SHARED DECISION MAKING, OR NOT, IN OTITIS MEDIA

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IMPACT OF OTITIS MEDIA (OM)

- OM most common diagnosis made by MD’s who provide care for children.

- When URI diagnosed in young children, 30% have OM. (Revai, et al, 2007)

- US $4 billion/yr. for OM.

- Tympanostomy tubes most common operation in infants and children.
IMPACT OF OM

- World-wide health problem

- Special populations: Native Americans, (e.g., Inuits, Navajos), Australian aborigines, New Zealand Maoris

- WHO estimates 90% burden in Asia, Western Pacific, & Africa.

- 28,000/yr. deaths from complications.
SHARED DECISION MAKING (SDM)

- SDM is advocated in Accountable Care Act (ACA) in 2010 by federal law.

- Patient-Decision Aids (PDA) also recommended, e.g., computer-based, print, audiovisual.
SHARED DECISION MAKING (SDM)

SDM a process in which patient & clinician faced with more than one acceptable treatment option jointly decide which option is best based on current evidence & patients needs, preferences and values.

WHAT’S NOT SDM?

- An example of decisions that are not PSD in which there is clear cut indications for treatment, usually from evidence-based medicine (EBM).

- Hip fracture: repair the hip! Not SDM!

- But, hip arthritis management is SDM.
Shared Decision Making, or Not, for Otitis Media?

- Antibiotics for OM?
- Other medications for OM?
- Myringotomy & Tubes (M&T)?
- Adenoidectomy?
Antibiotics for Acute Otitis Media (AOM)? (AAP 2004)

- Infants <2 yrs. Treat! (not PSDM)

- Children 2 yrs. & older: Severe (severe otalgia or fever > 39°C, rapid onset, middle-ear effusion(MEF), inflammation) Treat! (not SDM!)

SOCIETY FOR MIDDLE EAR DISEASE
Prevention, Early Diagnosis and Management of Middle Ear Disease
www.societyformiddleeardisease.org
Antibiotics for Non-Severe AOM (AAP 2004) (SDM)

- Children 2 yrs. & older: Nonsevere (mild otalgia or fever < 39°C, MEF)

Options: Observation (trial for 48-72 hrs, if failure treat) or treat?
Which Antibiotic for AOM? (AAP, 2004)

Temperature: 39°C or greater, &/or severe otalgia, or observation failure after 48-72 hours:

No:  Amoxicillin, 80-90 mg/kg/day

Yes: Amoxicillin-clavulanate, 90 mg/kg amoxicillin, with 6.4 mg/kg/day of clavulanate
Antibiotic for Treatment Failure (48-72 hrs) AAP, 2004

Temp: 39°C or greater, &/or severe otalgia:

**No:** Amox-clav, 90 mg/kg/day amox, with 6.4 mg/kg/day of clav.

**Yes:** Ceftriaxone, 3 days (if penicillin allergy: tympanocentesis & clindamycin)
SDM or Not: Other Meds. for AOM?

- **Analgesics**: AAP (2004) strongly advises **treat**, especially in 1\textsuperscript{st} 24 hours (**not** SDM)

- **Antihistamines**: **No** (**not** SDM) (Cochrane, 2008)

- **Decongestants**: **No** (**not** SDM) (Cochrane, 2008)
Non-Surgical Prevention of Recurrent AOM? (AAP, 2004)

- **Risk factors**: Breast feed; no smoking, bottle propping, or pacifier past age 6 mos of age, & no or smaller day care settings. (SDM)

- **Vaccines**: pneumococcal (SDM); influenza vaccines (AAP Advisory Comm, 2010) (not SDM)
Surgical Prevention of Recurrent AOM? (SDM)

- **BM&T**: 3 or more AOM in 6 mo. or 4 or more in 1 yr. with at least 1 in preceding 6 mos. (Casselbrant et al, 1992; Rosenfeld et al, 2000)

- **Adenoidectomy**: < 2 yrs **no** if only indication is RAOM; >2 yrs **yes** if repeat BM&T indicated. (Paradise et al, JAMA)
Antimicrobial Prophylaxis for Recurrent AOM? (SDM)

- **Long-term**: Not currently recommended for routine use due emergence of antibiotic-resistant otic bacteria.

