

# Overactive Bladder Treatment: Free Is Good

BY DAMIAN McNAMARA

HOLLYWOOD, FLA. — In a military-based health care system with no out-of-pocket medication expenses, 35% of nearly 8,000 adults did not refill their prescription for an overactive bladder treatment, according to a retrospective, observational study.

However, among the 65% who did refill their antimuscarinic prescription at least once, most compliance measures were superior to those in previously published studies, suggesting copayment or out-of-pocket expenses might be a deterrent, Dr. Christine L. Sears said. Antimuscarinic medications are often prescribed as first-line treatment for symptoms of overactive bladder, a common condition. Other investigators have estimated the prevalence at 12%-16% among adult women (Eur. Urol. 2006;50:1306-14; Eur. Urol. 2009;55:783-91).

Because previous reports in the United States regarding compliance with these medications assessed patients with pharmacy copayments, Dr. Sears and her colleagues assessed compliance in a health care system where patients do not pay for medication.

They identified 7,858 adult patients in the national capital region, including Washington, D.C., Maryland,

and Virginia, from pharmacy dispensing records from January 2003 to December 2006.

The median duration of medication adherence for all patients was 273 days. But when the 2,760 patients (35%) who never refilled their prescription were excluded, the median duration was 582 days.

"Our [35%] nonpersistence rate is really lower than in previous published studies," Dr. Sears said at the annual meeting of the American Urogynecologic Society. For example, researchers in one study reported a 45% nonpersistence rate in 1,117 patients (J. Manag. Care Pharm. 2008;14:291-301). The current study included 5,501 women (70% of the total) and 2,357 men. Compliance was better among women, said Dr. Sears of the department of urology at the National Naval Medical Center, Bethesda, Md. For example, among patients who refilled the prescription at least once, women remained on their medication a median of 606 days, compared with 547 days among men.

Dr. Sears and her colleagues also assessed the medication possession ratio (MPR). An MPR of 1.0 reflects 100% compliance, calculated as the sum of the supply of medication divided by the number of days it is prescribed. An MPR greater than 1.0 would result from early medication refilling, and a ratio less than 1.0 would

indicate a lapse in refilling. The overall median MPR in the study was 0.82. Men had a significantly higher median MPR (0.86) than women (0.81), Dr. Sears added.

The medication switch rate was almost 26%. This means that of the 5,098 patients who refilled their prescriptions, 1,305 changed medications or dosage at least once. Dr. Sears said the overall switch rate was similar to that reported in other antimuscarinic agent studies.

The most commonly used antimuscarinic agent was tolterodine extended release (Detrol LA) with 4,716 prescriptions. Dr. Sears and her associates reported no relevant financial disclosures.

Not surprisingly, overall compliance was better with the extended-release medications than with the immediate-release formulations, Dr. Sears said. For example, patients prescribed tolterodine extended release had a significantly higher MPR, 0.89, compared with those prescribed oxybutynin immediate release, 0.68.

The small sample size of patients prescribed oxybutynin extended release is a limitation of the study, Dr. Sears said. In addition, although they had access to the medical records, the investigators did not assess patient demographic or health care data because this information was not included in the study's institutional review board application. ■

## Abdominal Ultrasound May Help in PCOS Dx in Teens

BY MIRIAM E. TUCKER

NEW YORK — Ovarian volume assessed by transabdominal ultrasound correlated strongly with serum testosterone levels in a study of 39 adolescent girls undergoing evaluation for polycystic ovary syndrome.

Although magnetic resonance imaging and transrectal or transvaginal ultrasound (TVUS) may better visualize ovarian follicles, transabdominal ultrasound (TAUS) is a less invasive, cheaper, and more readily available imaging modality to diagnose PCOS, Dr. Clare A. Flannery said in a poster presented at a joint meeting of the Lawson Wilkins Pediatric Endocrine Society and the European Society for Pediatric Endocrinology.

With TAUS, the ovarian volume—the sum of the stromal volume and multiple follicles—can be easily calculated from the three dimensions of the ovary. Elevation of serum testosterone, a well-validated diagnostic criterion for PCOS, has been shown to correlate with typical PCOS using TVUS, but little is known about how accurately it relates to increased ovarian volume in TAUS, said Dr. Flannery of the department of endocrinology-internal medicine at Yale University, New Haven, Conn.

