Psoriasis:
Diagnosis and management

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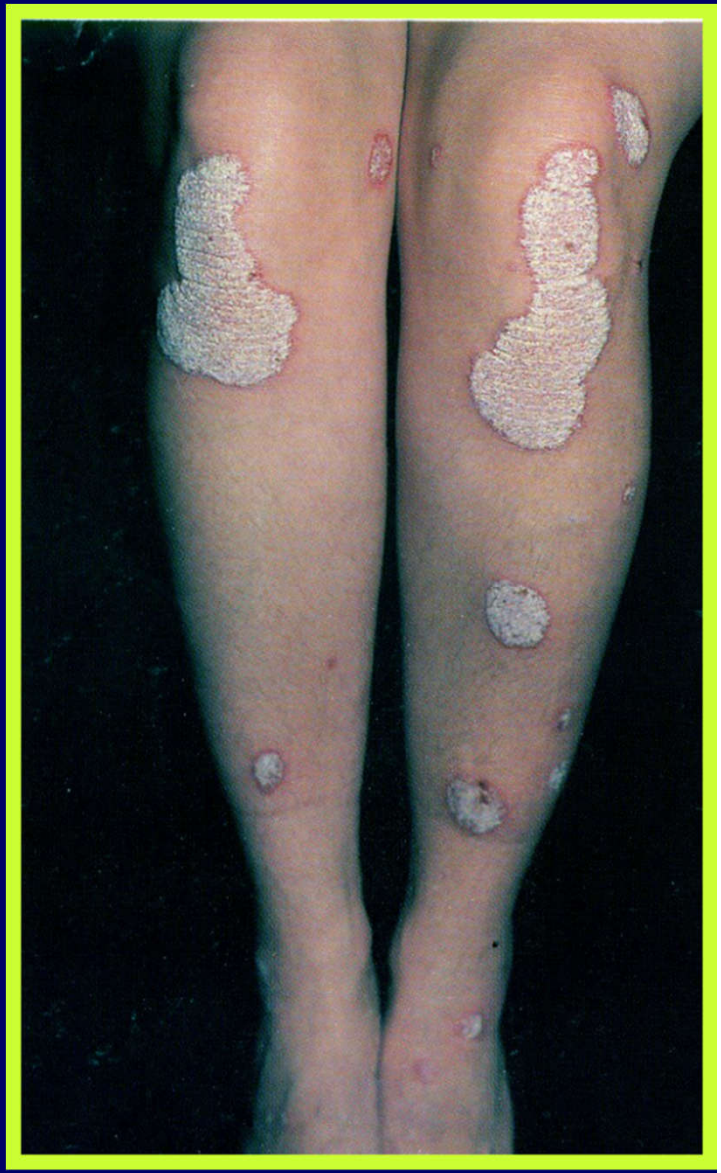
Psoriasis

* **Definition:**

- Psoriasis is a common, chronic, recurrent inflammatory disease of the skin
- Characterized by circumscribed, round, erythematous, scaly patches of variable sizes, covered by *silvery white scales*



* Epidemiology:

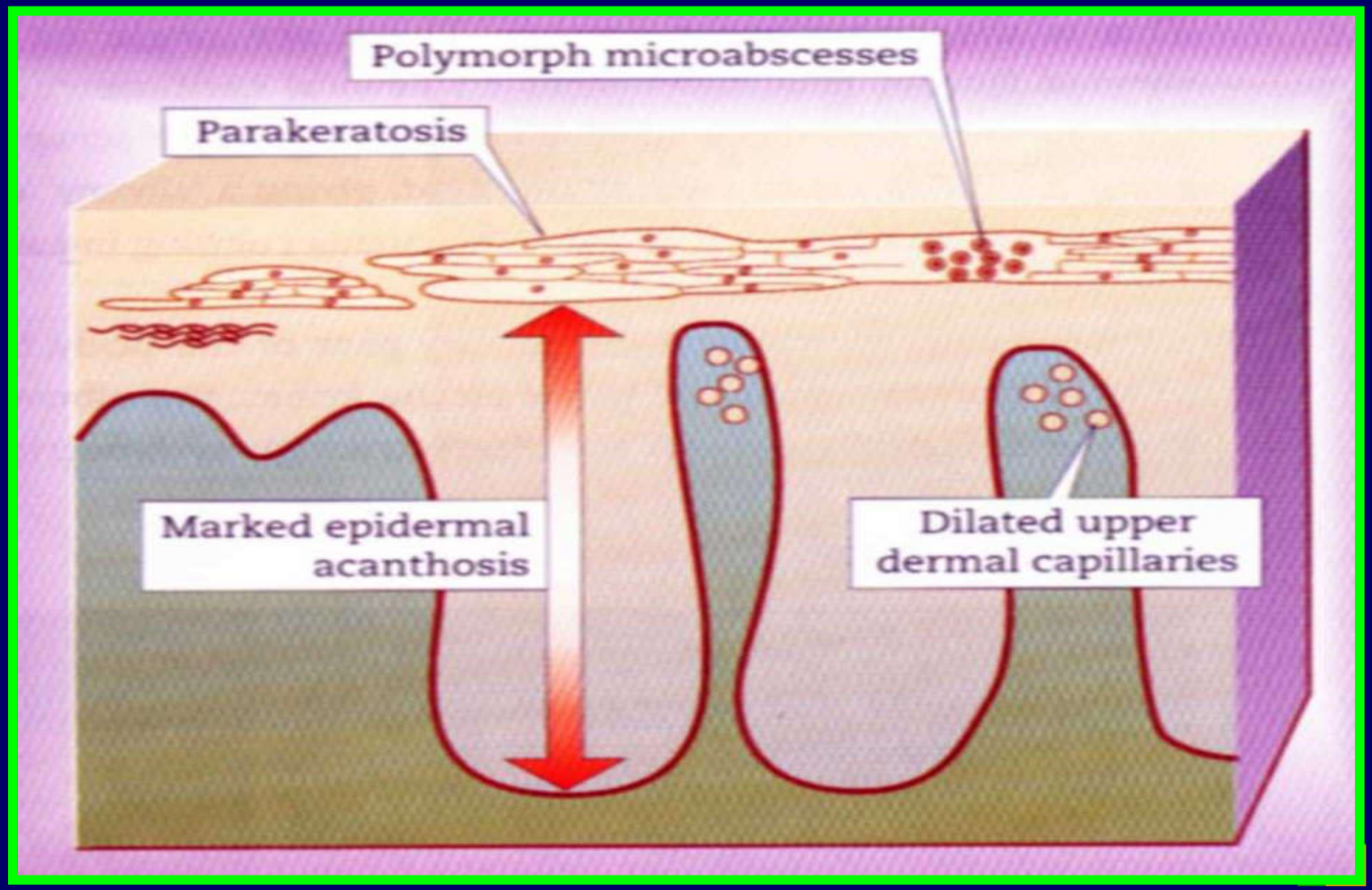
- Affects about 1 – 2 % of the general population
- Common in cold countries
- Both sexes are equally affected
- Affects all ages

* Pathogenesis of Psoriasis:

Rapid proliferation of epidermal keratinocytes with no enough time for maturation resulting in *parakeratosis* and scale formation

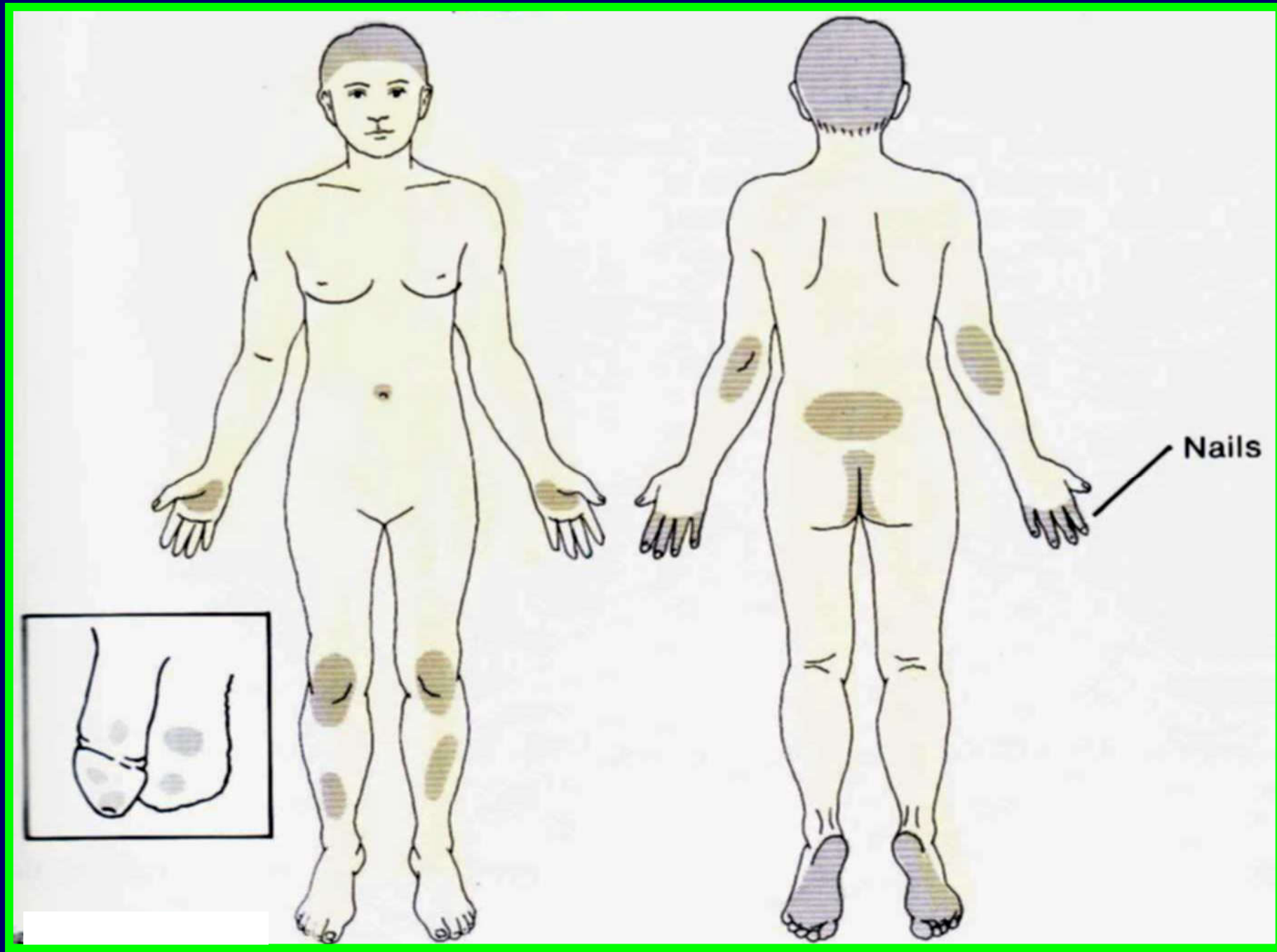
* **Etiology**:
  - Genetic predisposition
  - Immunological abnormalities
  - Infections
  - Trauma

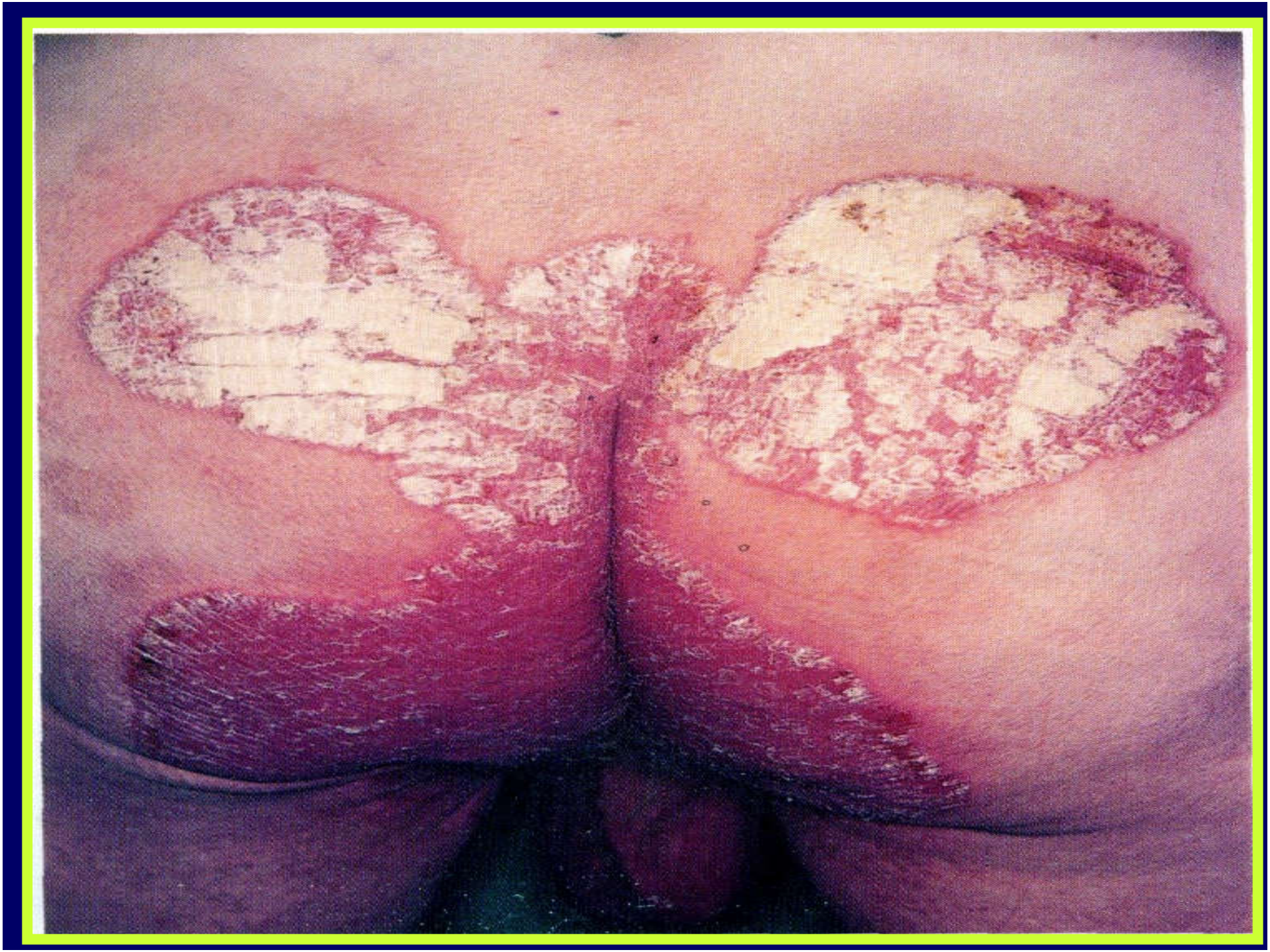
* Histopathology:

