Criteria Aid in UTI Prescribing Over the Phone

BY KATE JOHNSON

MONTREAL — Uncomplicated urinary tract infections can be diagnosed and treated by a medical assistant over the telephone with no increased risk to the patient and at a substantial cost savings, according to the findings of a randomized, controlled trial.

Patients had similar outcomes and levels of satisfaction regardless of whether they were randomly assigned to be treated in house or over the telephone, according to the findings that were presented as a poster at the annual meeting of the North American Primary Care Research Group.

"There was no statistically significant difference between the groups," said coinvestigator Dr. Chandrika Iyer from St. John Hospital and Medical Center in Detroit.

The literature shows that women have a 50% likelihood of having a urinary tract infection (UTI) if they present with at least one of the following symptoms: dysuria, urgency, frequency, or abdominal pain, Dr. Iyer said in an interview.

With the specific combination of dysuria and frequency, and in the absence of vaginal discharge or itching, there is a 90% likelihood of UTI (JAMA 2002; 287:2701-10). "Physical examination and lab testing don't add much more," she continued.

To test this observation, the study was conducted at two primary care centers: the Masonic Medical Center, in St. Clair Shores, Mich., a private practice; and the Family Medical Center in Detroit, a family medicine residency clinic.

A total of 122 women, aged 18-65 years, who called the clinic with symptoms of uncomplicated UTI, were invited to participate and screened for inclusion. Exclusion criteria were pregnancy, diabetes, kidney disease, UTI in the past month, bladder catheterization in the past 6 months, chemotherapy, vaginal discharge, flank pain, fever, chills, vomiting, or nausea. A total of 36 patients were excluded and 5 declined to participate, leaving 81 patients (mean age 39 years) to be randomized to either office or telephone treatment.

Participants in the telephone treatment arm were managed by a medical assistant who called or faxed a prescription to the patients' pharmacy. Treatment included 3 days of trimethoprim and sulfamethoxazole (Bactrim DS), one tablet twice daily, or, in the case of sulfa allergy, ciprofloxacin 500 mg twice daily. Questionable cases were reviewed with the patient's assigned physician or the principal investigator.

Patients randomized to office treatment had a regular visit with a primary care physician, where urine analyses and cultures were performed and treatment was prescribed.

In the case of persistent symptoms, women in both groups were instructed to call the clinic and be seen by their physician.

All women were called 1 week after treatment for a survey about their symptoms and satisfaction with treatment.

Ten patients did not follow up after treatment, and one patient was later diagnosed with vaginitis. Of the remaining participants, there were no statistically significant differences between groups in the rate of symptom resolution (80% with the telephone treatment versus 70% with office treatment), or complete satisfaction (86% with telephone treatment versus 79% with office treatment). Eighty percent of the telephone treatment group and 85% of the office treatment group said they would like the same treatment next time.

A cost comparison of both strategies revealed a saving of between $49 and $133 per patient in the telephone treatment group, Dr. Iyer said. This was calculated based on an office visit code of 99212 or 99213, at a cost of $34 or $68, respectively (excluding patient copayment). The average patient copayment ranges from $10 to $20. In addition, urine analysis costs up to $5 and urine cultures cost up to $40.

With an estimated 8.5 million women seeking care for bladder infections each year, at a cost of about $2.5 million, telephone treatment is an appealing alternative to office-based management, Dr. Iyer said. ■