Hand, foot and mouth disease - recommendations for kindergartens and schools

Hand, foot and mouth disease is a common viral illness among children. Adults can also get sick. The disease is usually mild and most cases do not require hospitalisation. Rarely, more severe forms of the disease may occur.

The cause

Hand, foot and mouth disease is caused by enteroviruses. While most of these viruses cause mild forms of the disease, more severe forms with neurological complications can also occur.

Disease signs in hand, foot and mouth disease (HFMD)

The incubation period, or the time from infection to onset of disease, is usually four to six days. Virus shedding begins before the onset of symptoms and continues for several weeks after recovery. The usual signs and symptoms of this highly contagious disease are fever, sore throat and skin rash. The rash usually appears on the palms of the hands, soles of the feet and buttocks. Painful blisters are found in the oral cavity, especially on the tongue and soft palate. The fever lasts for four to five days. The fever, rash and ulcers usually disappear spontaneously within a week. Complications are rare.

How does the disease spread?

Infection is transmitted mainly directly through saliva, nasal secretions, faeces or indirectly through infected objects and surfaces. A person may continue to shed the virus in the faeces for several weeks after infection, and infection may also continue without any signs of disease.

Can we get the disease more than once?

Individuals who recover from HFMD develop immunity to the virus that caused their infection. However, because HFMD can be caused by several different viruses, people can become ill again if they become infected with one of the other viruses.

Epidemiology

The disease occurs mainly in summer and autumn. Enteroviruses are widespread throughout the world, with varying incidence and prevalence in different parts of the world. In the last decade, there have been a number of outbreaks, mainly in the Western Pacific (Japan, Malaysia, Singapore).

There is little information on the occurrence of enterovirus infections in Europe.

Laboratory diagnostics

In most cases, laboratory diagnosis is not necessary.

Treatment

Treatment is symptomatic, with medications to relieve sore throat and reduce fever. Antibiotics are not a treatment for viral infections.

Recommendations

- Wash hands regularly with soap and water, especially when they are contaminated with mouth or nasal secretions, after changing nappies and using the toilet.
- > Avoid sharing personal items (cutlery, towels, toothbrush, etc.).
- Frequently ventilate enclosed spaces. Where there is no central ventilation system, short-term and intensive ventilation by opening windows is the most appropriate method. Ventilate rooms (classrooms, playrooms and other working and living areas) at regular intervals. Open windows wide for 2–3 minutes every school hour. Ventilate even at low external temperatures and during the heating season.
- > Thoroughly clean toys contaminated with children's secretions.
- Frequently clean surfaces and objects that children often touch.
- In times of increased illness or disease outbreaks, more frequent cleaning and disinfection of sanitary facilities is also needed.
- Children with hand, foot and mouth disease should stay at home. They can return to nursery or school when they no longer have a fever and the blisters are dry.
- If you see an increase in the number of children with signs of hand, foot and mouth disease in your kindergarten or school, inform the epidemiology service of the National Institute of Public Health's regional unit, where they will advise you on what actions to take.