

# Atopic dermatitis: Update



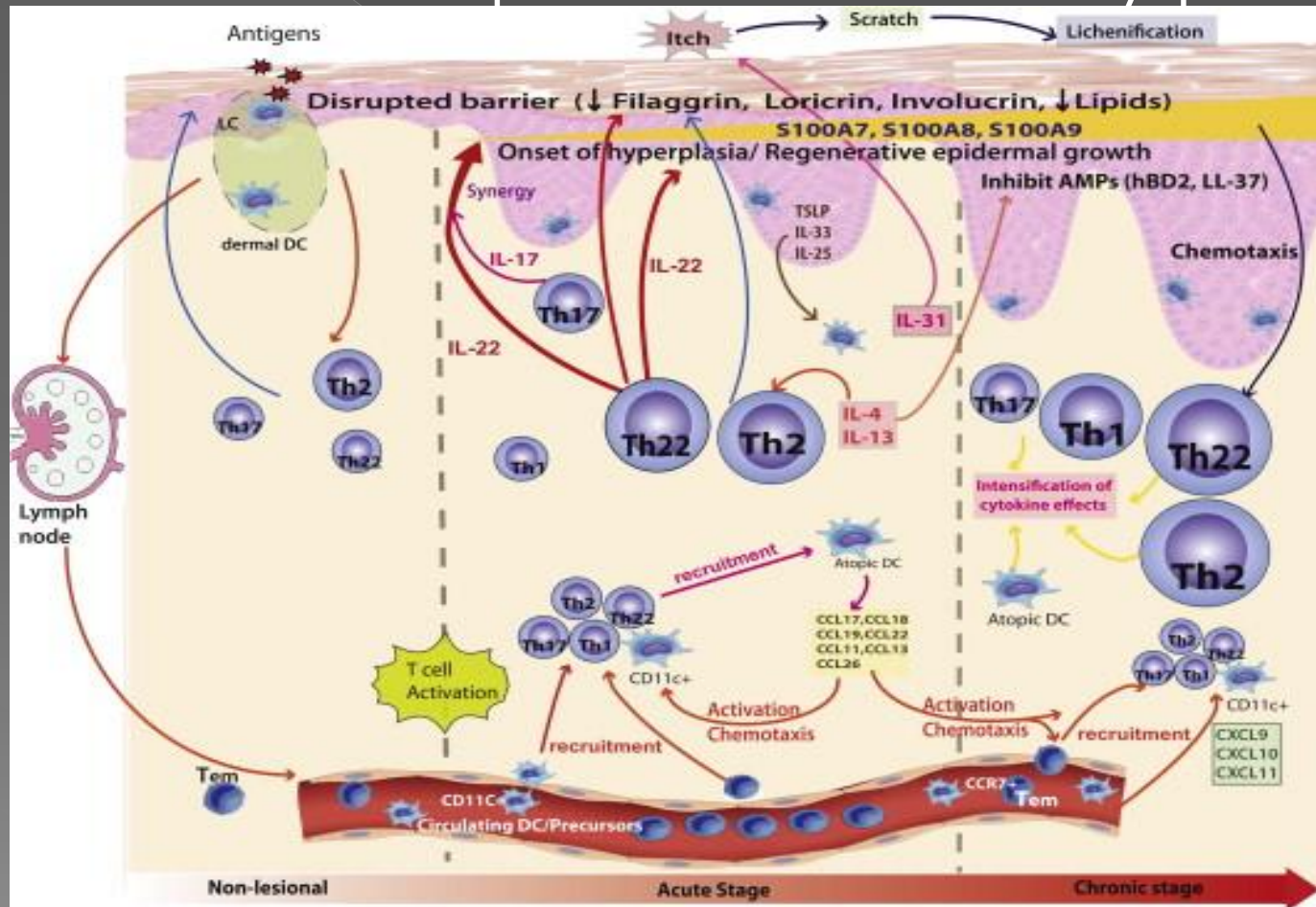
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# Atopic Dermatitis: Definition

- ⦿ Atopic dermatitis = eczema = itchy skin
- ⦿ Greek- meaning
  - > (ec-) over
  - > (-ze) out
  - > (-ma) boiling

