

## **POLIOMYELITIS VACCINE PROPHYLAXIS**

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**Introduction.** Polio is one of the most dangerous childhood diseases, which can lead to death or severe disability. There were 125 endemic countries in 1988. Today, only two countries in the world Afghanistan and Pakistan are polio-endemic. In 2015, WHO confirmed 2 cases of infection with circulating vaccine-derived poliovirus.

**Aim.** To study the basic aspects of epidemiology, etiology, pathogenesis, clinical manifestations, treatment and vaccination of poliomyelitis.

**Materials and methods.** WHO adopted a resolution to eradicate polio in the world. This marked the beginning of the Global Polio Eradication Initiative. To completely eliminate the incidence of polio has been developed polio eradication strategic plan and the implementation of the final stage in the 2013-2018.

**Results and discussion.** Polioviruses are human enterovirus belonging to Picornaviridae family. Penetrating into the human body, the virus replicates in the oropharynx and the intestine, penetrate the regional lymph nodes. Approximately 1% of the virus from infected blood-brain barrier and overcomes affects nerve cells, predominantly large motor neurons of the anterior horns of the spinal cord and motor nuclei of the brain stem nerve that leads to the development of acute flaccid paralysis of muscles. In rare cases, viral destruction of bulbar cells leads to paralysis of the respiratory muscles and death. The source of infection is a sick person or a virus carrier. Risk group are children under 5 years. The mechanism of transmission are the fecal-oral, possible airborne. Antiviral drugs for the specific treatment of the disease there.

Maximum protection is achieved polio vaccine prophylaxis. Two types of vaccines have been created: oral polio vaccine (OPV) and inactivated polio vaccine (IPV). Today there is an active immunization of children in Ukraine. Vaccination of children for polio prevention is carried out according to the immunization schedule at ages 2 months, 4 months, 6 months, 18 months and 6 years and 14 years. IPV is used for the first two vaccinations, and with contraindications to the introduction of OPV IPV is indicated for all subsequent immunizations. OPV vaccine used for 3-6-th vaccinations (6 months, 18 months, 6 years and 14 years) in the absence of contraindications.

**Conclusions.** Polio is a dangerous infectious disease, the only protection is vaccination.