HPV Vaccine May Stem Vulvar, Vaginal Cancers

BY SHARON WORCESTER
Southeast Bureau

ATLANTA — The recently approved quadrivalent human papillomavirus vaccine shown to be effective for preventing most HPV-related cervical cancers may also prevent most vulvar and vaginal cancers, Dr. Jorma Paavonen reported at the annual meeting of the American Society of Clinical Oncology.

The vaccine (Gardisil, Merck & Co.) received approval from the U.S. Food and Drug Administration in June, after winning unanimous support from an FDA advisory panel.

Gardisil targets HPV 6 and 11, which are associated with anogenital warts, and HPV 16 and 18, which cause most cervical cancers. HPV 16 and 18 are also the most common causes of vulvar and vaginal cancers, said Dr. Paavonen, professor and chief physician in obstetrics and gynecology at the University of Helsinki, Finland.

The FUTURE II study was a combined analysis of data from three randomized, placebo-controlled trials that studied the impact of the vaccine on rates of HPV 16- and 18-related vulvar and vaginal intraepithelial neoplasia grade 2/3. FUTURE II showed that the vaccine was 100% effective up to 2 years of follow-up for preventing these precancerous lesions, said Dr. Paavonen, who has served as a consultant to and received research funding from Merck.

These trials randomized 18,150 women aged 16-26 to receive either the vaccine or placebo. Vaccination occurred at day 1 and at 2 and 6 months. Genital tract specimens were obtained at day 1 and then at 6- to 12-month intervals for up to 48 months, with colposcopy performed as needed following algorithm-based referrals.

On per-protocol analysis, there were 10 cases of vulvar intraepithelial neoplasia (VIN) 2/3 or vaginal intraepithelial neoplasia (VaIN) 2/3 in the placebo group, and none in the vaccine group, at an average of 18 months of follow-up. On modified intention-to-treat analysis, there were 24 histologically confirmed cases of VIN 2/3 or VaIN 2/3 in the placebo group, at an average of 2 years of follow-up.

"The burden of HPV disease is not restricted to the cervix. HPV is present in nearly 80% of the 6,000 cases of vaginal and vulvar cancers diagnosed in the United States each year," Dr. Paavonen said. ■

Precollege Rush for Menactra Drove Distribution During the First Year

BY HEIDI SPLETE
Senior Writer

WASHINGTON — Despite a recommendation to prioritize 11- to 12-year-olds, distribution of the meningococcal conjugate vaccine was especially high among 18-year-olds and was evenly distributed among 11- to 17-year-olds during its first year on the market, Dr. Gregory Wallace reported at a meeting of the National Vaccine Advisory Committee.

Supplies should be able to cover adolescents entering high school, dorm-dwelling college freshmen, and other high-risk groups.

The rationale for the recommendation was to help establish an adolescent vaccine visit, and was not generated because of an increased disease risk among 11- to 12-year-olds, explained Dr. Wallace, chief of the Vaccine Supply & Assurance Branch at the Centers for Disease Control and Prevention.

The vaccine is also recommended for adolescents entering high school who have not been previously vaccinated, as well as for college freshmen living in dorms.

Demand for the meningococcal conjugate vaccine (MCV4), marketed as Menactra, was high starting in June 2005 after the publication and promotion of the vaccination recommendations by the CDC's Advisory Committee on Immunization Practices, the American Academy of Pediatrics, and the American Academy of Family Physicians.

The demand was initially highest for 18-year-olds, and the peak months were June and July 2005. The high demand then decreased during the fall of 2005, as did patients' and parents' concerns about the vaccine supply.

The overall vaccine distribution rate from March 2005 to March 2006 was approximately 10% for 11- to 17-year-olds, but it approached 16% among 18-year-olds, based on physicians' billing-claims data provided by the vaccine's manufacturer, Sanofi Pasteur USA.

About 4.2 million doses were distributed between March 2005 and March 2006. The manufacturer projects that 6 million doses will be available for 2006-2007, but the amount currently available for the summer months of 2006 is about the same as last year, and Sanofi Pasteur expects the demand for the vaccine to exceed supply this summer.

