

### What is psoriasis?

Autoimmune chronic inflammatory diseases of the skin.

Occurs due to overstimulation of immune cells that causes excessive proliferation of keratinocytes.

Silvery scaling of skin and itching.

Not contagious and not severe in many cases (outpatient mx)

### General features

Erythematous papules and silvery-white scaling plaques

Well demarcated, raised, red patches

Usually not itchy (pruritus is typically mild - 80% of cases)

Affects scalp, back, elbows and knees (extensor surfaces), and nails (thimble pitting).

**Erythematous**- superficial redness caused by dilation of capillaries.

**Nail pitting** - small, round depression in the nail.

### Clinical variants.

**Plaque psoriasis** Well demarcated individual thick, scaly, erythematous lesions

**Guttate psoriasis** numerous small, scaly, red or pink, tear-drop shaped lesions

### Psoriatic nail disease

#### Drug-induced psoriasis

**Psoriatic arthritis** Inflammation of joints on hand, feet and spine that can occur with psoriasis

**Pustular psoriasis** appears as red bumps filled with noninfectious pus (pustules)

**Flexural/inverse psoriasis** occurs in skin folds and flexor surfaces creases of joints

**Erythrodermic psoriasis** generalized erythematous lesions.

### Clinical variants. (cont)

Scalp psoriasis affects the scalp

### Plaque Psoriasis

Most common type

Thick, scaly, erythematous lesions

Lesions are red with silver-white scaling

Common sites: Extensor surfaces of elbows and knees.

Lower back

Scalp (can cause temporary hair loss)

Palms

Nails- pitting and onycholysis

**Onycholysis** - separation of the nail from the nail bed

### Guttate Psoriasis

Often preceded by Streptococcal infection (*Streptococcus pharyngitis*)

Resolves quickly

### Erythrodermic Psoriasis

There is increase in cutaneous blood flow, heat loss, and water loss

Skin becomes red.

Scaling is absent (although this can precede the erythroderma).

### Inverse/Flexural Psoriasis

Common sites: Genitals (between thigh and groin)

Armpits

Under an overweight abdomen (panniculus)

Under the breasts (inflammatory fold)

Increased by friction and sweat

Vulnerable to fungal infections

Looks like smooth inflamed patches on skin

### Psoriatic arthritis

Joint and Connective tissue inflammation.

Most common joints affected: Fingers and toes

Results in Dactylitis

Other joints: Knees, hips, spine (spondylitis)

Morning stiffness of affected joints

**Dactylitis** - Sausage shaped swelling of fingers and toes.

### Pustular psoriasis

Can be localized, common to hands and feet Palmoplantar pustulosis

Or generalized, widespread patches

### Etiology

Genetics

Precipitating factors

1. Pharyngitis, HIV

Infections

2. Drugs Beta blockers, anti-malarial, lithium, NSAIDs, systemic steroid withdrawal

3. Alcohol and smoking

4. Emotional stress

5. Local trauma

### Grading

Mild (3% of the body)

Moderate (3-10% of the body)

Severe

Degree of severity is based on: proportion of body surface area affected

disease activity (plaque, redness, scaling)

response to previous treatments

impact of the disease in the patient

### Diagnosis

Based on appearance of the skin

Skin biopsy, or scrapping - to rule out other disorders

Biopsy shows clubbed rete pegs if positive for psoriasis

Auspitz sign    small pinpoint bleeding when scales are scraped off

### Treatment

Mild disease    Emollients

Mild-to-moderate disease    **Topical corticosteroids** (triamcinolone, fluocinonide, clobetasol), **emollients**, **topical retinoids** (tazarotene), **vitamin D analogs** (calcipotriene, calcitriol)

For facial areas    Topical **tacrolimus** and **Pimecrolimus**

Severe    Phototherapy, MTX, cyclosporine, anti-T cell agent, anti-TNF agent

### Vitamin D analogs

Avoid use on delicate skin areas (face, flexures) because of irritation.

Combine with steroids to increase efficiency

### Coal Tar

Anti-inflammatory, anti-pruritic, anti-mitotic

### Systemic Therapies

For severe generalized psoriasis intolerant after topical therapy

MTX    S/E: hepatic fibrosis, myelosuppression, teratogenic

Hydroxyurea    S/E: myelosuppression, skin reactions, liver toxicity, teratogenic

Cyclosporine    S/E: renal toxicity, HTN, gingival hypertrophy