Papulosquamous Diseases

Papulosquamous diseases are a group of disorders characterized by scaly papules and plaques. These entities have little in common except the clinical characteristics of their primary lesion.

Some Important Papulosquamous Diseases:

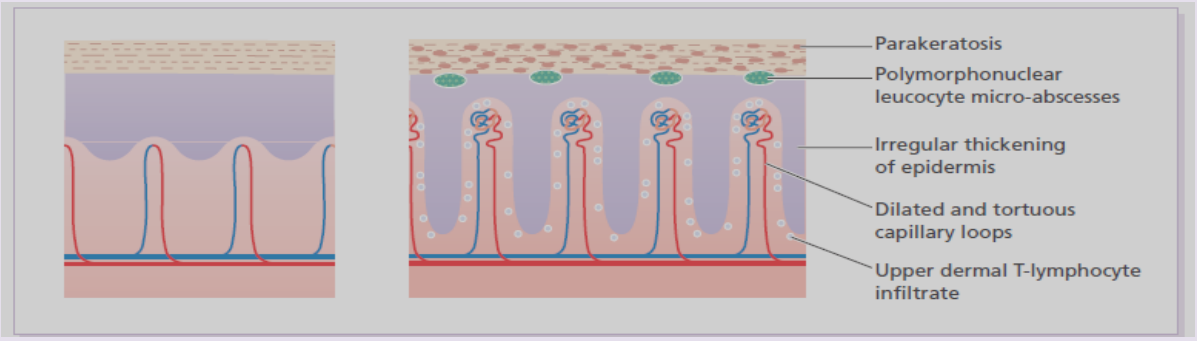
Psoriasis
Pityriasis rosea
Lichen planus
Pityriasis rubra pilaris
Discoid lupus erythematosus
Tinea
Nummular eczema
Seborrhoeic dermatitis
Secondary syphilis
Drug eruptions

Psoriasis

- A common, chronic, disfiguring, inflammatory and proliferative condition of the skin, in which both genetic and environmental influences have a critical role.
- Affects approximately 1–3% of the population.
- Psoriasis is found principally on the extensor surface of the elbows, knees, lumbosacral area, and the scalp.
- The areas are sharply demarcated, raised, erythematous (salmon red), and covered with silvery white scales. On removal of the scales, bleeding points are manifest (**Auspitz sign**).
- **Koebner's phenomenon** is seen in active psoriasis, = development of psoriasis in injured or traumatized skin.
- **Woronoff's ring** is a concentric blanching of erythematous skin at or near the Periphery of a healing psoriatic plaque.
- **Reverse Koebner's phenomenon** is also seen in psoriasis, i.e., clearing of psoriasis after trauma

Precipitating factors:

- Infections (e.g. streptococcal, HIV).
- Drugs: e.g. antimalarials, withdrawal of steroids, Beta-blockers, lithium.
- Trauma (physical,chemical,psychological)
- Cigarette smoking and alcohol.
- Psychological stress.



Clinical Presentation

Variations in the morphology of psoriasis are listed here.

- Chronic plaque psoriasis
- Guttate psoriasis (acute eruptive psoriasis)
- Pustular psoriasis
- Erythrodermic psoriasis
- Light-sensitive psoriasis
- HIV-induced psoriasis
- Keratoderma blenorrhagicum (Reiter's syndrome)

Variations in the location of psoriasis are listed here.

- Scalp psoriasis
- Psoriasis of the palms and soles
- Pustular psoriasis of the palms and soles
- Pustular psoriasis of the digits
- Psoriasis inversus (psoriasis of flexural areas)
- Psoriasis of the penis and Reiter's syndrome
- Nail psoriasis
- Psoriatic arthritis.

Plaque psoriasis (psoriasis vulgaris)

- More than 80% of patients.
- Typical silvery-scaled pink plaques; may be pruritic.
- Symmetrical sites on the elbows, knees, lower back and scalp,nails are sites of predilection (affects the extensor surfaces more than the flexor surfaces).
- Plaque-type variants: annular, figurate, follicular, linear.
- Scalp involvement (common): frontal hairline and retroauricular crease involvement; can have thick scale surrounding clumps of matted hair (Pityriasis amiantacea).

Guttate psoriasis

- This is usually seen in children and adolescents and may be the first sign of the disease, often triggered by streptococcal tonsillitis.
- The word 'guttate' means 'drop-shaped'.
- Numerous small round red macules come up suddenly on the trunk and soon become scaly.
- The rash often clears in a few months but plaque psoriasis may develop later

Inverse Psoriasis

- Occurs in the flexural creases of the inguinal areas, submammary folds, gluteal fold, retroauricular fold, axillae, groin and genital regions.
- Lesions of inverse psoriasis are smooth with no visible scaling, unlike classical plaque psoriasis.
- Infection, friction and heat may induce psoriasis in these flexural creases, a manifestation of the Koebner phenomenon.
- In the absence of visible scaling, this variant can be easily misdiagnosed as a fungal infection or erythrasma.