To handle the anticipated summer rush among 18-year-olds, the CDC and other organizations have recommended that physicians defer the vaccination of 11- to 12-year-olds until further notice from the manufacturer that the shortage has been resolved. The current supply projections should be sufficient to cover adolescents entering high school, dorm-dwelling college freshmen, and other high-risk groups, including military recruits and travelers to areas where the risk of meningococcal disease is high. For periodic vaccine supply updates, visit www.cdc.gov/nip/news/shortages/default.htm. ■

Telephone Intervention Boosts Pneumococcal Vaccination Rates

BY PATRICE WENDLING
Chicago Bureau

CHICAGO — Telephone outreach is relatively inexpensive and successful at raising pneumococcal vaccination rates, Dr. Adrienne Mims reported at the annual meeting of the American Geriatrics Society.

Dr. Mims presented data from an outpatient study conducted in five managed care clinics that compared a telephone intervention with a control condition. A total of 2,395 healthy patients over the age of 65 years and 3,711 patients aged 18 years and older with diabetes, coronary artery disease, or congestive heart failure were randomized to either the telephone-intervention group or the control group.

These populations are targeted for universal immunization, according to practice guidelines. There were 3,053 patients in each of arm of the study, which was funded by the Centers for Disease Control and Prevention.

Patients in the intervention arm were sent a letter explaining the study and received up to four calls during daytime and evening hours from outreach nurses who explained that the shot was free, was available at a nurse visit, and could be scheduled if desired.

The nurses also asked why the patient had not been immunized and then gave scripted information tailored to the reason mentioned by the participant. Most commonly, the patients said "they didn't know or the doctor didn't tell me," said Dr. Mims of Kaiser Permanente, Atlanta.

At the 6-month follow-up, 489 patients (16%) in the intervention group were vaccinated, compared with 211 (7%) in the control group. Overall, patients who received the telephone intervention were 2.3 times more likely to be vaccinated than were patients in the control group, reported Dr. Mims and associates.

The elderly were more likely to be vaccinated than were younger, chronically ill patients (17% vs. 16%). But the intervention improved immunization rates significantly in both of these populations. Most patients received their pneumococcal vaccine within 3 months of the intervention.

The cost of the nurses' phone calls was $41,520, or $147.00 per additional patient vaccinated. Dr. Mims said pneumococcal immunization is vastly underutilized, and she called the intervention a bargain compared with the cost of an office visit or of hospitalization for treating pneumococcal disease, which costs about $5,000 on average.

Prior to the study, Kaiser Permanente in Atlanta had tried several initiatives to improve pneumococcal immunization rates, such as patient outreach letters, yearly newsletter articles, clinic posters, evidence-based guidelines published in staff pocket notebooks and on the company Web site, chart flags, and financial bonuses for staff and departments.

Those efforts significantly improved immunization rates, to 60% among seniors and about 40%-45% among younger, chronically ill patients. However, the target set by the Healthy People 2010 initiative of the Department of Health and Human Services is 90%, Dr. Mims said. ■

Higher-Dose Flu Vaccine Appears More Immunogenic in Elderly

A higher-dose influenza vaccine than is currently recommended appears to be more immunogenic in the elderly, reported Dr. Wendy A. Keitel of Baylor College of Medicine, Houston, and her associates.

"For reasons unknown, vaccine efficacy among elderly persons has been variable. A progressive reduction in immune competence is described with increasing age, and reduced antibody responses to inactivated influenza vaccines have been noted in elderly persons," the investigators said.

They assessed the immunogenicity of several doses of a 2002 U.S. vaccine formulation in 202 healthy subjects aged 65-88 years.

The subjects were randomly assigned to receive a single intramuscular injection of trivalent inactivated subvirion influenza vaccine containing 15, 30, or 60 mcg of hemagglutinin per strain, or a placebo injection. The usual recommended dose is 15 mcg.

One month later, mean titers of antibodies to all the viral strains showed significant increases that corresponded to increasing vaccine dose. The percentage of subjects who attained protective titers of antibodies also rose with increasing vaccine dose, the researchers said (Arch. Intern. Med. 2006;166:1121-7).

Among subjects who had the lowest antibody titers at baseline, the antibody response to the 60-mcg dose was nearly double that to the 15-mcg dose of the vaccine.

All vaccine doses were deemed safe and well tolerated. There were significant dose-related rises in the frequencies of injection-site pain and redness or swelling, but most of these reactions were mild and transient.

There were no dose-related differences in systemic symptoms and no serious adverse events attributed to the vaccines.

Further, larger-scale trials are warranted to confirm the finding that enhanced-potency vaccines are safe and effective in the elderly, Dr. Keitel and her associates said.

The vaccines for this study were provided by the drug manufacturer Aventis Pasteur.

—Mary Ann Moon