Psoriasis

A brief introduction

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What is Psoriasis

- Psoriasis is a common chronic skin disorder most commonly characterized by well-demarcated erythematous plaques with silver scale

Epidemiology

- There seem to be two peaks for the age of onset:
- between 30 and 39 years and
- another between 50 and 69 years

Genetic factors

- Psoriasis has long been known to occur in families.
- 40% of patients with psoriasis or psoriatic arthritis have a family history of these disorders in first-degree relatives .
- wide association studies have identified multiple susceptibility loci for psoriasis
- The psoriasis-susceptibility (PSORS1) Locus & HLA-Cw6

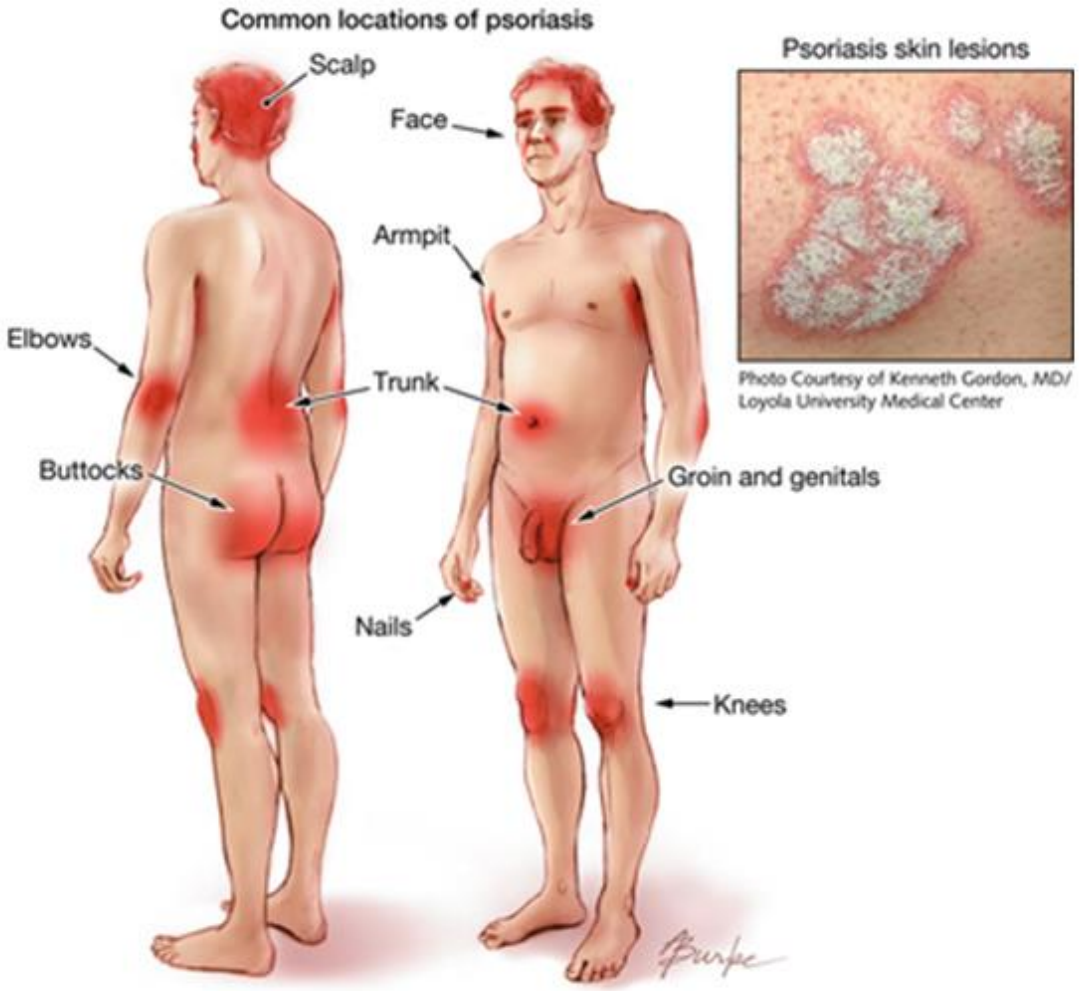
Risk factors for Psoriasis

- Smoking-higher incidence for both current & Past smoker
- Obesity-
- Drugs-Beta blockers, Lithium, Antimalarial drugs can worsen psoriasis.
- Infections: both viral & bacterial can worsen Psoriasis.
- Alcohol:
- Vitamin-D deficiency-deficiency may be associated with increased risk for certain immune diseases, including type 1 diabetes, multiple sclerosis, and inflammatory bowel disease.

