**HPV Confers Survival Advantage in Skin Cancer**

**Positivity linked with a 79% lower risk of death for head and neck SCC patients.**

**BY FRAN LOWRY**
Orlando Burch

**ATLANTA** — Clinicians can be more confident in the safety of Gardasil® vaccine, because postlicensure safety data from the first year of widespread use confirm that serious adverse events associated with the vaccine are rare.

"Postlicensure surveillance reporting for HPV4 has occurred at relatively high levels, as is expected for a newly licensed product that has garnered significant public attention," said Dr. John Iskander, who presented the postlicensure data at a meeting of the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices.

Dr. Iskander presented safety data from the United States Vaccine Adverse Event Reporting System (VAERS) and the Vaccine Safety Datalink (VSD), two surveillance mechanisms supported by the CDC.

"The data encompass the first 11 months of the U.S. experience with Gardasil," said Dr. Iskander.

A substantial proportion of HPV4 use occurred within 10 months of its approval; 69% of reports were received in the first 11 months, and 11% were received in the first 3 months. The total number of doses distributed as of the end of March, according to the vaccine’s manufacturer (Merck), although the exact number of doses that have been administered is uncertain at this time, Dr. Bocchini added.

So far, the HPV4 overall vaccine adverse event reporting rate is 33 per 100,000 doses, and the serious adverse event rate is 1.8 per 100,000 doses, based on VAERS data.

A total of 1,763 adverse events related to use of the HPV4 vaccine had been reported to the VAERS as of May 8. Of these, 87% involved use of HPV4 alone. Nearly 70% of the reports involved girls and women aged 9-26 years (the age range used in prelicensure clinical trials).

"A substantial proportion of vaccine events began on the day of vaccination (39%), or in the days (immediately) following vaccination," Dr. Iskander noted. A serious adverse event occurred on the day of vaccination, with an average onset time of 1 day afterward. A total of 857 vaccine events (49%) were reported after a single dose of HPV4.

The most common symptoms in reports of serious adverse events were vomiting (14%), syncope (12%), and fever, nausea, and headache (all 1%). The most common symptoms reported with vaccine use were dizziness (13%), injection site pain (10%), syncope (10%), and nausea (9%).

Although data on associations between HPV4 use and reports of Guillain-Barré syndrome are limited, the VAERS data included 13 reports of GBS in patients who received HPV4. Of these, 11 cases occurred in girls aged 13-16 years; one case occurred in a 50-year-old woman, and the age of the other patient is unknown. More than half of these cases involved coadministration of Menactra and Gardasil.

The VAERS data also included two nonfatal cases of thromboembolism in patients who received the HPV4 vaccine.

In addition, 11 serious event reports from VAERS involved syncope, all of which occurred within 10 minutes of vaccination. "Current recommendations suggest a 15-minute waiting period after vaccination...to avoid syncope," Dr. Iskander said. The frequent reports of serious adverse events, such as syncope, are common in the general population and do not have a specific relationship to this vaccine or to vaccinations in general, he said.

Dr. Iskander also presented details on four cases of death in patients who had been vaccinated with HPV4. The cases included a 12-year-old girl who died of myocarditis after developing ventricular tachycardia, a 19-year-old girl who died from sudden cardiac death and pulmonary embolism (her autopsy showed multiple blood clots), a 14-year-old who died from multiorgan system failure due to influenza B viral sepsis, and a fourth case for whom few data were available except her use of oral contraceptives; her death was associated with blood clots.

Gardasil has been covered under the national Vaccine Injury Compensation Program since Feb. 1, and no claims alleging injuries as a result of HPV4 had been filed as of June 7, Dr. Iskander said. Complete vaccination coverage data are not yet available, but vaccine uptake is being followed using the VSD. The VSD sites are monitoring 68,266 doses of Gardasil given between Aug. 6, 2006, and May 13, 2007, for a variety of safety outcomes including Guillain-Barré syndrome, seizure, syncope, stroke, thrombosis, and pulmonary embolism.

Serious adverse events involving HPV4 have rarely been reported; the reported deaths in vaccine recipients do not appear to be causally related to vaccination, Dr. Iskander said. But the CDC will continue to collaborate with the Food and Drug Administration, the World Health Organization, and other organizations to monitor postlicensure surveillance and other communication related to HPV4.

At future ACIP meetings, the postlicensure safety data for Gardasil will be considered in conjunction with safety data on the bivalent HPV vaccine recently submitted to the FDA by GlaxoSmithKline.

**Largest Study Yet Supports Gardasil’s Safety, CDC Reports**

**BY HEIDI SPLETE**
Senior Writer

**CHICAGO** — A prospective study in which Elanco Co-operative Oncology Group study confirms what has up to now been reported only in retrospective, single-institution studies: head and neck squamous cell cancer patients infected with the human papilloma virus have significantly better survival than do their counterparts without the virus.

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