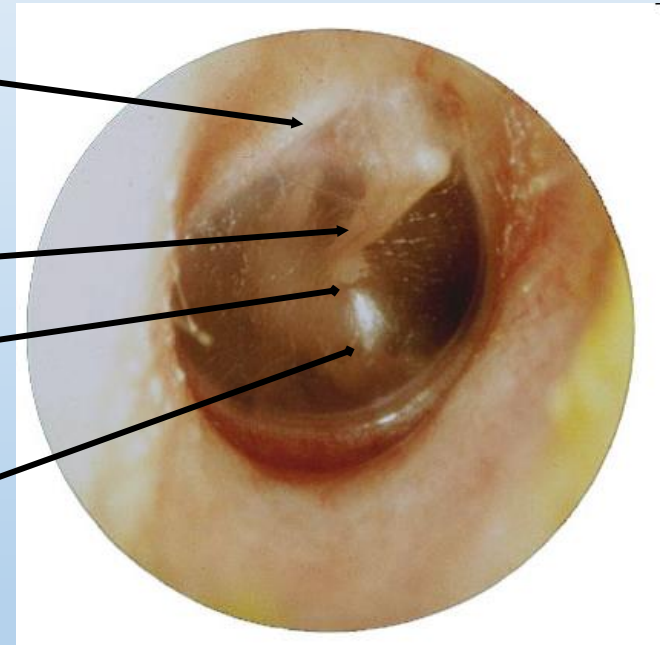


Pars flaccida

Malleus

Umbo

Cone of light





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WHAT TO LOOK FOR

- External canal Wall
 - Skin (normal, inflammed?)
 - Debris?
- **Malleus HANDLE** (or lateral process)
- **UMBO** (malleus stria)
- **CONE OF LIGHT** (triangle shape, with apex at umbo))
- Inspect Pars Tensa, starting in Posterior-Superior quadrant, clockwise
- Inspect Pars Flaccida

Ask Yourself



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- *Can I see **all** the external auditory canal?*
 - stenosis, foreign body, edema, blood, debris
- *Can I see the TM, or the handle of malleus, or both?*
- *Is the TM **intact**?*
 - retraction, perforation, blood vessels, clues about middle ear problems
- *Is the TM correct **colour and transparency**?*
 - Gold/blue/dull = fluid/blood in middle ear
 - White patches = tympanosclerosis (post-surgical?)
 - Pearly grey = Normal



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NORMAL

- Thin
- Semi-transparent
- Pearly grey

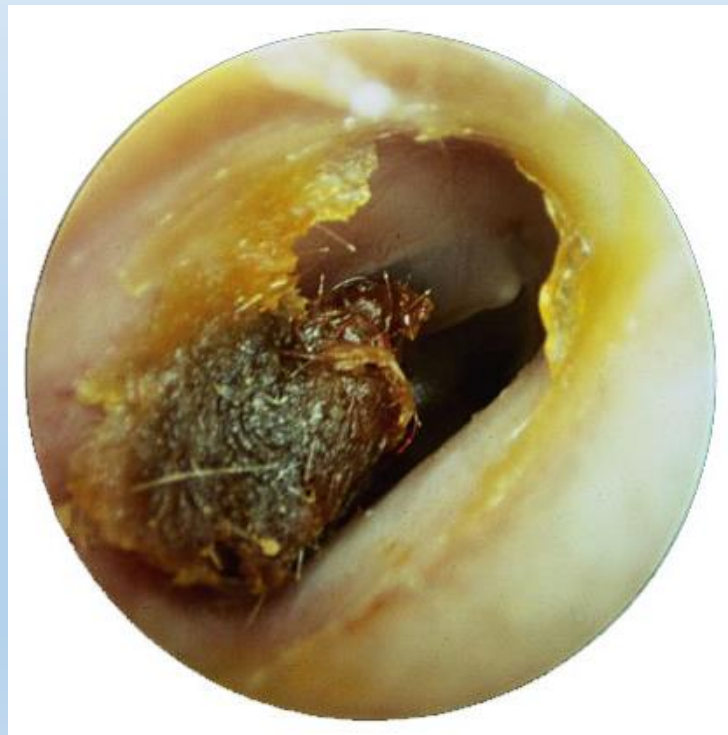


WAX / CERUMEN



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- Normal secretion of outer meatus
- Initially **semi liquid and colourless**, later **oxidises to yellow-brown harder** substance which can block passage of sound.

