

# Looking beyond the guidelines for perioperative antibiotics in nephrolithiasis

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Establishing guidelines for the use of perioperatively antibiotics for patients being treated for urinary stone disease presents a particularly challenging clinical issue. Nephrolithiasis patients represent a variety of etiologies, from obstructive to infectious stones, and their treatment ranges from practically non-invasive in the form of extracorporeal shockwave therapy to relatively invasive with percutaneous approaches. In addition, within each procedure type, there is a large gradation in level of associated morbidity—a ureteroscopy with a basket stone extraction for a distal 5 mm stone likely represents a much different infectious risk compared to a ureteroscopy with laser lithotripsy for a proximal 1 cm ureteral stone requiring ureteral orifice dilation along with access sheath placement. Therefore, the application of guidelines to even one type of procedure may not encapsulate the complex diorama that embodies stone patients and their treatments. As the authors very nicely summarized (1), recommendations regarding antibiotic use for stone procedures reflect an extremely broad and varied number of practice patterns. What this points to is the pressing need for better research

to understand markers to predict which patients will develop infection postoperatively and how to best apply appropriate antibiotics for these patients. Additionally, this highlights the need for a better biomarker for infection than traditional urine or even stone cultures in order for us all to more safely manage our nephrolithiasis patients.

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## Footnote

*Conflicts of Interest:* The authors have no conflicts of interest to declare.

## References

1. Motamedinia P, Korets R, Badalato G, et al. Perioperative cultures and the role of antibiotics during stone surgery. *Transl Androl Urol* 2014;3:297-301.

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