# Atopic Dermatitis: Cause

- AD is a complex inflammatory process



# Atopic Dermatitis

- AD is the first manifestation of atopy in many patients who later have allergic rhinitis, asthma, or both, a pattern that has been referred to as the “allergic or atopic march.”
- Affects 25% of children younger than 14 years\*



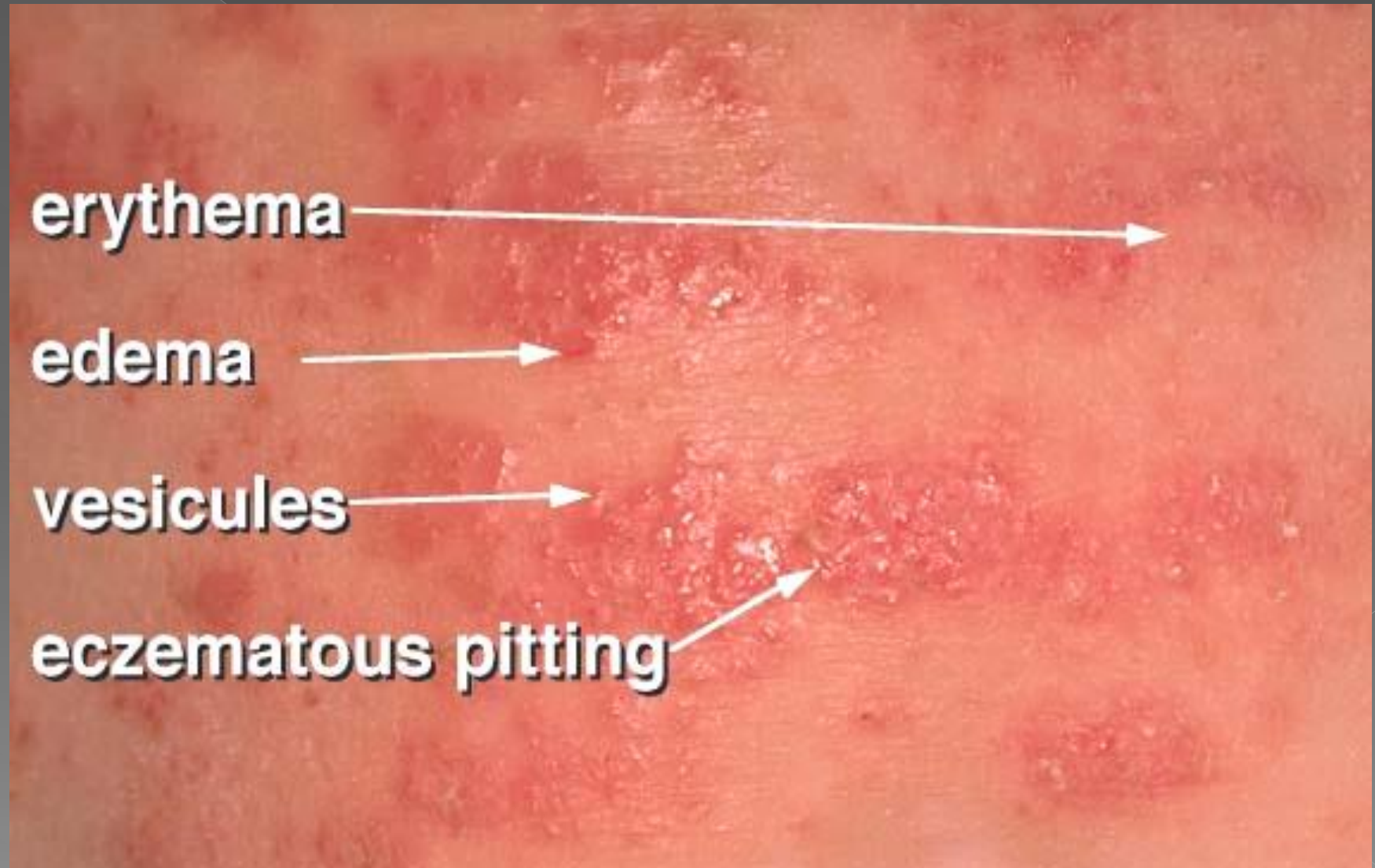
\*Odhiambo J.A., Williams H.C., Clayton T.O., Robertson C.F., and Asher M.I.: Global variations in prevalence of eczema symptoms in children from ISAAC Phase Three. J Allergy Clin Immunol 2009; 124: pp. 1251-1258.e1223