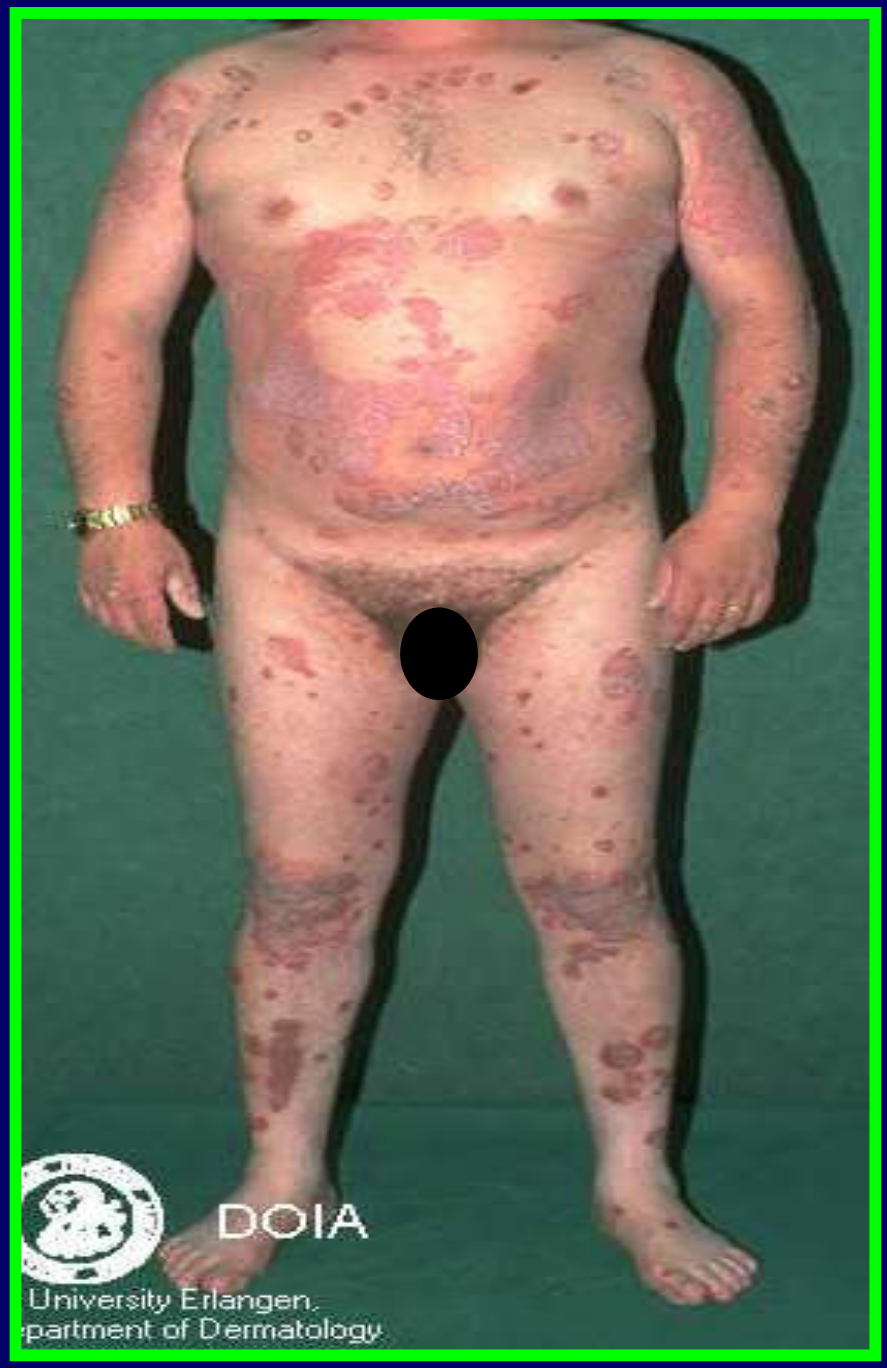


* Clinical features of ordinary psoriasis :

- Circumscribed, round, erythematous, scaly patches of variable sizes, covered by *silvery white scales*
- Vary from a solitary lesion to more than 100
- Affects extensors
- Bilateral and symmetrical
- The course is chronic and unpredictable


Nails

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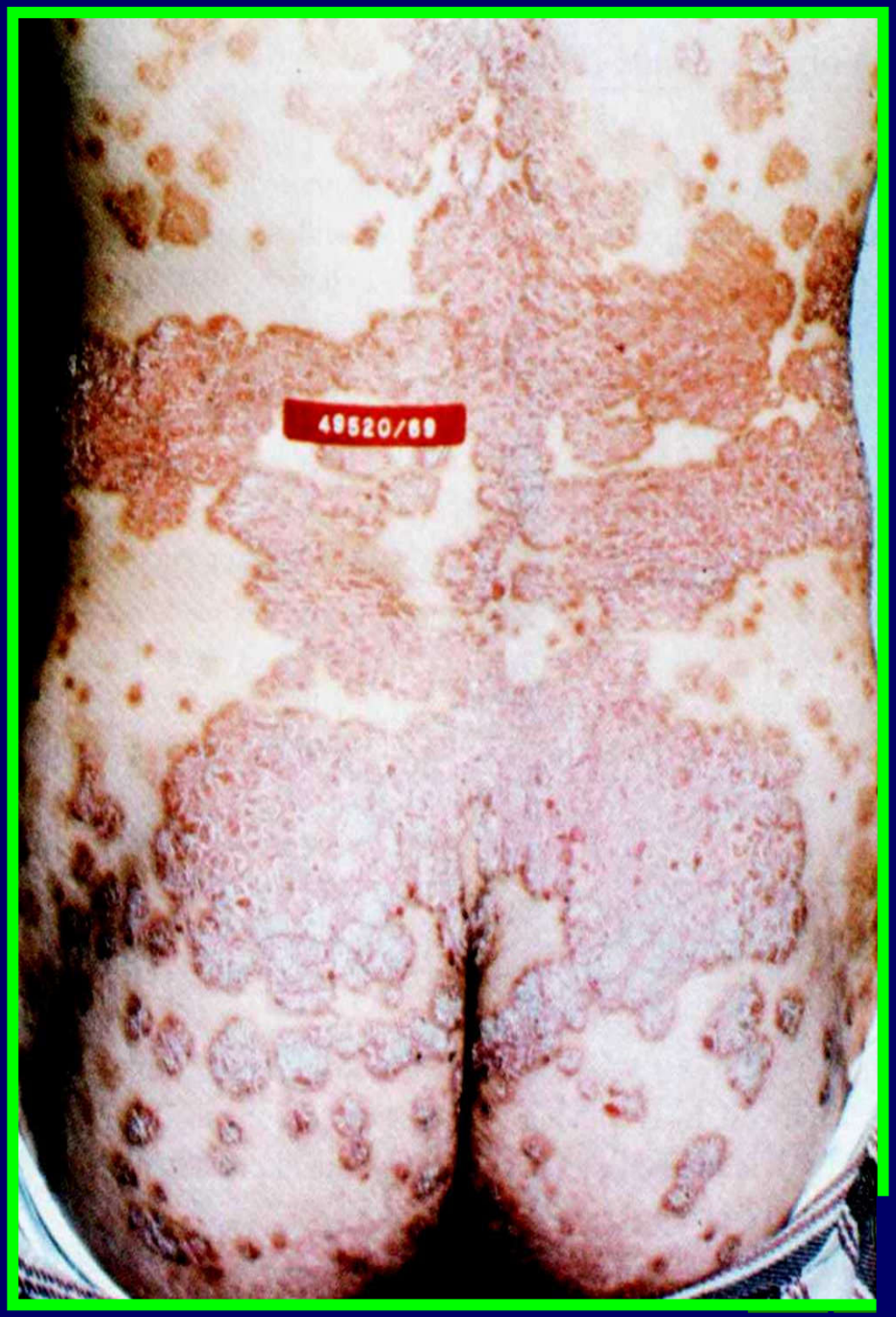
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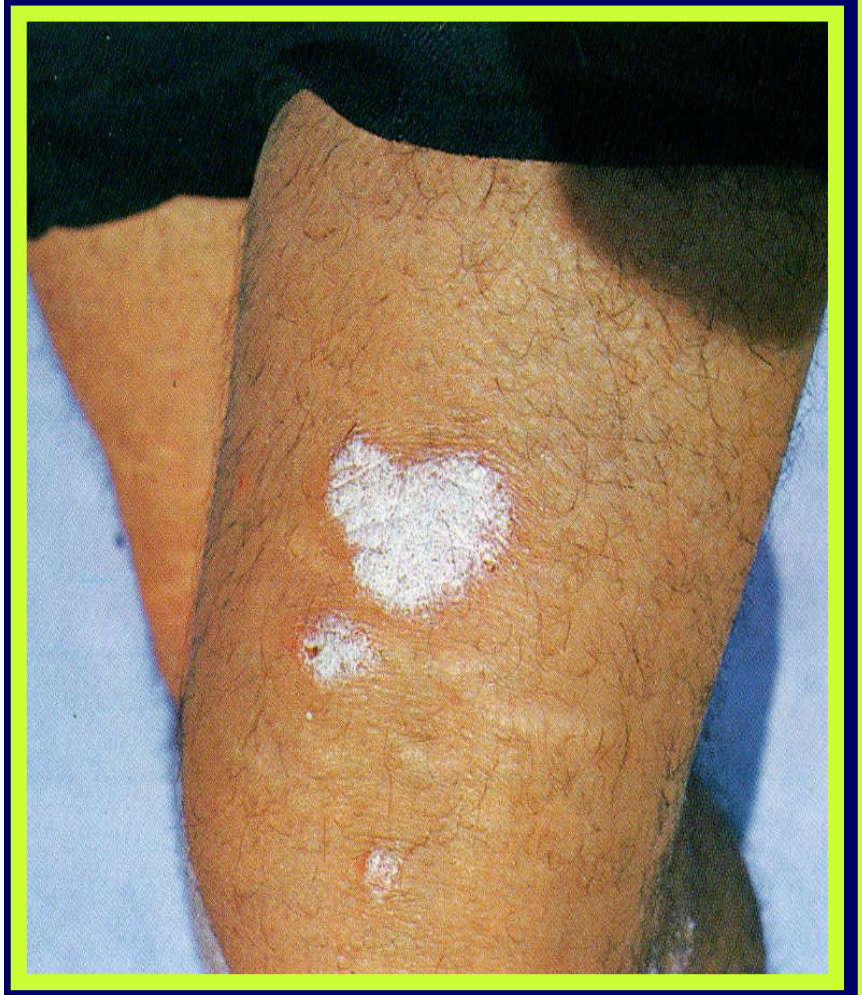

