Varicella

Vaccine Handling

The lyophilized form (of varicella vaccine) can be stored at refrigerator temperature for 1.5 years or more, but manufacturers suggest it is better stored frozen. It should not be refrozen.

Schedule

(Varicella) vaccine may be offered in any country to individual adolescents and adults without a history of varicella, in particular to those at increased risk of contracting or spreading the infection. This use in adolescents and adults entails no risk of an epidemiological shift, as childhood exposure to VZV remains unaffected.

From a logistic as well as an epidemiological point of view, the optimal age for varicella vaccination is 12-24 months.

In Japan and several other countries 1 dose of the (varicella) vaccine is considered sufficient, regardless of age. In the United States, 2 doses, 4-8 weeks apart, are recommended for adolescents and adults, in whom 78% were found to have seroconverted after the first, and 99% after the second dose of the vaccine. Children below 13 years receive only 1 dose.
**Varicella**

**Vaccine Administration**

When given at separate sites and with separate syringes, simultaneous vaccination of varicella with other vaccines is as safe and immunogenic as when the vaccines are given at intervals of several weeks.

*Varicella vaccines (WHO position paper)*

**Contraindications**

In immunocompromised persons, including patients with advanced HIV infection, varicella vaccination is currently contraindicated for fear of disseminated vaccine induced disease.

*Varicella vaccines (WHO position paper)*

Contraindications for varicella vaccination include a history of anaphylactic reactions to any component of the vaccine (including neomycin), pregnancy (due to theoretical risk to the fetus; pregnancy should be avoided for 4 weeks following vaccination), ongoing severe illness, and advanced immune disorders of any type.

Except for patients with acute lymphatic leukaemia in stable remission, ongoing treatment with systemic steroids (for adults >20 mg/day, for children >1mg/kg/day) is considered a contraindication for varicella vaccination. A history of congenital immune disorders in close family members is a relative contraindication.

*Varicella vaccines (WHO position paper)*
Recommendations on possible use of (varicella) vaccine for persons in certain states of immunodeficiency are beyond the scope of this article. Advice is provided by several expert panels such as the Advisory Committee on Immunization Practices (ACIP) in the United States.

**Immunization Coverage**

Routine childhood varicella immunization programmes should emphasize high, sustained coverage.

**Introduction of Vaccines**

Routine childhood immunization against varicella may be considered in countries where this disease is a relatively important public health and socioeconomic problem, where the vaccine is affordable, and where high (85%-90%) and sustained vaccine coverage can be achieved. (Childhood immunization with lower coverage could theoretically shift the epidemiology of the disease and increase the number of severe cases in older children and adults.)
Varicella

The likelihood that every child will contract varicella, combined with a socioeconomic structure that implies high indirect costs for each case, make varicella relatively important in industrialized countries with temperate climates. Routine childhood vaccination against this disease is estimated to be cost-effective in such areas.

In most developing countries other new vaccines, including hepatitis B, rotavirus, as well as conjugated Haemophilus influenzae type b and pneumococcal vaccines, have the potential for a much greater public health impact (than varicella vaccine), and should therefore be given priority over varicella vaccines. Hence, at the present time WHO does not recommend the inclusion of varicella vaccination into the routine immunization programmes of developing countries.