Gardasil, Zostavax: The Questions Patients Ask

BY BETSY BATES
Los Angeles Bureau

MONTEREY, CALIF. — Although most physicians are familiar with the basic facts concerning the newly introduced Gardasil and Zostavax vaccines, questions still surround their use.

Zostavax, a 14-fold concentrated version of Varivax, the varicella zoster vaccine to prevent chicken pox in children, was approved by the Food and Drug Administration in May 2006 for adults aged 60 years and older.

A month later, approval was issued for Gardasil in girls and young women aged 9- to 26-years-old to prevent cervical cancer, precancerous genital lesions, and genital warts caused by HPV types 6, 11, 16, and 18.

Dr. Stephen K. Tyring, professor of dermatology at the University of Texas Health Sciences Center in Houston, discussed commonly asked patient questions about the vaccines at the annual meeting of the California Society of Dermatology and Dermatologic Surgery.

Gardasil

▶ "I'm 30, and I'm in the dating scene. Should I get the Gardasil vaccine even though it's only approved for ages 9-26?"

The vaccine was studied in younger women, but "there's no reason in the world in terms of safety and efficacy" that older women who are sexually active shouldn't receive the vaccine, said Dr. Tyring. However, most insurance companies probably will not cover the cost of the vaccine in children or young women outside of the FDA-specified age groups.

▶ "Shouldn't we be vaccinating boys and young men too?"

Men obviously play an important role in the cycle of spread of oncogenic papillomaviruses, but women suffered more anogenital malignancies in the countries in which the vaccine was studied, so they were included in the trials, he explained. Ongoing studies will establish "at least the safety if not the efficacy" of the vaccine in males.

▶ "Why isn't Gardasil being used to treat cervical cancer?"

The few published studies assessing Gardasil's efficacy in treating cervical cancer have had unimpressive results; therefore, its role remains preventive.

▶ "How long will the viral protection last?"

"We don't know," said Dr. Tyring. The duration of protection was at least 5 years in trial participants. "We hope it's a lifetime."

▶ "I've already had genital warts. What would be the point of my getting the vaccine now?"

If a patient's gynecologist has demonstrated a patient has been exposed only to HPV types 6 and 11, studies have proven she could still receive protection against HPV types 16 and 18, which cause cervical cancer.

The American Cancer Society predicts more than 11,000 women will be diagnosed with cervical cancer in the United States this year, and nearly 3,700 will die of the disease.

Zostavax

▶ "I've heard the Zostavax vaccine isn't very effective. Why should I get it?"

In a pivotal trial, the Zostavax vaccine prevented herpes zoster in 51% of adults aged 60 years and older, a fairly impressive result considering it was being used to do something quite extraordinary: prevent reemergence of a virus that had been lying dormant in the dorsal root ganglia for decades, said Dr. Tyring. And even among those who did get shingles after receiving the vaccine, the rate of postherpetic neuralgia was reduced by two-thirds.

All people over 60 can be presumed to be at risk for shingles and therefore may benefit from Zostavax.

DR. TYRING

▶ "I'm 55, but I've seen what shingles was like in my dad, and I don't want to get it. Should I get the vaccine?"

Dr. Tyring and his associates have given the vaccine to people in their 50s and found that their immunogenicity is superior to that of older adults. Fortunately, trials will be underway very soon that may lead to approval in younger adults, but until that time, there may be no reimbursement for what appears to be a safe and effective vaccine.

▶ "I have had shingles, and I never want to go through it again. Will the disease prevent recurrence?"

Even without the vaccine, an immunocompetent person has only a 5% chance of getting shingles a second time. So while there is probably no harm in giving the vaccine to someone who has had the disease, it would cost approximately $250 (again, unlikely to be reimbursed) to reduce the risk from 5% to 4%. Vaccine administration is contraindicated in immunocompromised patients, since it is a live attenuated vaccine.

▶ "I don't think I even had chicken pox as a child, so would the vaccine be unnecessary?"

Fully 99% of people over age 60 are seropositive, whether or not they recall staying home from school with scratchy bumps. Dr. Tyring said all people over 60 can be presumed to be at risk for shingles and therefore could potentially benefit from the vaccine.

Dr. Tyring receives research support and has served on the speakers' bureau and as a consultant to Merck, maker of both vaccines. ■

DNA Testing for HPV Yields Faster Results Than Cytology

BY JONATHAN GARDNER
London Bureau

DNA testing for high-risk human papillomavirus is more sensitive than cytologic testing alone and leads to earlier detection of high-grade lesions, which could mean fewer lifetime screenings for women, according to a Dutch randomized control trial.