Pathophysiology

- psoriasis is a complex immune-mediated disease in which T-lymphocytes and dendritic cells play a central role.
- Increased numbers of epidermal stem cells
- Increased numbers of cells undergoing DNA synthesis
- A shortened cell cycle time for keratinocytes (36 hours compared with 311 hours in normal skin)
- A decreased turnover time of the epidermis (four days from basal cell layer to stratum corneum, compared with 27 days in normal skin)

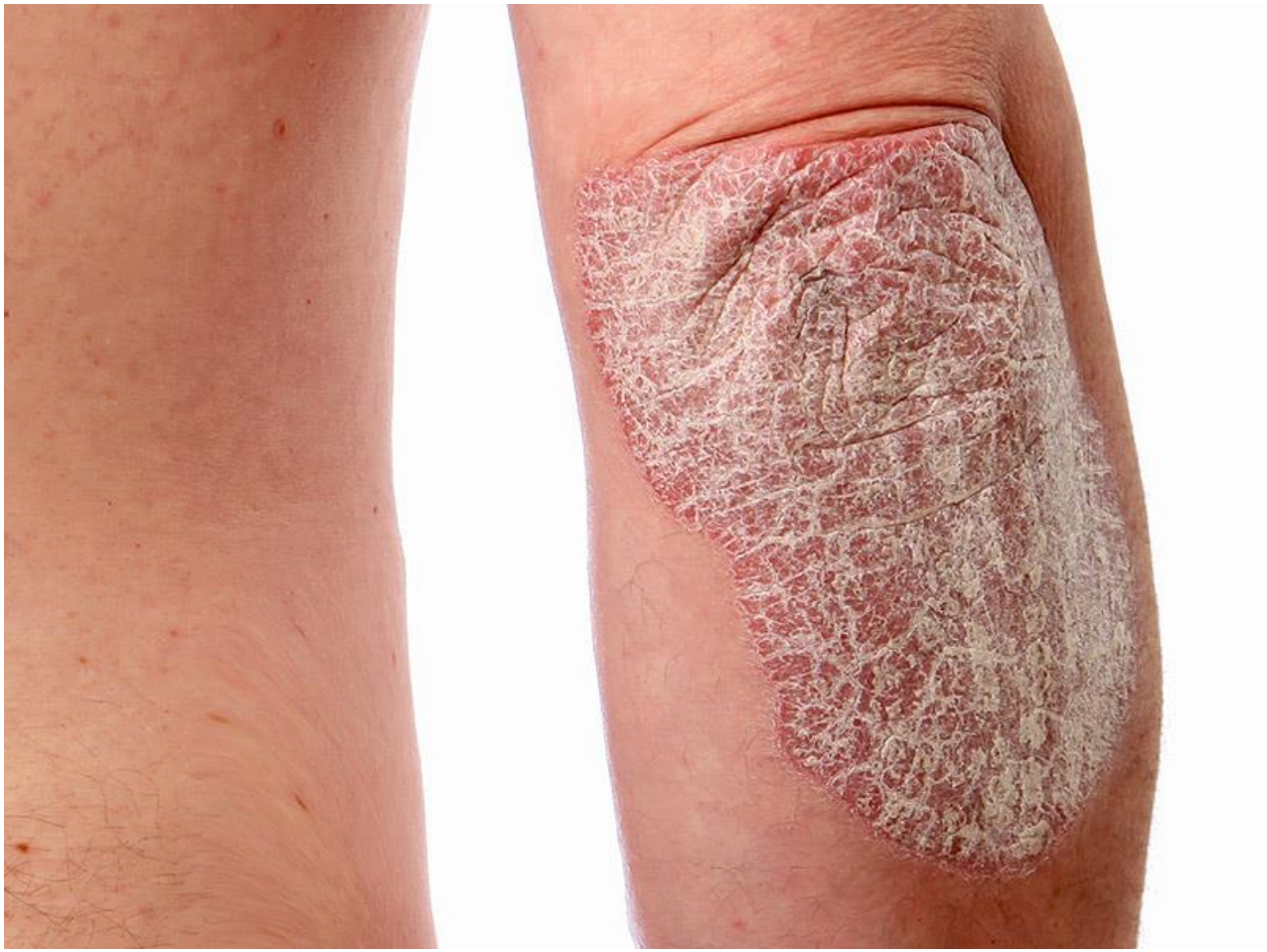
Common sites for Psoriasis



Chronic plaque Psoriasis

- Chronic plaque type psoriasis usually present with symmetrically distributed cutaneous plaques. The scalp, extensor elbows, knees, and back are common sites for involvement.
- The plaques are erythematous with sharply defined margins that are raised above the surrounding normal skin
- some patients complain of pruritus. Palmoplantar psoriasis can be very painful due to fissure formation and can be physically disabling

