Pediatrics Small Group Activity

Curriculum for Antimicrobial Stewardship

Objectives:

At the completion of this small group activity, the learner should be able to:

1. Identify strategies to reduce unnecessary antimicrobial use in children with otitis media
2. Distinguish Acute Otitis Media (AOM) from Otitis Media with Effusion (OME)
3. Discuss the appropriate antimicrobial treatment of AOM in children
4. Discuss the rational approach to antibiotic use for respiratory infections in children
5. Discuss techniques that can be used with parents who demand antibiotics

Case Scenario #1: You are in the Pediatrics outpatient clinic seeing Rachel, an otherwise healthy 16-month-old girl. Her parents tell you that she has had fevers to 103°F and irritability, which started yesterday. She has been pulling at her right ear. Her parents are concerned that she has an ear infection and needs antibiotics. Describe the physical exam techniques you would use as well as the clinical findings you would expect to find if Rachel were to have a certain diagnosis of acute otitis media.

Case Scenario #2: You are in the Pediatrics outpatient clinic seeing Ella, an otherwise healthy 5-year-old girl. Her mother tells you that she had a sudden onset of fevers up to 100.8°F and rhinorrhea 2 days. Ella started complaining that her left ear was hurting 2 days ago as well. Her mother has heard about antibiotic-resistant bacteria on the news and tells you that she only wants her daughter to take antibiotics if they are absolutely necessary. On exam, you note a bulging, erythematous left tympanic membrane with limited mobility. Under what circumstances would observation be an appropriate treatment strategy in patients with acute otitis media?

Case Scenario #3: **You are in the Pediatrics outpatient clinic seeing Francis, an otherwise healthy 4-year-old boy. His parents tell you that he has had fevers to 100.4°F, cough, rhinorrhea and several loose stools over the past 2 days. On physical examination, you note bilateral tympanic membrane immobility, but no erythema or air-fluid levels. The remainder of the exam is benign. What is your presumptive diagnosis? What treatment strategy do you recommend?**

Case Scenario #4: **You are in the Pediatrics acute care clinic seeing Samuel, a 2-year-old child, who has been coughing over the past seven days. His mother states that he initially had a fever and rhinorrhea, but has not been febrile over the past 4 days. His rhinorrhea is improved. She is concerned because he has been ill for a week and is still coughing. The physical examination is benign. Should antibiotics be considered in this patient? What clinical parameters would prompt you to consider antibiotics?**

Case Scenario #5: **You are in the Pediatrics acute care clinic seeing Samantha, a 6-year-old child with a cough of five days duration. The patient initially had a fever to 102.5°F, rhinorrhea, conjunctivitis and diarrhea. These symptoms resolved after 3 days, but her cough has persisted. You suspect that she has had a viral illness, which is resolving; however, her parents are demanding antibiotics for her cough. What would you say to her parents? What techniques can you use to counsel parents and patients when they demand antibiotics?**

Resources:

- American Academy of Pediatrics and American Academy of Family Physicians, Subcommittee on Management of Acute Otitis Media. Diagnosis and management of acute otitis media. *Pediatrics* 2004;113(5):1451-65.
- American Academy of Family Physicians, American Academy of Otolaryngology-Head and Neck Surgery, American Academy of Pediatrics Subcommittee on Otitis Media with Effusion. Otitis media with effusion. *Pediatrics* 2004;113(5):1412-29.
- OBrien KL, Dowell SF, Schwartz B, Marcy SM, Phillips WR, Gerber MA. Cough illness/bronchitis principles of judicious use of antimicrobial agents. *Pediatrics* 1998;101:178-181.
- http://www.cdc.gov/getsmart/campaign-materials/brochures.html