Gonorrhea Rates Increase 25% or More In Five Western States, Hawaii, and Alaska

BY DAMIAN McNAMARA
Miami Bureau

JACKSONVILLE, FLA. — The reasons for prominent increases in reported gonorrhea cases since 2000 in five Western states as well as Hawaii and Alaska remain unknown, Dr. Lori M. Newman said at a conference on STD prevention sponsored by the Centers for Disease Control and Prevention.

A combination of better gonorrhea detection, increased risky sexual behavior, reduced disease control efforts, and/or increased antimicrobial resistance likely accounts for the 25% or more jump in gonorrhea cases in the "wild West," said Dr. Newman, medical officer, Division of STD Prevention at the CDC.

Historically, males have had higher infection rates, but female transmission surpassed that of males slightly during the last 3 reported years.

Among states with at least 500 gonorrhea cases reported in 2005, preliminary data indicate that the greatest increases since 2000 were seen in Utah (206% increase), Hawaii (107%), California (55%), Washington (53%), Oregon (50%), Alaska (48%), and Nevada (40%).

In contrast to national trends, aggregated data for these seven states indicate a 48% increase in new cases among males and a 40% increase in new cases among females between 2000 and 2005. This disparity suggests increases among men who have sex with men, Dr. Newman said. However, overall increases suggest heterosexual transmission as well.

The overall gender gap for gonorrhea has narrowed. Historically, males have had higher infection rates, but female transmission surpassed that of males slightly during the last 3 reported years. The 2004 transmission rates were 117 females per 100,000 and 110 males per 100,000 in the United States.

CDC researchers have yet to identify any demographic risk factor that might explain the increases in the seven states. The increases are not concentrated in a particular age group, for example. By ethnicity, there has been an 80% increase among whites, an 89% increase among Hispanics, and an 18% increase among blacks since 2000.

The CDC has enhanced gonorrhea surveillance through six sites in the West in the STD Surveillance Network. "Translation of data into action is the most important step," Dr. Newman said.

Following an impressive overall decline in reported gonorrhea cases in the 1970s and 1980s, the total transmission rate in the United States has not changed much in the past decade, Dr. Newman said. According to the provisional data for 2005, the transmission rate is about 113 people per 100,000. "This is still far from our goal of 19 cases per 100,000."

Only some states in the Northwest and Northeast (Idaho, Maine, Montana, New Hampshire, North Dakota, Vermont, and Wyoming) have met the national goal.

Racial disparities still exist and are cause for concern, Dr. Newman said. Blacks still have an 18 times higher gonorrhea rate than whites despite a 24% overall decrease in reported cases from 1996 to 2006. "This is the highest disparity for any reported infectious disease," she said.

"Gonorrhea is of greatest concern for adolescents and the young adult population," Dr. Newman said. For example, nearly 70% of gonorrhea morbidity occurs in people aged 15-24 years, she said.

Among females, the highest gonorrhea rates are in 15- to 19-year-olds, Dr. Newman said. Among males, the highest rates are in those aged 20-24 years. ■

Visit www.cdc.gov/std/gonorrhea for more information.

Small Case Series Suggests Botulinum Toxin Affords Major Pain Relief in Endometriosis

BY KATE JOHNSON
Montreal Bureau

TORONTO — Patients with endometriosis that is unresponsive to surgical and medical treatment may get relief from intravaginal injections with botulinum toxin, according to a case series from the National Institutes of Health.

"We saw an impressive period of relief beyond what we would expect," said Dr. Melissa Merideth, an ob.gyn. with the Office of Rare Diseases at the National Human Genome Research Institute, an arm of the National Institutes of Health.

The study, which she reported in a poster at the annual meeting of the Society for Gynecologic Investigation, involved three women with chronic pelvic pain that persisted after laparoscopic excision of their endometriosis. Upon physical examination, all the women had palpable spasm of their pelvic floor muscles, Dr. Merideth said in an interview.

Because botulinum toxin relaxes muscle spasm and has been effective in the treatment of headache and myofascial pain, her group decided to test its effect on pelvic floor muscle spasm, she said.

"We felt the pelvic floor spasm was a component of their pain, and we wanted to see how addressing that would affect their other pain symptoms," she said.

