

Physician Advocacy for Zoster Vaccination

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Herpes zoster (HZ) infection occurs when the varicella-zoster virus (VZV) is reactivated due to waning cellular immunity associated with age or immunosuppression. It results in a painful blistering cutaneous eruption.¹ The incidence and rate of complications from HZ infection increase with age.² The most common complication of HZ infection is postherpetic neuralgia (PHN), which can be extremely debilitating.¹

In 2006 the US Food and Drug Administration approved a live attenuated HZ vaccine that boosts VZV cell-mediated immunity and largely reduces HZ disease burden. The HZ vaccine contains the same strain of VZV as the varicella vaccine but contains 14 times more virus particles.³ In a study of the efficacy and safety of the HZ vaccine, HZ vaccination was associated with a 51% reduction in HZ incidence, a 61% reduction in HZ disease burden, and a 67% reduction in PHN incidence at 3-year follow-up.⁴ In adults aged 60 to 69 years, the benefit of the HZ vaccine resulted from the reduction in HZ incidence.⁵ However, in adults 70 years and older, the benefit resulted from the reduction in PHN incidence and severity. Overall, the absolute benefit of the HZ vaccine was greatest in the older age group, as the severity and incidence of HZ and PHN are highest in these patients.⁵ Although efficacy declines with time, a long-term persistence substudy demonstrated that the HZ vaccine still reduced the incidence and severity of HZ.⁶

The HZ vaccine currently is approved for adults aged 50 years or older.³ Antivirals that are active against VZV (eg, acyclovir, valacyclovir, famciclovir) should not be administered 24 hours before or 14 days after vaccination.¹ Concurrent administration of the HZ vaccine and the pneumococcal vaccine is not recommended due to risk for reduced immunogenicity of the zoster vaccine.⁵ Because it is a live vaccine, the HZ vaccine is not recommended in immunocompromised patients. However, the HZ vaccine can be safely given to moderately immunosuppressed patients. The HZ vaccine also is well tolerated and stimulates a strong cell-mediated immune response in adults who have had prior HZ infections.

Herpes zoster vaccination is recommended in patients with a history of shingles, though there are no published data showing that it reduces the already low rate of recurrent HZ infections.⁷

Despite strong efficacy data and established guidelines, a low vaccination rate has been reported⁸ due to doubts about its long-term efficacy, failure of both physicians and patients to recognize the burden of disease imposed by HZ infection and PHN, and concerns about reimbursement and out-of-pocket costs for the patient.⁵ Furthermore, many patients who are eligible to receive the HZ vaccine may not do so because they do not remember having chickenpox and therefore do not feel they are at risk for developing shingles.

The HZ vaccine is an important factor in public health prevention strategy, as HZ infection and PHN are common, incurable, and incapacitating. The HZ vaccine is the most efficacious agent currently available on the market for prevention. It is important for dermatologists to educate our patients and encourage them to receive the HZ vaccine to safeguard their long-term health.

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