

# Psoriasis.

Dr. Fazal- Ur- Rehman Bangash  
Pathology Deptt. KGMC

# What is Psoriasis?

- Psoriasis is a chronic inflammatory & hyperplastic skin disease with a strong genetic predisposition and autoimmune pathogenic traits.
- Characterized by erythema & elevated scaly plaques of skin.
- Chronic, relapsing condition.
- Course of disease often unpredictable.

# Epidemiology.

- The worldwide prevalence is about 0.3-2.5%.
- It varies according to regions.
- It shows a lower prevalence in Asian and some African populations, and up to 11% in Caucasian and Scandinavian populations.
- Prevalence equal in males & females.
- Estimated incidence is 60/100000/year.

# Common trigger factors.

- Infections ( e.g. streptococcal, viral).
- Skin local trauma (koebner phenomena).
- Psychological stress.
- Drugs ( e.g. lithium, beta blockers).
- Sunburn.
- Metabolic factors ( e.g. calcium deficiency).
- Hormonal factors ( e.g. pregnancy).

# Pathogenesis.(1)

- An immunologic disease.
- Entry of Sensitized population of T cells in skin including CD4+ TH1 cells & CD8+ T cells and its accumulation in epidermis →
- Secretion of cytokines & Growth factors →
- Induction of keratinocyte hyper proliferation →
- Characteristic psoriatic lesions.

# Pathogenesis.(2)

- Koebner Phenomenon ( Local trauma)→
- Induction of local inflammatory response→
- Promotion of development of psoriatic lesion.
-

# Pathogenesis.(3)

- Various clinically useful agents block:
  1. T-cell activation & proliferation.
  2. T-cell trafficking and keratinocyte interaction with T-cells.
  3. Binding of tumor necrosis factor (TNF) to its receptor → inhibiting T-Cell functions.

# Morphology.

- Marked epidermal thickening (Acanthosis) with regular downward elongation of rete ridges.
- Increased epidermal cell turnover & lack of maturation.
- Resulting in loss of stratum granulosum with extensive overlying parakeratotic scale.



# Contd...

- Thinning of epidermal cell layer overlying tips of dermal papillae.
- Blood vessels within papillae are dilated & tortuous.
- Vessels bleed easily when scale is removed.
- Neutrophils form small aggregates within spongiotic superficial epidermis & parakeratotic stratum corneum.

# Thick plaque Psoriasis

Tortuous  
capillaries in high  
dermal papillae

Neutrophils in  
dermal  
papillae  
sometimes  
invading  
epidermis

Acanthosis

Clubbed rete ridges

Parakeratosis and  
hyperkeratosis

Loss of stratum  
granulosum



# Clinical Features of Psoriasis.

- Mostly affects skin of:
  - Elbows.
  - Knees.
  - Scalp.
  - Lumbosacral areas.
  - Intergluteal cleft.
  - Glans penis.
  - Nails.

# Contd...

- Most typical lesion is well demarcated pink to salmon colored plaque covered by loosely adherent silver white scale.
- Nails--: yellow brown discoloration, with pitting, thickening, crumbling & separation of nail plate from underlying bed ( Onycholysis).

# Clinical subtypes of Psoriasis.

- Chronic Plaque.
- Guttate.
- Flexural.
- Erythrodermic.
- Pustular : Localized & Generalized.
- Local forms : Palmoplantar, Scalp, Nail ( Psoriatic onychodystrophy).

# Chronic Plaque Psoriasis.



# Guttate Psoriasis.



# Flexural Psoriasis.





# Erythrodermic Psoriasis.



# Pustular Psoriasis.



# Palmoplantar Psoriasis.



# Scalp Psoriasis.



# Nail Psoriasis.

