Louis wasn’t the cocktail party type, but attending this gathering at the faculty club seemed more or less obligatory. He stood for a moment, noncommittally, in the doorway of the reception room. Conversations, mainly shop talk, were going on everywhere, and he wondered what the buzz words of the evening would be: cutbacks, restructuring, staffing? The evening was bound to be a drag. Then, to his relief, he spotted two of his cronies toward the back of the room: George and Joanne, from the family medicine clinic where he practised. You could always get a lively conversation out of George and Joanne, not least because they never agreed with one another. He worked his way across the room toward them. From the cluster of people where they were standing, he caught the word “evidence.” Oh no, he thought, this is going to be worse than I thought.

It seemed that they’d latched onto a discussion of the state of family medicine. “I want to practise evidence-based care,” Joanne was saying, “and try. But it isn’t feasible. It takes me half an hour to explain to a patient why I shouldn’t give him antibiotics for his cold, but it only takes me two minutes to look at his throat and give him a prescription.” Only half joking, she added: “I can’t afford not to prescribe antibiotics.” And then, more seriously: “Besides, half the time the cold turns into bronchitis and I end up prescribing antibiotics anyway.”

“Right,” said a voice from behind Louis’ shoulder. He turned to face a woman he vaguely remembered meeting before. Margaret something-or-other. But George was already tossing in his two cents: “Using antibiotics for viral infections is a waste of money that could be better used elsewhere, to say nothing of the danger of promoting antibiotic-resistant bacteria.”

“Right again,” said Margaret.

Louis couldn’t resist challenging her. “They can’t both be right,” he said. “You either should use antibiotics for a cold, or you shouldn’t.”

“Two rights don’t make a wrong,” she replied, smiling.

“All right,” he said, “we’re game. Expand and elucidate.”

“George is certainly right. It’s not always better to do something rather than nothing. Bloodletting used to be the cure-all; it remained popular for three centuries. In our day it’s antibiotics. A sloppy term — at least we should call them antibacterials. And who knows if they’ll be able to fight bacteria either, much longer. The facts are clear. Antibiotics are used for more than half the patients who consult doctors for upper respiratory infections,¹ although there is little if any evidence that they do any good.”²

Margaret conceded. “Antibiotics are not always useless, of course. For example, they shorten the duration of symptoms for the 20% of patients with positive cultures for Haemophilus influenzae.³ But it’s not practical to culture everybody. Cultures are too cumbersome, too slow, and too expensive for routine use. Antibiotics are not helpful for the 80% of patients with negative cultures, so until you get a rapid and inexpensive way to identify the subgroups with bacterial infections, using antibiotics doesn’t make sense.”

George reckoned that he had won the argument. “The spectre of antibiotic-resistant organisms is frightening,” he put in. “It’s already a significant problem, and it’s getting worse. It may be even more threatening to the human species than global warming, which we also seem to be ignoring.”⁴

But Margaret wouldn’t let him gloat. “But Joanne is right, too. It’s usually better...
to do something than nothing. A busy office is no place to start an education program. Patients who are feeling miserable don’t want a lecture or a platitude. They want something to be done, and they want it now. A good family doctor knows what her patients want and need.”

Then she turned to Louis. “So they are both right. When a patient comes in feeling miserable, he needs treatment. Why not try something that seems to work and doesn’t carry the risk of treatment with antibiotics? Zinc lozenges, for instance, in adequate doses can cut the duration of cold symptoms almost in half: Other treatments seem to be effective too, and if the benefits are partly placebo, that’s all to the good.7–10 So all of you are right. Your positions may be irreconcilable, but it’s easier to reconcile the irreconcilable than to unscrew the inscrutable.”

With that rather inscrutable comment, Margaret took another sip of her gin and tonic and set off in the direction of the cheese tray.

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References (Web sites accessed 2000 May 15)


   A survey of the office record forms of over 1500 physicians, for patients diagnosed as having colds, upper respiratory infections and bronchitis. Of the patients diagnosed as having colds, 51% received antibiotics.


   A systematic review of 7 trials comparing antibiotics with placebo for treatment of the common cold. The authors concluded that there is not enough evidence of important benefits and that there is a significant increase in adverse effects associated with antibiotic use.


   A randomized placebo-controlled trial of over 300 adults with common cold symptoms. Most participants with upper-respiratory-tract infection did not benefit from antibiotics. Side effects of antibiotic therapy were frequent. Only in the subgroup whose nasopharyngeal secretions contained H. influenzae, M. catarrhalis, or S. pneumoniae were antibiotics (in this case co-amoxiclav) clinically beneficial. Reviewed: Chessman A. Antibiotics were ineffective for the common cold unless bacteria were present in nasopharyngeal secretions. Evidence-based Med 1997;2:9.


   This study showed a direct correlation between the number of antibiotic prescriptions in 5 different communities with the carriage rate of antibiotic-resistant bacteria.


   Discussing the 1998 panEuropean meeting on antimicrobial resistance, the author argues that effective action will not only ameliorate a major problem, but will also demonstrate that different groups can work together on difficult issues.


   This systematic review of 7 randomized trials concluded that the evidence for overall effect of zinc lozenges for treating the common cold is inconclusive. However, review of the data reported from individual trials showed a clinically important reduction in the duration of cold symptoms when doses of 10 to 23 mg zinc every 2 waking hours were used.


   A review of 49 articles (randomized trials and authoritative reviews) of treatments for the common cold. Its summary points include the following. Alleviation of symptoms remains the only proven way to treat the common cold. First generation antihistamines and anticholinergics effectively reduce rhinorrhea and sneezing, but have minimal effects on other symptoms. Antitussive agents are probably of minimal benefit. Over-the-counter cold treatments are effective only in adults and adolescents. Zinc may reduce the duration and intensity of symptoms but a safe effective dose is not yet established.

8. Douglas RM, Chalker EB, Treacy B. Vitamin C for...
This systematic review of 30 trials showed that long-term daily supplementation with vitamin C in large doses daily did not appear to prevent colds. There appeared to be a modest benefit from ingestion of relatively high doses of vitamin C in reducing duration of cold symptoms.


This review of the published randomized trials of this traditional herbal remedy suggests a possible benefit, but the differences among the available preparations and the limited quality and consistency of the evidence do not allow clear conclusions about which product might be effective, in what doses and under what circumstances.

This is the first in a projected series of stories that illustrate contemporary approaches to clinical problem solving and knowledge management.

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