Hand, Foot and Mouth Disease

Hand, Foot and Mouth Disease (HFMD) is an acute viral illness chiefly affecting children under the age of 10 years but can also affect adults (Saguil et al 2019). This is most commonly caused by the coxsackievirus of the enterovirus family. This is not to be confused with foot and mouth disease of animals, which is caused by a different virus (NICE 2020).

HFMD is transmitted via direct contact with nasal and throat secretions (coughing and sneezing), direct contact with fluid from blisters, faeco-oral transmission (this can include infected individuals who are asymptomatic but may still excrete the virus in their faeces) or spread across the placenta from mother to foetus (NICE 2020). Outbreaks can occur frequently amongst groups of children such as childcare settings and schools.

The first signs of hand, foot and mouth disease are;

-A sore throat

-A high temperature

-refusing to eat

The second stage usually starts a few days later and includes;

-Vesicular eruptions in the mouth

-Raised rash to the hands, feet and sometimes the genitals and thighs. This can appear pink, red or darker than the surrounding skin depending on skin tone. This can turn to blisters which may appear grey or lighter than the surrounding skin

(NHS 2021)

Rarely complications of HFMD can occur and include dehydration due to difficult of swallowing, bacterial infection within a legion, potentially severe cardiopulmonary complications as well as potentially life-threatening neurological conditions (Zhu et al 2023).

HFMD should self-resolve within 7-10 days therefore treatment is generally supportive such as a non-steroidal anti inflammatory or paracetamol for the treatment of fever, encouragement of fluids and soft foods as required (Guerra et al 2022).

There is currently no approved vaccine against HFMD therefore strategies to reduce the spread of infection should be employed. These include good hand hygiene, avoidance of sharing personal items such as cups, utensils and towels, disinfectant of surfaces and avoidance of contact with infected individuals (Cox and Levent 2018).

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