

# ATOPIC DERMATITIS

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# Definition

- Common chronic relapsing skin disease
- Common in infancy and childhood

Characterized by

Inflammation

Itching

Swelling

Cracking

Crusting

Scaling



# Atopic March

- Infants with atopic dermatitis are prone to develop
  - Allergic rhinitis
  - Asthma



# Etiology

- Cause is unknown

- It is a complex genetic disorder

Defective skin  
Barrier

Reduced skin innate  
immunity

Increased  
Tcell  
respnses

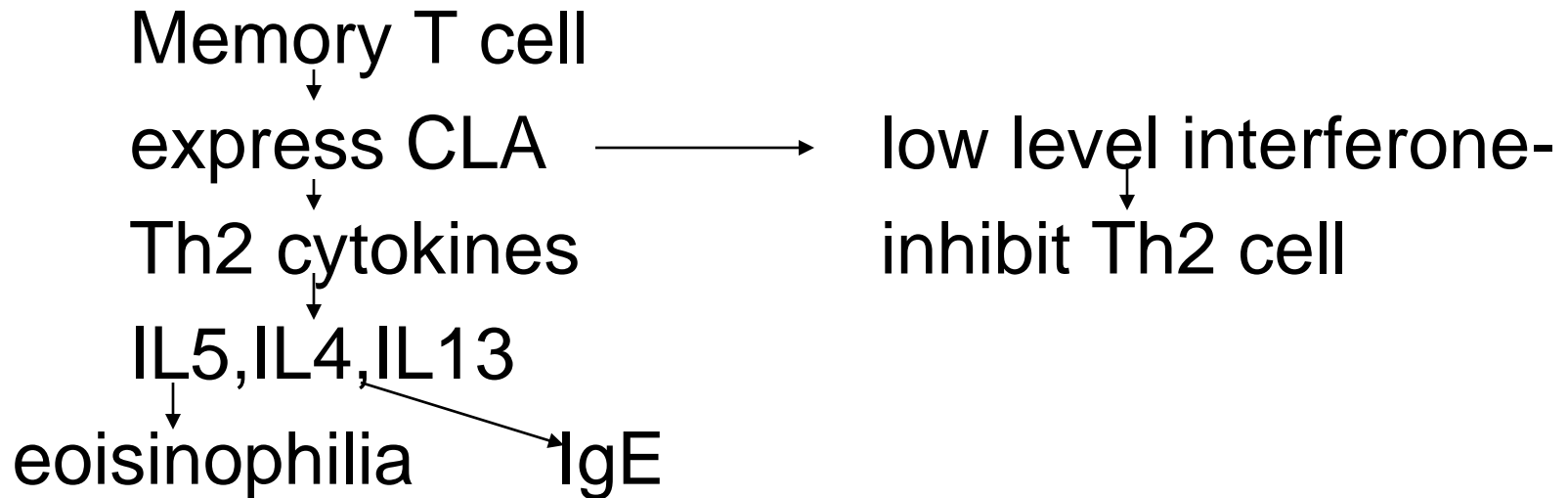


# Skin irritants in atopic dermatitis

- Synthetic fiber
- Soap and detergents
- Cosmetics
- Dust or sand
- Cigarette smoke
- Animal fur or pollen

# Pathogenesis

- Atopic(IgE mediated)70%-80%
- Non atopic(Non IgE mediated)20%-30%



# Conti.....

- Acute lesions characterized by
  - Marked perivenular Tcell infiltrates
  - Mast cells during degranulations
- Chronic lesions by
  - Hyperplastic epidermis
  - Hyperkeratosis
  - Spongiosis





# Clinical manifestations

- Begins in infancy
- 50% develop symptoms in 1<sup>st</sup> yr.
- 30% develop symptoms b/w 1 and 5yr
- Areas affected are folds of arms, back of knees, wrists, face, hands

# Conti....

- Dry, itchy, red skin (itch is the hallmark)
- Itch scratch cycle
- Rash
- Scaling
- Lichenification
- Papules
- Excoriations



# Diagnostic criteria

## ■ Major features

- Pruritis
- Facial and extensor eczema
- Flexural eczema in adolescents
- Chronic or relapsing dermatitis
- Personal or family history of atopic disease

# Associated features

- Xerosis
- Cutaneous infections
- Ichthyosis, keratosis pilaris
- Nipple eczema
- Anterior subcapsular cataract, keratoconus
- Elevated IgE levels
- Positive allergy skin test
- Early onset
- Facial erythema or pallor
- Environmental factors





# Investigations

- Peripheral blood eosinophilia
- Increased serum IgE levels



# Treatment

- Skin care
- Corticosteroids
- Calcineurin inhibitors
- Tar preparations
- Antihistamines
- Phototherapy





# Skin care

- Lukewarm soaking baths
- Applications of occlusive emollients
- Wet dressings



# Corticosteroids

- Topical glucocorticoids
  - Ultra high potency
  - Mid potency
- Systemic glucocorticoids
  - Short courses in acute exacerbation

# Conti.....

## ■ Side effects

- Thinning of skin
- Infections
- Growth suppression
- Stretch marks on skin

# Calcineurin inhibitors

- Pimecrolimus 1% (mild to moderate AD)
- Tacrolimus ointment 0.1% (moderate to severe)
- Immune modulators
- Used in case of
  - poor response to steroids
  - steroid phobia
  - face and neck dermatitis



# Phototherapy

- Ultraviolet A or B light waves or combination(mild to moderate)
- Photochemotherapy  
(ultraviolet light and psoralen)
- Sunlight




# Complications

- Psychosocial aspects
- Retarded growth
- Bacterial infections
- Viral infections
- Erythroderma
- Eye abnormalities



THANK  
YOU



# Questions & Answers

- Most common feature of atopic dermatitis?
- Which areas are mostly affected?
- When calcineurin inhibitors are used?
- Which ultraviolet rays are used?
- What is photochemotherapy?
- What are complications of atopic dermatitis?
- What is atopic march?