



PIC QUESTION OF THE WEEK: 1/14/08

Q: Should patients with a previous episode of shingles or those without a documented history of chickenpox receive varicella-zoster vaccine?

A: The virus varicella-zoster is the causative agent of chickenpox (varicella). After initial infection, varicella may remain dormant in sensory ganglia for years. In some adults, waning cellular immunity to the virus permits its re-activation and the subsequent development of shingles (herpes zoster). It is estimated that nearly 90% of adults in the United States had chickenpox. There are approximately one million new cases of shingles each year and nearly half of these patients are greater than 60 years of age. A live attenuated varicella-zoster vaccine (Zostavax) was approved by the FDA in 2006 and labeled for the prevention of shingles in adults 60 years of age or older. Although the CDC has not finalized its recommendation, the Advisory Committee on Immunization Practices has recommended administration of the vaccine to all individuals in this age group. Patients in whom the vaccine is contraindicated are those with a history of anaphylactic reactions to neomycin, gelatin, or any other component of the vaccine, immunocompromised individuals, those with active or untreated tuberculosis, and pregnant women. As a matter of information, the CDC considers use of prednisone *20 mg per day* (or equivalent dose of an alternative corticosteroid) for fourteen days or longer to be immunosuppressive. Two of the most common questions associated with use of this vaccine are included in the introductory question listed above. Although second episodes of shingles are uncommon, they have been reported. Thus, the CDC currently recommends that all adults over 60 years, even those previously experiencing an attack of shingles, receive a dose of varicella-zoster vaccine. Patients with histories of shingles were not included in the major study groups reviewed by the FDA prior to vaccine approval. There has also been some question as to the use of the vaccine in patients with an unknown history of chickenpox. One small study comparing response in vaccine recipients with varying antibody levels indicated there was little difference regardless of the patient's existing antibody levels. Thus, the CDC and others recommend administration of the vaccine regardless of the patient's history of chickenpox or shingles.

References:

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The PIC Question of the Week is a publication of the Pharmaceutical Information Center, Mylan School of Pharmacy, Duquesne University, Pittsburgh, PA 15282 (412.396.4600).