

FROM THE FAMILY PRACTICE INQUIRIES NETWORK

Does postcoital voiding prevent urinary tract infections in young women?

Bert Beisel, MD
Wayne Hale, MD

Moses Cone Family Medicine Residency Program Greensboro, NC

Rebecca S. Graves, MLS

J. Otto Lottes Health Sciences Library University of Missouri–Columbia

■ EVIDENCE-BASED ANSWER

Healthy women who urinate within 15 minutes of sexual intercourse may be slightly less likely to develop a urinary tract infection (UTI) than women who do not urinate afterward (grade of recommendation: D, extrapolation of single case-control study with nonsignificant findings).

■ EVIDENCE SUMMARY

A literature review revealed only 1 small case-control study. The goal of this study was to identify possible risk factors for developing UTIs among young, healthy women who presented to the University of California at Los Angeles student health center.¹ A total of 225 women were enrolled in the study. Exclusion criteria included pregnancy, diabetes, vaginitis, candidiasis, a history of more than 1 prior UTI, hospitalization, or catheterization 4 weeks before study enrollment. The women were surveyed regarding their dietary habits, clothing, sexual and urinary habits, and birth control methods used. From mid-stream urine samples, the authors identified 44 cases of UTI and 181 controls presenting to the health center without urinary symptoms or a history of UTI. A UTI was defined as the presence of more than 50,000 colony forming units of a single species of bacteria per milliliter of urine and the report of 1 or more of the following symptoms: painful urination, frequent urination, urination at night, and urgent need to urinate, or blood in the urine. A primary UTI case was further defined as a not having had a prior history of UTI; a secondary UTI case was defined as a patient who reported 1 prior UTI.

Women who urinated < 15 minutes after intercourse had an estimated relative risk (RR) of 0.40 (95% confidence interval [CI], 0.09–2.17) for developing a primary case of UTI, and an estimated RR of 0.92 (95% CI, 0.18–4.88) for developing a secondary UTI. These findings were not statistically significant, but the power

was too low to rule out a potential effect.

This single small case-control study had several limitations. It was not a randomized controlled trial, which would be required to prove that post-coital voiding is an effective intervention. The study included only young, healthy women and excluded women with recurrent UTIs, a subpopulation of sexually active patients who may particularly benefit from the intervention. Finally, the study lacked adequate sample size to detect a small-to-moderate effect of postcoital voiding.

■ RECOMMENDATIONS FROM OTHERS

A major urology text does not specifically address the prevention strategy of postcoital voiding.² However, *Griffith's 5 Minute Clinical Consult* recommends that women with frequent or intercourse related UTIs should "empty [their] bladder immediately before and following intercourse and consider post-coital antibiotic treatment."³ Furthermore, the American College of Obstetricians and Gynecologists District II NYS recommends urinating after sexual intercourse to prevent recurrent cystitis.⁴

Read a Clinical Commentary by Jay Moreland, MD, online at <http://www.FPIN.org>.

REFERENCES

1. Foxman B, Frerichs RR. Am J Public Health 1985;75:1314–7.
2. Schaeffer A. Infections of the urinary tract. In: Walsh PC et al, eds. Campbell's Urology. 7th ed. Philadelphia, PA: WB Saunders; 1997;533–614.
3. Dambro MR. ed. Griffith's 5-Minute Clinical Consult. 10th ed. Baltimore: Lippincott, Williams & Wilkins; 2002.
4. Nusbaum M, Schwarz R. Decreasing your chance of a urinary tract