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 mucoprulent 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-sulfa[1]

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-ASIM [6] 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. Peditar Infect Dis J 1991;10:329-333.

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