APPROACH TO THE PEDIATRIC EAR EXAM

Dr. Caroline Paul

Associate Professor

University of Wisconsin School of Medicine and Public Health

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Diagnostic Criteria are Straight Forward BUT…*Arriving* at the Diagnosis May Not Be

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Challenges

- Overlapping symptoms with those of URI
- Confusing subtle changes of TM
- Sub-optimal equipment
- Obstruction of TM by cerumen
- Uncooperative child
- Inadequate assistance for holding child

AAP Guidelines 2013

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A Deliberate Step by Step Approach

- Know *how* to get to the TM!
- Equipment
- COMPT
  - Method of describing TM
- Pneumatic Otoscopy
- Cerumen Removal

How to Get to the TM

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1. Engage with caregiver
   - Explain need for secure hold and anticipate need to remove cerumen
   - Get a quick clinical gestalt for soliciting child's cooperation
2. Have equipment ready
3. Use appropriate distraction and holding methods
4. Stabilize head!
   - Use non-dominant head to stabilize head
   - Use dorsum of hand to stabilize head
   - *Ensure that you do not move when their heads move*

The Ideal

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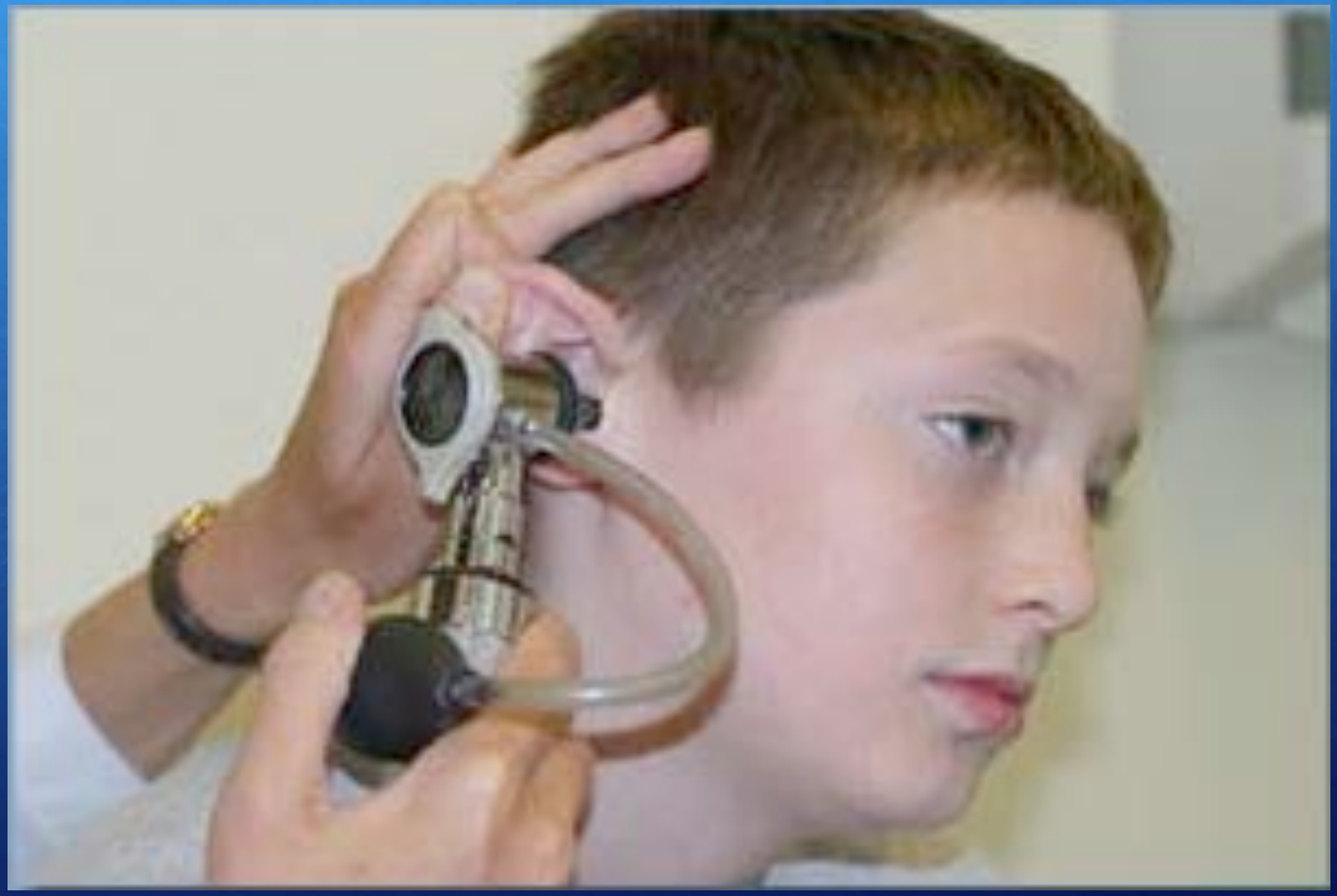

