

# Psoriasis vulgaris

# Definition

- **Chronic, recurrent skin disorder**
- **Indidence : 1-2 % of the population in western countries**
- **Age of onset : peaks at 22 and 55 years of age**
- **Equal incidence in males and females**
- **Heredity : polygenic trait (heavily influenced by environmental triggers)**

**HLA-Cw6, B13, B17, Bw57 types are most frequently associated with psoriasis**

# Triggering factors

- **Physical trauma (Koebner's phenomenon)**
- **Infections : acute Streptococcal infection**
- **Emotional stress**
- **Alcohol ingestion**
- **Drugs : systemic corticosteroids, lithium, antimalarial drugs, interferon, beta-adrenergic blockers**

# Immunology of psoriasis

- **T-cell mediated disorder**
- **T-helper-1 subtype**
- **IL-2, IL-12, IFN $\gamma$ , TNF $\alpha$**
- **VEGF (vascular endothelial growth factor)**

# Skin lesions

- **Sharply marginated erythematous papules, plaques covered by silvery-white lamellar scales**
- **Removal of scales results spotty bleeding (Auspitz's sign)**
- **Typical affected sites : scalp, elbows, knees, sacral and umbilical region, legs, palms and soles**
- **Special affected sites : nails, body folds (inverse psoriasis),**

# Histopathology

- **Parakeratosis**
- **Acanthosis**
- **Increased mitosis of keratinocytes, fibroblasts and endothelial cells**
- **Lymphocytic and monocytic infiltrate in the dermis**
- **Munro's microabscesses in the stratum corneum (polymorphonuclear cells)**

# Clinical forms

- 1. Acute guttate psoriasis**
- 2. Chronic plaque type psoriasis**
- 3. Inverse psoriasis**
- 4 Palmoplantar psoriasis**
- 5. Psoriatic erythroderma**
- 6. Pustular psoriasis**
- 7. Nail psoriasis**
- 8. Psoriatic arthritis**

# Acute guttate psoriasis

- **Salmon pink papules**
- **Size : 2 mm-1 cm**
- **Scales may be absent**
- **Located mainly on the trunk**
- **May resolve spontaneously or evolve into chronic plaque-type psoriasis**
- **Differential diagnosis : drug eruption, secondary syphilis, pityriasis rosea, nummular ekzema**

# Chronic plaque type psoriasis

- **Large erythematous plaques covered by adherent scales**
- **Tendency to coalesce into polycyclic, annular lesions**
- **Differential diagnosis : seborrheic dermatitis (scalp), psoriasiform drug eruptions, tinea corporis, mycosis fungoides**

# Inverse psoriasis

- **Axillar, submammary, inguinal and genital region**
- **Due to moist and warm environment, plaques are not scaly**
- **Bright red plaques with fissures and itching**
- **Differential diagnosis : mycotic intertrigo, contact dermatitis**

# Palmoplantar psoriasis

- **Alone or in association with other regions' involvement**
- **Massive hyperkeratotic scales, removal is difficult**
- **Painful fissures, bleeding**
- **Differential diagnosis : chronic eczema, tinea**

# Psoriatic erythroderma

- **Erythema, fine scaling, exfoliation of whole body surface**
- **Differential diagnosis : drug induced erythroderma, atopic dermatitis, cutaneous T-cell lymphoma, Sézary's syndrome, eczema, allergic contact dermatitis, seborrheic dermatitis, pityriasis rubra pilaris, pephigus foliaceus**

# Pustular psoriasis

**Pustules instead of papules and plaques, on normal or inflamed skin**

**Types of pustular psoriasis :**

- 1. Palmoplantar pustulosis (palms and soles)**
- 2. Acute generalized pustular psoriasis (von Zumbusch)**
- 3. Acrodermatitis continua (Hallopeau) (distal parts of fingers and toes)**

# Nail psoriasis

- **Fingernails and toenails**
- **Mostly associated with arthritis**
- **Nail pitting**
- **Subungual hyperkeratosis**
- **Onycholysis**
- **Oil spots (yellowish-brown subungual spots)**
- **Total nail dystrophy**
- **Loss of nails**
- **Differential diagnosis :  
onychomycosis**

# Psoriatic arthritis

- **Belongs to seronegative spondylarthropathies**
- **Carriage of HLA-B27 gene is common**
- **Asymmetric involvement of peripheral joints  
mostly small joints of the hands and feet,  
sacroileitis, hip and cervical involvement**
- **Tendon inflammation**
- **Swelling, redness, tenderness, sausage-like  
fingers**
- **Mutilating arthritis**

# Treatment of psoriasis

- **Topical moisturisers, urea or salicylic acid containing ointments, corticosteroids, dithranol preparations, Vitamin D analogues (calcipotriol)**
- **Phototherapy with 311 nm narrow band UV-B, PUVA photochemotherapy**
- **Oral retinoids (acitretin), RePUVA (Retinoid +PUVA), methotrexate, cyclosporine**
- **Monoclonal antibodies :**  
**alefacept (anti-CD45RO), infliximab (anti-TNF $\alpha$ ), etanercept (anti-TNF $\alpha$  fusion protein), efalizumab (anti-CD11 $\alpha$ )**

# Treatment of psoriatic arthritis

- **non-steroidal antiinflammatory drugs**
- **Sulfasalazine**
- **Methotrexate**
- **Leflunomide**
- **anti-TNF $\alpha$  agents**