



ATOPIC DERMATITIS



OVERVIEW

Atopic dermatitis, often referred to as atopic eczema, is a common, chronic disease that causes inflammation, redness, and irritation of the skin. and usually appears during infancy and childhood. However, it can occur at any age. Atopic dermatitis is not contagious, so it cannot be spread from person to person.

For many people, atopic dermatitis improves by adulthood, but for some, it can be a lifelong illness.

Atopic dermatitis (eczema) is a condition that causes dry, itchy, cracked and inflamed skin. It is characterized by intense itching and recurrent eczematous lesions.

CAUSES:

Its pathogenesis combines genetic susceptibility, skin barrier dysfunction and immune dysregulation.

- **Genetics:** The chance of developing atopic dermatitis is higher if there is a family history of the disease.
- **Overactive immune system:** which can create inflammation in the skin, leading to atopic dermatitis.
- **Environmental triggers** include tobacco smoke, fragrances and some compounds found in skin products and soap, cleaning products, climate, skin infection, certain types of air pollutants, pollen, dust mites, pet dander and mold.



SIGNS & SYMPTOMS:

The most common symptom of atopic dermatitis is itching.

Primary physical findings include the following:

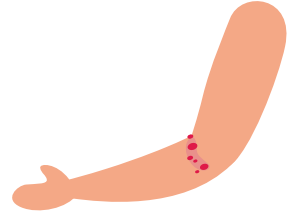
- Red, dry patches of skin.
- Thickening and hardening of the skin.
- Skin inflammation

The clinical manifestations of AD vary with age, where the main differentiating factor is the area of involvement. In infants (<2 years of age), lesions usually emerge on the cheek, forehead, scalp, neck, trunk, and extensor (outer) surfaces of the extremities.

In children (2 to 12 years), adolescence, and adulthood, the flexural surfaces of the extremities are usually affected.



<2 years of age



2 to 12 years



DIAGNOSIS:

The dermatologist will examine the skin and the rash and may order laboratory tests, such as: blood tests to check for other causes of the rash and skin biopsy of the rash or lesion.

The doctor may recommend patch testing on the skin. In this test, small amounts of different substances are applied to the skin and then covered. This can help diagnose certain types of allergies that are causing dermatitis.

COMPLICATIONS:

Complications of atopic dermatitis may include:

- Bacterial and viral skin infections that can worsen from scratching
- Food allergies: People with atopic dermatitis often develop food allergies
- Sleep problems
- Hand eczema (hand dermatitis)
- Conjunctivitis (pink eye), which causes swelling and redness in the inside of your eyelid and the white part of your eye
- Anxiety and depression



MANAGEMENT & TREATMENT:

Nonmedical measures that may be helpful include:

- Using soft clothing (eg, cotton) next to the skin and avoiding wool
- Maintaining mild temperatures
- Using a humidifier in both winter and summer
- Washing clothes in a mild detergent, with no bleach or fabric softener
- Avoidance of triggers

MEDICATIONS:

Depending on the severity of the disease, one or more of the following medications can be prescribed to treat atopic dermatitis.

- **Moisturizing creams** can help restore the skin barrier.
- **Corticosteroid creams and ointments** can help decrease inflammation.
- **Calcineurin inhibitors** applied to the skin to decrease inflammation and help prevent flares.
- **Phosphodiesterase4- inhibitors**, a topical cream prescribed when the symptoms do not respond to other treatments and can help with inflammation.
- **Phototherapy**, If the atopic dermatitis is severe, widespread, and has not responded to cream and ointment treatments, the use of ultraviolet A or B light waves may be recommended to treat symptoms.
- **Oral Medication**, oral systemic anti-inflammatory medications are usually indicated for patients who don't respond to the optimal topical regimens.
- **Biologic medication**, given by an injection under the skin, blocks specific functions of the immune system to help control and manage atopic dermatitis.
- **Small molecules**: given as oral immunosuppressant medications to help control and manage atopic dermatitis.

