Common Skin Infections in Children

Skin infections may be caused by bacteria, viruses, fungi or parasites. Impetigo is a common bacterial skin infection amongst children. Several common viral skin infections in childhood include varicella (chickenpox), hand, foot and mouth disease, viral warts and molluscum contagiosum. Fungal infections include candidiasis and ringworm. Scabies and hair lice are itchy parasitic infections that may spread via close contact.

Impetigo

Impetigo is a contagious skin infection caused by *Streptococcal* or *Staphylococcal* bacteria. It commonly occurs on the face, particularly around the nose and mouth. The lesions appear as blisters that rupture, leaving honey-coloured crusted erosions. Impetigo can complicate a pre-existing skin disorder such as eczema. Treatment includes the use of topical and oral antibiotics.

Hand, Foot and Mouth Disease

Hand, foot and mouth disease (HFMD) is a contagious viral illness caused by a group of viruses known as Enteroviruses. It spreads from person to person by direct contact with saliva, nasal discharge, faeces and fluid from the rash of an infected individual. Children below the age of 5 years are particularly susceptible. HFMD is very common in Singapore, with frequent outbreaks in childcare centres, kindergartens and schools. The disease is usually mild, manifesting with symptoms such as fever, sore throat, painful ulcers in the throat, mouth, tongue, and a vesicular rash typically on the palms, fingers, feet and buttocks. Complications are rare, and include brain, lung and heart infection. There is no specific treatment for HFMD. Adequate fluid intake to prevent dehydration should be encouraged. Medications to relieve pain and fever can be prescribed by your doctor.
**Viral Warts**

Viral warts are growths on the skin caused by the human papillomavirus. They usually appear as rough bumps with tiny dark dots, and can grow on any part of the skin, including the genitals. Warts are mostly painless, unless they are located on pressure areas such as the soles. There are various modalities of destroying warts, including cryotherapy (liquid nitrogen treatment), chemical application (salicylic acid, imiquimod), surgery and laser ablation. Without treatment, some warts may go away, but it may take 6 months to 2 years for the warts to disappear spontaneously.

**Varicella (Chickenpox)**

Chickenpox is a highly contagious disease caused by the varicella zoster virus. It spreads from person to person by direct contact with secretions from the rash and by droplets from an infected individual when he coughs or sneezes. An infected person is infectious one to two days before the rash appears and remains infectious until the skin lesions have crusted over. A person becomes immune to chickenpox once he has had the disease, and is not likely to catch it again. Chickenpox is not harmful in most individuals, but can be severe in persons with compromised immune systems (those on chemotherapy and other immune-suppressing medication, persons with AIDS) and newborn infants. Children with chickenpox should not receive aspirin because of the possibility of Reye’s syndrome, a very serious illness causing liver and brain damage.

There are anti-viral medications that may help to reduce the severity and duration of the disease, but these are usually most effective only if commenced in the early part of the disease. Most children do not require these medications. Chickenpox can be prevented through vaccination.

**Molluscum contagiosum**

Molluscum contagiosum is caused by a poxvirus and can spread from person to person by skin-to-skin contact (eg wrestlers, gymnasts, sharing of towels and clothing). The rash appears as tiny flesh-coloured dome-shaped bumps with an indented center. There may be surrounding redness if the lesion is inflamed. The lesions are most commonly found on the face, eyelids, neck, armpits and thighs.
Treatment of molluscum contagiosum may not be necessary in children as the lesions may disappear on their own. However, removal of the lesions helps to reduce spread to other areas of the body and to other people. Various modalities of treatment are available and include cryotherapy (liquid nitrogen), topical imiquimod 5% cream and trichloroacetic acid. It is not necessary to keep children who are infected with molluscum contagiosum out of school, although physical contact and sharing of clothes and towels should be avoided.

**Fungal Infections**

Superficial fungal skin infections are commonly caused by dermatophytes and yeasts.

Dermatophyte infections, otherwise known as ringworm, affects people of all ages and can involve the scalp, hair, face, limbs, trunk or nails. Transmission can occur from person to person, animal to person or soil to person. The most common site of involvement in childhood is the scalp (tinea capitis). Treatment consists of topical with or without oral medication, depending on the site and extent of infection.

Yeast infections include tinea/pityriasis versicolor (“white spots”) and candidal infections in warm moist body areas. Topical anti-fungal agents are usually effective in eradicating these yeast infections in children.

**Scabies**

Scabies is caused by the scabies mite, which burrows into the skin of infected individuals. Scabies is extremely itchy, and usually worse at night. The infection may be transmitted to close contacts, such as those within the same household, hospital or institution. Various topical medications have shown to be effective in eradicating the infection, and close contacts of the infected person are advised to be treated as well.