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
Reduced skin innate immunity
Increased Tcell responses
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%

Memory T cell express CLA
Th2 cytokines inhibit Th2 cell
- IL5, IL4, IL13
- eosinophilia
- IgE

Th2 cytokines include low level interferon - inhibit Th2 cell
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 1st 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
  - Thining 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?