Quality Care Network

Rainbow Care Connection

Clinical Practice Guidelines Overview: Pediatric Outpatient Antimicrobial Recommendations for Select Head and Chest Infections

Bronchiolitis and common cold (non-specific upper respiratory tract infection/URI) are not included due to viral etiology. Antibiotic therapy is not routinely recommended unless concern for bacterial superinfection as below.

Diagnosis	Indication for Testing or Treatment	First-line therapy:	Second-line or failure*	Non-type 1 β-lactam allergy	Severe type 1 β-lactam allergy	Duration
Acute Otitis Media (AOM) ***Children over 2 months old***	1. Severe bilateral or unilateral AOM (moderate to severe otalgia, otalgia >48h, or temperature > 39°C) 2. Mild bilateral AOM for children <2 years of age 3. Considerations to watch and wait: a. Unilateral AOM for children 6 months to 23 months b. Bilateral or unilateral AOM in children >2 years of age c. If failure*, initiation of antibiotic therapy is warranted 4. Use second-line recommendation if failure*, in presence of purulent conjunctivitis, or receipt of amoxicillin within 30 days	**Watchful waiting** OR **Amoxicillin** 90 mg/kg/day divided BID (max: 1000 mg/dose) **If tubes:** **Ofloxacin Otic** 5 drops in affected ear BID or **Ciprofloxicin/Dexamethasone Otic** 4 drops BID for 10 days	**Amoxicillin-clavulanate** 90 mg/kg/day (amoxicillin component) divided BID (max: 1000 mg/dose) **Ceftriaxone** 50 mg/kg IM daily x3 days (max: 2000 mg/dose)	**Cefdinir** 14 mg/kg/day divided BID (max: 300mg/dose)	**Levofloxacin** *Age <5 yrs:* 20 mg/kg/day divided BID (max: 250 mg/dose) *Age ≥5 yrs:* 10 mg/kg daily (max: 500 mg/dose)	*<2 years of age:* 10 days *≥2 years of age:* 7 days
Group A Streptococcus Pharyngitis (GAS)	1. Discriminate between GAS vs viral pharyngitis with use of rapid antigen detection test (RADT), PCR, or throat culture 2. Testing and treatment not routinely indicated: a. Presumed viral pharyngitis with associated rhinorrhea, cough, oral ulcers, hoarseness b. Children < 3 yrs of age, unless risk factors or close contact with GAS 3. For recurrent episodes of pharyngitis, consider possibility of chronic carrier status which does not routinely require treatment	**Amoxicillin** 50 mg/kg once daily (max: 1000 mg/dose) for 10 days OR **Benzathine Penicillin G** IM x1 dose ≤27 kg 600,000 units >27 kg 1,200,000 units		**Cephalexin** 40 mg/kg/day divided BID (max: 500 mg/dose)^ for 10 days	**Azithromycin** 12 mg/kg once daily (max: 500 mg daily/dose) for 5 days	See specific medication therapy
Acute Infectious Conjunctivitis	1. Conjunctival infection, purulent discharge 2. Difficult to differentiate between viral vs. bacterial conjunctivitis 3. Extremely contagious, encourage good hand washing	**Polymyxin B/Trimethoprim Ophthalmic drops** 1-2 drops four times daily	**Aminoglycoside** or **Fluoroquinolone Ophthalmic** drops are acceptable alternatives, however moxifloxacin should be reserved for ophthalmology use)			7 days