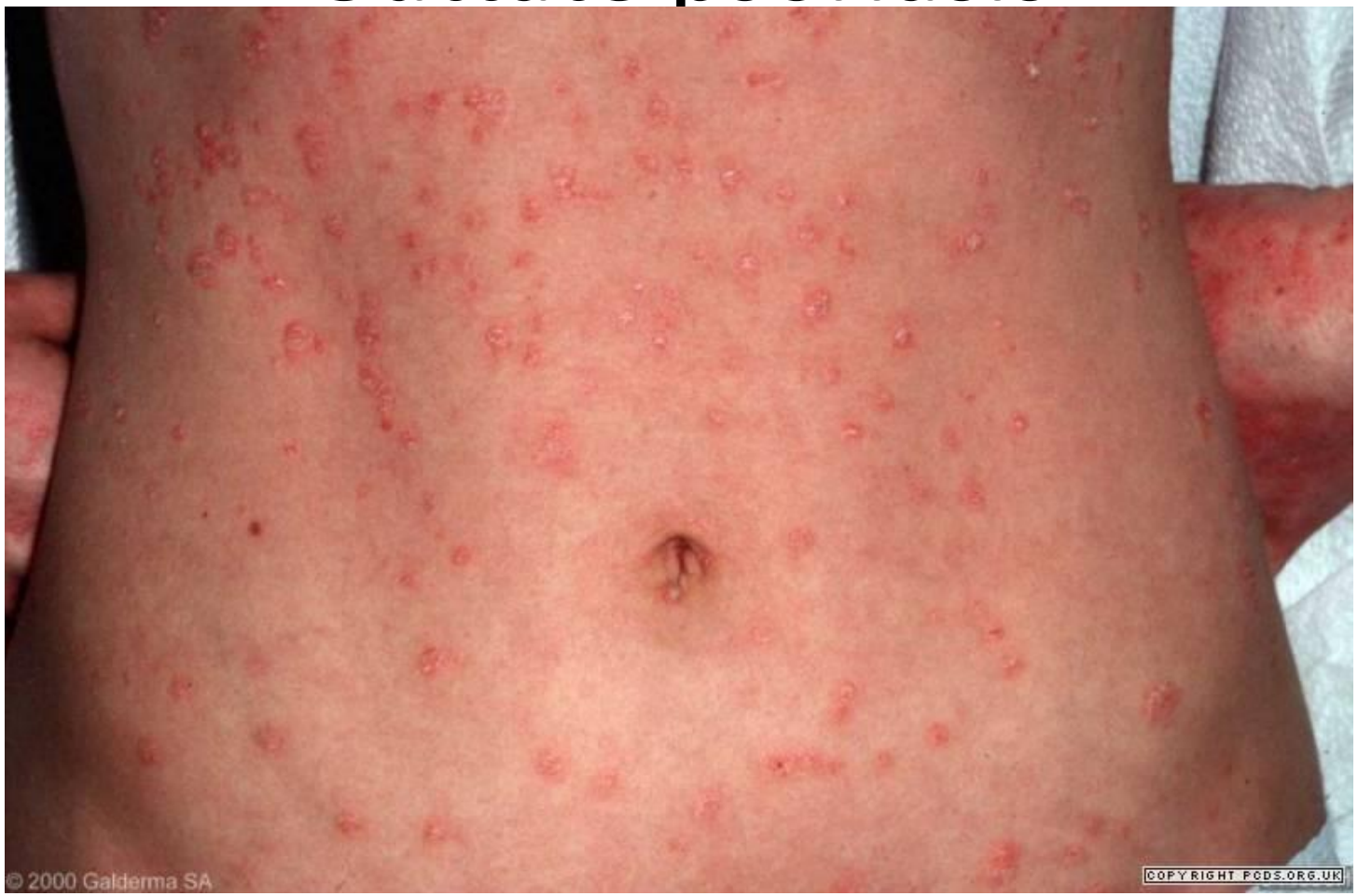
Chronic plaque psoriasis



Guttate psoriasis

- Guttate psoriasis is characterized by the abrupt appearance of multiple small psoriatic papules and plaques. The papules and plaques of guttate psoriasis are usually less than 1 cm in diameter (giving rise to the name guttate, which means drop-like). The trunk and proximal extremities are the primary sites of involvement.
- Guttate psoriasis typically occurs as an acute eruption in a **child** or **young adult** with no previous history of psoriasis.
- There is a strong association between recent streptococcal infection (usually pharyngitis) and guttate psoriasis.