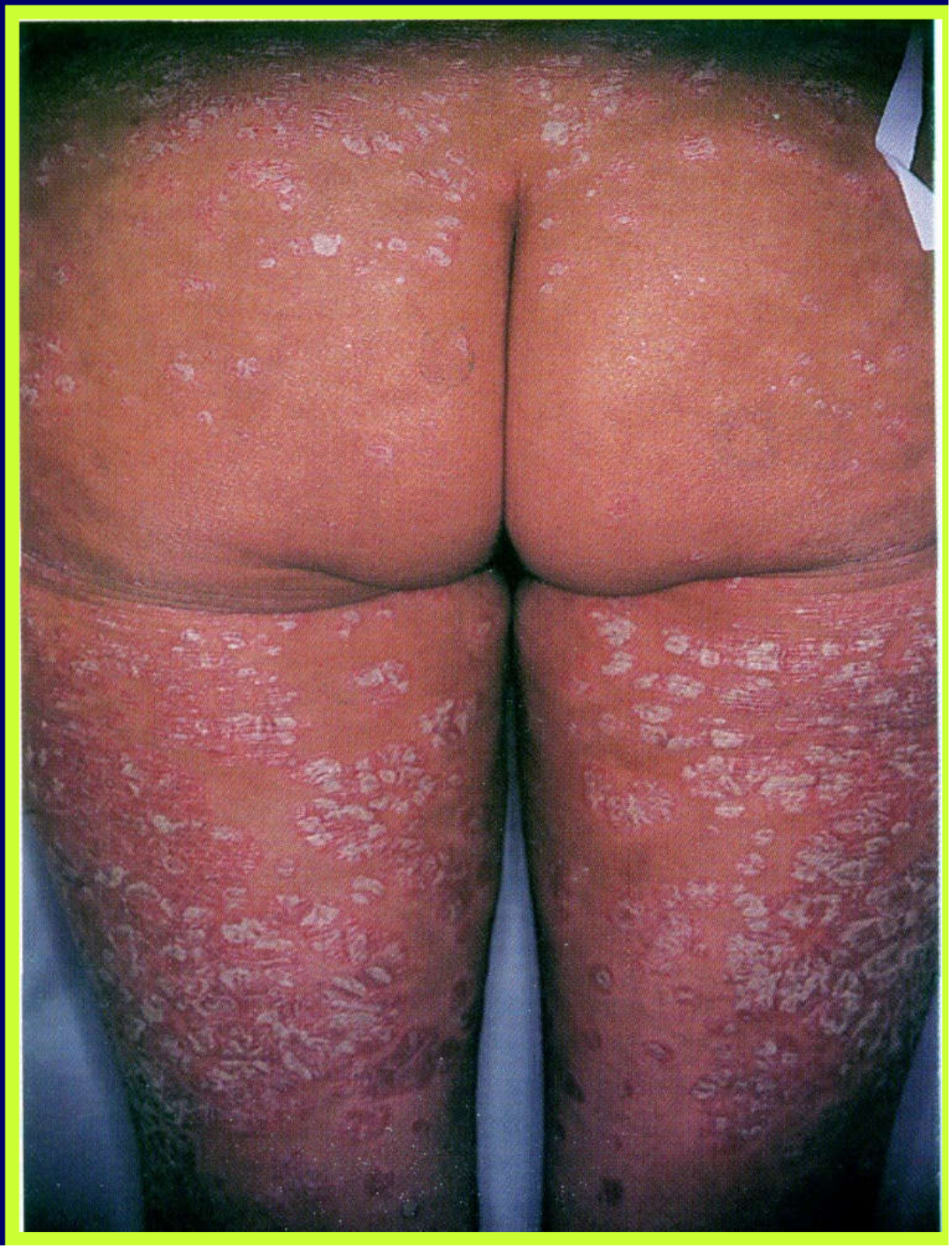

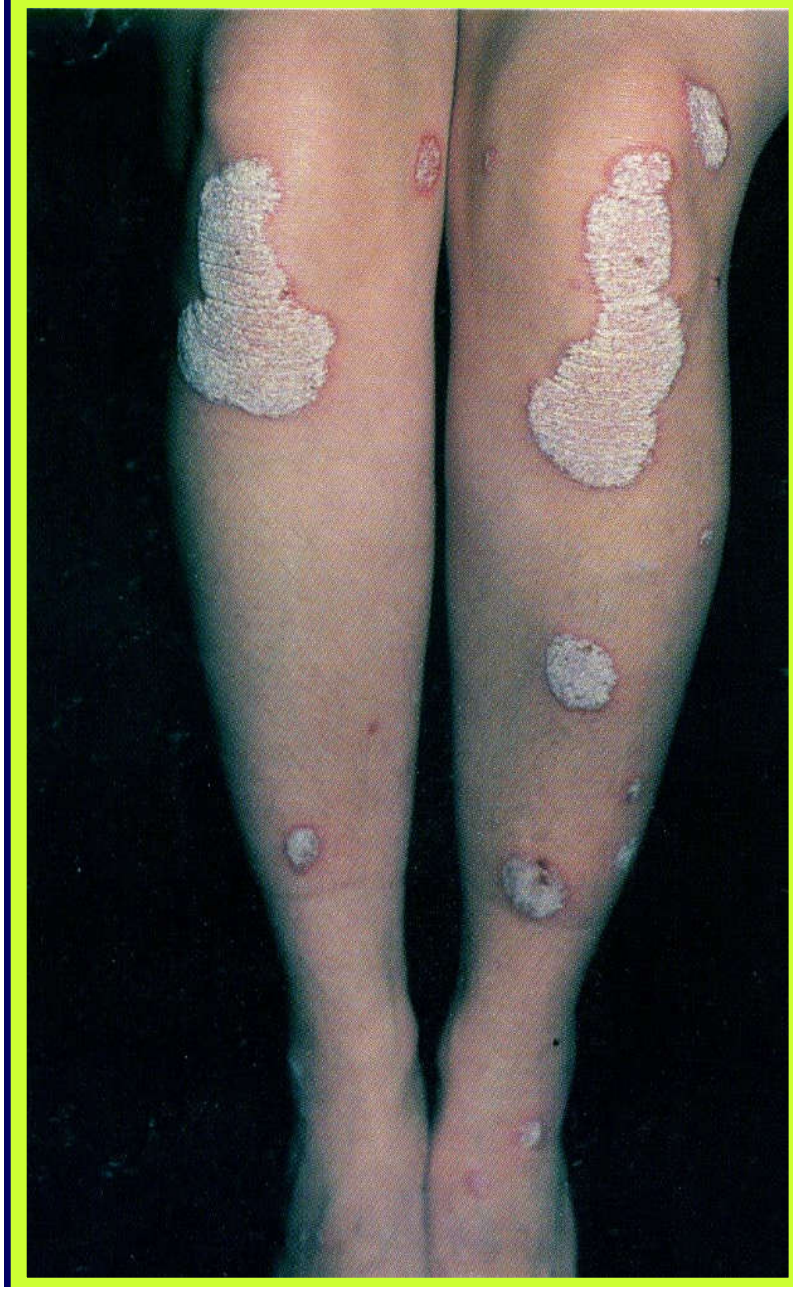

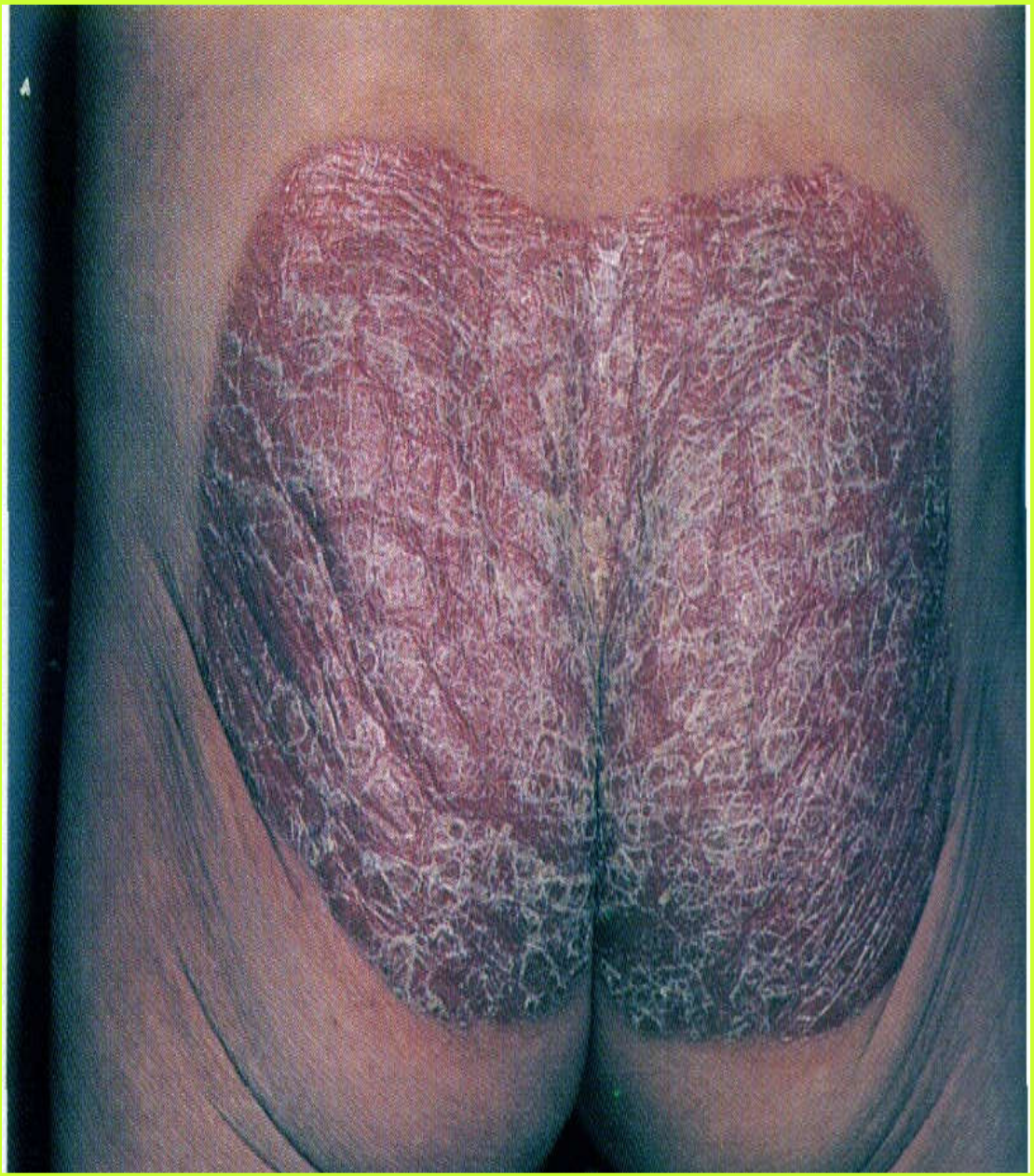

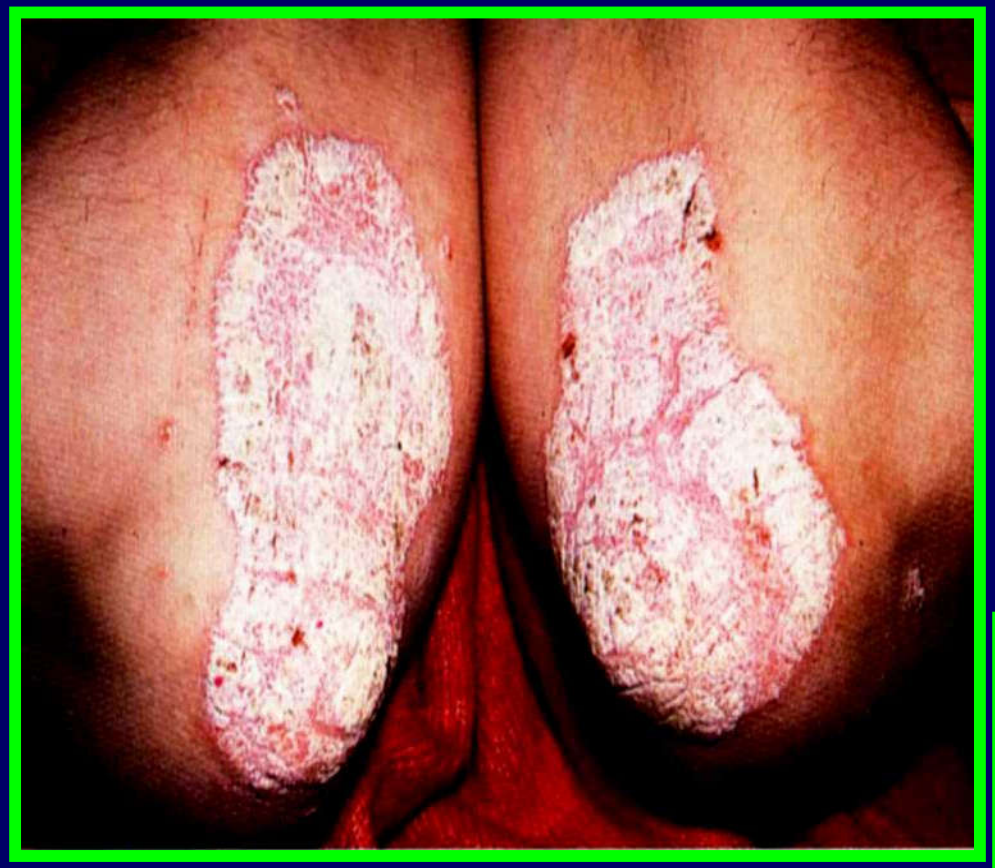

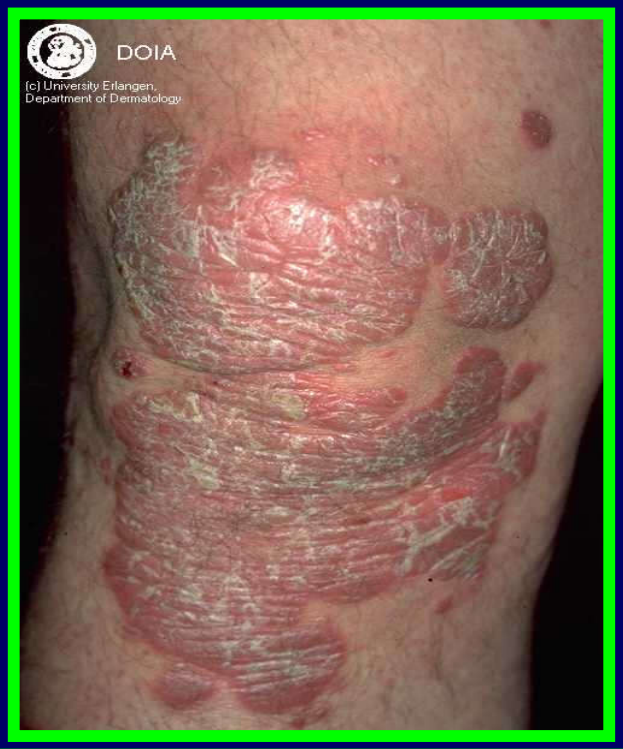
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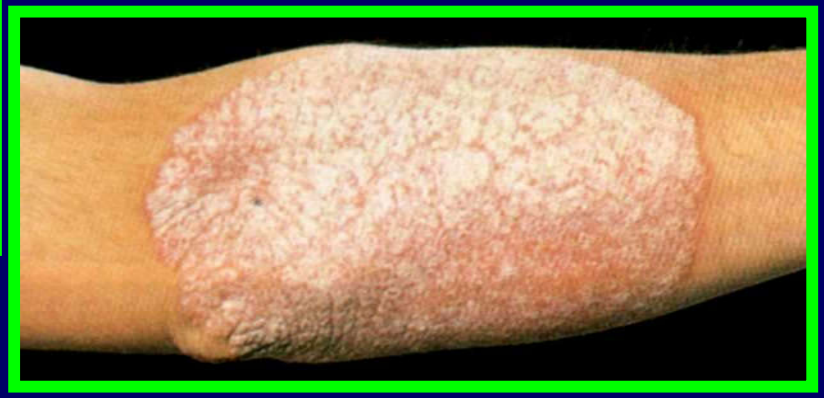

