

Shingles Vaccine Experience among the Survivors of Polio

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Members of PHI concerned that polio survivors might have abnormalities of the immune system questioned whether taking the shingles vaccine would either increase the risk of complications or make it less effective. In early 2013 PHI distributed a six-question survey through its PHI Membership Memo, website (www.post-polio.org) and Facebook. The *PHI Association Member Communiqué* asked support groups to recruit survey takers who had had polio from their memberships.

By late April, 293 people completed the survey. Some 64% of respondents (186) had taken the shingles vaccine (Zostavax®). Only six of these respondents (3%) reported any problems as a result of taking the vaccine.

Among the four respondents who described their problems, two reactions were mild with transient aching at the vaccine injection site. One, who took the vaccine after having had a case of shingles, described persistent itching at the injection site. One individual reported fainting while exercising about two weeks after taking the vaccine, which most likely was coincidental. These side effects are similar to those reported in non-polio survivors¹.

Regarding the vaccine's effectiveness, eight of 186 respondents (4.3%) reported developing a case of shingles after having received the vaccine. All of the cases were described as mild and no one reported postherpetic neuralgia (nerve pain), the severe persistent pain problem that is the most feared complication of having shingles. The worst case was described as "not severe but pretty painful and a downright nuisance."

Since the respondents received their vaccine a mean of 2.9 years before answering the survey, they represent

about 531 person years at risk for developing shingles. These numbers suggest an estimated incidence of clinical shingles among post-polio individuals who have taken the vaccine as 15 cases per 1000 patient years. This compares to a rate of 11.1 cases per 1000 patient years among placebo vaccine recipients and 5.4 cases per 1000 patient years among immune-competent, 60-plus-year-old vaccine recipients in the largest and best designed study of the vaccine's effectiveness².

Because PHI's survey was open to all its contacts and was voluntary, it undoubtedly had a responder's bias among its sample for people who had received the vaccine and still developed a clinical case of shingles (not laboratory confirmed).

In summary, our survey's estimated rate of developing shingles in spite of receiving the vaccine suggests that the shingles vaccine is most likely as effective among polio survivors as in people who never had polio, especially in preventing severe cases with disabling pain.

The low number of responders with side effects after receiving the vaccine is also reassuring in that its use is similarly safe for polio survivors. Given the high rate of shingles among older Americans, survivors of polio with a competent immune system are encouraged to receive the shingles vaccine. ■

1) Simberkoff MS, RD Arbeit, et al. Safety of Herpes Zoster Vaccine in the Shingles Prevention Study. *Ann Int Med* 2010; 152:545-554.

2) Oxman MN, MJ Levin, et al. A Vaccine to Prevent Herpes Zoster and Postherpetic Neuralgia in Older Adults. *NEJM* 2005; 352: 2271-2284.

Study Says Shingles Vaccine Not Reaching Enough U.S. Adults

Too few American adults have been vaccinated for shingles, according to research that calls for efforts to increase the U.S.-recommended inoculation.

Fewer than 2 of 10 Americans ages 60 and older have been vaccinated, while the rate is less than half that for those in their 50s, according to a study presented in September at the Interscience Conference on Antimicrobial Agents and Chemotherapy.

Almost one-third of Americans will get shingles in their lifetime, with about 1 million cases in the United States each year, the Centers for Disease Control and Prevention said. The vaccine Zostavax[®] was cleared for sale in 2006 for people 60 and older and for use by those in their 50s in 2011. Still, too few people take advantage of it, doctors said.

Shingles is caused by the same virus as chicken pox; it can remain in the body after a chicken pox infection and become active again years later. It's characterized by a painful rash that generally clears within a month and can be accompanied by fever, stomach ache and chills. A more problematic lasting side effect is postherpetic neuralgia, a burning nerve pain that can be severe enough to disrupt sleep and affect appetite, according to the Mayo Clinic.

Shingles becomes more prevalent with age; about half of infections occur in those 60 and older, according to the CDC. Yet just 16 percent of Americans in that age group had been vaccinated in 2011, the study of almost 30,000 people found. That compares with 4.3 percent of U.S. adults in their 50s.

The vaccine is generally covered by insurers for people 60 and older, researchers said.

Source: Bloomberg News

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