HPV Screening in Teens Not Cost Effective

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NEW YORK — Screening for the human papillomavirus in adolescent females is not cost effective because of the high rate of infection in that population, Dr. Edyta C. Pirog said at a gynecology conference sponsored by Mount Sinai School of Medicine.

Since the majority of low-grade squamous intraepithelial lesions will regress spontaneously in adolescent females, most treatment guidelines allow for the observation of these lesions through repeated cytology, said Dr. Pirog, of Weill Cornell Medical College, New York. However, immunosuppressed adolescents, who have a high rate of progression to high-grade squamous intraepithelial lesions, require careful follow-up by physicians, Dr. Pirog said.

The American College of Obstetricians and Gynecologists recently released a new committee opinion advising physicians to take a less aggressive approach to treating abnormal pap test results and benign lesions in adolescents, compared with the approach used in adults (Obstet. Gynecol. 2006;107:963-8). ACOG recommends a noninvasive approach because of the potential risk of cervical incompetence after surgical excision. Adolescent patients who follow their physician's instructions can be treated effectively through follow-up cytology screening at either two 6-month follow-ups or one 12-month follow-up in most cases, according to ACOG. There is a high prevalence of HPV in women aged 15-35 years, even among those with normal pap smears. About 20%-40% of women aged 15-35 with normal pap smears have HPV, Dr. Pirog reported.

Most infections are transient and asymptomatic. About half of women of all ages will clear an HPV infection within 8 months, and 90% of women clear the infection within 2 years, she said. In one study of adolescents aged 14-17 years, the cumulative incidence of HPV infection was more than 80% but the infections cleared within a matter of months (J. Infect. Dis. 2005;191:182-92).

Adolescents also have a different progression of squamous intraepithelial lesions, compared with adults. More than half of low-grade squamous intraepithelial lesions in adolescents have regressed at 12 months; 91% regress by 36 months (Lancet 2004;364:1678-83). This study found that only 3% of low-grade lesions have progressed to high-grade lesions at 36 months in adolescents, compared with about 10% in other age groups. However, researchers have shown that the risk of progression is greater in HIV-positive adolescents. A study of females aged 13-18 years found that the incidence of high-grade squamous intraepithelial lesions at the end of the 4-year follow-up was 21.5% in HIV-positive girls, compared with 4.8% in HIV-negative girls (J. Infect. Dis. 2004;190:1413-21). ■

Genital Gram Stains Unreliable As STI Detectors

WASHINGTON — Genital Gram stains alone lack the diagnostic ability to detect *Chlamydia trachomatis* and *Neisseria gonorrhoeae* infections, based on data from 1,511 emergency department visits, reported Dr. Shanda Riley in a poster at the annual meeting of the American College of Emergency Physicians.

In 502 visits (33%), physicians used a DNA probe without a Gram stain, 68 visits (5%) included a Gram stain without a DNA probe, and 941 visits (62%) included both a Gram stain and a DNA probe to detect sexually transmitted infections.

Dr. Riley of the University of Illinois, Peoria, and her colleagues reviewed all DNA probes for *C. trachomatis* and *N. gonorrhoeae,* along with *Trichomonas vaginalis* wet preps and genital Gram stains performed on patients seen in an emergency department between January 2004 and December 2004. The sensitivity and the specificity of the Gram stains were 71.1% and 41%, respectively, for *N. gonorrhoeae*, and 75.6% and 43%, respectively, for *C. trachomatis*. In addition, the average positive predictive value of the Gram stains for both organisms was 15%. Gram stains were considered positive if they demonstrated more than 10 white blood cells per high-power field or if clue cells, Gram-negative intracellular/extracellular diplococci, or *T. vaginalis* organisms were found.

—Heidi Splete