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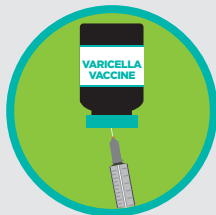
VARICELLA

WHAT YOU NEED TO KNOW

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ARE YOU SURE YOU USE THE RIGHT MEASURES
TO PROTECT YOURSELF AGAINST VARICELLA?

GET INFORMED! GET VACCINATED! GET PROTECTED!



THE DISEASE IN SHORT

Varicella (chickenpox) is still very common in the European Union countries, and is a seasonal disease with incidence peaks during winter and spring.

Outbreaks occur usually in pre-school and school children.

Periodic larger outbreaks may occur with an inter-epidemic cycle of 2 to 5 years.

Vaccination recommendations are not harmonized among member states.

Surveillance systems for varicella are also not harmonized and not all countries collect data on varicella cases.

SYMPTOMS

Incubation period:

9-21 days (usually 14 days)

Varicella begins with mild upper airway symptoms, which can be followed by fever and a pruritic rash emerging initially on the face and chest, then spreading to the extremities. The rash can be found also on the scalp, it's initially maculopapular and develops rapidly to vesicles and then to pustules. All phases of the rash can be seen at the same time. An enanthem may appear in the buccal or genital mucosa. Patients also usually complain of malaise, loss of appetite and headache.

TREATMENT

Varicella in children is usually self-limiting and no treatment is needed besides relief of pruritus and prevention of secondary skin infections. Antivirals such as acyclovir and valacyclovir are usually recommended for adults who are at higher risk for complications or for immune compromised persons. Varicella-Zoster immune globulin (or IV gamma globulin) is recommended for immunocompromised patients or for pregnant women and their neonates within 72 hours after exposure to varicella.

WHO NEEDS A VARICELLA VACCINE?

- **Any healthcare worker** who has no immunity (definitive history of the natural disease or history of two doses of the vaccine) is recommended to receive the varicella vaccine, due to increased risk for complications.
- **Healthcare workers** in particular, who come in contact with neonates or immunocompromised patients, should be vaccinated against varicella.
- A vaccine against herpes zoster has also been licensed in many countries and is recommended in one dose usually for persons ≥ 60 -65 years of age regardless of their immunity to varicella.

CONTRAINDICATIONS

- As a live vaccine it is usually contraindicated in persons with congenital or acquired immune deficiencies.
- May be considered in clinically stable HIV-infected children or adults with CD4+ T-cell levels $\geq 15\%$, including those receiving highly active antiretroviral therapy (HAART).
- The tetravalent vaccine with MMR has not been studied in immunocompromised patients.

REMEMBER THE FOLLOWING FACTS ABOUT **VARICELLA**

- Adults without proven immunity to varicella are at higher risk for complications from the natural disease.
- Varicella is an airborne highly contagious disease.
- The varicella vaccine contains live attenuated virus and can also be found as a tetravalent vaccine with Measles, Mumps and Rubella (MMRV).
- Varicella can be particularly severe and life threatening to:
 - | immunocompromised patients
 - | pregnant women around delivery time and their neonates, who cannot be protected by maternal antibodies.

WHEN DO I NEED TO GET A VARICELLA VACCINE?

Health care workers (HCWs) before starting clinical work, esp. with immunocompromised patients such as in oncology, neonatology or intensive care units.

Any HWC who has been exposed to varicella without immunity (definitive history of the natural disease or history of two doses of the vaccine).

- If the vaccine is administered within 3-5 days of exposure to varicella, patients may develop only mild symptoms.
- Pregnant HCWs exposed to varicella should receive Varicella Zoster immune globulin or IVIG.

The varicella vaccine contains live attenuated varicella zoster virus and should be given in two doses 4 -8 weeks apart, subcutaneously or intramuscularly.

VARICELLA VACCINATION



EFFECTIVENESS OF VARICELLA VACCINE



is 70-90% effective in preventing varicella



are almost 98% effective. Antibodies remain for at least 10-20 years.

COMPLICATIONS FROM VARICELLA (CHICKENPOX)

- Dehydration
- Skin and soft tissue bacterial infections, usually with Group A streptococcus (GAS). Invasive GAS can lead to toxic shock syndrome, fasciitis and sepsis
- Pneumonia/pneumonitis (1/400 adults, higher in pregnant women and immunocompromised)
- Haemorrhagic varicella
- CNS: encephalitis, meningitis, cerebellar ataxia (1/4,000 children)
- Hepatitis, mainly in immunocompromised individuals
- Arthritis
- Osteomyelitis
- Congenital varicella syndrome: if infection in the 1st or early 2nd trimester, then in 4/1,000 - 2/100 pregnancies
- Herpes zoster (up to 1-2/10 persons after primary varicella infection can develop shingles in their lifetime)

VARICELLA VACCINE BENEFITS & POSSIBLE SIDE EFFECTS

Two doses of the vaccine are 98% effective against varicella. Possible side effects include:

Mild (most frequent >1/10 doses)

- Redness at the site of the injection
- Local pain at the injection site (2-3/10)
- Mild fever (up to 38°C)
- Headache
- Fatigue
- Mild nausea, vomiting or diarrhea

Moderate (rare >1/1,000 doses)

- Mild rash that looks like chickenpox (up to 3/100 doses)

Severe (very rare 1/10,000- 1/1,000,000 doses)

- Febrile seizures, up to 3-4/10,000 vaccinated children 12-23 months old. Not reported in older children and adults.
- Herpes zoster from the vaccine strain

WHERE CAN I FIND MORE INFORMATION?

1. BZgA, Germany: www.impfen-info.de
2. ECDC- Communication Toolkit on Immunisation: ecdc.europa.eu/en/healthtopics/immunisation/Pages/Communication-toolkit.aspx
3. WHO Europe: Vaccines and immunization, www.euro.who.int/en/health-topics/disease-prevention/vaccines-and-immunization
4. NIH, USA: www.vaccines.gov
5. Immunization Action Coalition, USA: www.immunize.org
6. National Centre for Immunisation Research & Surveillance, Australia: www.ncirs.edu.au



HProImmune
Promotion of Immunization for Health Professionals in Europe
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Disclaimer: The consortium partners declare no relevant conflict of interest with direct bearing on the subject matter of the HproImmune project. This pertains to relationships with pharmaceutical companies, biomedical device manufacturers and other companies with relation to vaccines.



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