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But…

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Distraction Techniques

- What are your favorites?
  - Build a repertoire
- Choose age and developmentally appropriate techniques

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Positioning is Important

- Varies for age and developmental status
- Make your encounter safe, quick and effective
- Ask for help (in the beginning)

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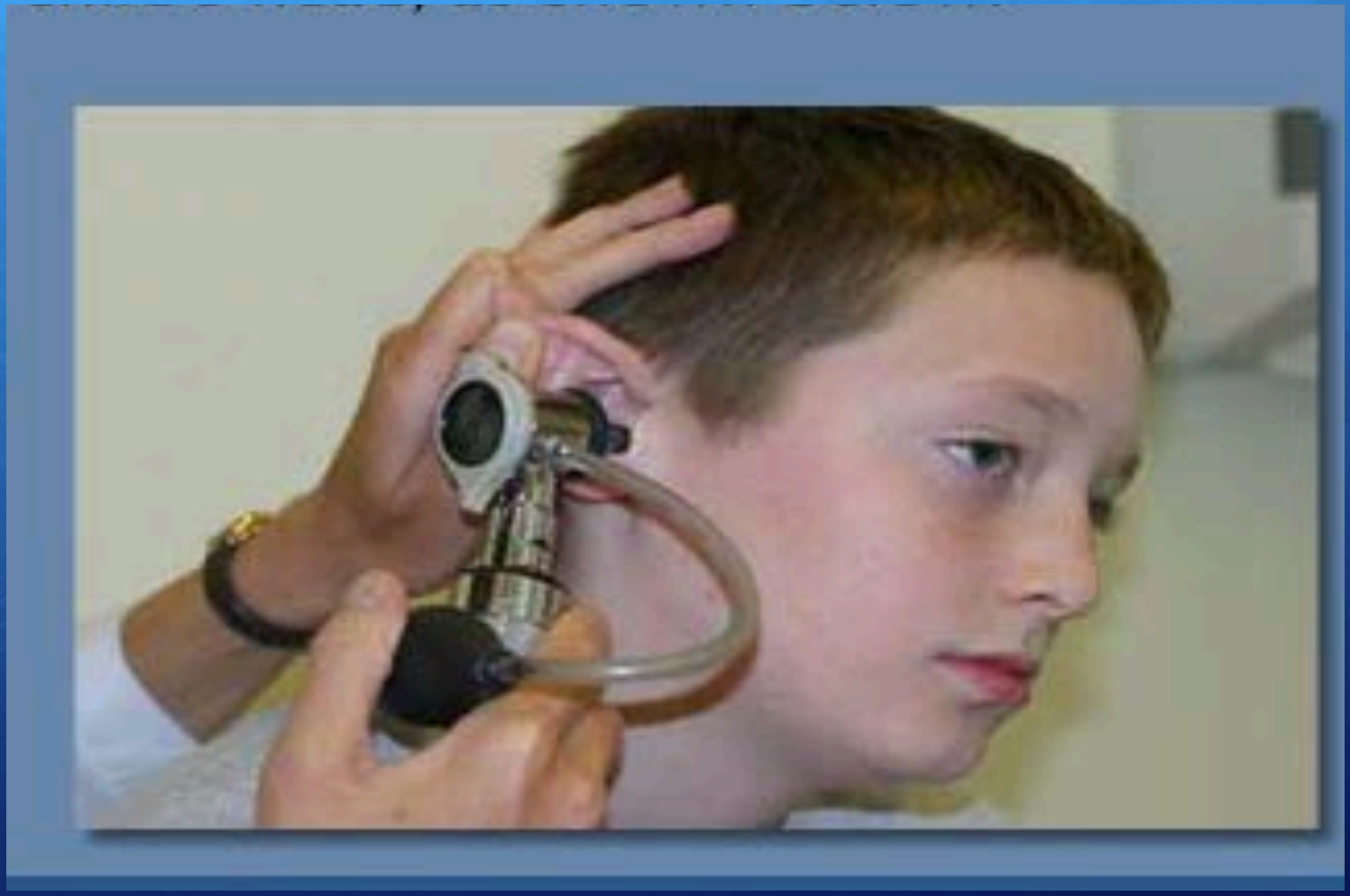
Older Children
Best on Table - Use 2-handed Brace



