**ECZEMA**

**What is atopic dermatitis?**
Atopic dermatitis (AD) is a common chronic skin disease that also is called eczema. People with AD usually have dry, red, itchy patches on the skin. Itching is the major feature of atopic dermatitis. In general, atopic dermatitis will come and go, often from changes in the environment. Atopic dermatitis is not contagious and, like many diseases, currently cannot be cured. However, for most patients the condition may be managed well with treatment and avoidance of triggers.

**How common is atopic dermatitis and can my child outgrow it?**
Approximately 10 to 20 percent of all infants have atopic dermatitis. However, many infants with atopic dermatitis improve by age 2, and about 40 to 50 percent of patients outgrow the disorder by the time they are young adults.

**Is my child at risk for other diseases due to their atopic dermatitis?**
Patients with atopic dermatitis often develop other allergic diseases. About 2/3 of the patients with atopic dermatitis will have allergic rhinitis (hayfever). Also, about ½ of the children with atopic dermatitis can develop asthma later in life.

**How can atopic dermatitis be treated?**

**BREAK THE ITCH/SCRATCH CYCLE**
Scratching or rubbing the skin can make the itch and rash of AD worse. Scratching causes further irritation, injures the skin and increases itchiness. This is called the itch-scratch cycle. Emphasizing behavior modification (especially in older children) by teaching your child to apply cold compresses to the itch, instead of scratching, can be helpful.

**Antihistamines**
Antihistamines taken by mouth can help reduce itching. Use non drowsy antihistamines during the day like Reactine, Aerius or Claritin. Benadryl or Atarax can be used at night (these can cause drowsiness).

**Moisturizing the skin – THIS IS THE MOST IMPORTANT STEP IN CONTROLLING ECZEMA**
Moisturizers are most effective when applied directly after bathing (within three minutes after finishing baths) so that the moisture from the bath is "locked in." We recommend Glaxal base with 10% glycerin (pharmacist will mix it up for you) or HYDROLATUM (hydrated petrolatum). For patients who may not tolerate occlusive ointments like Hydrated Petrolatum or during the summer months when sweating becomes an important trigger, non-perfumed skin creams can also be effective. Examples include EUCERIN (contains lanolin) or GLAXAL BASE or CUREL. Lotions contain water and alcohol, which can actually dry the skin and are usually inadequate for the dry skin of patients with AD.

For stubborn areas, wet dressing can help. For example, leaving a wet sock on for two hours, covered by a dry sock can help the thickened areas on the ankle and foot. After removing the wet dressing, moisturizers and ointments need to be applied.

**Bathing and shampoo**
- Use warm, not hot, water for 10 to 15 minutes until the skin "prunes"
- Add Oilatum or Keri Oil to the bath
- Do not allow your child to play with soap during the bath; use it at the end and rinse thoroughly
- When bathing, use a mild moisturizing soap such as Dove or Cetaphil
- Use only mild shampoos such as JOHNSON'S BABY SHAMPOO and rinse thoroughly.
- Avoid excessive scrubbing and toweling
- Apply a moisturizer to the skin within three minutes after bathing

**Allergens**
The non-medication approach to avoid inflammation is to avoid triggers including pollens, dust, animals, mold and foods. Dust mites and pet dander are significant indoor triggers. Encasing pillows and mattress in dust mite-impermeable covers, washing sheets in hot water and keeping humidity between 30 and 50 percent will effectively decrease the dust mite levels.

Other dust mite prevention measures include changing all bed linens, dusting your home, vacuuming carpets with vacuums that use 2-ply vacuum bags and removing rugs and drapes. These measures will reduce dust exposure, which not only
triggers the itch of some patients, but also decreases the chance of developing allergy to the dust mite — the most common allergic cause of asthma and hay fever later in life.

The only completely effective measure for eliminating animal dander is removal of the animal from the home.

Environmental pollens are difficulty to avoid. The indoor environment should be kept free of pollen by using air conditioners and closing the windows during pollen season. If your child is exposed to allergens on a daily basis, bathe daily.

**Foods**
For children with severe eczema, up to 40 percent will have food allergies that trigger their eczema. The most common foods are eggs, milk, peanut, soy, wheat, fish and tree nuts (e.g., walnuts, cashews). This will be further discussed at your visit with the allergist.

**Avoid sudden changes in temperature or humidity**
Keeping thermostats set low and having your child wear fewer bedclothes to prevent night sweating are two ways to combat the problem. Since the most common trigger of the scratch/itch cycle is overheating and sweating, preventing these environmental situations, whenever possible, is essential.

**Irritants**
Avoid cigarette smoke, fragrances, alcohol containing skin care products, wool, furry pets, juices, harsh soaps and detergents.

**Clothing**
Your child's skin should be covered with smooth cotton clothing, such as long pants and long-sleeved shirts and pajamas at night, to decrease scratching and itching. Cotton bedding is often beneficial. Wool, feathers, or other harsh materials are irritating to the skin and therefore increase itching and scratching. It is often helpful to add a second rinse cycle to laundry to remove any excess soap or detergent.

It also helps to keep your child's fingernails short! If scratching at night is a problem, try covering the hands with a soft pair of socks or cotton gloves.

**Emotions and Stress**
Emotions and stress do not cause AD, but they may bring on itching and scratching. Anger, frustration and embarrassment can cause flushing and itching.

**Infections**
People with AD are prone to skin infections. Learn to recognize the early signs of skin infections and consult a physician immediately. Signs to watch for include increased redness, pus-filled bumps (pustules), weeping areas that become crusted, and cold sores or fever blisters. If this happens, your doctor may prescribe topical or oral antibiotics to kill the bacteria causing the infection.

**Controlling inflammation**
Prescription medications may be needed to control the inflammation that leads to the itching. There are two types:

Topical immunomodulators (TIMs) are new and have been approved for use since February 2000. These include Tacrolimus (PROTOPIC) and Pimecrolimus (ELIDEL). Studies have shown that this new class of drugs will improve or completely clear eczema in 60 to 80 percent of treated patients. The major side effect seen in these medications is some itching or burning in the first week of use. There may be long term side effects from extended use. This website can give you more information regarding safety of these products: http://www.dermatology.ca/english/public-patients/positions_e.html#calcineurin

Topical corticosteroids range in strength from mild to very potent. Low potency topical steroids like hydrocortisone do not have the side effects seen in high potency topical steroids. The more potent ones can cause thinned skin, stretch marks and other problems if used for too many days in the same areas of the body. To prevent side-effects, such as the skin thinning seen in high potency steroids, your doctor may limit the length of treatment time and locations where your child can apply these ointments. In general, only mild topical corticosteroids should be used on the face and in the groin area.