



Eczema (Atopic Dermatitis)



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I. What Is Eczema?

Eczema or atopic dermatitis is an allergy-related skin problem characterized by dry, scaly or weeping, sometimes raw areas of skin that itch intensely. It most commonly affects the inner elbows, back of the knees, and the face, but can occur anywhere on the body. If good care is not exercised, infection with bacteria makes the itching, scratching, redness, and oozing worse.

II. Who Gets Eczema?

We think that eczema is an inherited problem. At least two-thirds of affected people have a family history of eczema or related allergic problems (hay fever, asthma, or hives). A form of eczema may occur in up to 17% of the US population; two thirds of patients with eczema or atopic dermatitis have moderate to severe symptoms.

The onset of eczema usually occurs in infancy, but it can happen at any age. There appears to be no racial or sex predisposition. However, as with other allergic disease, eczema is more common in industrialized countries.

Eczema is often the first manifestation of allergic disease. Infants and young children with eczema are at an increased risk of developing asthma, hay fever, and food allergies as they get older (the so-called “allergic march”).

III. What Contributes to Eczema?

The exact cause of the problem is not known. Several factors may contribute to the severity of eczema.

- a. *Drying of the skin* – Long contact with soap and water (especially hot water) lead to drying of the skin. However, bathing for 10 to 15 minutes, patting dry with a towel, and immediate application of a moisturizing cream or ointment should be employed.
- b. *Infection* – Bacterial or fungal infections that result from scratching and skin injury may be treated with topical or oral antibiotics or antifungal drugs as needed.



- c. *Allergy* – Foods and airborne or environmental allergens (especially dust, mold, and pet dander or saliva) may aggravate eczema. Control of this problem is generally related to avoiding the allergens.
- d. *Emotion* – Having a constant itch and rash may cause anyone to become tense. Medicine may be needed to control this.
- e. *Climate* – Hot or cold weather with low humidity may cause the skin condition to worsen, and the effects must be minimized by environmental temperature control.

IV. Treatment

There is no single form of therapy that will control atopic dermatitis in all patients. Therefore, a combination of approaches is necessary.

- a. *Personal care* – Fingernails should be cut short. Bathing should occur when necessary using mild soap such as Dove® unscented or Neutrogena®. Contacts with water should be limited. A moisturizing cream such as Nutraderm®, Eucerin®, or Aquaphor® should be used several times a day to keep the skin moist.
- b. *Antipruritics* – The itching may be reduced with an antihistamine given orally, especially before bed.
- c. *Topical preparations* – Topical corticosteroid creams or ointments may be used to calm flares of the condition. These include hydrocortisone, Diprolene® (betamethasone), or Dermacin® (fluocinonide). Nonsteroid ointments include Elidel® (pimecrolimus) and Protopic® (tacrolimus). Milder creams are preferred when possible for control, especially on the facial areas.
- d. *Diet* – In some patients dietary therapy such as strict avoidance of foods to which the individual is allergic may be beneficial.
- e. *Dress* – Clothing should be soft and not restrictive. Abrasive fabrics such as wool should not be chosen. Long sleeves and trousers may cause excessive sweating, which worsens the condition. Natural fibers like cotton allow perspiration to evaporate more easily than synthetic fibers.
- f. *Environmental* – Avoid direct exposure to harsh cleaning chemicals, dyes, and fragrances in laundry and toiletry products. Fabric softeners should be avoided.