

**GENERAL INTERNAL MEDICINE & HEALTH SERVICES RESEARCH CASE
CONFERENCE TEACHING MODULE**

Upper Respiratory Infections

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Learning objectives:

- To have working knowledge of the URI RTCs that have studied the efficacy of antibiotic use from URIs
- To gain an understanding of the serious overuse of antibiotics for URIs
- To discuss the evidence on use of beta agonists, vitamin C, and Zinc

Teaching Points:

Patients, rightly or wrongly, have come to expect physicians to prescribe drugs for URI. MDs in the community recommend drugs for 94% of patients who present with URI (most often 2 different drugs); antibiotics are prescribed in 50% of such encounters. Even if the provider does not offer a prescription, there are more than 800 OTC preparations marketed for URI symptoms.

Case 1:

Ms. W is a 32 yo female who presents to IMS with a 2 day history of sore throat, myalgias, chills, and fevers at home to 100 degrees last night. Her 2 yo son was started on amoxicillin yesterday by his pediatrician for a presumed ear infection and she would like a prescription for antibiotics for herself from you. What are the findings in the history and on the physical examination that increase the probability that this patient has a bacterial pathogen?

- 1. What are the most likely pathogens causing her symptoms?**
- 2. Should Ms. W have a throat culture?**
- 3. Should Ms. W. receive antibiotics?**
- 4. What is the down-side of giving her antibiotics for this viral syndrome and how will you explain this to her?**
- 5. What will be your course of action if she is unwilling to accept your explanation?**

Case 2:

A 60 year old man presents with a 2-day history of symptoms typical of a URI. He has had no fever, but has coryza, cough, and malaise. His past medical history is remarkable for labile hypertension, treated with nadolol, and mild symptoms of prostatism. He has DJD of the hips, treated with Motrin. When he has had similar symptoms in the past, another physician has prescribed erythromycin. The patient would like you to write another prescription for erythromycin, as well as a prescription for some medicines to relieve his symptoms.

- 1. What advice would you offer this patient regarding therapy for his URI? What additional information from the patient's history or physical examination would help you in formulating your recommendation?**

- 2. What are the generic components of the following OTC preparations, and which of them might you recommend to this patient: Chlortrimeton, Sudafed, Actifed, Contac, Nytol, Co-Tylenol, Neosynephrine nose drops, Afrin nasal spray, NaSal saline nose drops. What side effects of each of these drugs would you be most concerned about?**

- 3. What would you say when your patient asks you about Vitamin C? What might be an optimal "dose"? What about zinc lozenges?**

- 4. When would you consider prescribing a beta agonist inhaler and what is likely to be the benefit?**

** Case 2 was adapted from the teaching module on the WWW designed by Mark A. Musen, MD, Division of General Internal Medicine, Stanford University