

Adult Chickenpox: Review Questions

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QUESTIONS

Choose the single best answer for each question.

- Approximately how many cases of adult chickenpox occur in the United States each year?**
 - 500
 - 5000
 - 50,000
 - 500,000
 - 5,000,000
- All of the following persons have a higher than average risk of developing adult chickenpox EXCEPT:**
 - A 19-year-old male Army recruit from Puerto Rico
 - A 24-year-old female student from France
 - A 27-year-old female medical resident from the Philippines
 - A 33-year-old male computer engineer from India
 - A 40-year-old female executive from Malaysia
- A 25-year-old man comes to your office concerned about getting chickenpox because he cannot recall having it as a child. He was born and raised in the United States. He inquires about getting vaccinated to prevent chickenpox. Which of the following is the most appropriate advice at this time?**
 - Varicella vaccination is not indicated for adult males
 - Chickenpox in adults is not a serious illness, so he need not worry about it
 - Varicella antibody testing should be performed because it is likely that he is immune
 - He should proceed immediately with varicella vaccination
 - None of the above
- Which one of the following statements regarding adult varicella vaccination is correct?**
 - For 10 years after vaccination, severe illness due to varicella is reduced by approximately 95%
 - After vaccination, varicella antibody titers remain fairly stable over time
 - Vaccination has no effect on the incidence and severity of herpes zoster
 - Varicella vaccine is a killed strain of the virus
 - Giving the vaccine to an already immune person increases the risk of vaccine-related side effects
- A 31-year-old woman, previously in good health, presents with a diffuse, intensely pruritic rash consistent with chickenpox. She first noticed the rash about 36 hours ago. Other than the skin findings, her physical examination is unremarkable. Her children (ages 2 and 4 years) have similar rashes. Her last menstrual period ended 1 week ago. Which of the following statements regarding this patient's condition is correct?**
 - Antiviral medications need to be given within 24 hours of varicella rash onset to be effective
 - If she were pregnant, congenital varicella syndrome would almost certainly occur
 - Hospitalization for administration of intravenous acyclovir is indicated
 - Oral therapy with valacyclovir would be effective in reducing severity and duration of symptoms
 - None of the above

(turn page for answers)

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EXPLANATION OF ANSWERS

- 1. (C) 50,000.** Although chickenpox is most often seen in childhood, a significant number of adults in the United States become ill each year with chickenpox.
- 2. (B) A 24-year-old female student from France.** Persons born and raised in temperate climates (eg, Europe) will more often have immunity to varicella because of a higher incidence of childhood chickenpox in these regions. Persons from more tropical climates (eg, Puerto Rico, the Philippines, India, Malaysia) have a lower probability of varicella immunity, owing to the lower incidence of childhood chickenpox in those regions.
- 3. (C) Varicella antibody testing should be performed because it is likely that he is immune.** In the United States, 71% to 93% of adults who recall no history of chickenpox are immune due to forgotten or sub-clinical illness. Thus, adults should be tested for varicella immunity before proceeding with immunization when there is no history of chickenpox. Vaccination is reasonable in men younger than 30 years who are motivated to comply with testing followed by vaccination if they are antibody-negative. Adults with chickenpox frequently have severe symptoms and are at greater risk for complications compared with children.
- 4. (A) For 10 years after vaccination, severe illness due to varicella is reduced by about 95%.** Vaccination is highly protective against severe illness due to chickenpox. However, antibody titers and protection from illness wane over time after vaccination. Ongoing studies may determine whether varicella vaccination decreases the incidence and severity of herpes zoster. The vaccine contains a live, attenuated strain of varicella virus. Vaccination of those who are already immune has not been shown to increase the risk of adverse events.
- 5. (D) Oral therapy with valacyclovir would be effective in reducing severity and duration of symptoms.** Antiviral therapy with oral valacyclovir, acyclovir, or famciclovir is beneficial when given within 48 hours of rash onset. Hospitalization for intravenous acyclovir is typically limited to complications of chickenpox, such as varicella pneumonia or encephalitis, or for immunosuppressed patients with chickenpox. Approximately 0.4% to 2.0% of pregnant women with chickenpox have infants with congenital varicella syndrome (ie, low birthweight, cutaneous scarring, limb hypoplasia, microcephaly, cortical atrophy, chorioretinitis, cataracts, and other abnormalities).

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INTERNAL MEDICINE

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