Otitis Media with Effusion
Sheila Woods MD
SC AAP-QTIP Learning Collaborative
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Facts about OME
One of the most common childhood illnesses in US
- more than 2.2 million diagnosed cases/year
- estimated annual cost of 4 billion dollars
- 90% of children (86% of individual ears) will have at least one episode of OME by age 10
- majority of cases occur between 6 months and 4 years
- Many resolve spontaneously within 3 months
- 30 to 40% have recurrent episodes
- 5 to 10% of cases last more than 1 year

Source: www.effectivehealthcare.ahrq.gov Published Online: August 7, 2013

Predisposition and Diagnosis
- Exposure to secondhand smoke
- Attending childcare
- Environmentally induced allergies
- Fluid behind TM without acute onset or signs of inflammation or infection
- TM bulges with AOM/ Retracted-neutral with OME
- Tympanocentesis is gold standard of diagnosis-rare
- Use of pneumatic otoscopy and tympanometry(flat)
- Conductive hearing loss 25 decibels (dB) or 10 dB above the normal hearing level(15 dB)

Presumed Risks of OME
Hearing loss may delay or change communication skills
Chronic Eustachian tube dysfunction and OME may cause structural damage of the tympanic membrane

Results of AHRQ Research
- Tympanostomy Tubes (TT)
  - At 2 yrs-decreased OME compared to Watchful Waiting (WW) or myringotomy (Myr)
  - At 6 mos-improved hearing compared to WW
  - 12 mos-OME resolution more likely with Adenoid than no treatment
  - 34 mos-Adenoid/Myr superior to Myr alone in OME/hearing
  - Oral steroids at 2 months/topical steroids at 9 months-no difference in OME or hearing
  - TT and WW did not differ in long-term language, cognitive or academic outcomes
  - Tympanosclerosis and otitis were more common with TT

Bottom Line
- Do not know what age child it is most deleterious for fluid to remain untreated
- Do not know whether children with cleft palate or Down syndrome need to follow a different treatment course
- No evidence of differences in long-term functional outcomes or quality of life between subjects who had TT placement and those who had watchful waiting for OME
Measure 16

- % of ages 2 mos to 12 years with OME that were NOT prescribed systemic antimicrobials
  - ICD-9 Codes
    - 381.16-Chronic serous otitis media, simple or unspecified
    - 381.19-Other chronic serous otitis media
    - 381.20-Chronic mucoid otitis media, simple or unspecified
    - 381.29-Other chronic mucoid otitis media
    - 381.3-Other and unspecified chronic nonsuppurative otitis media
    - 381.4-Nonsuppurative otitis media, not specified as acute or chronic

Denominator

- All children ages 2 months to 12 years with diagnosis of OME
  - Exclude: Documentation of medical reasons for prescribing systemic antimicrobials

Numerator

- Children in the group who were not prescribed systemic antimicrobials