Diagnosis	Indication for Testing or Treatment	First-line therapy:	Second-line or failure*	Non-type 1 β-lactam allergy	Severe type 1 β-lactam allergy	Duration
Bacterial Sinusitis	1. Persistent nasal discharge or daytime cough lasting >10 days without improvement 2. Worsening or new onset nasal discharge, daytime cough, headache or fever after initial improvement 3. Severe onset (temperature ≥ 39°C, facial pain, purulent nasal discharge for ≥3 days) a. Typical age is 4-7 years, less common <2 yrs of age. b. Sinus development = maxillary/ethmoid (birth-age 4) > sphenoid (age 2-5) > frontal (age 7 – adulthood)	**Watchful waiting** OR **Severe or Worsening Symptoms:** **Amoxicillin-clavulanate** 90 mg/kg/day (amoxicillin component) divided BID (max: 2000 mg/dose) OR **Persistent Symptoms Only:** **Amoxicillin** 90 mg/kg/day divided BID (max: 2000 mg/dose)	**Clindamycin** 40 mg/kg/day divided TID (max: 600 mg/dose) **PLUS** **EITHER** **Cefpodoxime** 10 mg/kg/day divided BID (max: 200 mg/dose) OR **Cefixime** 8 mg/kg/day divided BID (max: 200 mg/dose)	**Clindamycin** 40 mg/kg/day divided TID (max: 600 mg/dose) **PLUS** **EITHER** **Cefpodoxime** 10 mg/kg/day divided BID (max: 200 mg/dose) OR **Cefixime** 8 mg/kg/day divided BID (max: 200 mg/dose)	**Levofloxacin** *Age <5 yrs:* 20 mg/kg/day divided BID (max: 250 mg/dose) *Age ≥5 yrs:* 10mg/kg daily (max: 500 mg/dose)	Minimum 10 days, continue 7 days after resolution of symptoms
Community-Acquired Pneumonia (CAP)	1. Mild-moderate CAP suspected bacterial in origin 2. Consider inpatient therapy if respiratory distress, hypoxemia, inadequate follow up, not tolerating oral therapy	**Amoxicillin** 90 mg/kg/day divided BID (max: 2000 mg/dose) ***≥ 5 yrs old consider adding coverage for atypical pneumonia*** **Azithromycin** 10 mg/kg day 1 (max 500 mg/dose) followed by 5 mg/kg days 2-5 (max 250 mg/dose) **Influenza pneumonia:** **Oseltamivir-** 5 days course *For children ≥12 months* ≤15 kg: 30 mg/dose twice daily >15 to 23 kg: 45 mg/dose twice daily >23 to 40 kg: 60 mg/dose twice daily >40 kg: 75 mg/dose twice daily *For children < 12 months* 1-8 months: 3 mg/kg/dose twice daily 9-11 months: 3.5 mg/kg/dose twice daily	**Amoxicillin-clavulanate** 90 mg/kg/day divided BID (max: 2000 mg/dose)	**First line:** **Clindamycin** 40 mg/kg/day divided TID (max 600 mg/dose) **Second line:** **Clindamycin** **PLUS** **EITHER** **Cefpodoxime** 10 mg/kg/day divided BID (max :200 mg/dose) OR **Cefixime** 8 mg/kg/day divided BID (max: 200 mg/dose)	**First line:** **Clindamycin** 40 mg/kg/day divided TID (max 600 mg/dose) **Second line:** **Levofloxacin** *Age 6 months – 5 yrs:* 20 mg/kg/day divided BID (max: 375 mg/dose) *Age ≥5 yrs*: 10 mg/kg/day (max 750 mg/dose)	10 days

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- Lieberthal AS, et al. *The Diagnosis and Management of Acute Otitis Media*. Pediatrics 2013. 131(3): e964-99.
- Shulman ST, et al. *Clinical Practice Guideline for the Diagnosis and Management of Group A Streptococcal Pharyngitis: 2012 Update by the Infectious Diseases Society of America*. Clin Infect Dis 2012. 55(10):1279-82.
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*Failure is defined as lack of clinical improvement within 48-72 hours

^Do not use if anaphylaxis, angioedema, urticaria, or bronchospasm to β-lactam; consider ID consultation for treatment recommendations or Allergy referral for penicillin allergy testing.

~This handout is intended to provide a framework for clinical decision-making and is not meant to replace clinical judgment