

## **MODERN FACILITIES OF PREVENTION ROTAVIRUS INFECTION**

Kirdan V.T, Tryshchuk N.M

The National University of Pharmacy, Kharkiv, Ukraine

[nadezhdatr@mail.ru](mailto:nadezhdatr@mail.ru)

According to the World Health Organization, each year worldwide rotavirus gastroenteritis is the cause of death from 1 to 3 million children. Proved that rotavirus infection in both developed and developing countries, has a share of approximately 40% of other enteric infections. That is, despite the observance of sanitary measures, reducing the morbidity is not marked. This is due to features the virus. The main mechanism of transmission of the virus - "hands - the mouth".

For rotavirus infection is necessary that the body has got only 10 - 100 virus particles. Given the physiological characteristics of children from 6 months to 2 years (knowledge of the world through the mouth, intense teething), to protect the child is almost impossible.

The rotavirus disease causes severe watery diarrhea, often with vomiting, fever, and abdominal pain. In babies and young children, it can lead to dehydration (loss of body fluids). Rotavirus is the leading cause of severe diarrhea in infants and young children worldwide. Tools specific therapies for treating rotavirus infection are absent.

Therefore, a more reasonable way to protect the child from rotavirus infection is vaccination. Vaccination of 716 million children in the world for next 20 years will save 2.4 of millions of lives. Rotarix is a vaccine given to prevent gastroenteritis caused by rotavirus. After having this vaccine, infant's natural defence system will make antibodies against the common types of rotavirus - these antibodies help to protect against rotavirus infection.

Rotarix is a monovalent the live attenuated vaccine strain G1P8 (oral suspension). The vaccine is given as an oral liquid at the same time as other routine childhood immunisations. Course of vaccination includes two doses starting from 6 weeks of age. The completion course of vaccination must take no later than 24 weeks of age. The interval between injections should be at least 4 weeks.

Lightweight implications after administration of rotavirus vaccine-children may become irritable, or they may have a temporary diarrhea or vomiting. Serious implications, possible increase in the incidence of indigestion during the first week after the first dose of rotavirus vaccine, the risk is 1 in indigestion per 100 000 infants.

Rotarix provides early, effective and long term protection against severe rotavirus gastroenteritis during the first 3 years of life in children in different regions of the world. It has been shown to protect against around 90% of the rotavirus strains.