Hand, foot and mouth disease (HFMD) occurs worldwide sporadically and in epidemics. Incidence is greatest in summer and early autumn. Outbreaks occur frequently among groups of children in childcare centres and schools. It is usually caused by coxsackie A virus (A16), but may be caused less commonly by other group A and group B coxsackie viruses and enterovirus 71 (EV71). Hand, foot and mouth disease usually affects children under 10 years of age. Enteroviruses may also cause more serious disease such as meningoencephalitis and myocarditis. Treatment is symptomatic. Children are particularly infectious until the blisters have disappeared. Exclusion from school or childcare is not practical as the virus may be present in the faeces for several weeks.

Presentation

Hand, foot and mouth disease is a syndrome characterised by vesicular stomatitis and cutaneous lesions of the distal extremities. The illness usually begins with a prodrome of fever, sore throat and anorexia. One or two days after the fever begins, vesicles appear on the cheeks, gums and sides of the tongue (Figure 1). These begin as small red spots that blister and often become ulcers. The skin rash develops over 1–2 days with papulovesicular lesions occurring in 75% of cases. These appear on the palms, fingers, toes, soles, buttocks (common), genitals and limbs (Figure 2, 3). The lesions may look haemorrhagic and are not itchy. The illness usually lasts 7–10 days. Diagnosis is usually based on the clinical picture alone. Viral isolation from nasopharyngeal and stool specimens, and polymerase chain reac-
tion analysis of blood, cerebrospinal fluid, and faeces are possible, but rarely indicated. Infection results in immunity to the specific virus, but a second episode can occur following infection with a different member of the enterovirus group.

Management

Symptomatic treatment only is required. More severe enteroviral infections have been treated with the new antiviral agent, pleconaril, although there are few studies showing a clear improvement in outcome.

Pregnancy

Enterovirus infection can be transmitted to the fetus if infection occurs late in pregnancy. Meningoencephalitis, thrombocytopenia, disseminated intravascular coagulopathy, cardiomyopathy and hepatitis may ensue in the newborn, and disease appears to be more severe than if it is postnatally acquired.

School or childcare exclusion

Notification is not required. Exclusion is not practical as the virus may be present in the faeces for several weeks.

Conflict of interest: none declared.

**SUMMARY OF IMPORTANT POINTS**

- Enteroviral infections, including HFMD are common in children, particularly in summer and autumn.
- Most children have a short lived mild illness.
- Parents and childcare workers should wash hands carefully after handling respiratory discharges, faeces, or after contact with skin lesions.
- Exclusion from school or childcare is not indicated.

**References**