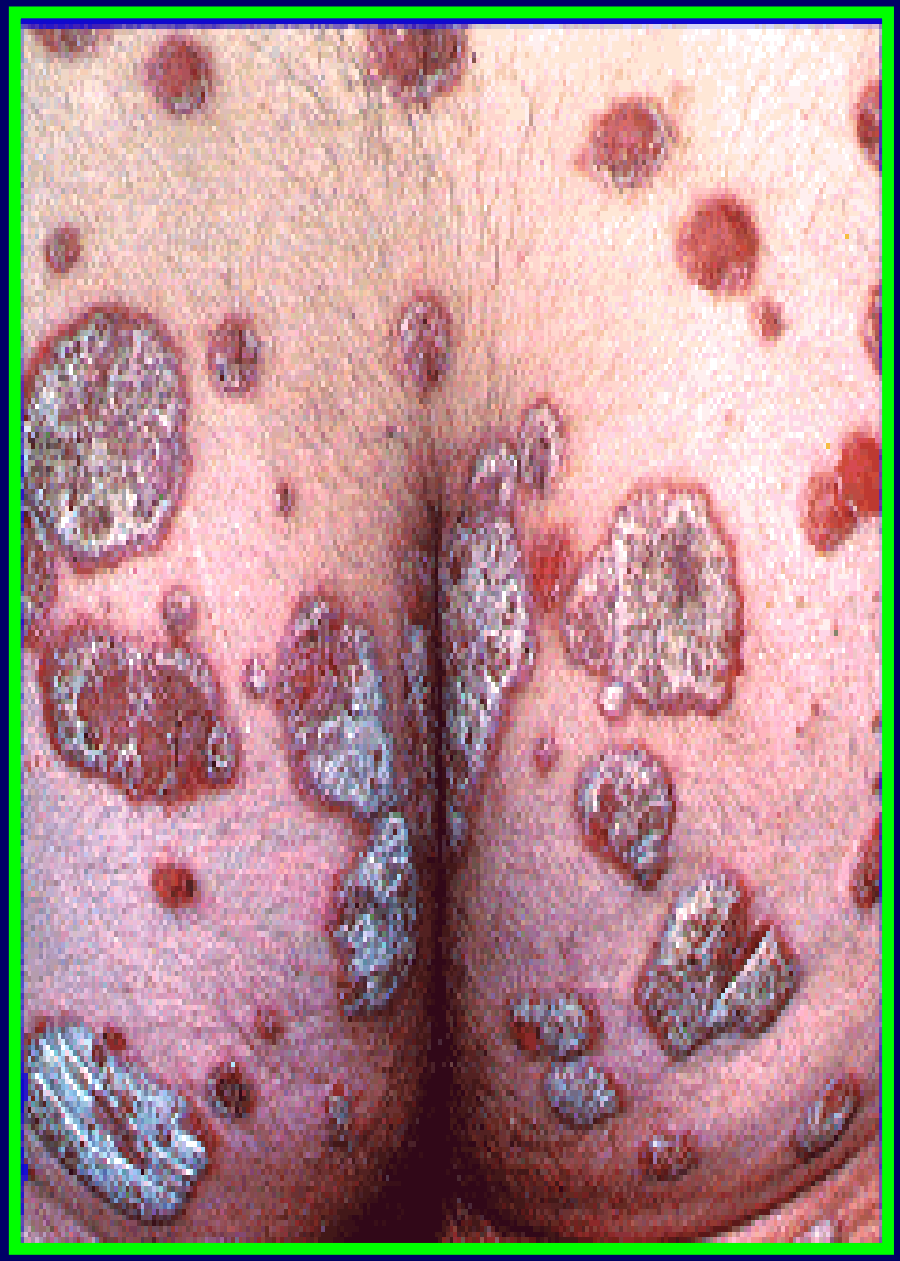

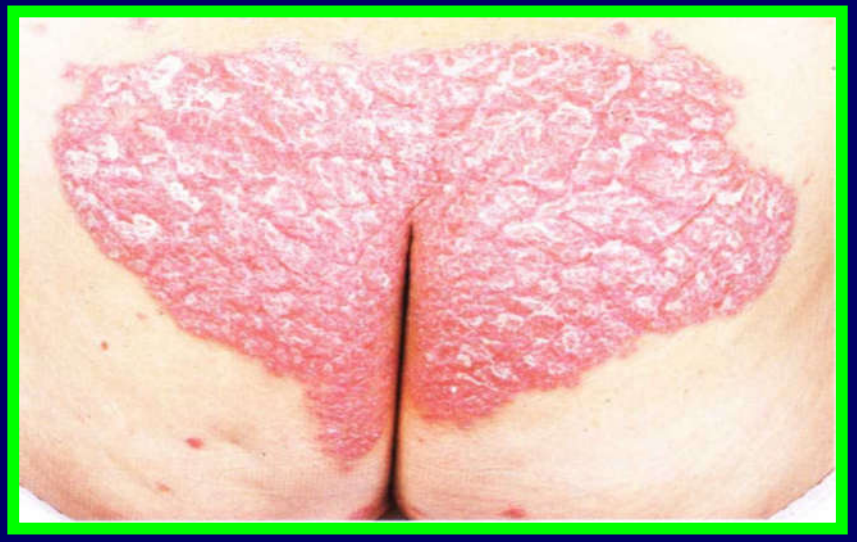

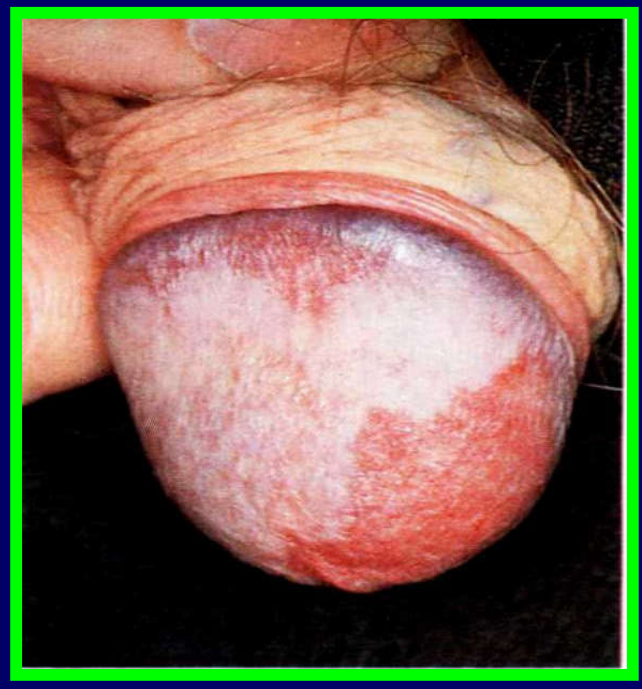

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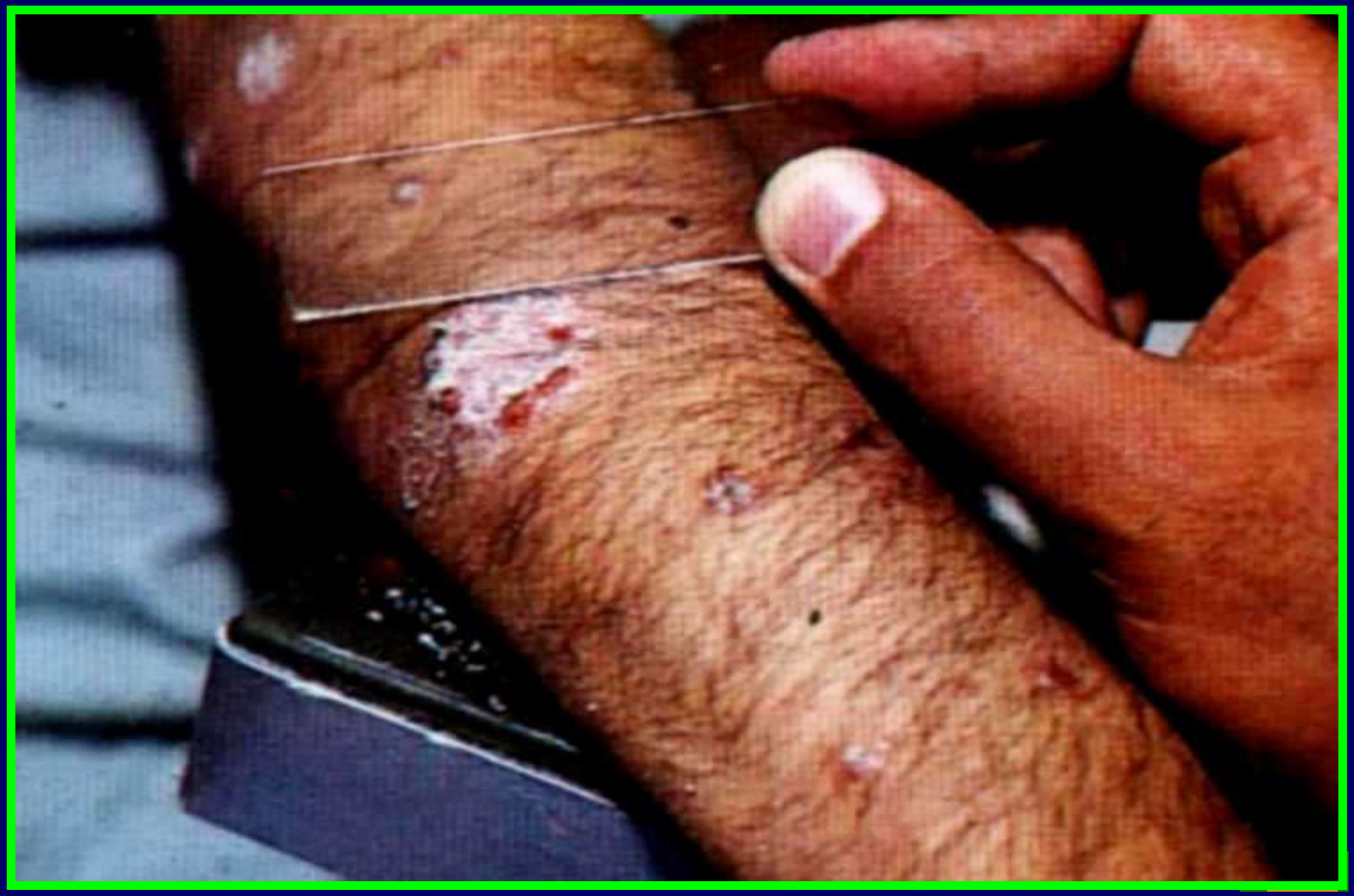
