

Psoriasis

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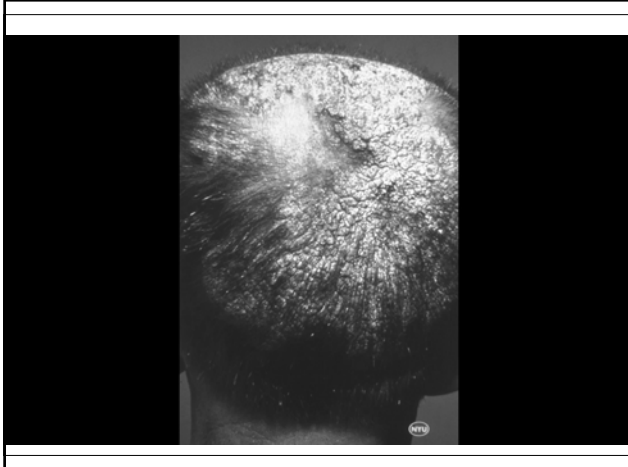
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Psoriasis

- Psoriasis is a chronic skin disorder resulting from a polygenic predisposition combined with triggering factors including trauma, infections, and medications.
- The characteristic lesion is a sharply demarcated, erythematous plaque with silvery white scales.
- The most common sites involved are the scalp, elbows, knees, and intergluteal fold.
- Psoriasis has a significant negative impact on the quality of life of affected individuals.





Psoriasis - Immunology

- An immune mediated disorder
- Predominant TH₁ cytokine profile
- Memory effector T-cells (CD45RO+) play a major role
- TNF-alpha is important in psoriatic arthritis and cutaneous psoriasis

Psoriasis - Epidemiology and Genetics

- Psoriasis involves 2% of the world's population.
- In the U.S., the prevalence may be as high as 4.6%.
- It is estimated that 4.5 million Americans suffer from psoriasis.
- Approximately 1.5 million Americans have moderate to severe psoriasis.
- Psoriatic arthritis occurs in 5-30% of patients, depending on diagnostic criteria utilized.

Triggering Factors

- Koebner phenomenon – injury to the skin, sunburn
- Infections – especially streptococcal infections, HIV, hepatitis C
- Psychogenic stress
- Medications – lithium, interferon, B-blockers, antimalarials, rapid tapers of corticosteroids



Psoriatic Arthritis – Clinical Patterns

- Distal interphalangeal joints of hands and feet
- Oligoarthritis – asymmetrical, 4 or fewer joints
- Polyarthritis – symmetrical, similar to RA, > 5 joints
- Arthritis mutilans
- Spondyloarthropathy

Psoriasis - Associated Medical Conditions

- Patients have an increased risk of lymphoma
- Psoriasis may confer an independent risk of myocardial infarction with the greatest risk in young patients with severe psoriasis.
- Increased incidence of obesity
- Increased incidence of depression
- Increased incidence of metabolic syndrome



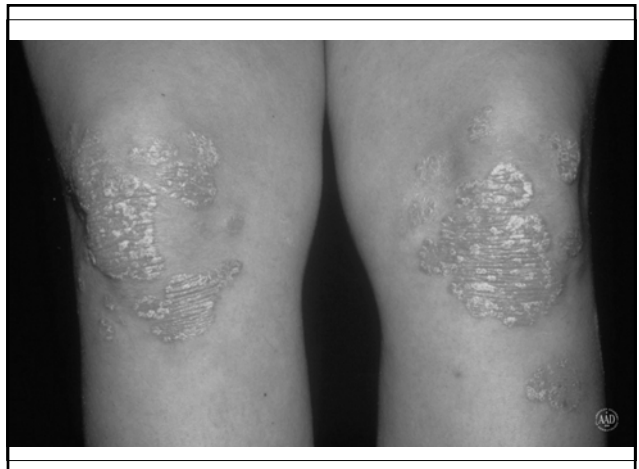
Psoriatic Arthritis

- Patients complain of morning stiffness, usually > 45 minutes in duration.
- Enthesitis – inflammation at tendon insertion into bone
- Dactylitis – inflammation and swelling of a whole digit
- Nail involvement in > 80% of patients
- HLA-B-27 positive in > 80%
- Some anemia, leukopenia, thrombocytopenia