Guttate psoriasis

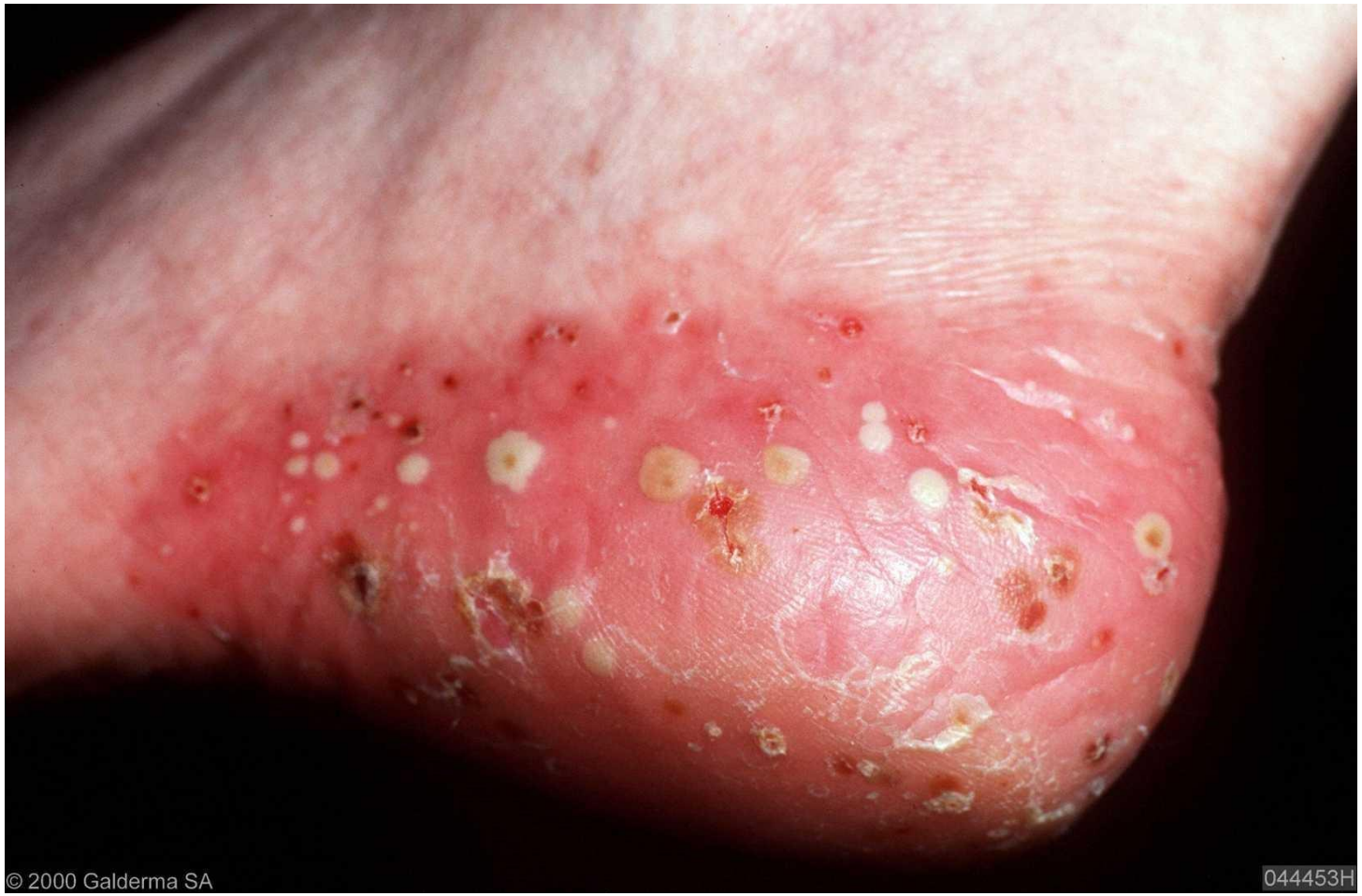


multiple small psoriatic papules and plaques

Pustular psoriasis

- Pustular psoriasis is a form of psoriasis that **can have life-threatening complications**.
- This form of psoriasis can be associated with malaise, fever, diarrhea, leukocytosis, and hypocalcemia. Renal, hepatic, or respiratory abnormalities and sepsis are potential complications.