- **Selected indications**: Yes, on individualized basis, e.g., surgical candidates at risk for general anesthesia; prior to BM&T. (Bluestone options)
New American Academy of Pediatrics AOM Guidelines

- Publication scheduled in 3-4 months (2012?).
- Similar to 2004 but not identical.
- Includes recommendations for prevention.
- Currently “EMBARGO” prohibits publication or lectures.
Recommendation for Surgery for Chronic OME (AAP, 2004)

- MEE persists for 4 months or longer, with hearing loss or other signs or symptoms in children who are at risk, e.g., developmental difficulties, cleft palate, or with structural damage to tympanic membrane or impending ossicular erosion.

- Conclusion: SDM
Medical Treatment for OME? (AAP 2004)

- **Antibiotics**: no long-term benefit.
- **Coricosteroids**: no long-term benefit.
- **Antihistamines/decongestants**: not effective.
- **Conclusions**: medical treatment not SDM (no EBM indication to treat).
Surgical Treatment of Chronic OME? (AAP 2004) (SDM)

- **Initial surgery**: BM&T (no adenoidectomy if only indication OME).

- **Repeat surgery**: Adenoidectomy (>4 yrs) with myringotomy, with or without tubes. <4yrs BM&T only. (4 yrs age cut if only indication OME; Casselbrant et al. 2009)
Surgical Treatment of Chronic OME? (AAP 2004)

- **No** tonsillectomy if only indication is for OME;
- **No** myringotomy alone.
- **Not** SDM.
PATIENT DECISION AIDS (PDA)

- High-quality, up-to-date information about condition (EBM), risks & benefits of options, or limits of knowledge about outcomes.
- Helps sort out patient’s values & preferences.
- Guidance or coaching to improve pt. involvement in SDM.
WHAT IS MIDDLE-EAR DISEASE (MED)?

- MED consists of otitis media (OM) and other diseases and disorders of the middle ear.

- OM is an inflammation of the middle ear. (All OM is MED, but all MED is not OM.)

- Other MED, e.g., Eustachian tube dysfunction, cholesteatoma
SMED MISSION STATEMENT

International non-profit community (lay) advocacy society that promotes public and professional awareness of the importance of MED as a major world-wide health problem.
SMED MISSION STATEMENT

Enables individuals with MED, as well as parents and other family members of infants and children with MED, to meet the challenges of the disease, and its associated hearing loss, and possible complications, through information, advocacy and support.
SMED MISSIONS

- INFORMATION DISSEMINATION
- ADVOCACY
- SUPPORT
INFORMATION DISSEMINATION

- Website: [www.societyformiddleeardisease.org](http://www.societyformiddleeardisease.org)
- Official Guidelines for diagnosis and management of MED from US & other countries.
- Books, Videos, Links, Social Media, FAQ
SMED WEBSITE IS A 3PDA

- SMED website not a PDA, but a Patient, Parent, Physician Decision Aid (3PDA).

- Empower patients & families, & inform health-care professionals about MED.
SMED MISSIONS

- **FUND RAISING**: Promote research for OM; lobbying government, e.g., NIH, & solicit foundations, industry, private philanthropy.

- **FOUNDATION**: Interest for modest expenses, and research grants for MED
SMED BOARDS

- ADVOCACY: 8 Advocates (community) from 4 states in US.

- ADVISORS: 7 U.S. & 35 from 25 other countries. (ENT, Peds, FP, & a scientist)

- Headquarters at Children’s Hospital of Pittsburgh of UPMC (CHP); CHP Foundation financial umbrella.
When to Recommend SMED Website

• Patients & family members who want to know more about otitis media

• When patients/family members seek more answers than time permits.

• Other health care professionals

• Students: Medical, nursing, college, high school, and others
THANK YOU