Physicians Say Herpes Zoster Vaccine Worthwhile

ARTICLES BY
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ATLANTA — Most internists and family physicians would recommend the herpes zoster vaccine to their older patients despite concerns about the vaccine's cost and reimbursement for its administration, Dr. Allison Kempe reported at a meeting of the Advisory Committee on Immunization Practices of the Centers for Disease Control and Prevention.

The findings came from a national survey of internists and family physicians conducted by Dr. Kempe and her associates at the University of Colorado, Denver, in November and December 2005.

The U.S. Food and Drug Administration is currently reviewing the licensure application for Zostavax, which was filed by Merck & Co. in April 2005. In June 2005, the vaccine received widespread media coverage with the publication of a study showing 51% efficacy in preventing herpes zoster, 66.5% efficacy against postherpetic neuralgia, and 61% reduction in pain in adults aged 60 and older (N. Engl. J. Med. 2005;352:2271-84).

Less than 10% of the surveyed physicians expressed concern about the fact that the vaccine must be kept frozen rather than refrigerated, yet previous experience with other live virus vaccines in primary care settings suggests this might be a bigger problem than many physicians realize, Dr. Gregory S. Wallace of the CDC told the advisory committee in a separate presentation.

Of the 270 general internists and 325 family physicians who participated in the survey (response rates of 62% and 76%, respectively), 35% "strongly" agreed that herpes zoster and postherpetic neuralgia cause significant burden among older patients, while another 46% "somewhat" agreed.

The percentage of physicians who strongly agreed that the burden of the two disorders was "sufficient enough to warrant a vaccine" was significantly higher with regard to patients aged 60-79 years, compared with patients aged 50-59 years (40% vs. 15% among internists and 29% vs. 17% among family physicians).

Overall, physicians of both specialties reported being somewhat or very likely to recommend the vaccine for all patients over 50 years, but were significantly more likely to recommend it to patients aged 60 and older than to those aged 50-59 (79% vs. 57% among internists and 78% vs. 60% among family physicians).

Despite their overall support for the vaccine, respondents did perceive several potential barriers to administering it. "Lack of reimbursement" topped the list, with 76% saying that would "definitely" be a barrier or would be "somewhat" of a barrier. "Patients unwilling to pay if not covered by insurance" and "up-front costs to purchase vaccine" were the second and third most important barriers, respectively.

In addition to the issue of freezer storage, other potential barriers cited by less than 10% of respondents included "concerns about safely administering a live attenuated virus to patients with chronic medical conditions," and the "fact that vaccine will not be licensed for immunosuppressed patients."

The low level of concern for those two issues appears justified: There were no major safety problems in the published study, in which 90% of the 38,546 subjects had at least one prior medical condition, including more than 20% each with arthritis and hypertension, Dr. Paula Annunziato of Merck told the committee.

Immunosuppressed individuals were excluded from the study, and none of the survey respondents had treated or referred any such patients for herpes zoster or postherpetic neuralgia in the previous year, Dr. Kempe said.

But freezer storage, which is required for all live virus vaccines, may indeed turn out to be a problem in many practices, according to the CDC's Dr. Wallace.

In one previous study of more than 700 primary care providers, 18% of freezers were being kept too warm for proper storage of varicella vaccine, measles-mumps-rubella-varicella vaccine, or live attenuated influenza vaccine (Flumist), all of which must be kept at or below 5° F (Am. J. Prev. Med. 2002;23:246-53). Another study of 221 private provider offices found that 17% of freezers were too warm (Pediatrics 2001;107:e100-4).

Recently, it has become apparent that the opposite is a problem, too: In order to keep the freezer cold enough for live virus vaccines, the refrigerator compartment may become too cold, which is damaging to inactivated vaccines that are stored there (MMWR 2003;52:1023-5). This is a particular problem in small dormitory-style refrigerators without a separate freezer section; these are unacceptable for storing vaccines, Dr. Wallace said. ■

Single-Day Famciclovir Speeds Healing of Genital Herpes

WASHINGTON — A single-day treatment of famciclovir taken by a patient within 6 hours of a genital herpes outbreak can significantly speed the time to healing, Dr. Fred Y. Aoki reported at the annual Interscience Conference on Antimicrobial Agents and Chemotherapy.

Current regimens for episodic genital herpes have become shorter and shorter without a loss of efficacy. That, along with pathogenesis data demonstrating that herpes simplex virus (HSV) titers increase in lesions only over the first 24 hours, provide the rationale for use of a single-day, two-dose regimen of 1,000 mg of famciclovir, said Dr. Aoki, professor of medicine, medical microbiology, pharmacology, and therapeutics at the University of Manitoba, Winnipeg.

