Eczema (Atopic Dermatitis)

McKenzie Pediatrics, P.C. September 2008

What Is Eczema?

Eczema, medically known as *Atopic Dermatitis*, is an **intensely itchy**, **chronic** or chronically relapsing (comes and goes) rash with a mixture of redness, scaling, bumps (papules), and extreme dryness. **It usually itches more at night**, **causing loss of sleep and daytime behavior consequences.**

Eczema usually represents the child as having an *atopic predisposition*, meaning that the child is one of 10-15 percent of humans genetically prone to developing allergic diseases. **One-half** of children with eczema will develop asthma in their lifetime, and **three-fourths** will develop seasonal or perennial allergies. This is known as the "atopic march". Early recognition and treatment of eczema <u>may</u>, in fact, slow this march, and make it less likely the child will go on to develop either of these conditions.

About 10 to 20 percent of children will develop eczema. Two-thirds who do will do so before 12 months, and 90 percent will do so before age 5 years. **The most common age to begin seeing eczema is between 6 and 12 weeks**.

Male and female children are equally affected. Eczema is more common in formula-fed infants, and in children formula-fed as infants. The majority of young children with eczema will go into "remission" as they get older, although some will find their eczema returns with puberty. Between 1 and 3 percent of adults continue to have eczema.

Where Does Eczema Occur?

Eczema may occur <u>anywhere</u> on the body. In <u>infants</u>, the usual places are on the cheeks, behind the ears, and on the outer surfaces of the arms and legs. Some infants might also develop *seborrheic eczema*, a weepy yellow oily type of eczema in the diaper area, behind the ears, or on the scalp or forehead.

Older children with eczema often have the rash on their torso, and on the inner surfaces of the arms and legs (especially at the elbows, wrists, knees, and ankles), as well as the buttocks. Some have *nummular eczema*, with coinshaped patches often confused for ringworm. Others may have *dyshidrotic eczema*, with itchy irritated blistery areas on the palms or soles – this is especially common in older children and teenagers.

What Causes Eczema?

The better question is: "What *triggers* eczema?" It is an allergic disease. Some children have triggers in their environment, such as dust mites, mold spores, pet dander, or grass and/or tree pollens. Others, especially young infants, may have cow and/or soy milk as their trigger. Breastfeeding babies with eczema *may* be showing an allergy to dairy, soy, or eggs in the mother's diet. Do not, however, change your baby's milk without first discussing it with your doctor.

Other irritants that <u>trigger or worsen</u> eczema include perfumed soaps and detergents, fabric softeners, bleach, skin lotions and oils, wool clothing, bubble baths, alcohol-containing shampoos, nylon, tight clothing, dry air, sweat, and high wind (which evaporates the skin's moisture). Older children (about 40%) may have food triggers as well: dairy, eggs, wheat, fish, and peanuts are the most likely foods to worsen eczema. A two-week elimination trial of each food, guided by your doctor, may help to determine if one of these foods is at fault. However, food allergies do not alone cause eczema, they only worsen it.

Does Eczema Always Itch?

Not always, depending on the child's age. Young infants seldom seem bothered by their eczema, unless it covers a large part of their body. However, by 6 months of age most infants are able to begin to rub or scratch their dry patches, making the eczema worse. Older children almost always have some degree of itching; just ahead we'll discuss how to manage this, because allowing them to scratch will only worsen the eczema. Eczema is known as the itch that rashes.

Does It Ever Go Away?

In about 80 percent of young children, their eczema will improve with age, often resolving by age 5, if not sooner. However, it is *very important* that parents understand that eczema is a **chronic** disease; treatment is suppressive not

curative, a marathon not a sprint. Be happy when your child's eczema is better, but don't be surprised when it returns. Such is the nature of eczema.

Does Eczema Increase My Child's Risk For Other Skin Conditionss?

Yes. Because the skin is not healthy, secondary infections are more likely. Children with eczema are more likely to suffer bacterial infections in affected areas, scabies, yeast infections, and Molloscum (tiny, wart-like lesions).