- There is clinical overlap with Seborrhoeic dermatitis (sebo- psoriasis).
- Tar, vitamin-D analogues, tacrolimus may be useful treatment.

Nail psoriasis

- Pitting of the nail plate is most common; rarely can involve all 20 nails.
- Other findings: discoloration, Onycholysis, distal subungual debris.
- Yellowish brown spots under the nail plate the oil spot (pathognomonic)
- Periungual psoriasis can lead to marked nail dystrophy with hyperkeratosis and crumbling of the nail plate.
- Psoriatic nail changes are seen in 80% of patients with psoriatic arthritis

Pustular/erythrodermic psoriasis

Localized variants:

- Palmoplantar pustulosis: pustules on palms and soles turn to brown macules, and then desquamate.
- Digital acropustulosis (acrodermatitis continua of Hallopeau): swelling of the nail folds with glazed erythema, pustules and desquamation of the fingertips with nail dystrophy

Generalized variants:

- Acute generalized pustular psoriasis (von Zumbusch): diffuse erythroderma with overlying pustules and lakes of pus which later form sheets of desquamation.
- The patient is unwell, with fever and malaise, and requires hospital admission.

Erythrodermic psoriasis

- An acute, severe form of psoriasis characterized by generalized inflamed erythema and widespread scaling which affects more than 90% of the body surface area.
- Can be sparked off by the irritant effect of tar or dithranol, by a drug eruption or by the withdrawal of potent topical or systemic steroids..
- Malaise is accompanied by shivering and the skin feels hot and uncomfortable.
- loss of this barrier function making death from sepsis a well-known complication of erythrodermic psoriasis

Psoriatic arthritis

Psoriatic arthritis occurs in 10–25% of the patients.

Five clinical patterns of arthritis:

1. Asymmetrical distal interphalangeal joint involvement with nail damage (16%).
2. Arthritis mutilans with osteolysis of phalanges and metacarpals (5%)
3. Symmetrical polyarthritis-like rheumatoid arthritis, with claw hands (15%)
4. Oligoarthritis with swelling and tenosynovitis of one or a lew hand joints (70%)
5. Ankylosing spondylitis alone or with peripheral arthritis (5%)

Pathogenesis

- The pathogenesis of psoriasis is difficult to elucidate. The prevailing theory is that it is an autoimmune disease in which epidermal and capillary proliferation result from release of cytokines by lymphocytes.
- The nature of the growth factors acting on the epidermis is uncertain, but interferon-γ, interleukin-2, tumour necrosis factor (TNF)-α and interleukin-8 are likely to play role.

How to Make the Diagnosis

- Correct diagnosis of psoriasis is usually made by physical examination.
- Punch biopsy can be diagnostic in difficult cases.
- A careful examination of the scalp, umbilicus, intergluteal cleft, and nails can provide clues.

Treatment

For limited disease (less than 20% of the body) :

- emollient creams and ointments, and moderate to super-potent topical corticosteroid ointments and creams are the mainstay of therapy.
- Because psoriasis is a chronic condition, the strength of topical corticosteroid should be reduced as soon as possible to avoid side effects.
- Calcipotriene 0.005% cream, ointment, or solution twice daily in combination with intermittent topical corticosteroids is usually effective.
- A topical retinoid, tazarotene gel 0.05% to 0.1% once daily is also an alternative to topical corticosteroids.

For moderate disease (greater than 20% of the body) :

Ultraviolet (UV) light treatments either with ultraviolet B (UVB) or the combination of ultraviolet A (UVA) plus oral psoralens ultraviolet light of A wavelength (PUVA) are frequently effective.

- Narrow-band UVB (311 nm) has been gaining popularity as a highly effective UV therapy with reduced total accumulative dose.
- Widespread disease, pustular psoriasis, and severe psoriatic arthritis require systemic therapies.
- Methotrexate, systemic retinoid (acitretin), and cyclosporin A are used alone or in combination.
- A new class of antipsoriasis drugs, the biologic immune response modifiers, has huge promise. Inhibitors of tumor necrosis factor (TNF) (e.g., infliximab, etanercept, adalimumab), and receptor modifiers alefacept and efalizumab are being studied and approved for use in psoriasis.
- All are delivered parenterally and are expensive, but are a welcomed alternative to existing systemic therapies.

Prognosis

- Psoriasis is usually a lifelong disease.
- Morbidity can be significant in patients with psoriatic arthritis and pustular forms.
- Psoriasis comorbidities include reduced quality of life, malignancy, cardiovascular disease, and metabolic syndrome.
- Primary care physicians should be aware of potential cardiometabolic conditions and risk factors when treating patients with psoriasis.