Educate patients about the disease and its treatment, and tell them to fill a prescription before an outbreak occurs.

DR. AOKI

In a Novartis-funded study, a total of 229 patients aged 18-82 years with at least 4 outbreaks of genital herpes in the preceding 12 months and laboratory-confirmed HSV-2 infection were instructed to take either 1,000 mg of famciclovir twice in one day or placebo, beginning within 6 hours of prodromal symptom onset or the appearance of lesions.

In the intention-to-treat analysis of 125 famciclovir and 145 placebo subjects, the proportion of patients with aborted lesions was 23% with famciclovir vs. 13% with placebo. This difference "was statistically significant and probably clinically important," Dr. Aoki noted.

Time to healing was also significantly shorter with famciclovir (4 vs. 6 days), as was time to resolution of individual symptoms, with differences ranging from a 29% shorter time to resolution of tingling to a 41% quicker resolution of both itching and tenderness.

Among the two-thirds of patients who had all five classic herpes symptoms—burning, pain, tingling, itching, tenderness—time to resolution of all was approximately 2 days shorter with famciclovir, he said.

Total adverse events were reported by 26% of the famciclovir group and 24% with placebo. There were no reported serious adverse events, and none of the subjects discontinued due to adverse events. Two were reported significantly more often with famcyclovir: diarrhea (5% vs. 1%) and headache (14% vs. 5%). The headaches were mostly of mild to moderate severity and were resolved by analgesics, Dr. Aoki noted.

In response to a question from the audience, Dr. Aoki advised that physicians educate patients with recurrent genital herpes about the disease and its treatment, and then give them a prescription to fill before an outbreak occurs. ■

Herpes Simplex Virus Type 2 Linked To Pelvic Inflammatory Disease Risk

WASHINGTON — Herpes simplex virus type 2 infection in women may be associated with an increased risk of pelvic inflammatory disease, Dr. Thomas L. Cherpes reported in a poster at the annual Interscience Conference on Antimicrobial Agents and Chemotherapy.

The role of chronic genital viral infections in the pathogenesis of pelvic inflammatory disease (PID) may be more significant than currently recognized, although no etiologic link has been defined yet, noted Dr. Cherpes and his associates at the University of Pittsburgh.

A total of 725 nonpregnant women aged 15-30 years who were either diagnosed with a lower bacterial genital tract infection (purulent cervical discharge, untreated *Neisseria gonorrhoeae* or *Chlamydia trachomatis* infection, symptomatic bacterial vaginosis) or were at risk for such an infection (sexual contact with a male diagnosed with gonorrheal, chlamydial, or nongonococcal urethritis) were recruited from sexually transmitted disease clinics and gynecology clinics.

Of those, 43% (309) were seropositive for herpes simplex virus type 2 (HSV-2).

Of the 86 women with acute endometritis, 55% (47) were HSV-2 seropositive, as were 51% (70) of the 136 women found to have plasma cell endometritis. Acute endometritis was independently associated with black race (odds ratio 1.7) as well as infections with *C. trachomatis* (3.3), *N. gonorrhoeae* (2.8), *Trichomonas vaginalis* (2.4), and HSV-2 (2.2). Black race also was associated with plasma cell endometritis (odds ratio 1.9), but HSV-2 was the only reproductive tract infection significantly associated with that condition (odds ratio 1.5), the researchers reported.

Coinfection with HSV-2 and a genital tract bacterial pathogen significantly increased the likelihood of PID, compared with having one or the other alone. For example, the odds ratio for acute endometritis was 5.0 for women with chlamydia and 2.6 for those with HSV-2, compared with women who did not have those conditions. However, the odds ratio jumped to 7.3 for women coinfected with both.

Among 471 of the women who underwent hysterosalpingography, 8.1% (38) had both HSV-2 infection and evidence of fallopian tube obstruction: Those 38 women accounted for 19% of the 199 women who were HSV-2 positive and 54% of the 71 with tubal blockage.

These data do not exclude the possibility that the higher prevalence of HSV-2 among women with PID may simply reflect a marker for sexual activity and/or the coacquisition of a PID-associated bacterial pathogen. However, "as PID remains the most frequent gynecologic cause for emergency room visits as well as the most frequent infectious cause of infertility, confirmation and further exploration of these findings could have important clinical implications," Dr. Cherpes and his associates wrote.

The conference was sponsored by the American Society for Microbiology.