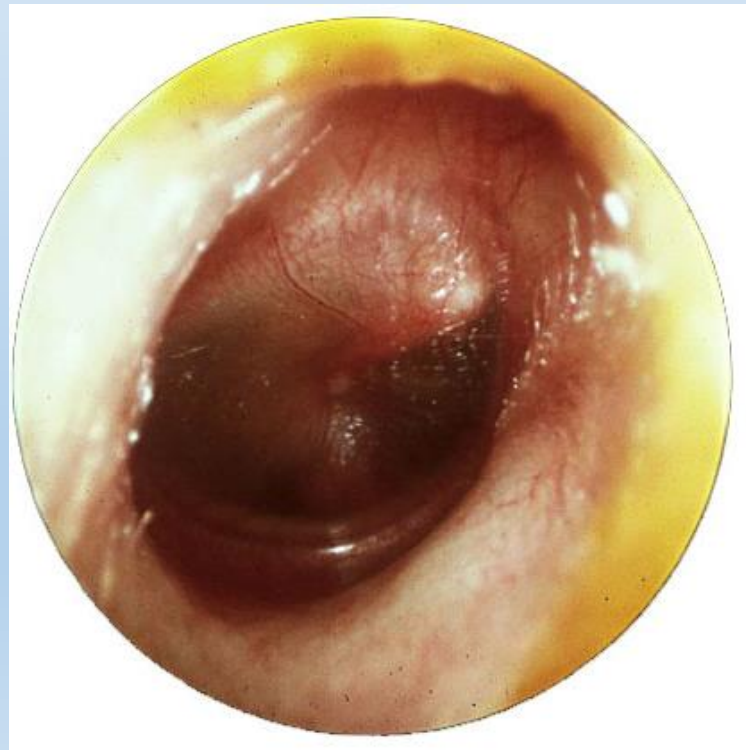




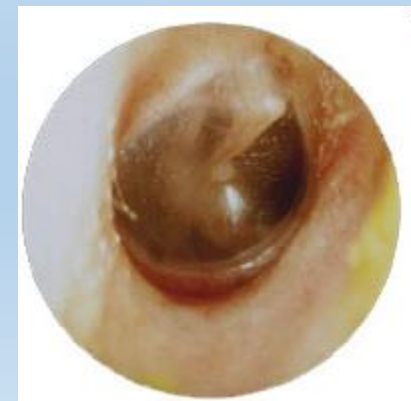
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ACUTE OTITIS MEDIA

- Inflammation of middle ear (infection)
- Upper half:
 - Prominent blood vessels, Bulging, malleus prominence obscured (fluid)
- Lower half:
 - Dull



Normal





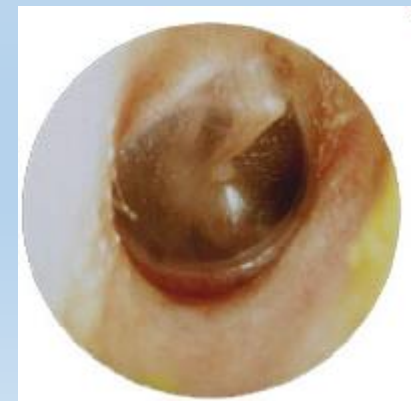
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ACUTE OTITIS MEDIA

- Inflammation of middle ear (infection)
- **Bulging** TM, with Purulent fluid behind a tense TM
- **Risk of perforation** – need to drain!



Normal

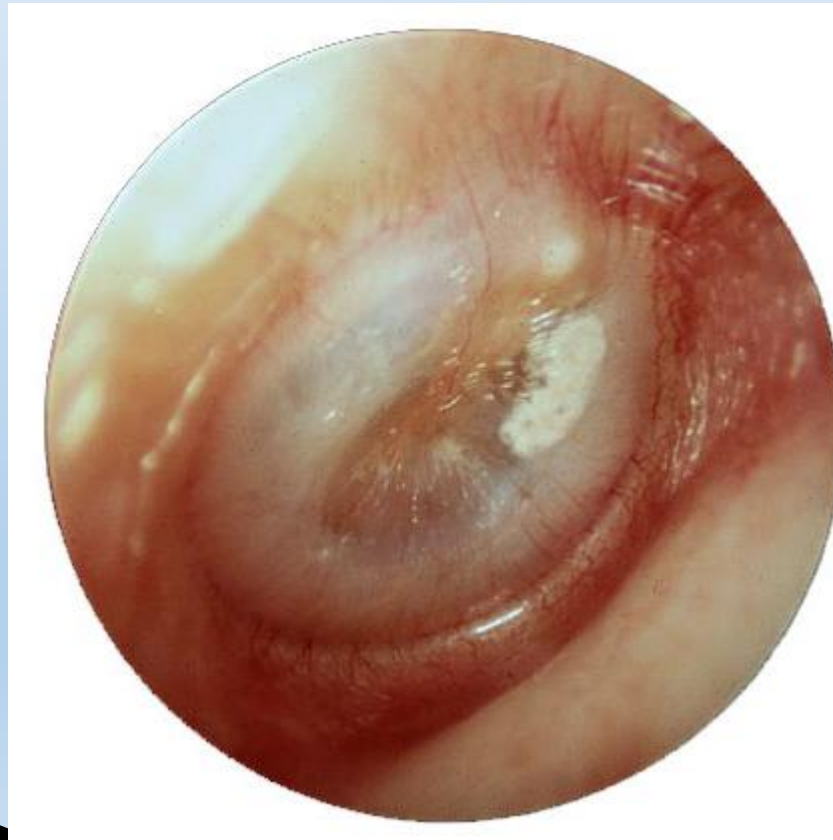




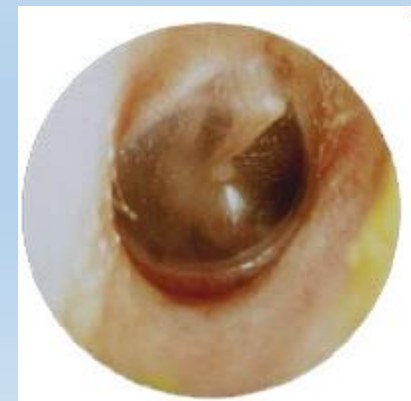
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TYMPANO-SCLEROSIS

- Incomplete healing of OM
- Inflammatory process > Scar Tissue = **Calcified plaques on TM**



NORM





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Middle ear effusion

- Non-purulent effusion of the middle ear
- TM: dullness or ear fluid level



CENTRAL PERFORATION OF TM

- Causes include **Trauma to head**, Spontaneous perforation, Loud sounds, Middle ear fluid build up ...etc
- Pressure related: circular
- Trauma related: cake shaped