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Young Children

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- Cooperation may change at any time
- Helpful to “hug” against “your chest”
- Remember to watch for the shoulder and the head

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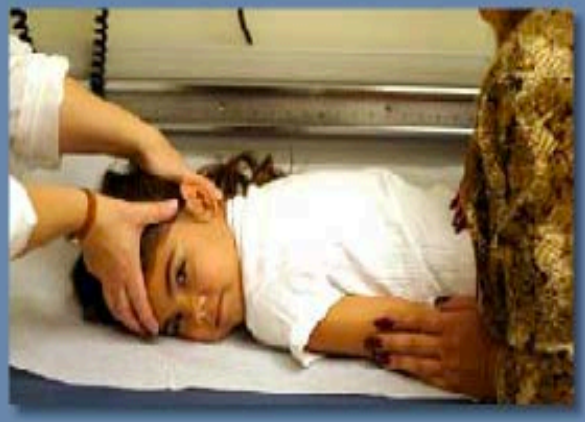
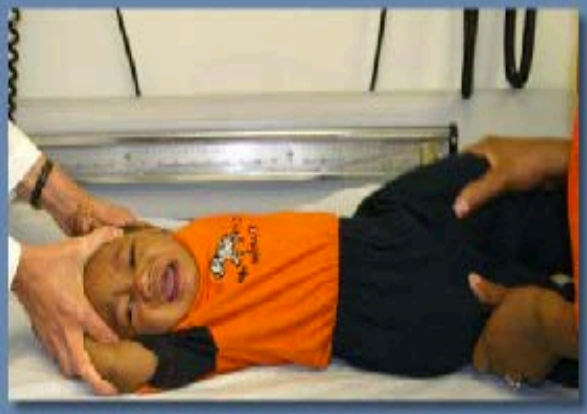
Section 2: Requisites for a Successful Ear Examination

Positioning the Child for Examination

Infants and Young Children

Otoscopic examination of an infant is best performed on an exam table so that the infant's head can be steadied against the table and the body can be secured. This is also true for young children who resist examination.





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Section 1: Otoscopic Equipment

Pneumatic heads

- Uses:
  - routine examination of TM
  - cerumen removal (via partially displaced magnifying lens)
- Round or rectangular models:

Example of round otoscopic head with companion non-disposable ear specula and rubber bulb.

click to enlarge

Example of round head model with adjustable focus and increased magnification.

click to enlarge

Example of square otoscopic head with companion ear specula and rubber bulb.

click to enlarge

For routine examination, we find that the round pneumatic head:

- facilitates the creation of an airtight seal
- provides better illumination and visualization of the TM
- produces less local trauma

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The Diagnosis of Acute Otitis Media

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- Need acute inflammation and presence of effusion
- This means…
  a distortion of the TM
- This means… mild bulging (full) to a bulging TM for diagnosis

The Diagnosis of Acute Otitis Media

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- Diagnosis of AOM
  - Moderate to severe bulging of TM
  - New onset of otorrhea not new to acute OE
  - Mild bulging (full) AND recent (less than 48 hours-a*cute*) onset of ear pain
  - Mild bulging and *intense* erythema
  - OME does not equal AOM