Working in an office setting in conjunction with a neurologist, a gynecologist injected a total dose of 100 U of botulinum type A toxin (reconstituted with 4 cc of preservative-free saline) transvaginally into between three and six injection sites in the women's levator ani muscles at sites of palpable spasm. The women were premedicated with Valium and the procedure was done using electromyographic guidance and lidocaine cream at each injection site. Five injection sessions were carried out in the three women.

'We felt the pelvic floor spasm was a component of their pain, and we wanted to see how addressing that would affect their other pain symptoms.'

The first patient had an 8-year history of unremitting pelvic pain, which was relieved for 9 months after her first injection session. A second injection session provided another 1.5 years of relief.

The second patient had a history of severe pelvic pain that limited her ability to walk. She had amenorrhea as a result of 5 years of treatment with leuprolide acetate and add-back therapy.

After one injection session, she had 1 year of pain relief, resumed normal menstrual cycles, and regained her ability to walk with minimal pain and normal gait, said Dr. Merideth.

And the third patient had pelvic floor spasm and bladder atony following laparoscopic surgery 1 year earlier. She was unable to self-catheterize because of the muscle spasm and therefore required a suprapubic catheter. Her first injection session decreased her pain and muscle spasm such that she was able to self-catheterize. After a second injection session 6 months later, she was able to decrease narcotic usage and return to work. The first two patients stopped narcotic usage entirely and also returned to work.

Spasm of the pelvic floor muscle is not a finding in all patients with endometriosis, and "one would anticipate this treatment would only work in patients who had spasm on exam," said Dr. Merideth. "How it plays into their pain and the neural-immune response of the body is something we're still studying." She said there are plans to proceed with a blinded study comparing the medication to placebo in a larger group of women. ■

HPV Test Alone Most Sensitive For Finding CIN

BY JOHN R. BELL
Associate Editor

Human papillomavirus testing alone was more sensitive than conventional cytology for detecting cervical intraepithelial neoplasia, and adding liquid-based cytology to HPV testing only increased the rate of false positives, according to a phase I report from a two-phase randomized controlled trial.

Dr. Guglielmo Ronco of the Centro per la Prevenzione Oncologica, Turin, Italy, and his colleagues from the New Technologies for Cervical Cancer Working Group enrolled more than 33,000 women from nine Italian cancer-screening programs. The primary end point of the analysis was cervical intraepithelial neoplasia grade 2 (CIN2) or higher (as confirmed by histology) or cervical cancer found via the screening test.

One group (16,658 women) was screened via conventional cytology; the experimental group (16,706) was screened by using the ThinPrep liquid-based cytology system (Cytyc Corp., Boxborough, Mass.) and tested for HPV with the Hybrid Capture 2 assay (Digene Corp., Gaithersburg, Md.). Mean patient age was 45 years. Exclusion criteria were pregnancy, prior hysterectomy, or CIN testing within the last 5 years. (J. Natl. Cancer Inst. 2006;98:765-74).

Referral to colposcopy was triggered by a finding of atypical squamous cells of undetermined significance (ASCUS) in the conventional arm and by either findings of ASCUS or a positive (at least 1 pg/mL) HPV test in the experimental arm.

CIN2 or a more severe histology was found in 75 of the women in the experimental arm, 54 of whom had ASCUS or more severe cytology and 73 of whom tested positive for HPV. Among women in the conventional arm, there were 51 women with CIN2 histology or worse.

When compared with the conventional cytology arm, the experimental screening group had higher relative sensitivity (1.47) for detecting CIN2 or greater but the decrease in positive predictive value (11.4% vs. 4.5%) was substantial. ASCUS was the cutoff for colposcopy.

By contrast, HPV testing alone, with 1- and 2-pg/mL cutoffs, increased sensitivity over conventional cytology by 43% and 41%, respectively.

In addition, HPV testing alone, again with 1- and 2-pg/mL cutoffs, avoided the loss of positive predictive value seen when liquid-based cytology was added, 6.6% and 8.5%, respectively.

"Our data strongly suggest that supplementing HPV testing with cytology provides little advantage and mainly increases costs and anxiety," the authors concluded. They added that the absence of any high-grade lesions among 845 HPV-negative women with ASCUS cytology "strongly supports the use of HPV in triaging ASCUS when cytology is performed first, as previously reported." ■