Some common skin rashes in babies and young children

When a baby is born, the skin is exposed to external environmental conditions. In the womb, the skin is covered with vernix which acts as antimicrobial, anti-oxidant and also helps in temperature regulation. As soon as this cheesy unsightly material is washed out from the surface, the baby skin becomes vulnerable and needs extra protection from external elements. Skin rashes affecting babies and children are broadly divided into congenital, infective or inflammatory conditions.

A baby can be born with various skin lesions including congenital naevi, haemangioma and other vascular malformations, as well as juvenile xanthogranulomas. Most of these lesions are harmless and can also appear at a later stage in infancy. There are many types of congenital naevi and most are benign and warrant treatment only for cosmetic reasons. Few of them like the sebaceous naevus may have some malignant potential and need to be dealt with. Infantile haemangiomas are rapidly growing, benign proliferations of endothelial cells, affecting around 1% of babies. They can attain quite sizeable proportions but usually resolve gradually over the next few years. Most occur on the head and neck areas and can cause a lot of distress to the parents. If they cause obstructive symptoms or are very unsightly, treatment with steroids, propranolol or laser ablation can help shrink the lesions. Juvenile xanthogranulomas are growths that tend to develop in the first or second year of life. They are commonly encountered in the dermatology practice and usually have no clinical consequences. Most appear as nodules on the skin and tend to regress before the age of 6 years. In a few babies, they can occur in the eyes and internal organs and should be managed accordingly.

The most common inflammatory disease affecting babies and children are the eczemas. Up to forty percent of children will suffer from eczema and the prevalence is increasing. Atopic eczema commonly begins at the age of three months and tends to resolve by the mid-teen years. Sometimes it can continue into adulthood or present for the first time in adults. The rash tends to be symmetrical with ill-defined redness and fine scaling, together with serous exudation, vesiculation and crusting in the more acute states. The skin is generally dry and xerotic. The rash tends to start on the face and spread to the trunk and limbs, with a predilection for the flexural areas. In severe cases, lichenification can be present in all over the body with temporary loss of scalp hair, mainly occurring in black children. Moreover, the children are extremely irritated and do not sleep properly due to severe pruritus and at times pain form the open areas. This can lead to a decrease in appetite and failure to thrive.

These patients should be treated aggressively from the beginning to get the disease under control. Firstly, there should not be any food restriction, unless it is unequivocally proven that every time the patient consumes a certain diet, the rash get aggravated. Good nutrition helps improve the overall well-being of the patient and helps the healing of the damaged skin, due to scratching. Commonly used therapy includes corticosteroid creams, emollients, oral steroids, antibiotics and antihistamines to break the itch-scratch cycle. In severe cases,

patients are treated with immunosuppressant and narrowband UVB light therapy. Once the disease is under control, the patient needs to be regularly monitored and maintained with the emollients, low dose corticosteroids, calcineurin inhibitors or even phototherapy.

Infantile seborrheic eczema can look very similar to atopic eczema. These babies are less itchy and the rash appears in the first few weeks of life. It can present as a cradle cap or a rash in the napkin area which gradually involves the face and other regions of the body. It can have a yellowish, scaling look especially on the face and the scalp. Most cases are treated with emollients or corticosteroid creams. The cradle cap can be exfoliated using a low concentration salicylic acid mixture.

Babies and young children are very prone to infections. Fungus, bacteria, virus or parasite are common in this this age group and they tend to have various skin manifestations that help in their identification. Candida infections tend to occur in the napkin region presenting with rawness, maceration of the genitocrural folds with satellite pustules. The latter suggests the diagnosis and a swab for culture can confirm the diagnosis. Other commonly encountered rashes in the napkin area can at times be very difficult to distinguish from candida and include napkin dermatitis, seborrheic eczema, napkin psoriasis, langehans'cell histiocytosis and rarely acrodermatitis enteropathica due to zinc deficiency. If in doubt, the patient needs to be referred to a dermatologist for confirmation.

Tinea capitis is very common in school going children. It is more common in low-socioeconomic areas and is caused by various Microsporum and Trichophyton species. Usually the patient presents with small areas of hair loss and at times with a dry scale. At times there may be multiple small patches with the presence of pustules. The diagnosis is clinical and if in doubt the scales from the affected areas can be plucked and sent for microscopy. These patients should be treated early, with oral anti-fungals to prevent areas of scars and permanent hair loss.

There are many bacterial infections affecting young children and impetigo seems to be the most common. It is caused by either S. aureus or Streptococcus or both. Most children get the lesion on their face; however, it can occur anywhere. Impetigo tends to start as small blisters, which becomes filled with pus. These lesions rupture and the purulent exudate dries to form golden coloured crusts. These lesions can be very infectious and need to be treated early with oral antibiotics.

Virus infections are extremely common in early life and children tend to acquire them at crèche or at primary schools. Measles, erythema infectiosum, roseola infantum, molluscum contagiosum, various herpes viruses, hand foot and mouth disease and viral warts are commonly encountered in this group. Many of the viral infections can resemble each other with subtle differences. Erythema infectiosum is caused by parvovirus B19 and appears as red, raised erythema over the cheeks, followed by a symmetrical reticular papular eruption

on the buttocks and on the extensor surfaces of the limbs. It lasts for around two weeks and treatment is supportive.

As for roseola, it is caused by HHV6 or HHV7 and is characterised by an abrupt onset of high fever, which subsides after around four days, when the rash appears. It is characterised by multiple red macules all over the body and typically begins on the neck and spread to the trunk and limbs. The rash disappears within a few days. Hand, foot and mouth disease is caused by Coxsackievirus and results in lesions in those areas. There may be a prodromal phase during incubation phase with the onset of vesicles surrounded by erythema. The management is supportive and the disease resolves itself within a week.

Molluscum contagiosum is caused by the only remaining poxvirus to specifically afflict humans after the eradication of smallpox. It is thought to be transmitted by skin to skin contact or by contaminated swimming pools. This virus presents as umbillicated papules on various areas of the body and can spread rapidly. Most can disappear within six months to a year; however, in some causes they persist and therefore require treatment. Destroying the lesions or irritating the lesions by various means can lead to complete resolution and once treated, they do not tend to recur.
There are numerous skin diseases affecting children and an in depth discussion is beyond the scope of this article. Whilst the vast majority can be confirmed clinically, some may require biopsies and various tests to confirm. Parents can become very impatient especially with chronic diseases and with growths like haemangioma and juvenile xanthogranulomas, on their babies. In these cases, they must be well-counselled and the pros and cons of various treatments need to be well-explained.

Dr Rakesh Newaj
Specialist Dermatologist
MBBCh (Wits) FC Derm (SA)
Pretoria branch: 266 Polaris ave, Waterkloof ridge
Tel:(+2712)-7514001
Johannesburg, Kempton park branch: Arwyp medical centre
Tel: (+2711)-9221565
Fax: 0865037142
www.dermatologistjohannesburg.com