The population-based trial comprised 45,000 women aged 29-56 years taking part in the Netherlands' regular nationwide HPV-screening program. After cervical specimens were taken, the women were randomly assigned to either an intervention or a control group. Those in the intervention group were advised based on both cytologic testing and DNA results for the highest-risk varieties of HPV. For the control group, advice was based on cytologic testing with a blinded DNA test. Of those, 18,403 completed the required follow-up of 6.5 years.

Combining baseline and follow-up data, the researchers found similar detection rates for cervical intraepithelial neoplasia grade 3 or worse (CIN3+). However, significantly more CIN3+ lesions were detected in the intervention group, compared with the control group at baseline (68 of 8,575 vs. 40 of 8,580, respectively) and significantly fewer at the subsequent round of testing in the intervention and control groups (24 of 8,413 vs. 54 of 8,456), according to the study (Lancet 2007 Oct. 4 [Epub doi:10.1016/S0140-6736(07)61450-0]).

Researchers concluded that introducing HPV DNA testing could improve quality and efficiency in the health care system.

"Our results show that implementation of HPV DNA testing in cervical screening leads to earlier detection of clinically relevant cervical lesions," according to the researchers, led by Dr. Nicole W.J. Bulkmans of the pathology department at Vrije Universiteit Medisch Centrum in Amsterdam. "On the basis of these data, we suggest that the current screening interval of 5 years could be extended by at least 1 year. The extension will be advantageous to women because of a reduction in the lifetime number of screening tests and referrals."

"Long screening intervals will be an advantage not only in terms of cost but also of burden for women, and should improve participation in screening within the interval (nonparticipation is still the most important reason for later development of cervical cancer in most developed countries)," wrote Dr. Guglielmo Ronco and Dr. Nereo Segnan of the Centro Prevenzione Oncologica in Turin, Italy, in an accompanying editorial.

"Women with abnormal cytology but negative for HPV DNA had a negligible risk of CIN3+ lesions, which supports, in agreement with previous results, a screening policy based on stand-alone HPV DNA testing, with cytological tests only for triage of positive cases," they wrote (Lancet 2007 Oct. 4 [Epub doi:1016/S0140-6736(07)61480-9]).

Researchers also found a higher rate of referrals in the intervention group, compared with the control group at baseline (2.3% vs. 1.3%) and a lower rate at follow-up (1.3% vs. 1.9%). The CIN3+ rate was similar at baseline (33% vs. 32%) but was lower in the intervention group than in the control group at follow-up (25% vs. 40%), they reported.

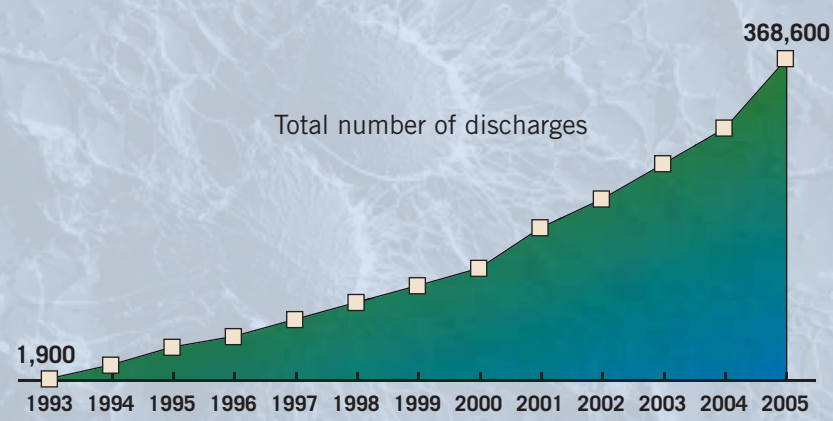
For women with an initial negative test, those in the intervention group were at a lower risk of CIN3+ than were those in the control group with a positive test at follow-up (0.1% vs. 0.8% adjusted risk), the study found.

The adjusted risk of CIN3+ at follow-up for women with a negative HPV DNA test at baseline was 0.2%, according to the study.

Two of the researchers disclosed ties to GlaxoSmithKline, which manufactures an HPV vaccine, and one of the researchers disclosed ties to Digene Corp., which manufactures an HPV-screening test. Dr. Ronco disclosed receiving payment from Gene Probe Inc., which is developing an HPV RNA test. ■

DATA WATCH

Steady Growth in Methicillin-Resistant *Staphylococcus aureus* Cases in U.S. Hospitals



Note: Based on data from the Nationwide Inpatient Sample.
Source: Healthcare Cost and Utilization Project

ELSEVIER GLOBAL MEDICAL NEWS