Pustular psoriasis



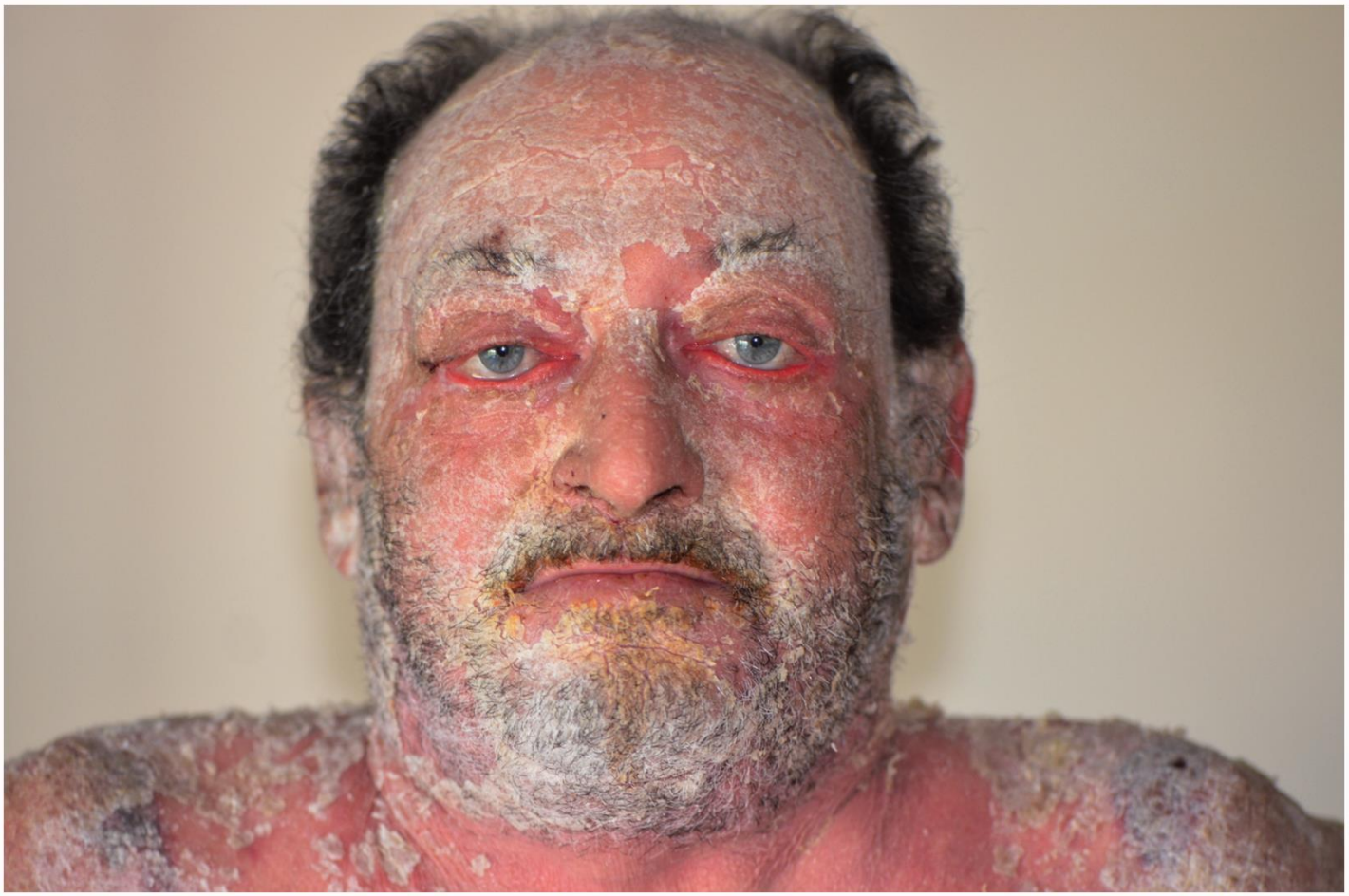
Erythrodermic psoriasis

- **Erythrodermic psoriasis** —

  It is characterized by generalized erythema and scaling from head to toe .

Such patients are at high risk for complications related to loss of adequate barrier protection such as infection (including sepsis) and electrolyte abnormalities secondary to fluid loss. Inpatient management involving a dermatologist is frequently necessary.