AAP Clinical Practice Guideline
February, 2013

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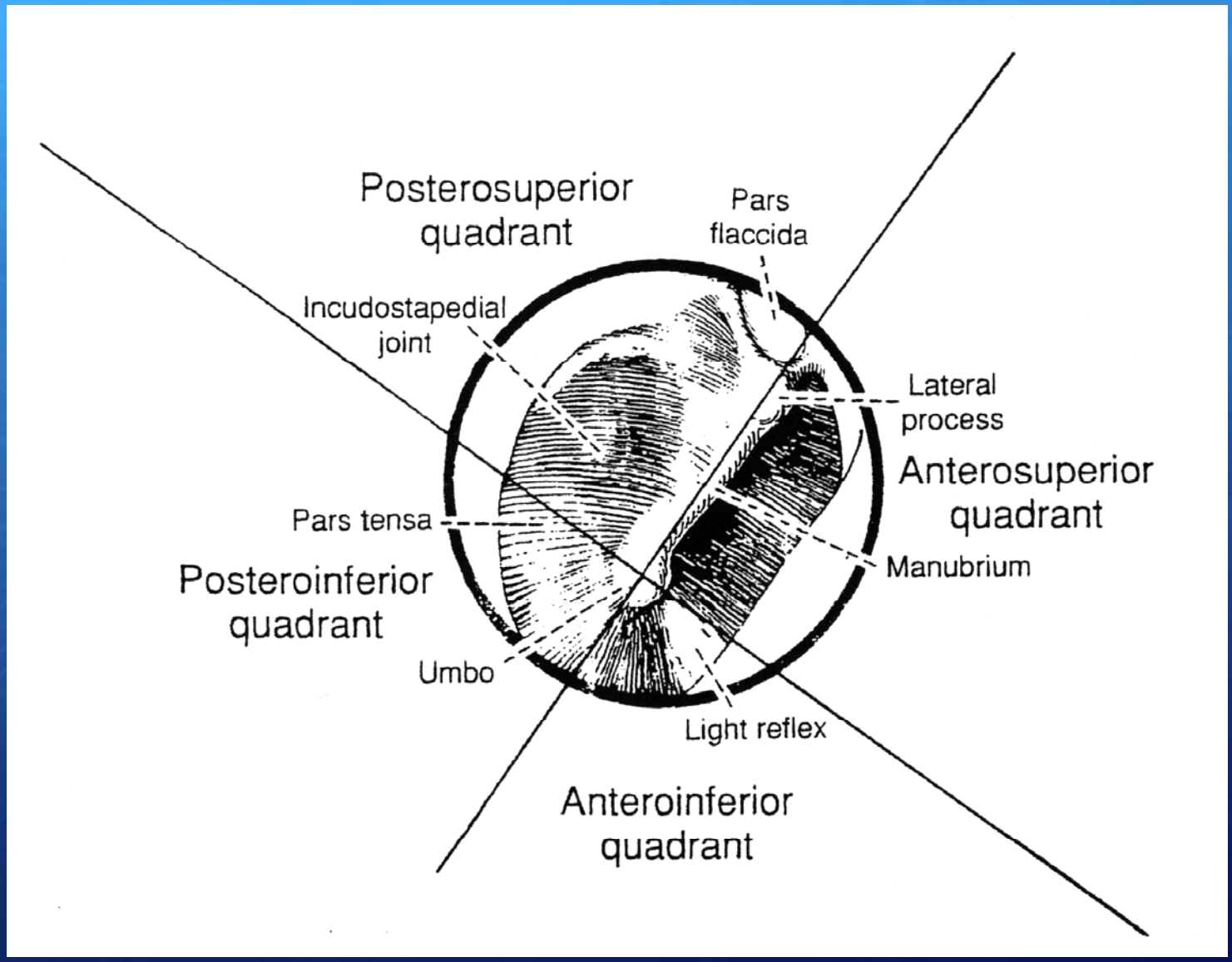