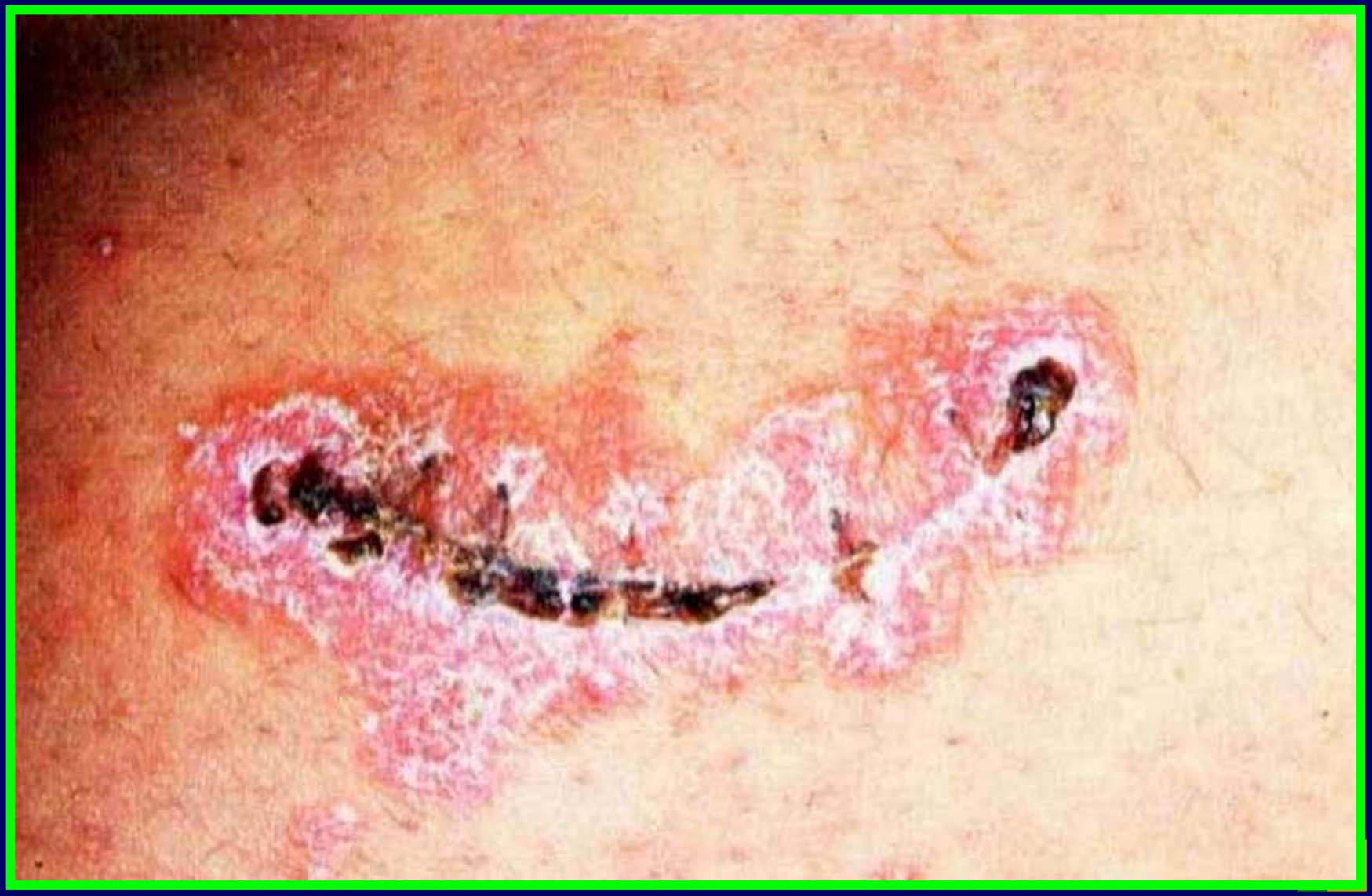
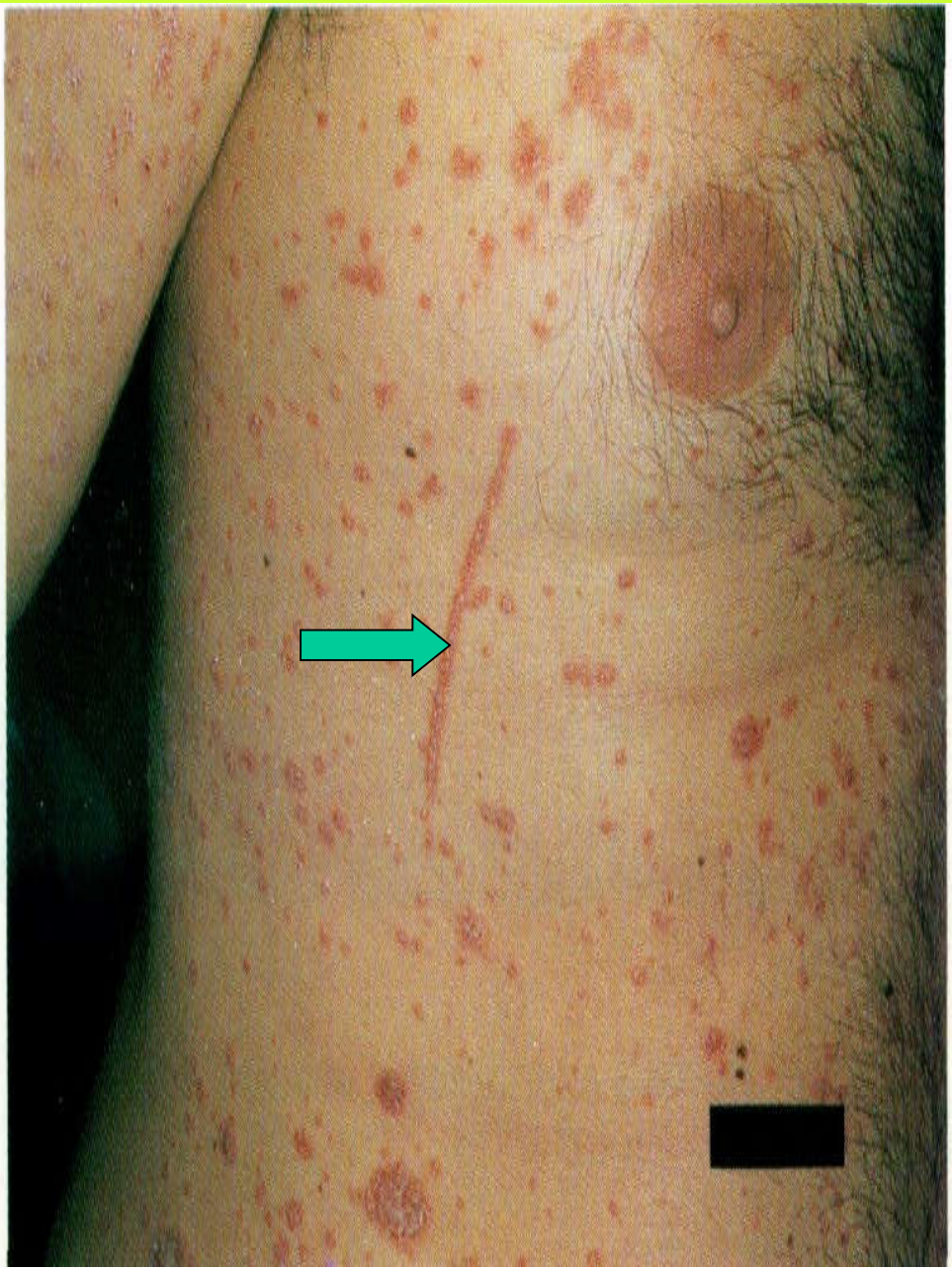
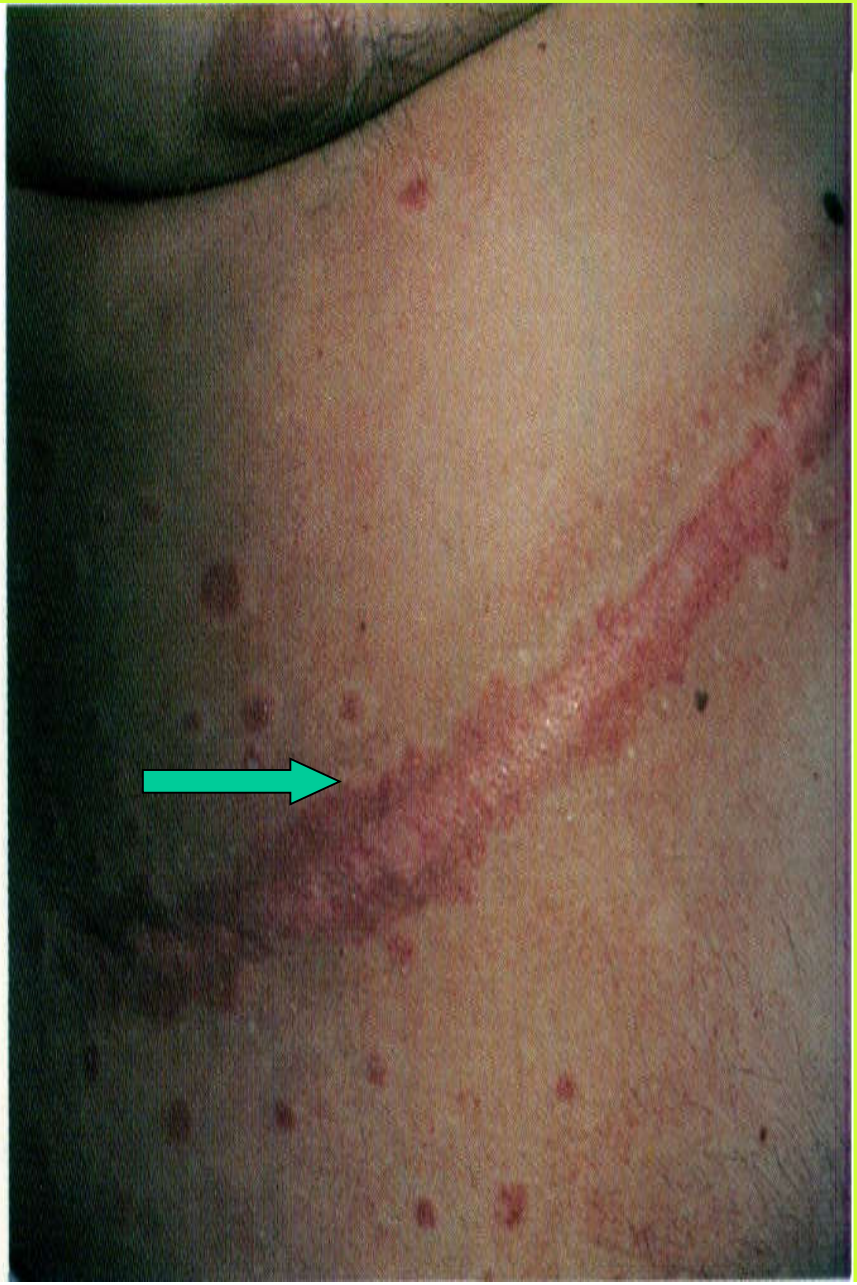


Auspitz sign

* Koebner's phenomenon:



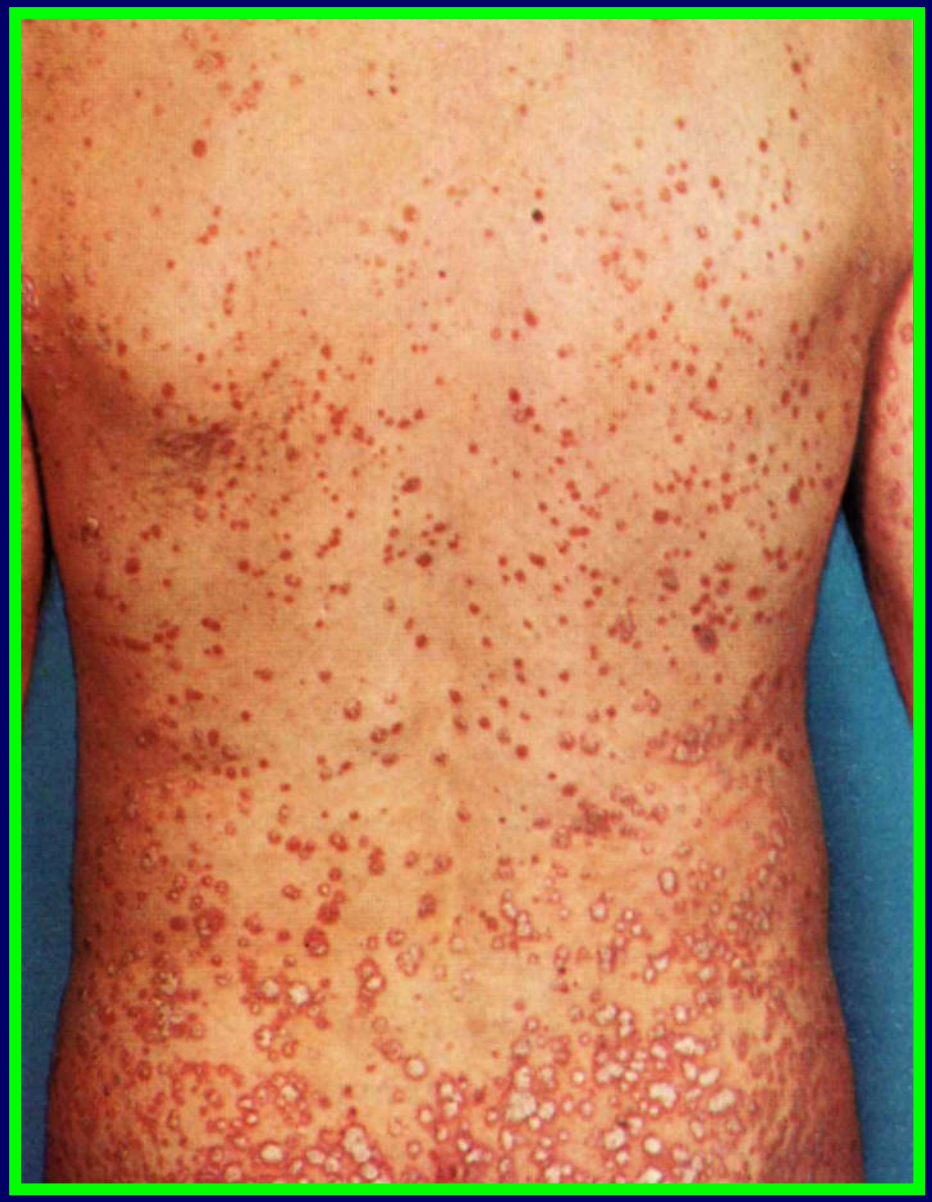


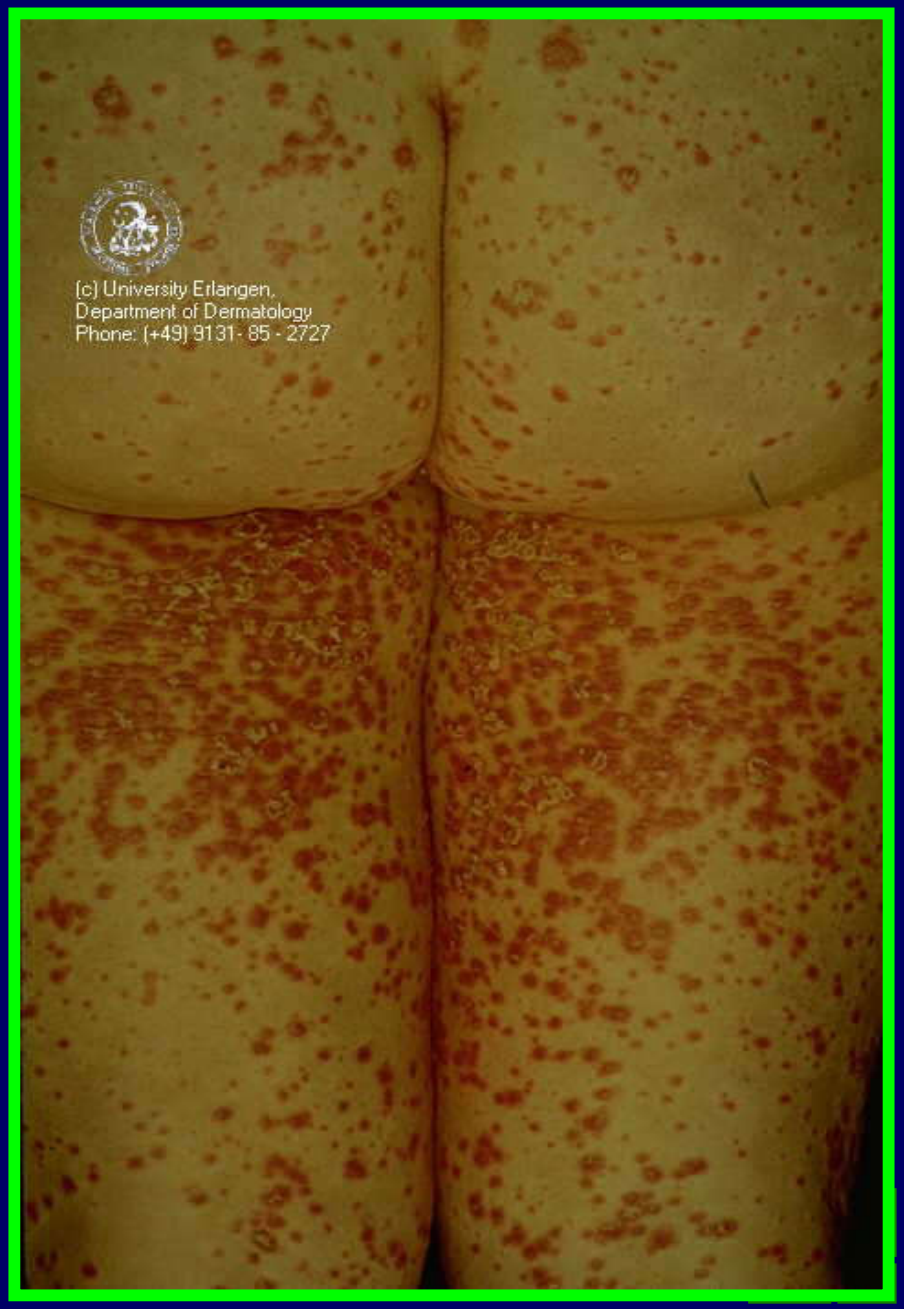


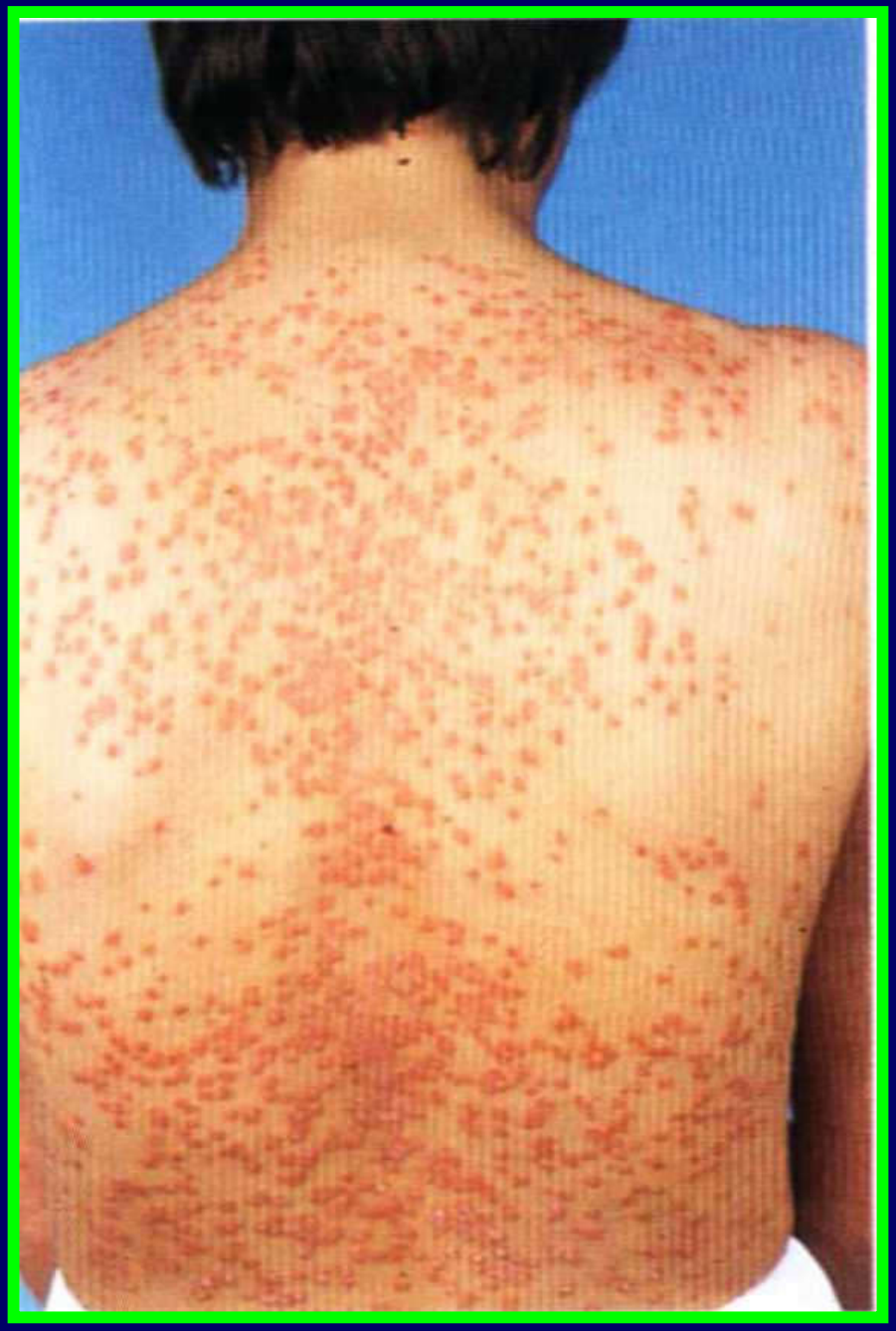
Clinical varities of Psoriasis

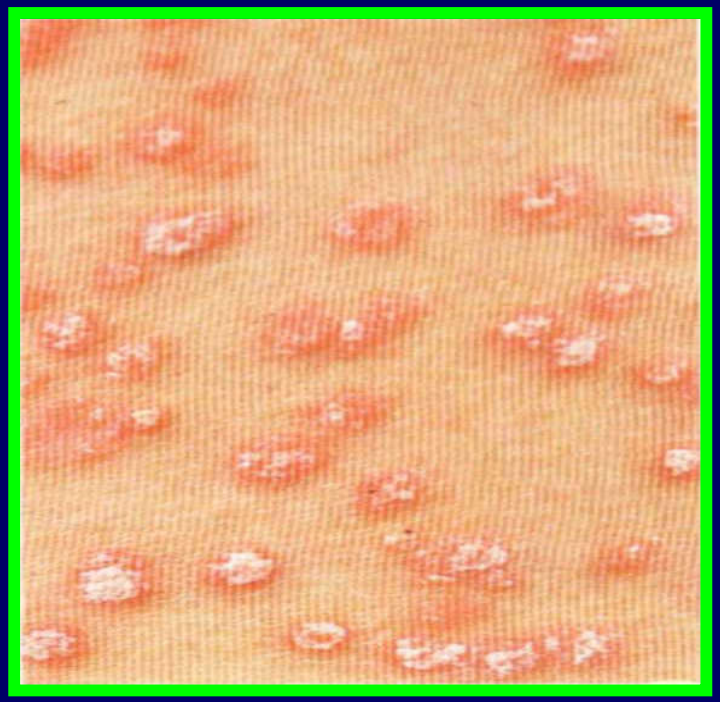
- Psoriasis vulgaris
- Guttate psoriasis
- Discoid psoriasis
- Annular psoriasis
- Flexural psoriasis
- Psoriasis of the nails
- Psoriasis of the scalp
- Pustular psoriasis
- Erythrodermic psoriasis
- Arthropathic psoriasis