Children with eczema are also more likely to have other skin conditions, especially **seborrhea** (oily skin patches, especially in the scalp, behind the ears, in the groin, and in the eyebrows), and **keratosis** (bumpy skin on the cheeks, behind the upper arms, and on the thighs). Both these conditions tend to be life long.

How Can I Make My Child's Eczema Better?

- ♦ Eczema causes increased skin water loss. Bathe your child in lukewarm water 1-2 times per day, but for no more than 10 minutes. When done, *lightly pat them dry* (vigorous rubbing just rubs out all the moisture!).
- ♦ To maximize moisture retention, **immediately** apply an emollient (moisturizing **ointment** or **cream**) to their skin. Brands include Eucerin, Nivea, Aquaphor, and Lubriderm. Rub it on in the same direction as the flow of their fine body hair. *Avoid baby oils or lotions*.
- Use a **gentle soap** when bathing: Dove Unscented (also called Sensitive Skin), Tone, Caress, and Phisoderm are a few examples. Do <u>not</u> use baby soaps, and do not scrub their skin, but instead gently clean.
- ♦ Baby shampoo is fine to use, but shampoo <u>last</u> so that the child is not sitting in the shampoo bubbles for long.
- ♦ Avoid bubble baths, and bath fragrances.
- Change your family's detergent to a **perfume and dye-free detergent**, such as All Free, Cheer Free, Dreft etc Avoid Tide Free brand. Avoid bleaches if possible, and also buy perfume and dye-free fabric softener sheets for the dryer (such as Bounce Free sheets).
- During the dry times of year (summer and winter), run a vaporizer in your child's room at night to increase the humidity level.
- Trim the child's nails often (weekly or twice weekly) to prevent deep scratching.
- Avoid abrasive clothing, such as wool and synthetics (nylon). Avoid tight-fitting clothing. 100% cotton clothing is best
- ◆ During flare-ups, give your child a dose of **Benadryl** every night at bedtime to reduce the itch and improve your child's sleep. Some children will require a prescription antihistamine at bedtime. For daytime itching, **Zyrtec** works best…ask your doctor or nurse for the correct dosage for your child's age and weight.
- ♦ Your child might be prescribed a topical steroid ointment, which is used twice daily in place of the emollient. Your physician should tell you whether it is a low-potency or higher potency steroid. If it is a higher potency, do not use it more than twice daily for more than a week unless instructed by your physician. Low-potency steroids (such as 1% Hydrocortisone) can be used for longer periods, *except on the face*.
- ♦ Your child might also be prescribed one of the newer, non-steroidal medications for eczema, such as **Elidel** (tacrolimus). These medications are very effective though expensive. They are especially useful for eczema flareups on the face, but can be used anywhere on the body. They are usually begun twice daily, weaning to once daily or every other day as the eczema improves. Children often report a feeling warmth or heat when these medications are applied during flare-ups; most children tolerate this just fine.
- For older children, consider a daily **zinc supplement**. If your child is older than age 1 year and not very good at eating fruits, also consider a daily **Vitamin C supplement**.

When Should I Call The Doctor?

- If you've done everything mentioned above for 1 month, and no improvement is seen.
- ◆ If the skin is deep red or "angry"-looking, or if it is raw or bleeding. This likely indicates a secondary infection (usually Staph).
- If thick yellow crusts develop, indicating **Impetigo**.
- If your child has been exposed to someone having "fever blisters" or "cold sores", which are caused by oral Herpes, and may easily infect skin that is irritated from eczema.

What About Allergy Testing?

As frustrating and time-consuming as eczema can be, many parents ask about allergy-testing for their child to see what their triggers are. Unfortunately, skin testing is somewhat inaccurate under age 3, and a miserable experience for most children. Therefore, only children with the worst eczema, especially those with no improvement despite doing all the right things, deserve attempts at skin testing!