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JOURNAL CLUB

BRINGING CLINICIANS TOGETHER TO DISCUSS CURRENT DRUG THERAPY

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The following succinct analysis appeared in Pharmacist's Letter. Based on vol. 35. No. 6

INFECTIOUS DISEASES

You'll notice more focus on <u>avoiding antibiotics for asymptomatic bacteriuria</u>...due to updated guidelines from the Infect Dis Soc of Am.

These patients DON'T have UTI symptoms...painful or frequent urination, flank pain, etc...despite lots of bacteria in their urine.

This is a common finding...especially in patients with a catheter, with a spinal cord injury, or who live in a long-term care facility.

But most adults or kids with asymptomatic bacteriuria don't need treatment. Antibiotics don't lower infection risk in these patients... but DO increase resistance, risk of *C. difficile*, side effects, and cost.

Use this as an opportunity to reinforce antimicrobial stewardship.

Don't recommend screening patients withOUT UTI symptoms...to avoid the temptation of using unnecessary antibiotics. Even cloudy or foul-smelling urine is usually due to dehydration, not infection.

Explain that confusion or falls in an elderly patient aren't likely to be due to bacteriuria...especially without a fever. Evaluate other causes first...constipation, anticholinergic meds, etc.

On the other hand, be aware that spinal cord injury patients may have nonspecific UTI symptoms...such as lethargy or increased spasticity.

Continue to advise screening pregnant women for asymptomatic bacteriuria at about 12 to 16 weeks of gestation.

If needed, recommend treating these women the same way as a UTI in pregnancy...to possibly decrease risk of pyelonephritis and premature labor.

Don't suggest rescreening pregnant women withOUT UTI symptoms.

See our chart, Urinary Tract Infections in Adults, for more on when to screen and what to recommend for UTI treatment and prophylaxis.

(For more on this topic, see Clinical Resource #350609 at PharmacistsLetter.com.)

Primary Reference – Nicolle LE, Gupta K, Bradley SF, et al. Clinical practice guideline for the management of asymptomatic bacteriuria: 2019 update by the Infectious Diseases Society of America. Clin Infect Dis 2019 Mar 21. doi: 10.1093/cid/ciy1121.



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DISCUSSION QUESTIONS OVERVIEW OF CURRENT THERAPY

1. What are the new guidelines for asymptomatic bacteriuria?

ANALYSIS OF NEW GUIDELINE

- 2. What are the criteria for development or evaluation of practice guidelines?
- 3. Are the new guidelines for asymptomatic bacteriuria evidence based? Is evidence linked to recommendations with a strength of recommendation grading system?
- 4. Are the guidelines unbiased and representative of a wide range of clinicians?
- 5. Are the guidelines based on outcomes important to patients?
- 6. Are the interventions proposed in the guidelines feasible in all practice settings?



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- 7. Have the guidelines been prospectively validated?
- 8. What are the major recommendations of the guidelines?
- 9. Are the guidelines expressed in terms we care about and can use?

HOW SHOULD THE NEW GUIDELINES CHANGE CURRENT THERAPY?

10. Do the guidelines change your practice? How?

APPLY THE NEW FINDINGS TO THE FOLLOWING CASE

BB is a 65-year-old male who is in the clinic for his "Welcome to Medicare" annual exam. He has hypertension, which is well-controlled on lisinopril 40 mg daily. Additionally, he takes aspirin 81 mg daily and simvastatin 40 mg daily. He currently smokes 1/2 pack per day of cigarettes and has been smoking since the age of 22.

11. What health maintenance or preventive care items does BB need?



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You discuss the recommended measures with BB, and he agrees that he would like to address the items he needs.

You also ask BB about his use of a daily 81 mg aspirin. He explains that he has always heard it is good for his heart. His father died of a heart attack at age 87, so he is doing his due diligence to decrease his risk of a heart attack.

12. What should you recommend about aspirin for BB?

You discuss the recent evidence that has changed recommendations on low-dose aspirin for primary CV prevention. You also encourage BB to quit smoking as a measure to reduce his CV risk. BB says he isn't ready to stop smoking and wants to continue taking aspirin for now, with the understanding that its benefits may be a toss-up for him and that it increases his bleeding risk.