Guttate psoriasis

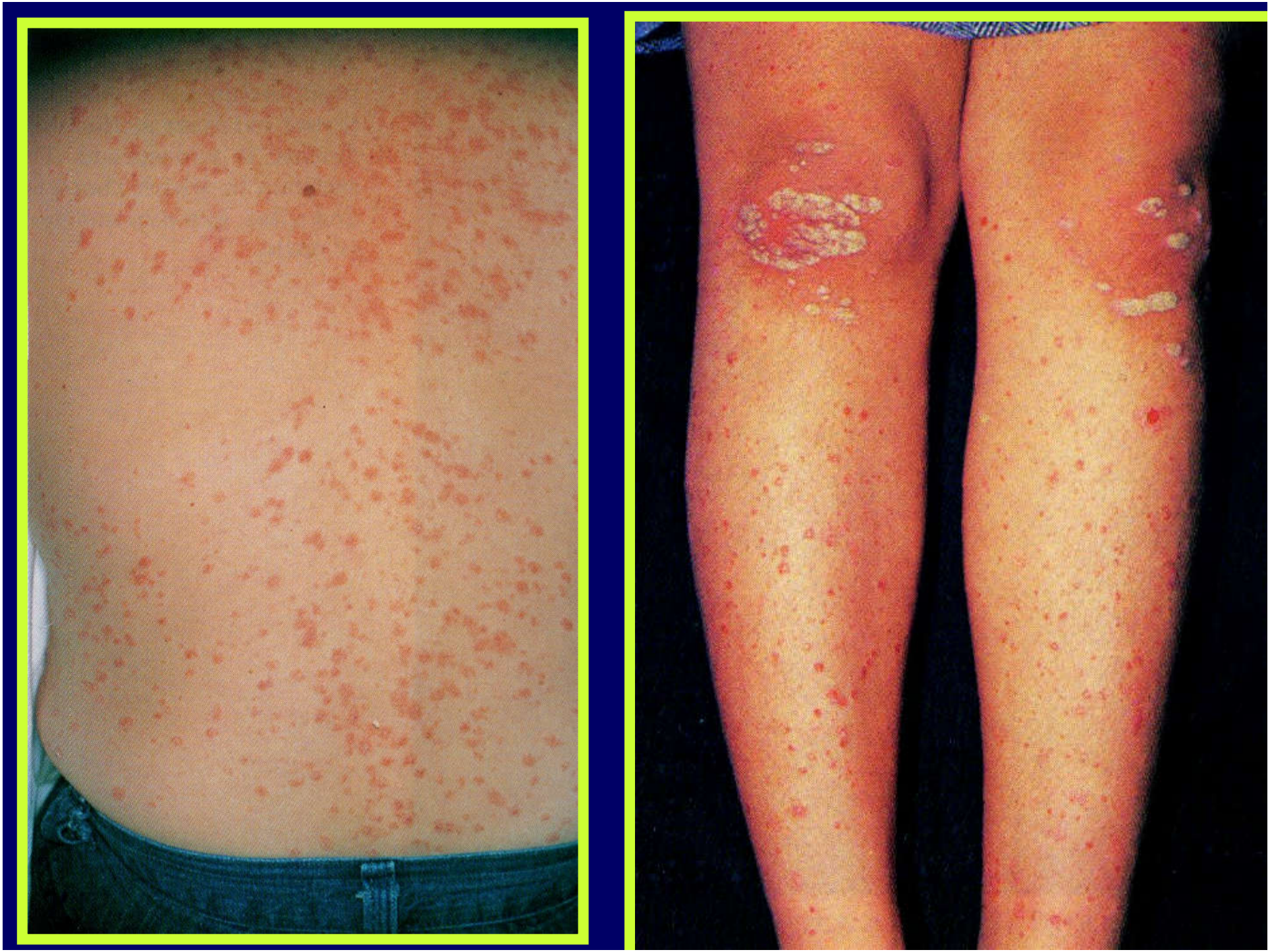




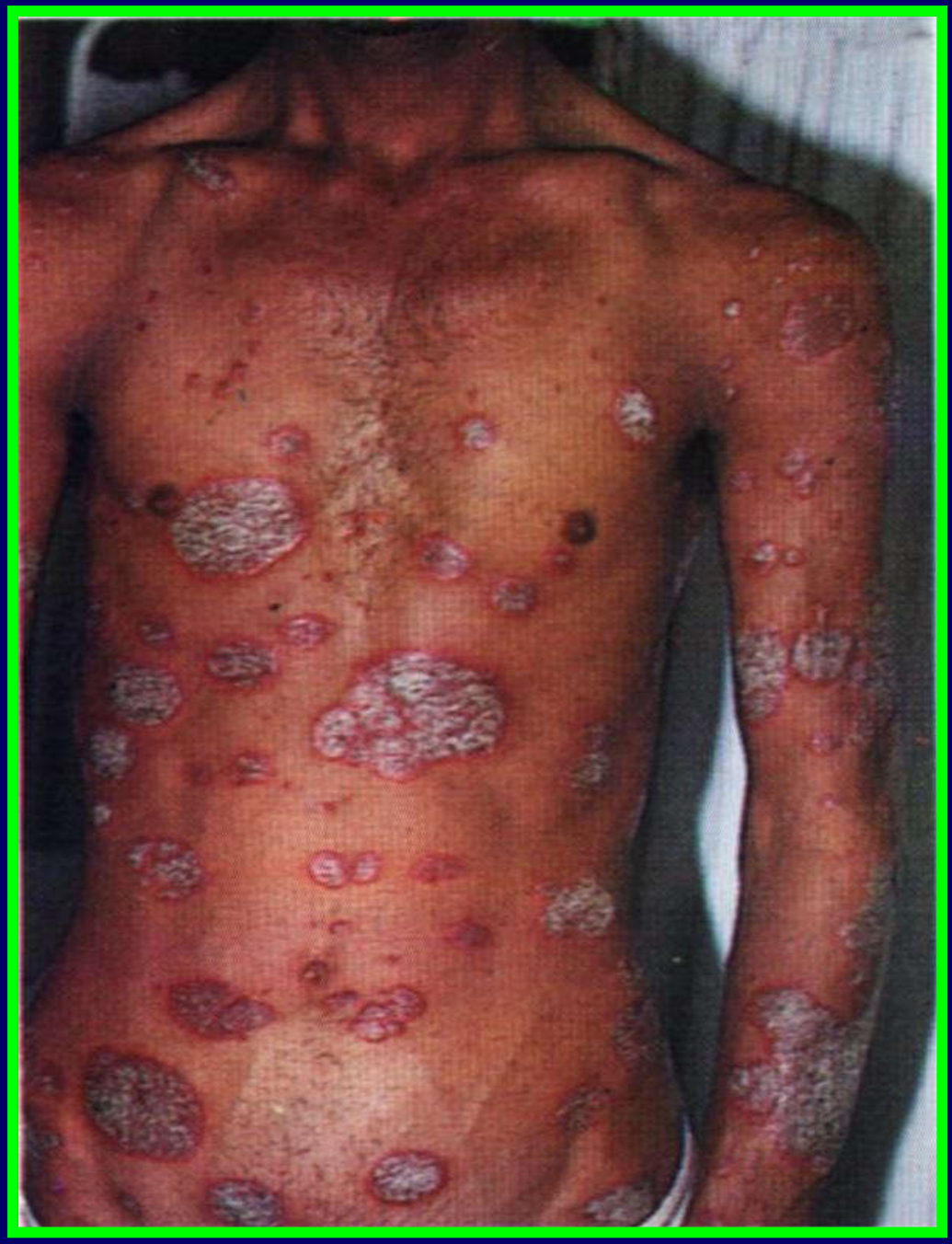




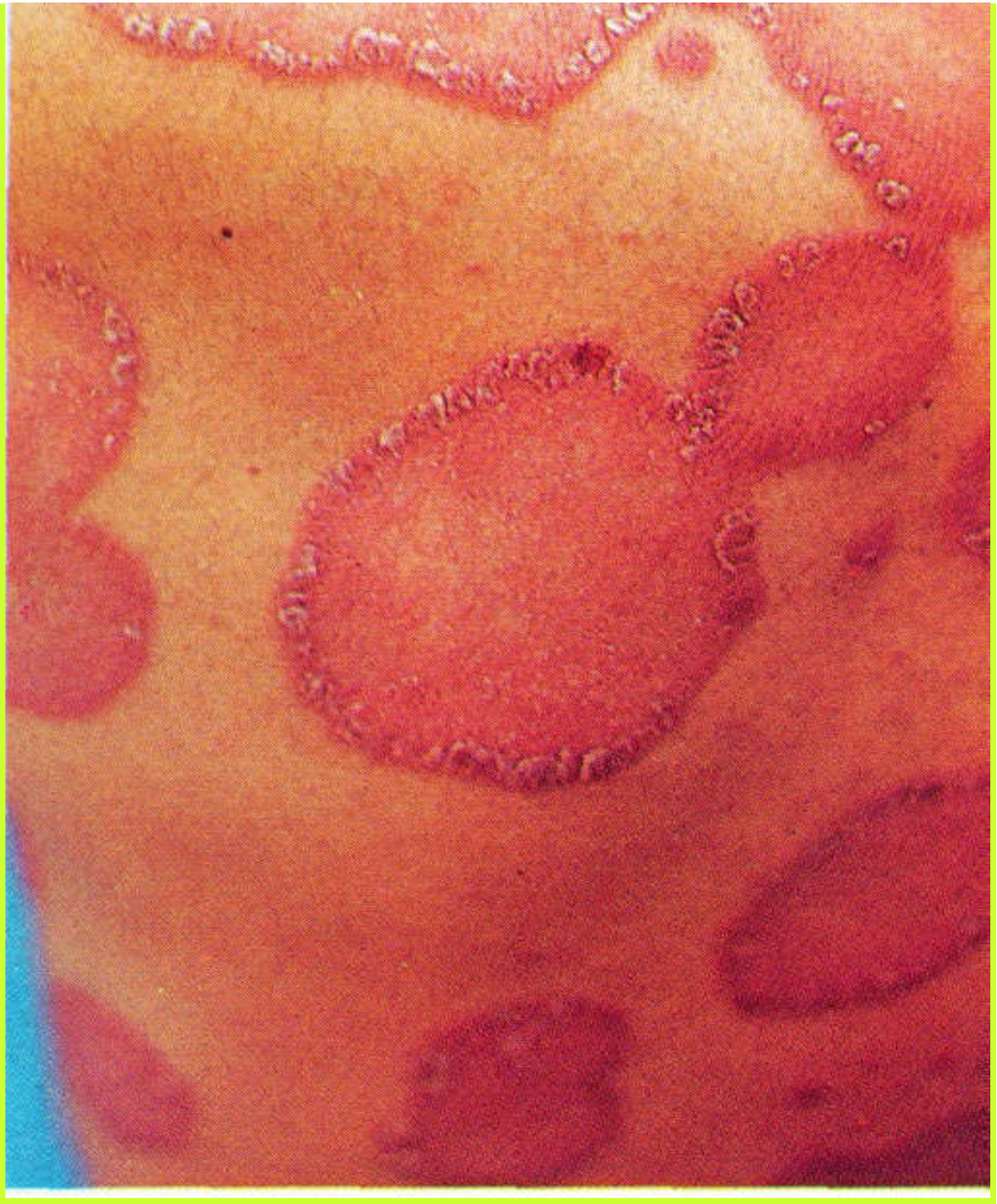
Guttate psoriasis

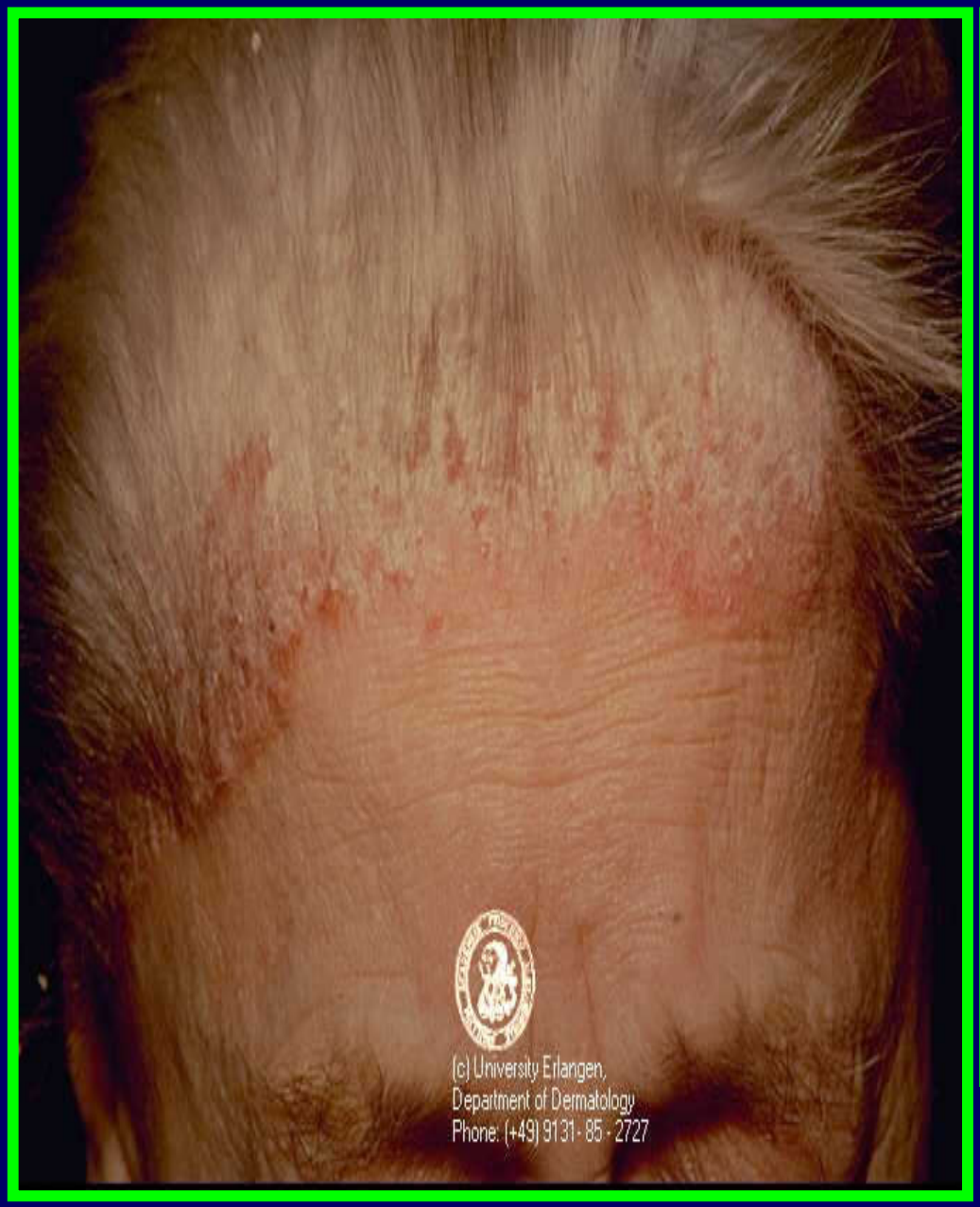


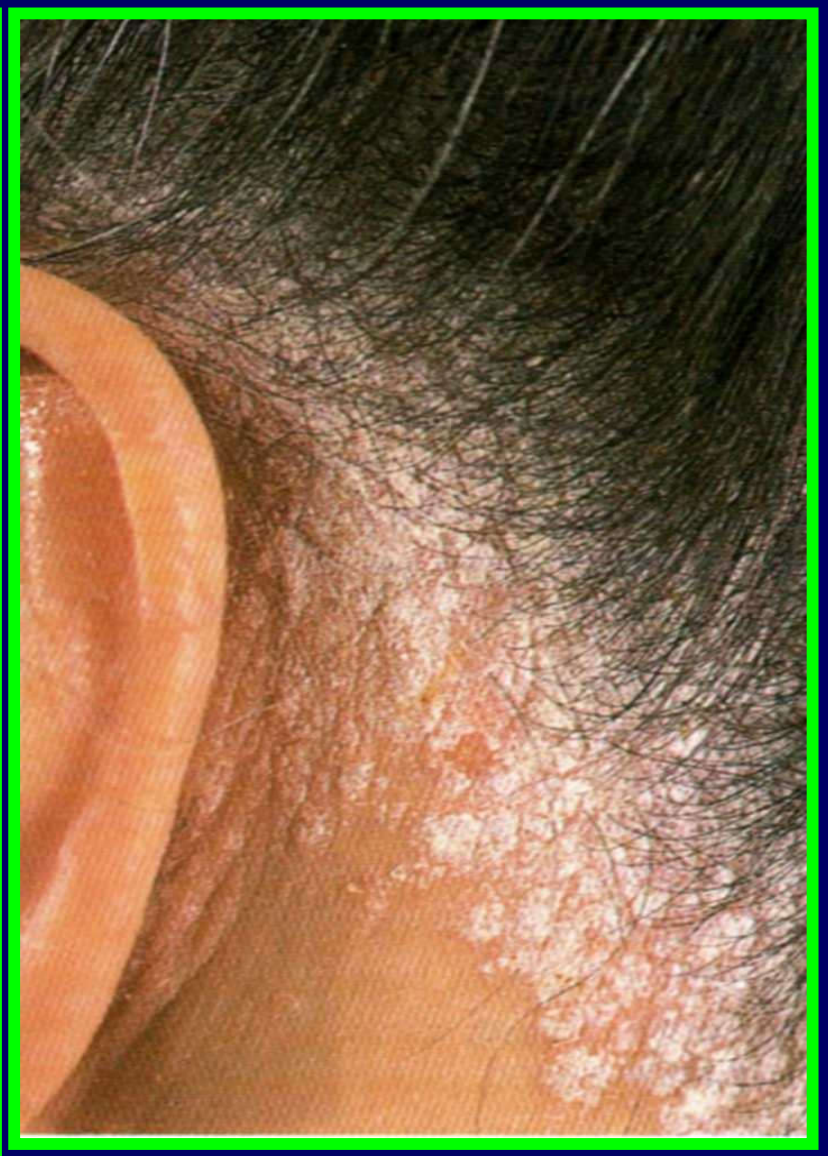