# Atopic Dermatitis: Diagnosis and testing

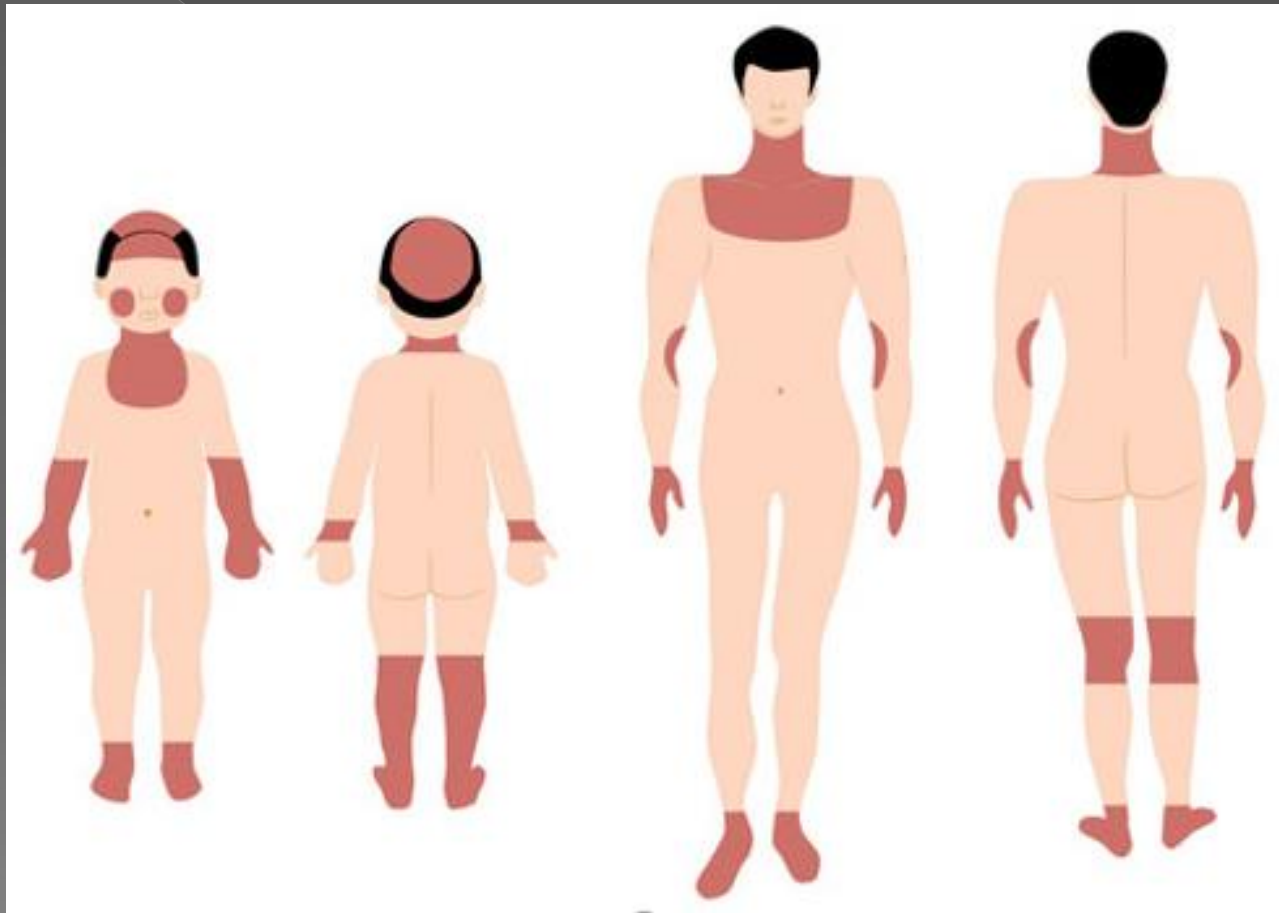
- The diagnosis of AD is based on its **clinical presentation** rather than the results of diagnostic testing.
- Other Helpful testing:
  - > Skin prick testing
  - > Specific IgE to relevant allergens
  - > Patch testing