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Find Your Landmarks

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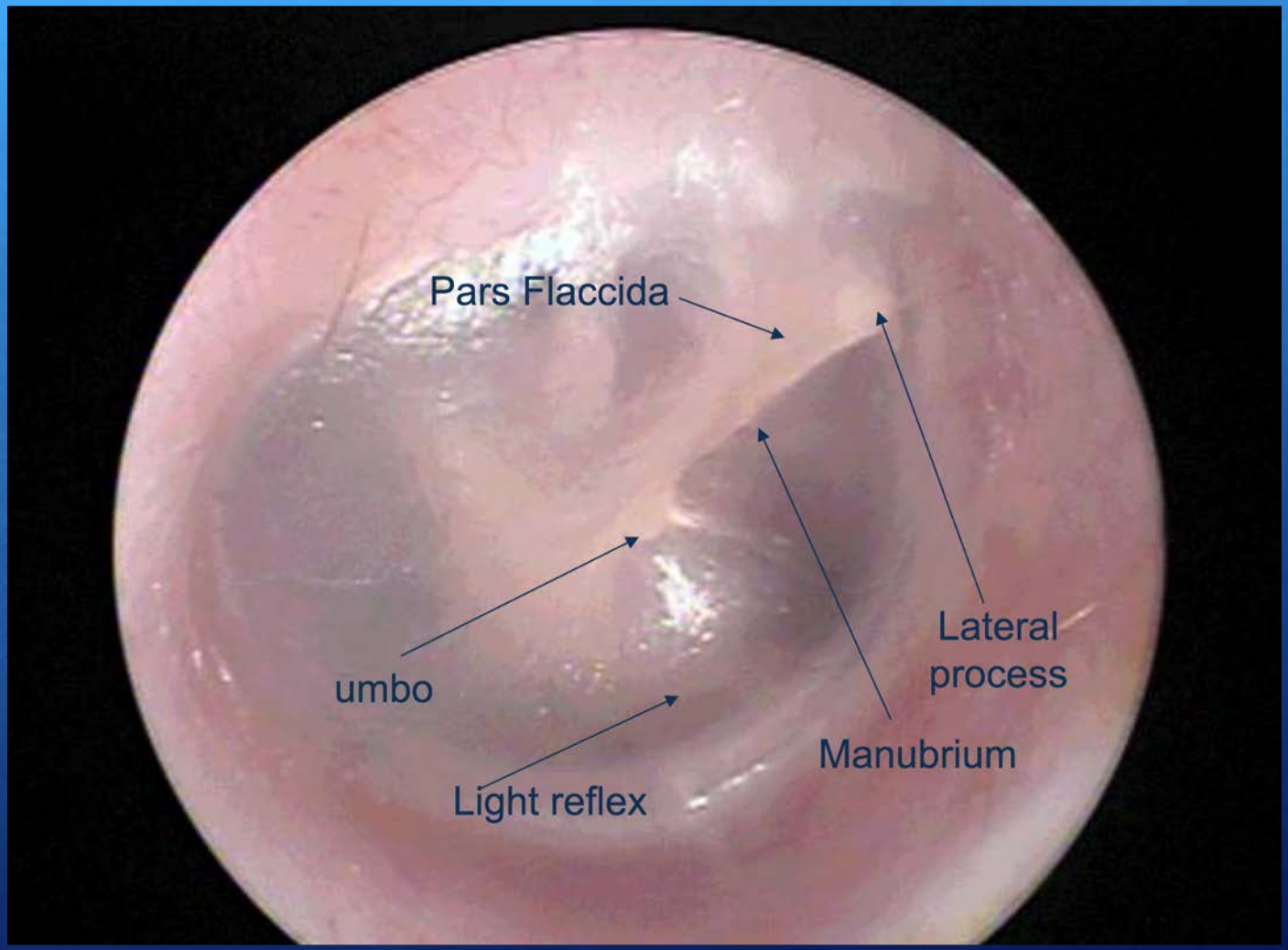

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How to Describe the TM?

C **C**olor

O **O**ther

M **M**obility

P **P**osition***

T **T**ranslucency

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P-Position
COMPT

- Neutral
- Retracted
- Full (mild bulging)
- Bulging - most specific otoscopic sign of AOM
  - Mild➔Moderate➔Severe
  - Almost all children with AOM will have a full or bulging TM