

Chickenpox in a Vaccinated Adult

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A healthy 37-year-old man presented with a pruritic rash, chills, and body aches for three days. He was afebrile and had scattered vesicles on an erythematous base, on his trunk and extremities (Figs. 1 and 2). He reported never having chickenpox but had received two doses of the varicella vaccine at age 20. He worked at a nursing home where a resident had recently developed shingles. Vesicular fluid PCR testing was positive for varicella zoster, consistent with chickenpox.

The varicella zoster virus (HHV-3) can cause two forms of disease—primary infection (varicella, or chickenpox)



Fig. 1 Vesicular rash on trunk.



Fig. 2 Vesicular rash on back.

and a reactivation disorder (herpes zoster). This patient developed chickenpox almost two decades after being vaccinated. Each year after vaccination, the rate of breakthrough varicella increases.¹ A meta-analysis found approximately 80% effectiveness for a single dose in preventing varicella disease of any severity and over 99% effectiveness in preventing severe disease (defined by >500 lesions, complications requiring medical care, hospitalization, or death). Two doses increased the mean effectiveness to approximately 92 to 93% in preventing breakthrough varicella of any severity.^{2, 3} This patient was treated with a 7-day course of valacyclovir and was advised to stay home from work for two weeks.

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Compliance with Ethical Standards:

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