BB also shows you results of lab work that was done at his employer for a "work screening physical" 2 months ago. The labs included a comprehensive metabolic panel, complete blood count, lipid panel, thyroid stimulating hormone, hemoglobin A1C, urinalysis, and urine culture. He states that he was told by the program's nurse that everything "looked good" but that he had a urinary tract infection and needed to follow-up with his PCP for treatment. He hands you a urine culture with >100,000 cfu/mL of *Enterobacter*. He denies any dysuria, increased frequency, or flank pain.

13. How should you address BB's urine culture results?

You explain that BB doesn't have a UTI and doesn't need an antibiotic, even though he has bacteria in his urine. You let him know that using antibiotics when they're not needed increases the risk of side effects and bacteria being resistant to infections he may get in the future.



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REFERENCES

CMSS. CMSS Principles for the development of specialty society clinical guidelines. 2017. https://cmss.org/wpcontent/uploads/2017/11/Revised-CMSS-Principles-for-Clinical-Practice-Guideline-Development.pdf Accessed April 25, 2019.

Hayward RS, Wilson MC, Tunis SR, et al. Users' guides to the medical literature. VIII. How to use clinical practice guidelines. A. Are the recommendations valid? The Evidence-Based Medicine Working Group. JAMA 1995;274:570-4.

Health and Medicine Division of the National Academies of Sciences, Engineering, Medicine. Clinical Practice Guidelines We Can Trust. March 2011.

http://www.nationalacademies.org/hmd/~/media/Files/Report%20Files/2011/Clinical-Practice-Guidelines-We-Can-Trust/Clinical%20Practice%20Guidelines%202011%20Insert.pdf Accessed April 25, 2019.

Nicolle LE, Gupta K, Bradley SF, et al. Clinical practice guideline for the management of asymptomatic bacteriuria: 2019 update by the Infectious Diseases Society of America. Clin Infect Dis 2019 Mar 21. doi: 10.1093/cid/ciy1121.

Pulia M, Redwood R, May L. Antimicrobial stewardship in the emergency department. Emerg Med Clin North Am. 2018;36:853-72.

Shaughnessy AF, Vaswani A, Andrews BK, et al. Developing a clinician friendly tool to identify useful clinical practice guidelines: G-TRUST. Ann Fam Med 2017;15:413-18.

U.S. Preventive Services Task Force Draft recommendation statement asymptomatic bacteriuria in adults: Screening. https://www.uspreventiveservicestaskforce.org/Page/Document/draft-recommendation-statement/asymptomatic-bacteriuria-in-adults-screening1#Pod7 Accessed April 25, 2019.

U.S. Preventive Services Task Force. Screening for asymptomatic bacteriuria in adults: U.S. Preventive Services Task Force reaffirmation recommendation statement. Ann Intern Med 2008;149:43-7.

Additional Pharmacist's Letter Resources available at PharmacistsLetter.com

Chart, Resistant Gram-Negative Bacterial Infections. Pharmacist's Letter/Prescriber's Letter. March 2019. Chart, Urinary Tract Infections in Adults. Pharmacist's Letter/Prescriber's Letter. January 2019. Commentary, Does Aspirin Prevent Cancer? Pharmacist's Letter/Prescriber's Letter. December 2018. Chart, Adverse Reactions With Systemic Quinolones. Pharmacist's Letter/Prescriber's Letter. September 2018.

Toolbox, Antimicrobial Stewardship. Pharmacist's Letter/Prescriber's Letter. May 2018. Chart, Developing an Antimicrobial Stewardship Program. Pharmacist's Letter/Prescriber's Letter. May 2018.

Chart, Prevention of Recurrent UTIs in Women. Pharmacist's Letter/Prescriber's Letter. July 2017. Chart, Antibiotics in Pregnancy and Lactation. Pharmacist's Letter/Prescriber's Letter. May 2017. Chart, Antibiotic Therapy: When Are Shorter Courses Better? Pharmacist's Letter/Prescriber's Letter. November 2016.

Chart, Preventing Catheter-Associated UTIs. Pharmacist's Letter/Prescriber's Letter. July 2016. Chart, Pediatric Urinary Tract Infections. Pharmacist's Letter/Prescriber's Letter. June 2016.

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