Chief Complaint: 'I Need an Antibiotic'

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Overheard at the supermarket checkout..."I've had this cold for a week now and am going on vacation so I need to get an antibiotic..."

In fact, "I need an antibiotic" is a frequent complaint from patients in the outpatient setting, especially in the midst of the winter cold season and with the increased rates of COVID-19, influenza and RSV infections this year.

Getting at the Why behind "I need an antibiotic" can be both interesting and challenging. For many it's the very real concern that they have strep throat or pneumonia and those are easier to address. For others it's less tangible: "I've got green phlegm," or "I had the same symptoms last year and got an antibiotic and was better in a few days." Still others claim "low immunity" or "...I know my body better..." One 45-year-old male I saw wanted both an antibiotic and an antiviral to cover both alternatives prior to leaving the next day for a golf trip to The Islands.

Most of these arguments are just justifications for the Why, not really a discussion about whether an antibiotic is indicated or not. Not surprisingly, 80–90% of antibiotics are prescribed in the outpatient setting, predominately by PCPs, PAs, and NPs. The most commonly prescribed are azithromycin and amoxicillin. According to the CDC, almost 30% of outpatient antibiotics are unnecessary, and 50% are either unnecessary or prescribed inappropriately. Overprescribing of antibiotics is most common in adults with respiratory tract infections. ^{2,3}

Our overreliance on and overconfidence in antibiotic therapy seems surprising to me. So many patients are reluctant to accept long-term treatment for such chronic conditions as hypertension, hyperlipidemia and diabetes, many stating, "I don't like to take pills." Yet antibiotics are viewed as a panacea, a quick fix for patients who are perhaps too busy and don't have the time to be sick. Indeed, antibiotics have a proven track record which can be lifesaving for certain bacterial infections and their sequalae. And, antibiotics are viewed as "safe" despite broader health concerns surrounding antibiotic resistance and the more individual risks of C. diff, GU fungal infections, GI, dermatologic, and other rarer but more serious adverse effects. But those risk and concerns are of little interest to the patient who wants an antibiotic.

CDC guidelines

Current CDC guidelines for Adult Outpatient Treatment Recommendations⁴ include the more frequent conditions, the majority of which do not require antibiotic therapy:

- acute rhinosinusitis 98% are viral
- acute uncomplicated bronchitis
- the common cold or non-specific URI at least 200 culpable viruses
- pharyngitis only 5–10% of adult sore throat is caused by Group A Strep
- acute uncomplicated cystitis more common in females and usually caused by E. coli.

Point-of-care (POC) testing for COVID-19, flu, GAS and U/A can be useful tools to help guide the decision process. Many patients are reassured by this additional testing and the issue of an antibiotic becomes less. Chest X-ray is rarely needed in the absence of abnormal vital signs (temp >38C, HR >100bpm, resp rate >24br/min) and abnormal auscultatory findings.

But "I need an antibiotic" will continue to be a challenge for primary care providers trying to have an informed discussion about the Why for patients who may only be interested in the "I want it now."

The next installment of Chief Complaint will examine "I need an X-ray" or, for the more informed, "I need an MRI." *

References

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- ${\it 4.\ https://www.cdc.gov/antibiotic-use/clinicians/adult-treatment-rec.html}$

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