The 39 adolescents had a mean age of 15.3 years and a mean body mass index of 31.5 kg/m<sup>2</sup>; all had clinical features suggestive of PCOS, for which they had been referred to the Yale Multidisciplinary Adolescent PCOS Program directed by senior author Dr. Tania S. Burgert.

They underwent TAUS scans that were read by a radiologist blinded to all clinical information. Ovarian volume was calculated with three diameter mea-

surements, and total ovarian volume was obtained by adding the volume of both ovaries. They had a mean total ovarian volume of 23.2 cm<sup>3</sup> (range, 2.5-50.2 cm<sup>3</sup>), whereas the mean single largest ovary volume was 14.3 cm<sup>3</sup> (range 1.3-30.7 cm<sup>3</sup>), indicating that asymmetrical ovarian enlargement was not uncommon, Dr. Flannery said.

Total testosterone levels correlated with both single largest ovary volume and total ovarian volume, as did free testosterone. When ovarian volume was analyzed on a continuum, adolescents whose ovaries were less than 10 cm<sup>3</sup> in volume had a 77% likelihood of having normal testosterone (less than 50 ng/dL).

Differences were seen between the 18 obese (BMI greater than 30), 12 overweight (BMI of 25-29.9), and 9 lean (BMI less than 25) patients. The overweight and obese groups had lower sex hormone-binding globulin than did the lean group (37 nmol/L and 27 nmol/L, respectively, compared with 66 nmol/L in the lean group). They also had greater insulin resistance.

Total testosterone levels were not statistically different among the three BMI groups, although they trended higher in the obese group (mean total testosterone 56 mg/dL).

In an interview, Dr. Flannery said that the majority of the adolescent girls referred to their specialty clinic are obese with symptoms that may be consistent with signs of puberty, namely irregular periods and acne. It is a challenge to differentiate between girls with early or established PCOS versus girls with just obesity and insulin resistance, she said.

Dr. Flannery said neither she nor Dr. Burgert had any financial disclosures. ■

## Web-Based Tool Makes Patient STD Screening Accessible

BY BRUCE JANCIN

ESTES PARK, COLO — The STD Wizard is a patient-friendly Internet tool for determining individual STD screening needs that is a particularly good fit for busy primary care medical practices.

"I would recommend this site to your patients," Dr. L. Chesney Thompson said at a conference on internal medi-



**The STD Wizard involves a 5-minute online questionnaire with simple multiple-choice questions.**

DR. THOMPSON

cine sponsored by the University of Colorado.

The STD Wizard ([www.stdwizard.org](http://www.stdwizard.org)) involves a 5-minute online questionnaire in which patients answer simple multiple-choice questions about their demographics, history, location, and previous STD screening.

The Wizard is not a diagnostic tool; instead it analyzes an individual's answers and produces customized recommendations for STD screening. Patients are encouraged to print out the summary and bring it to their physician for action, explained Dr. Thompson, chief of the section of general ob.gyn. at the university.

The STD Wizard's recommendations are based on the 2006 Sexually Transmitted Diseases Treatment Guidelines of the Centers for Disease

Control and Prevention ([www.cdc.gov/std](http://www.cdc.gov/std)).

The Wizard was developed and funded by the Medical Institute for Sexual Health and the CDC. The goal is to help rein in the nation's STD epidemic by reaching out to the public in a novel way to encourage greater use of guideline-recommended screening. The idea is to take the screening guidelines directly to the public in an accessible way.

By CDC estimates, 19 million new cases of STDs occur annually in the U.S., nearly half in 15- to 24-year-olds. But that 19-million figure is "a woeful underestimate," according to Dr. Thompson.

"Half of the population—that is, males—aren't screened at all for HPV. Herpes simplex virus isn't screened for or reported, either. And those are probably the two most common STDs; 80% of women in this country will have been exposed to HPV by age 50," he noted.

Five of the top 10 reportable diseases in the U.S. are STDs. Chlamydia is the most common reportable STD, with roughly 3 million new cases a year. The CDC recommends annual screening for Chlamydia infection in all sexually active females aged 25 years or less, and routine screening of women over age 25 who have risk factors, such as new or multiple partners.

When a patient is diagnosed with one STD, it's worthwhile to consider casting a broader net and screening for others, in his view. This might involve screening for the major reportable ones—gonorrhea, syphilis, Chlamydia, chancroid, and HIV—along with hepatitis B and C and herpes simplex. ■