

UCV

CASE 12

ID/CC	A 3-year-old boy presents with a 2-day history of fever and pulling on his right ear.
HPI	He is an otherwise healthy child who is up-to-date with his immunizations. He suffered from a URI 2 weeks ago.
PE	VS: fever (38.4°C). PE: alert but restless; pneumatic otoscopy reveals erythema and a bulging tympanic membrane with decreased mobility (indicating presence of fluid in the middle ear); no perforation present; oropharynx clear without exudates or erythema; no cervical lymphadenopathy.
Labs	No labs are necessary unless the child appears toxic, in which case a CBC and blood culture may be warranted.
Pathogenesis	Acute inflammation of the middle ear. The most common bacterial pathogens are <i>Streptococcus pneumoniae</i> , nontypable <i>Haemophilus influenzae</i> , and <i>Moraxella catarrhalis</i> . Neonatal otitis media is often caused by group B streptococcus and gram-negative enterobacteria, while infants in the first 3 months of life may also become infected with <i>Staphylococcus aureus</i> and <i>Chlamydia trachomatis</i> . RSV is a common viral cause. In infants, irritability, constant crying, lethargy, and feeding difficulties are common presenting symptoms.
Epidemiology	Acute otitis media is the second most common infection seen in children after the common cold. It usually follows a URI but may also appear without antecedent infection. Breast feeding reduces the incidence and severity of infections. Passive smoking, recurrent viral infections, attendance at day care centers, and later birth order predispose to infection.
Management	Amoxicillin, TMP-SMX, or erythromycin-sulfisoxazole for 10 days; amoxicillin/clavulanate, azithromycin, and cephalosporins are reserved for refractory cases. Administer acetaminophen or ibuprofen for analgesia; topical anesthetics may also be used as long as there is no tympanic membrane perforation. Salicylates are contraindicated, since they may precipitate Reye's syndrome. Tympanocentesis and myringotomy may be needed for unresponsive cases.
Complications	Tympanic membrane perforation and hearing loss, cholesteatoma formation, mastoiditis, cerebral abscess, meningitis, labyrinthitis, and cranial nerve palsies.