Rethinking a history of recurrent urinary tract infections

Choosing Wisely Canada interview with Dr Sherry L. Bilenki

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Hospital medicine recommendation 2

Do not prescribe antibiotics for asymptomatic bacteriuria in non-pregnant patients.

Recall and describe a clinical encounter in which you were called on to choose wisely

I had admitted a woman in her late 80s who presented from her assisted-living facility feeling acutely unwell after taking a fall. She had not lost consciousness, but the paramedics said she was confused. Her workup in the emergency department was unremarkable aside from a history of recurrent urinary tract infections (UTIs) and laboratory results suggestive of mild acute kidney injury. The urinalysis and microscopy tests that had been ordered revealed moderate bacteria in her urine with some leukocytes. The emergency physician called me for admission and was concerned that the patient had a UTI.

In your exchange with the patient, how did you raise the need to choose wisely?

Dig deep on history: I always question the historical diagnosis of recurrent UTIs in elderly patients. In this patient's case, none of her previous cultures from prior hospitalizations had grown any bacteria. Despite this, the admission diagnoses often suggested a UTI. I don't place any blame in these cases; instead, I try to educate the family such that we may avoid inappropriate antibiotic use.

Information provided by family and staff at the patient's facility suggested she had had diarrhea for several days. Nothing suggested symptoms of dysuria, urinary frequency, or urinary retention.

Potential for harm: The patient's daughter initially hoped that we would treat for a potential UTI. However, I explained that treatment, especially when we are uncertain, is not without risk. I noted that in addition to the more well-known risks of anaphylaxis or hypersensitivity reactions, there is risk of *Clostridioides difficile* infection and, in this case, worsening of the patient's gastrointestinal symptoms. Also, antibiotic side effects have made it difficult for some of my elderly patients to tolerate their regular medications, such as antihypertensives or anticoagulants, which I would prefer them to take. Certain antibiotic classes, such as fluoroquinolones, also carry the risk of delirium in elderly patients.

Sample collection: The patient's culture report revealed the growth of multiple organisms, none in a concentration of 10^8 colony-forming units per millilitre or greater. There was no documentation from the emergency department about how the sample had been collected and, given the history of diarrhea, the urinalysis and culture may have been contaminated. I explained to the patient's daughter that we did not want to base a clinical decision on incomplete or inaccurate data.

What are the key elements of the communication that made it a success?

Flexibility: When admitting a patient with an unclear diagnosis to hospital, often the greatest tool we have is time. I explained that we would treat the patient with supportive management for the presumed diagnosis of viral gastroenteritis. However, I also noted that we would inquire daily about symptoms of a UTI and that we could always retest, if clinically indicated, or if she failed to respond to the provided treatments. This patient did well, with her acute kidney injury and delirium resolving after a couple days.

Frequent communication: It has been difficult to have a loved one admitted to hospital during the COVID-19 pandemic, especially with visitation restrictions in place. In this case the patient responded to supportive care and I kept the family updated regularly. They were satisfied, and they understood why she did not receive antibiotics and why her presentation likely did not stem from a UTI.

Dr Sherry L. Bilenki is a family physician in her first 5 years of practice. She has a busy outpatient and hospitalist practice in Winnipeg, Man, where she primarily cares for adult patients with multiple medical comorbidities. She has a special interest in the care of the elderly and mental health. She is affiliated with the University of Manitoba and supervises family medicine residents through her practice.

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Cet article se trouve aussi en français à la **page 353**.

Choosing Wisely Canada™ Choosing Wisely Canada is a campaign designed to help clinicians and patients engage in conversations about unnecessary tests, treatments, and procedures, and to help physicians and patients make smart and effective choices to ensure high-quality care is provided. To date there have been 13 family medicine recommendations, but many of the recommendations from other specialties are relevant to family medicine. In each installment of the Choosing Wisely Canada series in *Canadian Family Physician*, a family physician is interviewed about the tools and strategies they have used to implement one of the recommendations and to engage in shared decision making with patients. This interview was conducted and written by **Dr Aaron Jattan**, Department of Family Medicine, University of Manitoba, for Choosing Wisely Canada. If you are a primary care provider or trainee and have a Choosing Wisely narrative to potentially share in this series, please contact us at **aaron.jattan@umanitoba.ca**.