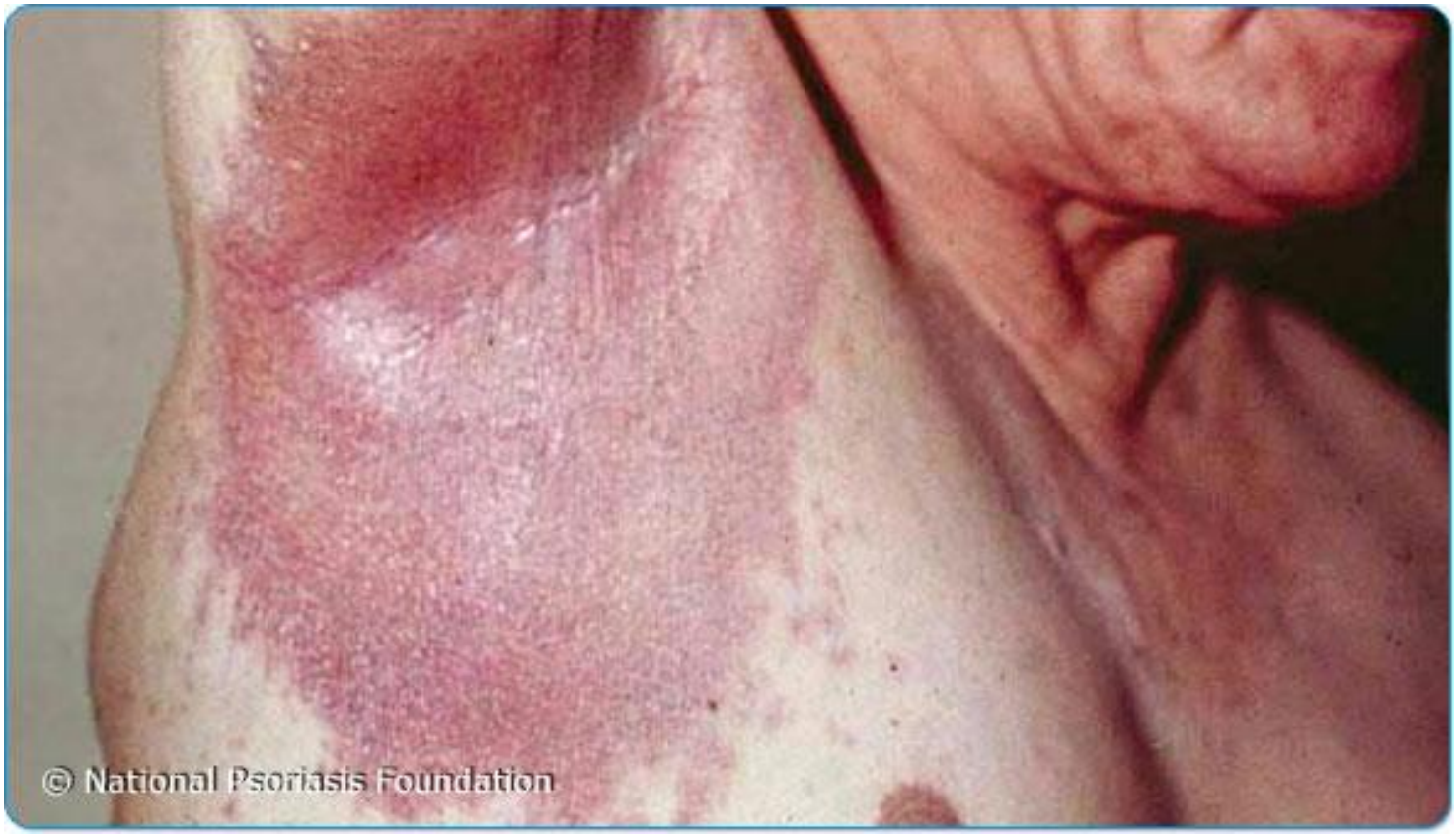
Erythrodermic psoriasis



Inverse psoriasis

- "Inverse psoriasis" refers to a presentation involving the intertriginous areas, including the inguinal, perineal, genital, intergluteal, axillary, or inframammary regions. This presentation is called "inverse" since it is the reverse of the typical presentation on extensor surfaces. This variant can easily be misdiagnosed as a **fungal or bacterial infection** since there is frequently no visible scaling.

