

JUDICIOUS ANTIBIOTIC USE

When patients and families request antibiotics for rhinitis or the “common cold” – Give them an explanation, not a prescription.

Rhinitis versus Sinusitis

Don't overdiagnose sinusitis

- Though most viral URIs involve the paranasal sinuses, only a small minority are complicated by bacterial sinusitis.

Avoid unnecessary treatment by using strict criteria for diagnosis:¹

- Symptoms of rhinorrhea or persistent daytime cough lasting more than 10–14 days without improvement.
- Or*
- Severe symptoms of acute sinus infection:
 - ✓ Fever (> 102.2°F) with purulent nasal discharge
 - ✓ Facial pain or tenderness
 - ✓ Periorbital swelling

Remember:

- Children have 2 - 9 viral respiratory illnesses per year.²
- In uncomplicated colds, cough and nasal discharge may persist for 14 days or more – long after other symptoms have resolved.
- Controlled studies do not support antibiotic treatment of mucopurulent rhinitis.³
- Antibiotics do not effectively treat URI, or prevent subsequent bacterial infections.⁴

Treating Sinusitis:

Target likely organisms with first line drugs:

Amoxicillin, Trimethoprim-sulfa¹

Use shortest effective course:

Should see improvement in 2-3 days. Continue treatment for 7 days after symptoms improve or resolve (usually a 10-14 day course).⁵

Consider imaging studies in recurrent or unclear cases:

But remember that some sinus involvement is frequent early in the course of uncomplicated viral URI – so interpret studies with caution.

Share the CDC/AAP/ACP-ASIM⁶ principles with patients to help them understand when the risks of antibiotic treatment outweigh the benefits.

- ✓ Rhinorrhea, fever, and cough are symptoms of viral URI
- ✓ Changes in mucous to yellow, thick, or green are the natural course of viral URI, NOT an indication for antibiotics.⁷
- ✓ Treating viral URI will not shorten the course of illness or prevent bacterial infection.⁴

References

1. Wald E. Sinusitis in Children. N Engl J Med 1992;326:319-23.
2. Monto AS, Ullman BM. Acute respiratory illness in an American community. JAMA 1974;227:164-169.
3. Todd JK, Todd N, Damato J, Todd WA. Bacteriology and treatment of purulent nasopharyngitis: a double blind, placebo-controlled evaluation. Pediatric Inf Dis J 1984;3:226-232.
4. Gadomski AM. Potential interventions for preventing pneumonia among young children: lack of effect of antibiotic treatment for upper respiratory infections. Pediatric Infect Dis J 1993;12:115-120.
5. O'Brien KL, Dowell SF, Schwartz B, et al. Acute sinusitis - principles of judicious use of antimicrobial agents. Pediatrics. In press.
6. ACP-ASIM. Principles of appropriate antibiotic use for acute sinusitis in adults. Ann Intern Med.2001;134:495-97
7. Wald ER. Purulent nasal discharge. Pediatr Infect Dis J 1991;10:329-333.



Save the Antibiotic. Don't Use It When You Don't Need It.