HPV Vaccine Doesn't Clear Existing Infection

BY MARY ANN MOON
Contributing Writer

In women who test positive for human papillomavirus DNA, the bivalent HPV-16/18 vaccination does not induce or accelerate clearance of the infection, according to a phase III study report.

Human papillomavirus (HPV) vaccination induces cell-mediated immune responses that are traditionally involved in the eradication of infection, and it has been suggested that the vaccine might benefit women who are already infected, perhaps by enhancing viral clearance. The study researchers examined the issue using a cohort drawn from a large, ongoing randomized clinical trial of vaccine efficacy.

The main study of vaccine efficacy focused on nearly 7,500 women aged 18-25 years who resided in Costa Rica, where cervical cancer screening programs incorporate HPV DNA testing with Pap tests. "Management protocols often involve retesting HPV-positive women within months of an initial HPV-positive result before treatment decisions are made, [so] understanding the impact of vaccination on viral clearance in the first 6-12 months after an initial HPV-positive result would be informative," said Dr. Allan Hildesheim of the National Cancer Institute, Rockville, Md., and his associates (JAMA 2007;298:743-53).

They assessed viral clearance in a subset of 2,055 subjects who were positive for HPV DNA and who received either a control immunization or the bivalent HPV-16/18 vaccine that contains viruslike particles only from HPV-16 and HPV-18. This formulation has been approved for use in Australia and is under review for use in the United States and other countries.

Clearance rates for HPV-16 and/or HPV-18 were not significantly different between the active treatment and placebo treatment groups either 6 months after the initial vaccination was given (33.4% vs. 31.6%, respectively) or at 12 months, when the entire series of vaccinations was completed (48.8% vs. 49.8%).

There also was no evidence of a vaccine effect in any of several subgroups studied, including women with a particularly high viral load, women infected with only a single HPV strain, oral contraceptive users, cigarette smokers, or women with concomitant chlamydia or gonorrhea infection.

"[Our] results … provide strong evidence there is little, if any, therapeutic benefit from the vaccine," and clinicians should discourage its use to treat existing HPV infection, the authors said. ■

Antiretrovirals May Inhibit Lipid-Lowering Therapy

LOS ANGELES — HIV-positive patients on antiretroviral therapy who are prescribed lipid-lowering agents do not respond to those drugs as well as other patients do, according to a large retrospective study.

The HIV patients were 57% as likely to reach the National Cholesterol Education Program's Adult Treatment Panel III (ATP-III) lipid goals with treatment, compared with those not HIV infected, Michael Silverberg, Ph.D., of the division of research, Kaiser Permanente Northern California, Oakland, and his colleagues said in a poster presentation at the 14th Conference on Retroviruses and Opportunistic Infections.

The HIV patients also had a mean drop in total cholesterol that was 4 percentage points lower than the change in controls (a mean reduction of 18% vs. 22%), a drop in LDL cholesterol that was 2 percentage points lower (22% vs. 24%), and a drop in triglycerides that was 17 percentage points lower (36% vs. 53%). The researchers analyzed data from all the HIV patients in their health system seen between 1996 and 2005 who met the ATP-III definition of dyslipidemia, and compared them each with 10 controls, matched for age, sex, and first year of lipidemia, who also received lipid-lowering therapy.

HIV patients on a regimen of a protease inhibitor plus a nonnucleoside reverse transcriptase inhibitor had the lowest reductions in total cholesterol and triglycerides of any of the HIV patients. Their mean reduction in total cholesterol was 17%, and their mean reduction in triglycerides was 16%.

The most common lipid-lowering therapy used in the patients and the controls was a statin; pravastatin was used more commonly in the HIV patients, he said.

—Timothy F. Kirn