

Atopic Dermatitis

What is Atopic Dermatitis (AD)? Atopic dermatitis (eczema) is a chronic skin disorder characterized by severe itching. 'Atopic' refers to a tendency to develop allergies, such as hayfever and asthma. 'Dermatitis' means inflammation of the skin. Most commonly, AD consists of dry, red, itchy skin on the face, inside of the elbows and behind the knees, but it can occur on other body sites. Scratching causes worsening of symptoms and may lead to crusted, weepy lesions which have become infected. Symptoms tend to come and go over a patient's lifetime but may resolve completely with time.

Who gets Atopic Dermatitis?

AD most commonly occurs in infants and young children, but may occasionally be seen in adults. City living and dry climates may increase likelihood of AD. As children age, AD may improve or even resolve; however patients with a history of AD may always have 'sensitive' skin.

What causes Atopic Dermatitis?

The cause of AD is un-known, but recent studies have suggested a genetic link. Other likely factors include environmental exposures and alterations of immunity (the body's system that fights infections and many diseases). Atopic dermatitis is considered part of the 'atopic triad' due to its association with asthma and hayfever, all of which may run in families. Atopic dermatitis is not a 'contagious' disease that can be passed to others.

How is Atopic Dermatitis Diagnosed?

Atopic dermatitis is a form of eczema, or inflammation of the skin, and may resemble other forms of eczema, such as allergic contact dermatitis.

Diagnosis is based on the clinical evaluation of the patient's history, family history and physical examination. The doctor may ask questions including when the symptoms first occurred, what exacerbates the rash and what makes it better, and do any family members have similar skin problems?

Although there is no certain test that can be used to diagnose AD, testing for allergies by a

dermatologist (skin doctor) or an allergist (allergy doctor) may be helpful. Occasionally, the doctor may need to take a small sample of skin to be examined under the microscope by a skin pathologist in order to distinguish AD from other skin diseases.

Things that make Atopic Dermatitis worse.

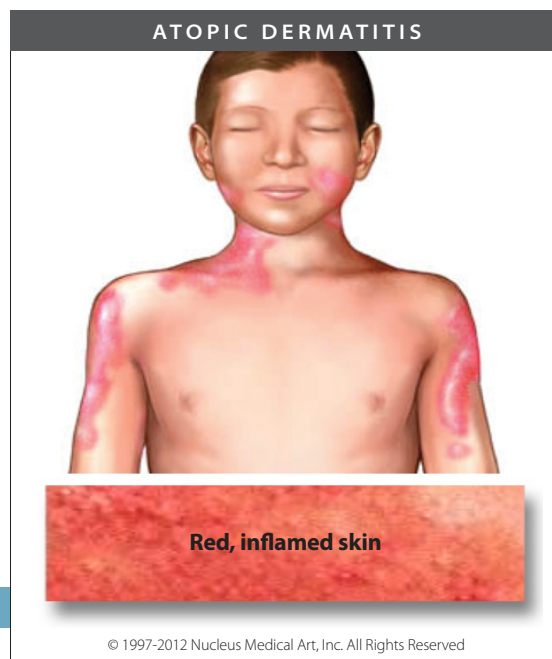
A variety of irritants and allergens may make atopic dermatitis worse.

Irritants may cause the skin to become red, dry and itchy or to burn. These include:

- Wool or man-made fibers
- Soaps and cleaners
- Some perfumes and makeup
- Chemicals such as chlorine, detergents and solvents
- Dust or sand
- Cigarette smoke
- Excessive sweating

Allergens are substances that may cause an allergic-type reaction. These may be foods (such as eggs, peanuts, fish, soy products, or wheat), plants, animals (including dog and cat dander), or even airborne mold, pollen or dust mites.

Stress, anger and other emotional states may make atopic dermatitis worse but haven't been shown to cause it. Climactic conditions, including



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low humidity and hot temperatures, may lead to flares of AD. Hot baths and showers may also make AD worse. Skin infections, particularly bacterial, may worsen or may be a complication of AD.

How is Atopic Dermatitis Treated?

Successful treatment requires communication between the patient, family members, and doctor. The goals of AD treatment are to heal the skin and to prevent flares. Healing the skin often requires topical medications, such as creams or ointments that not only medicate but also moisturize the skin. Topical medications include corticosteroid or other medications, usually applied two to three times daily. In severe cases, oral medications to suppress the immune system may be required. If there are signs of an infection of the skin, antibiotics will be used to treat bacterial infections. Anti-itching medications, including anti-histamines, are helpful to allow patients to sleep. Occasional severe cases may respond to artificial ultraviolet light therapy, sometimes used in combination with a medication.

In preventing flares, it is critical that AD patients avoid irritants and allergens, moisturize frequently (particularly immediately following bath or shower), and maintain a gentle skin care regimen.

Atopic Dermatitis and Vaccination against Smallpox.

People with AD should not get the smallpox vaccine as it may lead to serious complications and infection.

What Research is being Done on Atopic Dermatitis?

Research is currently underway searching for a genetic cause for AD, as well as studying the biochemical and immunologic features of the disease, which may lead to newer treatments. Newer immunologic treatments for severe cases of AD are being investigated, as well as the impact of bacterial infections.

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