

Common Health Conditions series – **Eczema**



Eczema, also known as atopic dermatitis, refers to an inflammation of the skin with the characteristics of

- Dry or scaly skin
- Rash that is itchy
- Redness or in certain instance, hypopigmentation or hyperpigmentation
- Oozing pus or blisters or crusts
- Lichenification, which refers to thickened dry skin at the rash

Eczema affects 20% of children worldwide, with an increasing trend in developed countries. While it is not life-threatening, it is a chronic disease that can severely impact one's quality of life due to the constant itch and poor sleep.

Causes of Eczema

Why do some children have eczema while others do not? As eczema is a multi-factorial condition, there is no one clear factor but various factors are noted with the increase in eczema.

1 Genetic – Should one parent or both parents or sibling have **eczema** or an allergic condition, there is a higher likelihood that the child will have **eczema**.

2 Allergic condition – **Eczema** belongs to the group of allergic conditions, thus having allergic rhinitis, asthma or allergy increases the chance of also having eczema (and vice versa).

3 Defective skin barrier – Defective skin barrier whereby the skin allows for higher penetration of irritants/allergens (for instance, visibly dry skin at birth) increases the probability of eczema.

4 Bacteria colonization – Everyone's skin has beneficial and harmful bacteria and the skin of **eczema** patients have been studied to have a higher rate of colonization by the bacteria *Staphylococcus aureus*. This bacteria promotes inflammation and also makes one more prone to infection.

5 Hygiene hypothesis – As the increase in **eczema** is largely seen in developed countries and in line with the increased

use of detergent and cleaning agents, it is hypothesized that being too clean had resulted in our immune system being hyper-sensitive to all foreign matters, even harmless ones like dust mites.

6 Diet – While there is no causal study between diet and **eczema**, associations have been seen between an unhealthy diet and more severe **eczema**.

Triggers of Eczema

Although a chronic condition, **eczema** can be controlled by good skincare routine and avoiding the triggers. Triggers can be in many forms, either food, inhaled or contact allergens. Below are the common triggers:

- **Food** – Food allergy is more common in younger children, than for older children. The common food allergens are cow's milk, egg, wheat, soy, peanuts and seafood.
- **Contact** – The common contact allergens are house dust mite, pet dander and mold, cockroach. Once tested positive to the respective contact allergen, measures can then be taken to reduce the allergen source, e.g. washing linens in above 60 degrees Celsius to kill dust mite or reducing food and damp spots for cockroaches.
- **Inhaled** – Pollen is a common allergen for people living in non-tropical areas and once the type of pollen is identified, effort should be made not to go outdoors or open windows when the particular pollen count is high.
- **Other factors** – Stress, fever, heat, humidity, hormonal changes, smoking and alcohol may trigger **eczema** for some patients.

Various allergy tests, such as skin prick test, IgE blood test and patch test can be conducted to find out which allergens trigger **eczema**. Although not 100% accurate, allergy tests can serve as a useful starting point for managing **eczema**.

Can Eczema be Prevented?

Given the high cost of **eczema** (consultation, prescription, medical leave, skin care products) and negative impact on quality of life (loss of sleep, constant itch resulting in inability to concentrate in school or loss of self-esteem), many parents are interested in primary prevention – prevention of the

onset of **eczema**. Unfortunately, there is no recommended way to prevent **eczema**, though the following have been the subject of more studies:

1 Breastfeeding – Breast milk is the recommended nutrition and there is no study to confirm the efficacy of changing the maternal diet (either avoiding common allergens or introducing them into mother's diet).

2 Probiotics – It is now more widely accepted that probiotics taken during pregnancy and when nursing has some protective purpose. The strain and amount of probiotics are still being studied.

3 Supplements – Omega 3 has been studied to have some impact and TCM also recommend certain Chinese medicine to boost immune system to be more tolerant of harmless triggers.

Good Skincare and Eczema Treatment

Given that eczema has to do with a defective skin barrier, daily skincare routine is important:

- 1.** Moisturize often, and immediately after shower
- 2.** Avoid long and hot showers
- 3.** Avoid soap products and opt for gentle, hypoallergenic products for young children
- 4.** For those with constant bacteria skin infection, consider chlorhexidine wash or bleach bath

TCM has its unique methods to treat eczema. Herbal oral medication, acupuncture and inhaling or steaming of herbal mist are used for this treatment and are customized for each individual. For children under the age of 6 years old, TCM pediatric massage is widely used and known to be effective in treating eczema, by regulating the body circulation system and restoring body balance through a specific set of acupoint massage. On the other hand, TCM physician may also recommend avoiding certain foods, such as fried foods, spicy food and alcohol.

It is important to treat eczema early as some studies show that more severe eczema is related to higher likelihood of other allergic conditions. Moreover, eczema is intensely itchy and untreated eczema may result in scratching and bacteria infection