

Uncontrolled eczema could impair the quality of your life!

What is it?

Atopic dermatitis (AD), also known as eczema is a chronic inflammatory condition of the skin. As part of the atopic spectrum, it is related to asthma and allergic rhinitis. In the majority of cases, it has its onset under the age of one although it may occur for the first time at any age. The affected skin gets dry, itchy, red, weepy, and crusty. In patients with long standing eczema, the skin gets thicker, cracks open and gets lighter or darker in color. During infancy the AD predominantly affects the face, and backs of arms and fronts of legs. In older children and adults, it affects the fronts of arms and backs of legs. Usually the atopic dermatitis gets better after the age of 3 or 4. But sometimes it can persist into adulthood. Onset of atopic dermatitis after the age of 40 is unusual, and should alert one to the possibility of other causes. Rash affecting only the hands may be a sign of atopic dermatitis in older patients. Such patients are also more prone to developing increased number of creases in their hands and feet, latex allergy, cataracts and keratoconus (where the cornea-transparent part of the eye gets elongated and out of shape resulting in visual difficulties). Atopic dermatitis has a tendency to remit and relapse. Many children with atopic dermatitis develop allergic rhinitis. Some of these children go on to develop asthma as well. Generally speaking atopic dermatitis tends to run in families where other close relatives also have atopic dermatitis. Sometimes the disease is mild and such history may not be available.

How is it caused?

In people with atopic dermatitis, the skin is unable to retain water. Therefore it gets dry and cracks open easily. This leads to itching and scratching resulting in inflammation of the skin and the appearance of rash. Scratching also introduces bacteria into the skin through skin cracks. The bacteria make toxins which contribute to further inflammation of the skin. About 10% of normal people have bacteria called *Staphylococcus aureus* colonizing their skin surface. However about 90% of patients with atopic dermatitis have colonization with the *Staphylococcus aureus* on their skin. Some of them also carry the bacteria in their nose. In small children who pick their nose and have dirty and long fingernails, the bacteria get spread from the nose to rest of the skin while scratching. Patients with atopic dermatitis also tend to get other kinds of infections on their skins more commonly. This includes viral infections [warts and molluscum contagiosum], and yeast and fungal infections. The reasons for this are not clear but could be related to lowered immunity in the skin to fight these infections. Rarely patients with atopic dermatitis, who also develop cold sores from herpes simplex viruses, could develop a generalized and a serious dissemination of herpes infection of their skin and this is called eczema herpeticum. This needs immediate medical attention.

Triggers

Scratching, secondary bacterial, fungal and viral skin infections, cold and dry weather and hot and humid weather, irritants, contact allergens or inhaled allergens such as pollens, dust, dust mite and animal dander, certain foods [citrus fruits, tomato], and certain sensitizing chemicals can aggravate the atopic dermatitis. These factors should be considered and eliminated following each exacerbation of AD. In up to 1/3 of patients with atopic dermatitis,

food allergy can be a trigger. Strict elimination of suspected foods may be tried for 14 days to see if it improves the condition.

Recommendations

The patient with atopic dermatitis should use hypoallergenic and fragrance free mild soaps (Dove, Cetaphil, Neutrogena or Aveeno) to bathe, use liquid detergents (Tide Free, All Free and Clear) to wash clothes and sheets, avoid using Clorox, Bleach, Downey or Bounce in the laundry, double rinse clothes and sheets, avoid use of bubble bath and woolen clothes, liberally apply emollients (Crisco shortening, Eucerin, Lubriderm, Plain Vaseline without Alovera) all over the body several times a day, use 100 percent cotton clothes and try to stay in cool environments and minimize sweating as much as possible. Trimming of fingernails and wearing mittens at night may also be considered. Usually AD tends to flare up during winter and/ or summer and the above measures should be intensified during these times. Of all the measures outlined above, liberal application of emollients over affected areas several times during the day is the most important step in the treatment of atopic dermatitis and this can never be overemphasized. Your doctor may prescribe medications to reduce inflammation (steroid creams, Protopic or Elidel), relieve itching (antihistamines), and to treat secondary infections (antibiotics, yeast medications or antivirals). Your allergist may be able to help you identify the triggers by doing allergy skin tests and patch tests.

About the author:

Natarajan Asokan, M.D., F.A.A.P. is a board certified allergist and immunologist and a board certified pediatrician with over 25 years of experience as a physician and 7 years of experience as a practicing allergist & immunologist. He treats adults and children with various allergy & immunology problems. He can be reached at 1739, Beverly Ave, Suite 118, Kingman, AZ 86409, Tel: 928-681-5800, Fax: 928-681-5801, or www.trinityallergy.com