



Atopic Dermatitis

What is it?

Atopic dermatitis (also called eczema) is a condition of the skin where the skin is dry, red and itchy. The main function of the skin on the body is to provide a barrier. In atopic dermatitis that barrier is not quite adequate, and the skin is easily irritated. The other main function of the skin is as a first defense in the immune system. In atopic dermatitis the immune system machinery is altered. When the inflammatory cells of the immune system populate the skin this results in red areas on the skin. You can think of the skin as "hyper-excitable." If you combine hyper-excitability of the skin with an inadequate skin barrier you get a rash and itching.

Why do people get this condition?

It is at least partly in the genetic makeup and is probably a combination of more than one gene that is inherited. There are also factors in the environment which trigger the condition to flare. Irritating soaps, dust mites, and pet dander are some of the more common triggers.

How is it diagnosed?

Diagnosis is clinical. There is no blood test that can be done that would label your child with this condition. Skin biopsy can also confirm the diagnosis but is only required in some cases if the presentation is not typical.

How can it be prevented from showing up?

Keep the skin well moisturized.

Avoid irritants and triggers.

Use prescribed medicine when there are red or rough areas to help the skin to return to normal as quickly as possible.

Try to limit scratching.

If everything is being done as it should, why does the dermatitis keep flaring?

If you keep the skin well moisturized, and avoid coming in contact with things you know irritate your child's skin, there will be less flares. However, some flares of atopic dermatitis are beyond your control. Tell your doctor if flares are still a regular occurrence so that he/she can consider other options for your child.

What are the triggers?

Triggers are different for different people. Most commonly the triggers are:

Heat and sweat for some individuals, cold weather for others

House dust mites, pet fur

Wool; synthetic fabrics like nylon; dyed fabrics

Tobacco smoke

Fragrances in: shampoos, soaps, laundry detergents, fabric softeners.

Saliva, prolonged exposure to water

Can eczema be outgrown?

Most children do outgrow the condition. Many continue to have sensitive skin into adulthood.

Treatment: The main theme is that all the treatments are designed to limit contact with irritating factors and to balance the immune system's reaction in the skin.

There are many different options for prescriptions to improve the skin. Different doctors prescribe different medications and may advise slightly differently according to their experiences. The main

treatments are topical creams and ointments. The two main types of topical therapy are corticosteroids and the newer topical immune modulators.

1) Use moisturizer all over the entire body at least twice a day.

This keeps the skin moisturized to restore the barrier function:

Find a cream or ointment that your child likes - this is the most important. The medicine does not do much good in the bottle. The thicker the moisturizer, generally the better barrier it provides.

Ointments work better than creams. Creams work better than lotions. Lotions are more useful during the summer when thick creams can be unbearable. If you put moisturizer on the skin while the skin is damp, this is doubly effective. The moisturizer provides a seal holding the water in the skin. You may bathe your child in warm, not hot water, for short periods of time (no more than 15 minutes at a time) once a day if they like. Lightly pat your child dry with a towel then, while the skin is still damp, (within 3 minutes) apply a moisturizer from head to toe. If your child is using a medicated cream, apply that before you put the moisturizer on.

2) Apply the prescription medication twice a day to only the red, rough areas on skin. Put the medication on your fingers and gently rub it into the areas. Usually the medicine will help an area within a few days time. Try to put the medicine on for two days after you have noticed that the redness is no longer present; this will help the redness from returning.

3) Avoid triggers.

Some children have specific things that trigger itching and rashes, while others may have none that can be identified. It may require a little bit of trial and error to see what applies to your child. Also, triggers can change over time for your child. The most common triggers are listed above; start with these. Avoid use of fabric softeners in the washing machine or as dryer sheets. Try to use laundry detergents, soaps and shampoos that are fragrance free. You may find that double rinsing the clothes helps. Some children are sensitive to house dust mites and they may benefit from a plastic mattress wrap. While food allergy is more common in children with eczema, foods are specific triggers for flares in only a small percentage of children. If you notice that the skin flares after certain foods you can see if eliminating one food at time makes a difference, as long as your child can still enjoy a well balanced diet.

4) Consider using a medication by mouth to help control the itching.

Scratching only makes the skin more reactive and the barrier function even more disrupted. It can cause both children and their parents to loose sleep! There are different types of anti-itch medications. Some cause more drowsiness than others. Both types are acceptable depending on your child and your preference. Start with benadryl and if that does not work, ask for a prescription “antihistamine.”

5) About the prescription creams:

Steroid creams and ointments (generally things with “-one” on the end of the name):

The strength of the cream or ointment depends on the name of the active ingredient. The numbers at the end do not indicate the relative strength. Thus triamcinolone 0.1% ointment is much stronger than hydrocortisone 1% even though the number following the name is much lower. Topical steroids are very effective in treating atopic dermatitis. When used in the manner prescribed (to only rashy areas of skin and for not more than a few weeks time to any one area) they are very safe. Remember that these are cortico-steroids and are anti-inflammatory not “anabolic steroids” like those used illicitly by athletes.

Topical non-steroid creams and ointments (topical immunomodulators): These creams and ointments decrease itching and redness in the skin. Since they are so new, they are generally used as second-line medications, though they may be used alone or in conjunction with topical steroids. The good thing is that they do not have some of the side effects that misuse of steroids can have (thinning of skin and stretch marks when not used properly). Names of immunomodulators include Elidel and Protopic.

This is the medical opinion of Savannah River Dermatology. For additional information, please contact us at 706-691-7079.