# Morphology



# Distribution



# Atopic Dermatitis: Treatment

- Trigger avoidance
- Measures to restore skin barrier function
- Anti-inflammatory medication





# Atopic Dermatitis: Treatment

1. Reduce contact with irritants/allergens
2. Emollients
3. Antihistamines
4. Antibiotics
5. Topical Steroids



# 1. Reduce contact with irritants/allergens

- Avoid overheating: lukewarm baths, 100% cotton clothes, & keep bedding to minimum
- Avoid direct skin contact with rough fibers, particularly wool, & limit/eliminate detergents
- Avoid cosmetics, fragrances (make-ups, perfumes) as all can irritate
- Avoid soap- use soap substitute
- Use gloves to handle chemicals and detergents
- Patch testing



# 1. Reduce contact with irritants/allergens

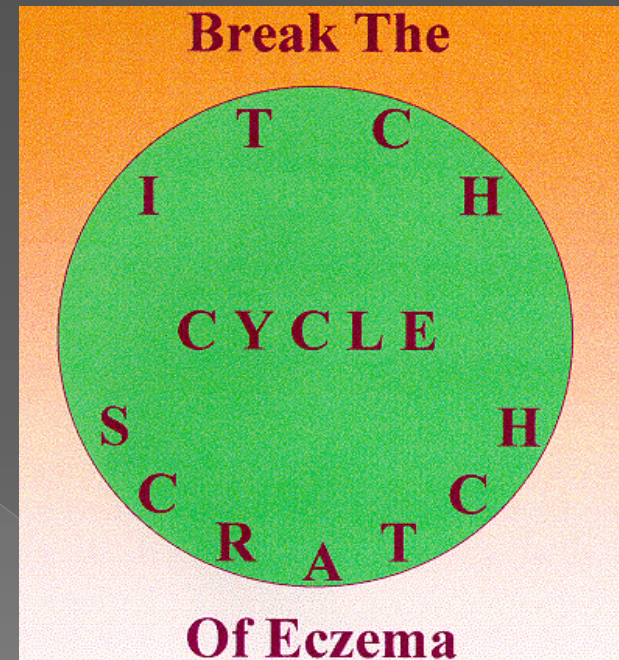
- Allergic reactions include:
  - > House dust mite, molds, grass pollens & animal dander
  - > Keep bedroom, free of dust mites via washing of bedding in hot water and using mite free covers.
- If food allergies exist, the most likely culprits are:
  - > Dairy products
  - > Eggs
  - > Wheat
  - > Soy
  - > Nuts
  - > Shellfish

## 2. Emollients

- Emollients soften the skin soft and reduce itching.
- Moisture Trapping effectiveness
  - > **Best:** Oils (e.g. Petroleum Jelly)
  - > ***Moderate:*** Creams
  - > Least: Lotions
- Apply emollients after bathing and times when the skin is unusually dry (e.g. winter months).

### 3. Antihistamines

- Some patients might benefit from the use of antihistamines for the relief of pruritus associated with AD.
- Treatment of AD with topical antihistamines is generally not recommended because of potential cutaneous sensitization.



## 4. Antibiotics

- Atopic dermatitis frequently secondarily colonized with a bacteria
- Staphylococcus aureus are a recurrent problem in patients with AD





## 5. Corticosteroids

- Topical steroids are very effective
- If AD is not controlled by moisturizers alone, then the clinician should recommend a topical corticosteroid
  - > Low-potency corticosteroids are recommended for maintenance therapy
  - > Intermediate and high-potency corticosteroids should be used for the treatment of clinical exacerbation over **short periods** of time.



# Atopic Dermatitis: Treatment Refractory

- ◉ Steroid sparing agents are also available
  - > Topical tacrolimus, pimecrolimus
- ◉ There are a variety of other treatment options for patients with severe or refractory AD.
  - > Wet dressings and occlusion
  - > Bleach baths
  - > Systemically administered immunosuppressants, such as cyclosporine and antimetabolites.

# Take Home Points

- Treatment options
  1. Reduce contact with irritants/allergens
  2. Emollients
  3. Antihistamines
  4. Antibiotics
  5. Topical Steroids
- There is no CURE for eczema but the goal is CONTROL

