Dermatology Disorders: Psoriasis, Scabies & Eczema

Psoriasis

Definition: A chronic autoimmune skin disease characterized by rapid proliferation of keratinocytes leading to erythematous plaques with silvery scales.

Etiopathogenesis:

- Genetic predisposition (HLA-Cw6).
- Triggers: infections, trauma, stress, drugs.
- Autoimmune T-cell mediated inflammation \rightarrow cytokine release (TNF- α , IL-17, IL-23).
- Increased keratinocyte turnover \rightarrow thick scaly plaques.

Clinical Manifestations:

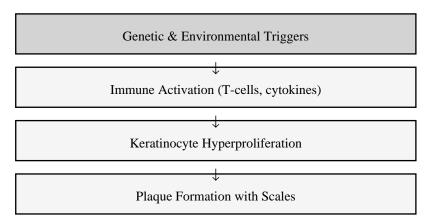
- Well-demarcated erythematous plagues with silvery-white scales.
- Common on scalp, elbows, knees, sacral area.
- Nail changes: pitting, onycholysis.
- Arthritis in some cases (psoriatic arthritis).

Management:

Non-pharmacological: Avoid triggers, moisturizers, phototherapy.

<u>Pharmacological:</u> Topical corticosteroids, vitamin D analogs, methotrexate, cyclosporine, biologics (anti-TNF, IL inhibitors).

Flowchart: Pathophysiology of Psoriasis



Scabies

Definition: A contagious parasitic infestation of the skin caused by Sarcoptes scabiei mite, producing intense itching and burrows.

Etiopathogenesis:

- Caused by female mite burrowing into stratum corneum.
- Hypersensitivity reaction to mite, eggs, and feces.
- Spread by close contact, overcrowding, poor hygiene.

Clinical Manifestations:

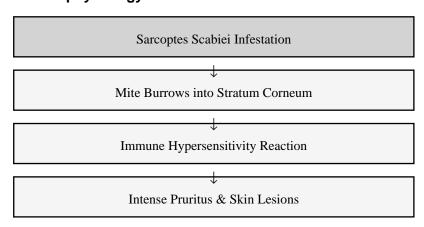
- Severe nocturnal itching.
- Burrows, papules, vesicles, excoriations.
- Common sites: interdigital spaces, wrists, axillae, genitalia, waistline.
- Secondary bacterial infection possible.

Management:

Non-pharmacological: Treat family contacts, wash bedding & clothes in hot water, maintain hygiene.

<u>Pharmacological:</u> Topical permethrin (first-line), benzyl benzoate, ivermectin (oral for severe cases), antihistamines for itching.

Flowchart: Pathophysiology of Scabies



Eczema (Atopic Dermatitis)

Definition: A chronic relapsing inflammatory skin condition characterized by itching, erythema, and lichenification, often associated with atopy.

Etiopathogenesis:

- Genetic predisposition (filaggrin mutation).
- Defective skin barrier → increased allergen & microbe penetration.
- Immune dysregulation: Th2 dominance $\rightarrow \uparrow$ IgE.
- Triggers: allergens, irritants, stress, climate.

Clinical Manifestations:

- Intense itching.
- Acute: erythematous papules, vesicles, oozing.
- Chronic: lichenification, hyperpigmentation.
- Common sites: face, flexural surfaces, hands.
- Associated with asthma, allergic rhinitis.

Management:

<u>Non-pharmacological:</u> Avoid triggers, skin hydration with emollients, stress reduction. <u>Pharmacological:</u> Topical corticosteroids, calcineurin inhibitors, antihistamines, antibiotics for secondary infection, systemic immunosuppressants in severe cases.

Flowchart: Pathophysiology of Eczema