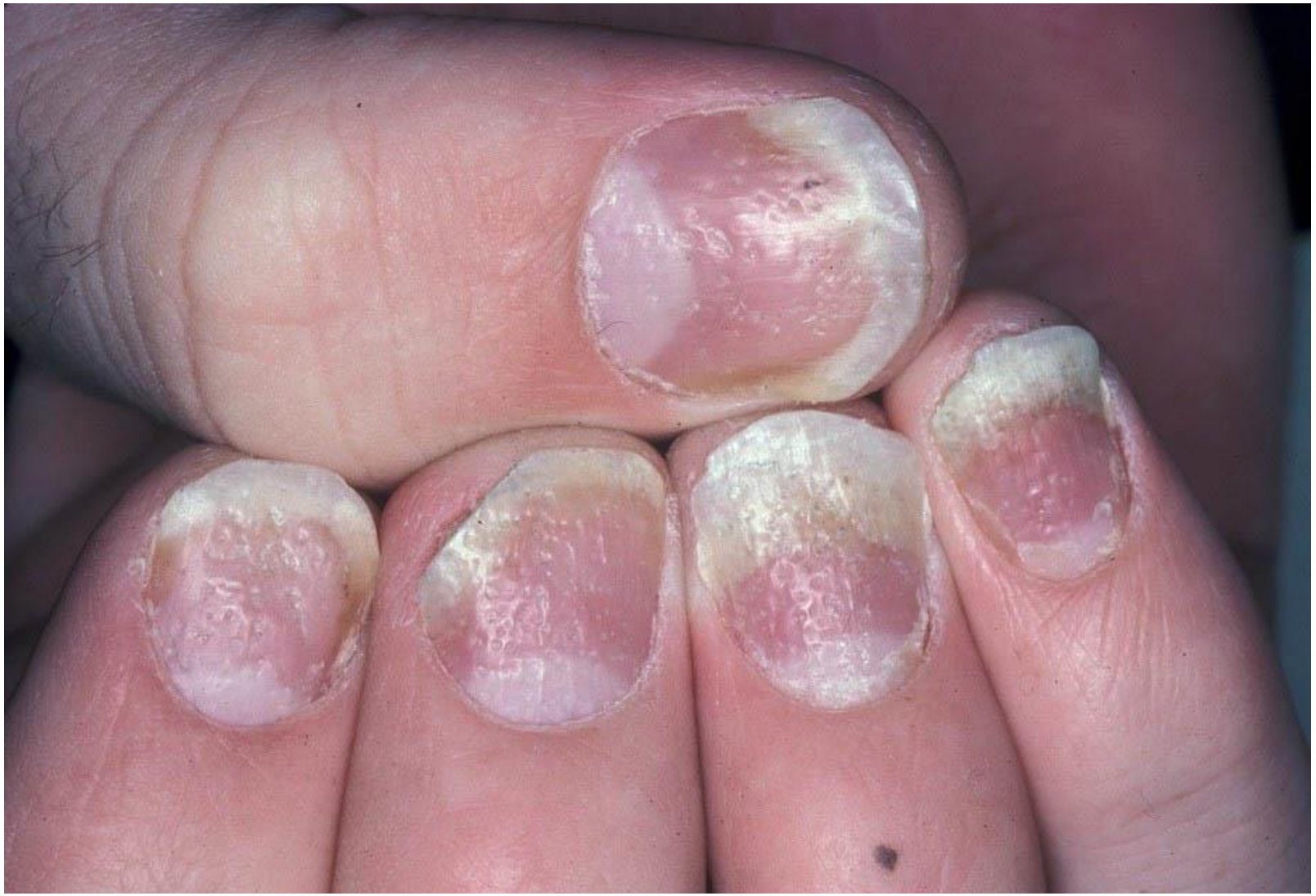
Inverse psoriasis



Nail Psoriasis

- nail involvement is the only manifestation of psoriasis
- The presence of nail disease may be important diagnostically, often providing valuable supportive evidence of disease in difficult cases. Nail disease is more common in patients with psoriatic arthritis, and may be one of the strongest clinical predictors for concomitant psoriatic arthritis.

