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## Self-Therapy Among Options for Recurring UTIs

BY CHRISTINE KILGORE

EXPERT ANALYSIS FROM THE ANNUAL MEETING OF THE AMERICAN UROLOGICAL ASSOCIATION

WASHINGTON – Recurring, uncomplicated urinary tract infections in female patients may be treated in the future through bacterial interference and other novel approaches, but for now, treatment involves an individualized approach with possible postcoital prophylaxis, chronic low-dose prophylaxis, or self-therapy, said urologist Robert M. Moldwin.

Addressing the case of a 35-year-old, otherwise-healthy woman who has had three culture-documented, symptomatic bacterial cystitis episodes over the last 3 months, Dr. Moldwin said that chronic low-dose prophylaxis may be considered when recurring infections are not related to intercourse.

Chronic prophylaxis should be reserved for frequently recurring infections, he emphasized, and the "goal is to grade down on the dose arbitrarily over a 6- to 12-month span, perhaps going to every other night or every third night, and then hopefully discontinuing this regime altogether," he said during a panel discussion on UTIs at the meeting.

The two agents that are best support-

ed in the literature for chronic low-dose prophylaxis are nitrofurantoin and methenamine hippurate. Trimethoprimsulfamethoxazole and early generation cephalosporins "have also been espoused," said Dr. Moldwin of Hofstra University, Hempstead, N.Y.

"Unfortunately, though," he said, "recurrent infections are bound to show up at some point when prophylaxis is discontinued."

Self-therapy can "really pay off" in cases in which infections are recurring less frequently, and it can also be "a great protocol to institute when one takes a patient off of antibiotic prophylaxis," said Dr. Moldwin, also of the Arthur Smith Institute for Urology in New Hyde Park, N.Y.

In this scenario, the patient is armed with a sterile collection cup, a urinalysis and urine culture prescription, and a prescription for an antibiotic. "At the first sign of infection, the patient is instructed to obtain a midstream urine sample ... and start [herself] on an appropriate course of an antibiotic," he said. "Within 24-48 hours, the patient can bring the specimen to the local laboratory" and can have the results sent to her physician for analysis if symptoms don't resolve, he added.

Cranberry juice has been touted for

UTI prevention because it contains various chemicals that may prevent bacterial adherence to the bladder wall. Evidence that was published several years ago concluded that "after many dis-



There is some evidence to recommend cranberry juice for prevention of recurring uncomplicated UTIs.

claimers, [there] is some evidence to recommend cranberry juice for the prevention of uncomplicated UTIs in women with symptomatic infections," a randomized clinical trial published this year showed no difference in UTI recurrence between patients who used cranberry juice and those who used place-bo (Clin. Infect. Dis. 2011;52:23-30), Dr. Moldwin said.

The trial of 319 college students is "the most recent and probably the best" that has been published to date, he said.

Oral D-mannose is another popularized preventive measure that – even more so than cranberry juice – has "not held up to scientific scrutiny," he said. The concept is that mannose-sensitive uropathic bacteria adhere to D-mannose instead of the bladder surface. But "in reality, almost all the mannose is metabolized before ever reaching the urine," he said.

A Google search shows 45,000-61,000 hits, he said, but a Pub Med search on D-mannose and therapy turns up "nothing," he noted.

Other forms of bacterial interference may prove efficacious, however. The use of vaginal or oral probiotics, for instance, or the introduction of nonpathogenic *Escherichia coli* "to the vaginal vault, the gut, or even the bladder itself" are among the "novel and viable options that we hope to see more work on in the future," he said.

Dr. Moldwin disclosed that he is a consultant, adviser, or investigator for Ortho-McNeil Pharmaceuticals, Pfizer, and Pinnacle Pharmaceuticals.



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References: 1. Hollowell JG, Staehling NW, Hannon WH, et al. lodine nutrition in the United States. Trends and public health implications: iodine excretion data from National Health and Nutrition Examination Surveys I and III (1971-1974 and 1988-1994). *J Clin Endocrinol Metab*. 1998;83(10):3401-3408. 2. Zimmermann MB. lodine deficiency. *Endocr Rev*. 2009;30(4):376-408. 3. Mock DM. Marginal biotin deficiency is common in normal human pregnancy and is highly teratogenic in mice. *J Nutr*. 2009;139(1):154-157. 4. Horrocks LA, Yeo YK. Health benefits of docosahexaenoic acid (DHA). *Pharmacol Res*.1999;40(3):211-225. 5. Uauy R, Hoffman DR, Mena P, Llanos A, Birch EE. Term infant studies of DHA and ARA supplementation on neurodevelopment: results of randomized controlled trials. *J Pediatr*. 2003;143(suppl 4):S17-S25. 6. Birch EE, Garfield S, Hoffman DR, Uauy R, Birch DG. A randomized controlled trial of early dietary supply of long-chain polyunsaturated fatty acids and mental development in term infants. *Dev Med Child Neurol*. 2000;42(3):174-181. 7. Agostoni C, Trojan S, Bellù R, Riva E, Giovannini M. Neurodevelopmental quotient of healthy term infants at 4 months and feeding practice: the role of long-chain polyunsaturated fatty acids. *Pediatr Res*. 1995;38(2):262-266. 8. Dietary supplement fact sheet: folate. National Institutes of Health Web site. http://www.marchofdimes.com/professionals/14332\_1151.asp. Accessed March 15, 2010. 10. Metafolin®: about Metafolin®. Merck KGaA Web site. http://www.metafolin.com/servlet/PB/menu/1784410/index.html. Accessed March 15, 2010.