COMMENTARY

Considerations and alternative approaches to antibiotic prophylaxis for prostate biopsy

Eric H. Kim, MD, Gerald L. Andriole, MD

Department of Urology, Washington University School of Medicine, St. Louis, Missouri, USA *Referring to the article published on pp.* 10099-10104 *in this issue*.

KIM EH, ANDRIOLE GL. Considerations and alternative approaches to antibiotic prophylaxis for prostate biopsy. *Can J Urol* 2020;27(1):10105.

In this study of culture-specific antibiograms from six hospitals in the Philadelphia region, the authors compare American Urological Association (AUA) recommendations for prostate biopsy prophylaxis against the common urinary pathogens, E. coli, Klebsiella, and Proteus.¹ The authors examine the sensitivity of these pathogens to the most commonly utilized antibiotics for biopsy prophylaxis, including fluoroquinolones (FQ), trimethoprim/sulfamethoxazole (TMP/SMX), gentamicin, and ceftriaxone. The results are alarming, with E. coli resistance to FQ and TMP/SMX ranging from 20% to 32%; Klebsiella resistance to FQ and TMP/SMX ranging from 6% to 22%; Proteus resistance to FQ and TMP/SMX ranging from 10 to 32%.

Address correspondence to Dr. Gerald L. Andriole, Dept. of Surgery, Washington University School of Medicine, 4960 Children's Place, Campus Box 8242, St. Louis, MO 63110 USA Although the study is limited by the specificity of these antibiograms to the Philadelphia region, the conclusion is clear: the AUA guidelines should be revised to emphasize local antibiogram-specific prophylaxis or to consider patient rectal swab culture-specific prophylaxis.

Alternatively, with the rise in antibiotic resistance across multiple urinary pathogens, urologists everywhere should strongly consider transperineal prostate biopsy as an alternative to the conventional transrectal approach.

References

 Mann M, Calio BP, Mark JR et al. Hospital-specific antibiograms and antibiotic prophylaxis for prostate biopsies: a reexamination of AUA recommendations. *Can J Urol* 2020;27(1):10099-10104.