Chronic Plaque Psoriasis

- The most common variant of psoriasis
- Symmetric distribution of sharply defined, erythematous, scaling plaques
- The scalp, elbows, knees, presacrum, hands, and feet are sites of predilection



Guttate Psoriasis

- A common presentation in children
- Often preceded by strep pharyngitis or severe upper respiratory infection
- > 50% of patients have elevated ASO, anti-DNase B, or streptozyme titers
- Presents as multiple widespread discrete papules and plaques with white scales

Erythrodermic Psoriasis

- Characterized by generalized erythema and scaling
- Onset may be acute or gradual
- Need to rule out atopic dermatitis, T-cell lymphoma, and pityriasis rubra pilaris



Pustular Variants

- Von Zumbusch pattern – generalized pustules, fever, leukocytosis
- Annular pattern
- Pustulosis of palms and soles
- Acrodermatitis continua of Hallopeau



Nail Psoriasis

- Incidence varies from 10-80%
- Psoriasis affects the nail matrix, nail bed, hyponychia
- May produce nail pits, oil spot sign, leukonychia, subungual hyperkeratosis
- Nail involvement is common in psoriatic arthritis

Treatment - Topical Therapies

- Topical corticosteroids – first line as monotherapy or in combination
- Vitamin D analogues
- Anthralin
- Topical retinoids
- Coal tar derivatives

Treatment - Phototherapy

- Broadband UVB
- Narrow band UVB (311-313 nm)
- PUVA – photochemotherapy with UVA
- Excimer laser 308 nm

Methotrexate - Indications

- Chronic plaque psoriasis (> 20% BSA)
- Pustular psoriasis
- Erythrodermic psoriasis
- Psoriatic arthritis

Systemic Therapies

- Methotrexate
- Cyclosporine
- Systemic retinoids

Methotrexate - Contraindications

- Creatinine clearance < 60 ml/min
- Trimethoprim-sulfamethoxazole
- Pregnancy and lactation
- Significant liver abnormalities
- Severe anemia, leukopenia, thrombocytopenia

Cyclosporine - Indications

- Severe psoriasis
- Conventional therapies ineffective or inappropriate

Systemic Retinoids - Indications

- Severe psoriasis which cannot be managed by topical therapies or light therapy
- Erythrodermic or pustular psoriasis

Cyclosporine - Contraindications

- Impaired renal function
- Uncontrolled hypertension
- Past or present malignancy
- History of excessive light therapy
- Active infections

Systemic Retinoids - Contraindications

- Moderate to severe liver disease
- Severe kidney dysfunction
- Pregnancy and lactation
- Women of childbearing age who cannot guarantee adequate contraception during therapy and up to 3 years following discontinuation of therapy
- Hyperlipidemia

Biologic Agents - Indications

- Patients with moderate to severe psoriasis eligible for systemic treatment
- Psoriatic arthritis

Biologic Agents – Anti TNF Alpha Targeted Therapy

- Etanercept – human fusion protein, receptor inhibitor
- Infliximab – chimeric monoclonal antibody
- Adalimumab – human monoclonal antibody

Biologic Agents - Contraindications

- Active tuberculosis
- Significant viral, bacterial, or fungal infections
- Increased risk for developing sepsis
- Malignancy within the past 5 years
- With anti-TNF agents – autoimmune disease, blood dyscrasias, hepatitis B, congestive heart failure, demyelination disorders

Biologic Agents – Inhibit T-cells

- Alefacept – human fusion protein targets CD2
- Efalizumab – humanized antibody – targets CD11a