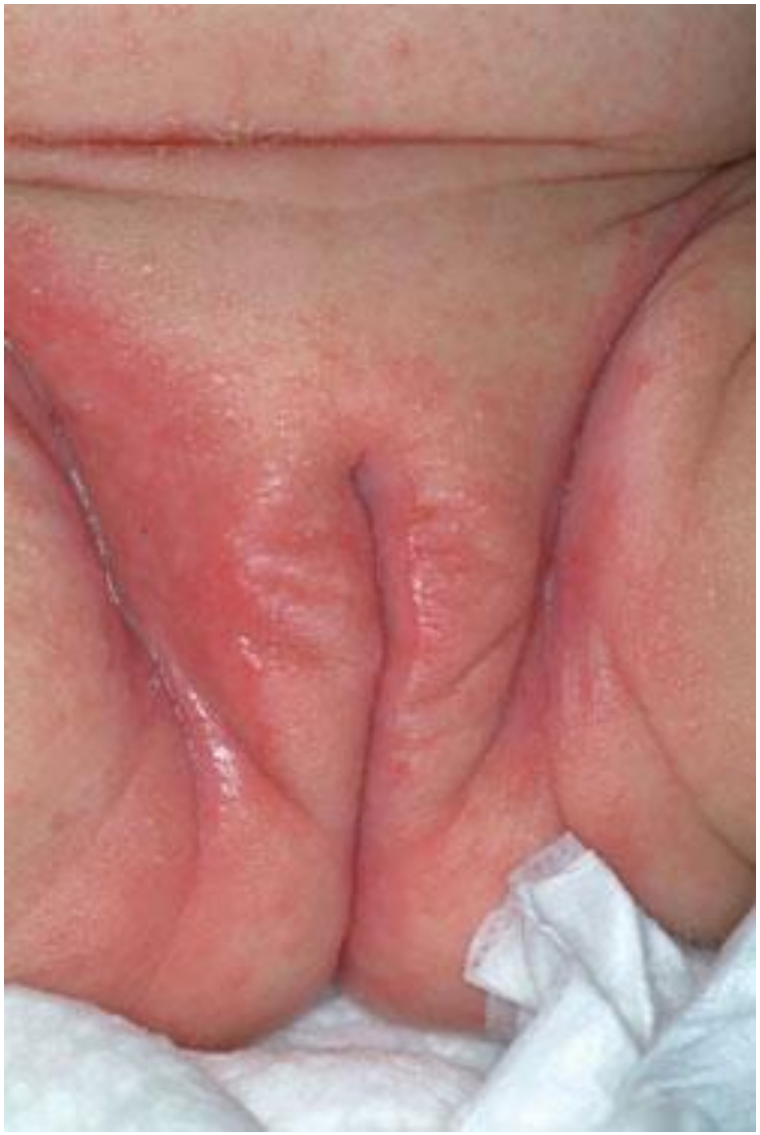
Nail Psoriasis



Psoriasis in Children

- Psoriasis in infants often presents with involvement of the diaper area. The terms **diaper psoriasis** and napkin psoriasis are often used to refer to this presentation.
- Infants with diaper-area involvement typically develop symmetrical, well-demarcated erythematous patches with little scale.
- Unlike irritant diaper dermatitis, the inguinal folds are usually involved. Affected infants may also have psoriatic plaques in other body areas. These plaques are often smaller and thinner than the psoriatic plaques in adult patients

Diaper psoriasis



Psoriatic Arthritis

- Several clinical patterns of joint involvement in psoriatic arthritis have been identified:
- Distal arthritis, characterized by involvement of the distal interphalangeal (DIP) joints.
- Asymmetric oligoarthritis in which <5 small and/or large joints are affected in an asymmetric distribution
- Symmetric polyarthritis, similar and at times indistinguishable from **rheumatoid arthritis**
- Arthritis mutilans, characterized by deforming and destructive arthritis.
- Spondyloarthropathy, including both sacroiliitis and spondylitis
- enthesitis, tenosynovitis, and dactylitis ("sausage digits") are additional common findings in psoriatic arthritis.

Management of Psoriatic Arthritis

- Managed in collaboration with rheumotaologist & Dermatologist
- physical and occupational therapy, exercise, prescription of orthotics, and education regarding the disease and about joint protection, disease management, and proper use of medications.
- NSAID (Naproxen)
- DMARDs (Methotrextate, Leflunomide, Sulfasalazine)

Diseases reported to occur at a higher frequency in patients with psoriasis

- cardiovascular disease
- malignancy
- diabetes
- hypertension
- metabolic syndrome
- inflammatory bowel disease
- serious infections
- autoimmune disorders

Ocular findings

- Disorders of the eye, such as blepharitis (inflammation of eye lid), conjunctivitis, xerosis, corneal lesions, and uveitis may occur with increased frequency in patients with psoriasis

Diagnosis

- well-demarcated plaques and coarse scale, particularly when involvement of the scalp, ears, elbows, knees, umbilicus, or nails is present.
- Family History
- Laboratory studies- Skin biopsy

Treatment

- mild-to-moderate plaque psoriasis be initially treated with topical corticosteroids and emollients (alternatives tar, topical retinoids ,topical vitamin D. For facial or intertriginous areas topical tacrolimus.
- Improvement can be anticipated within 1-2 mths
- moderate-to-severe plaque psoriasis phototherapy if feasible and practical+ systmemic meds (Methotrexate, Ciclosporine)

Thank you