Discoid psoriasis



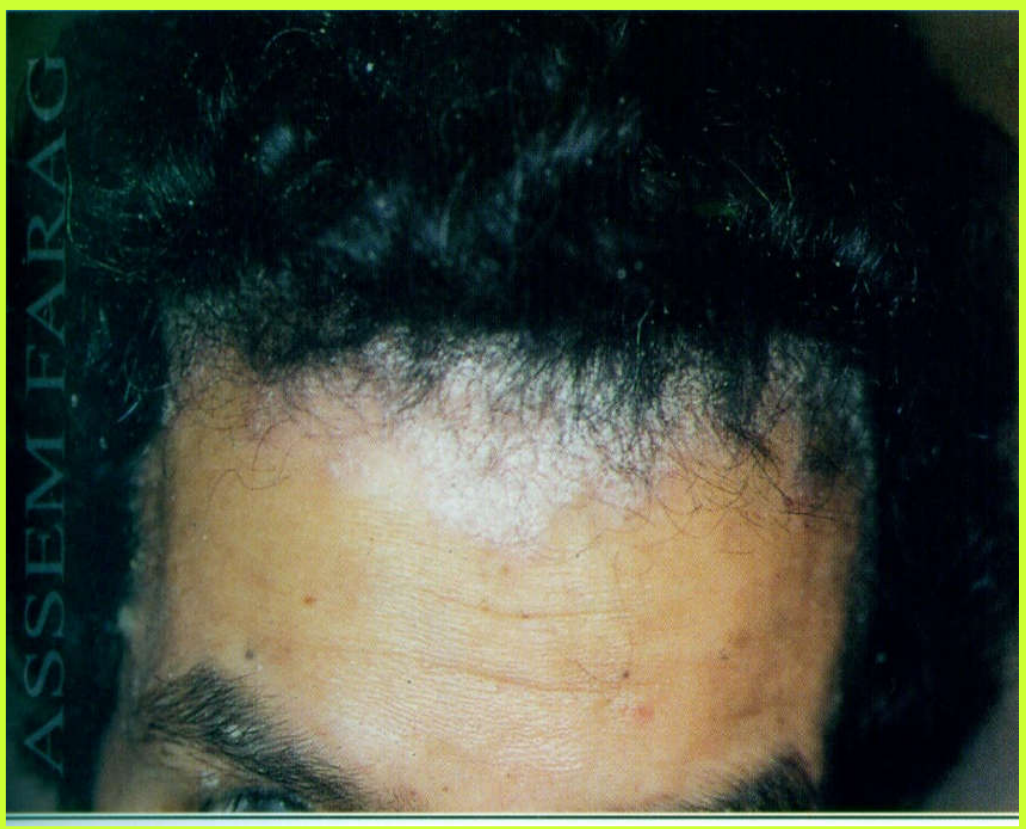
Annular Psoriasis







Psoriasis of scalp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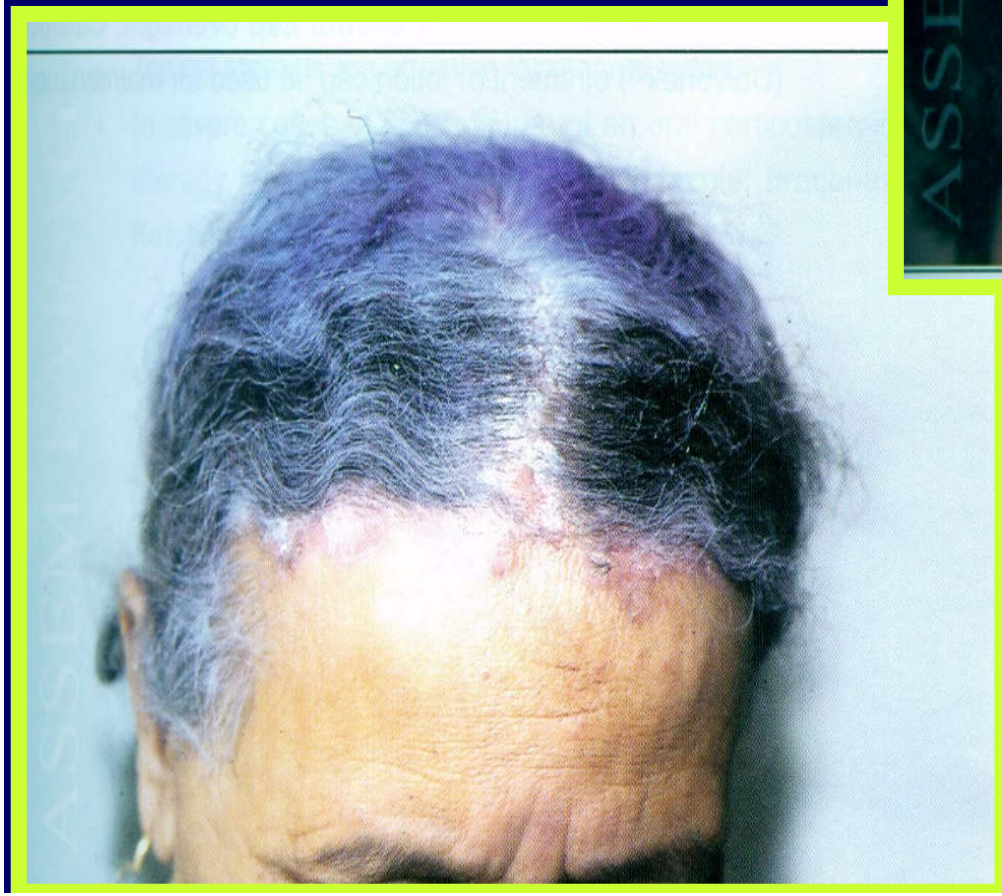
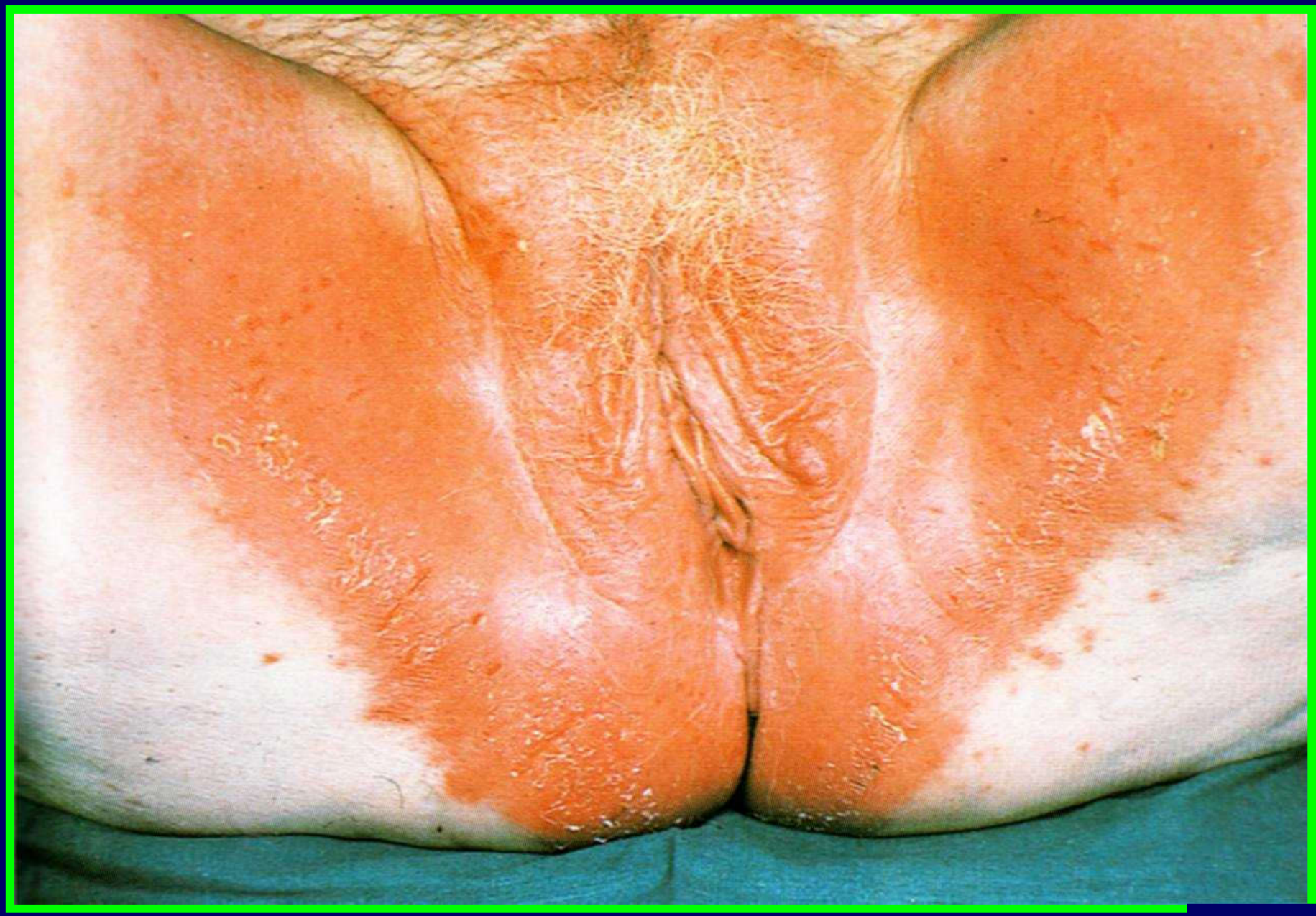
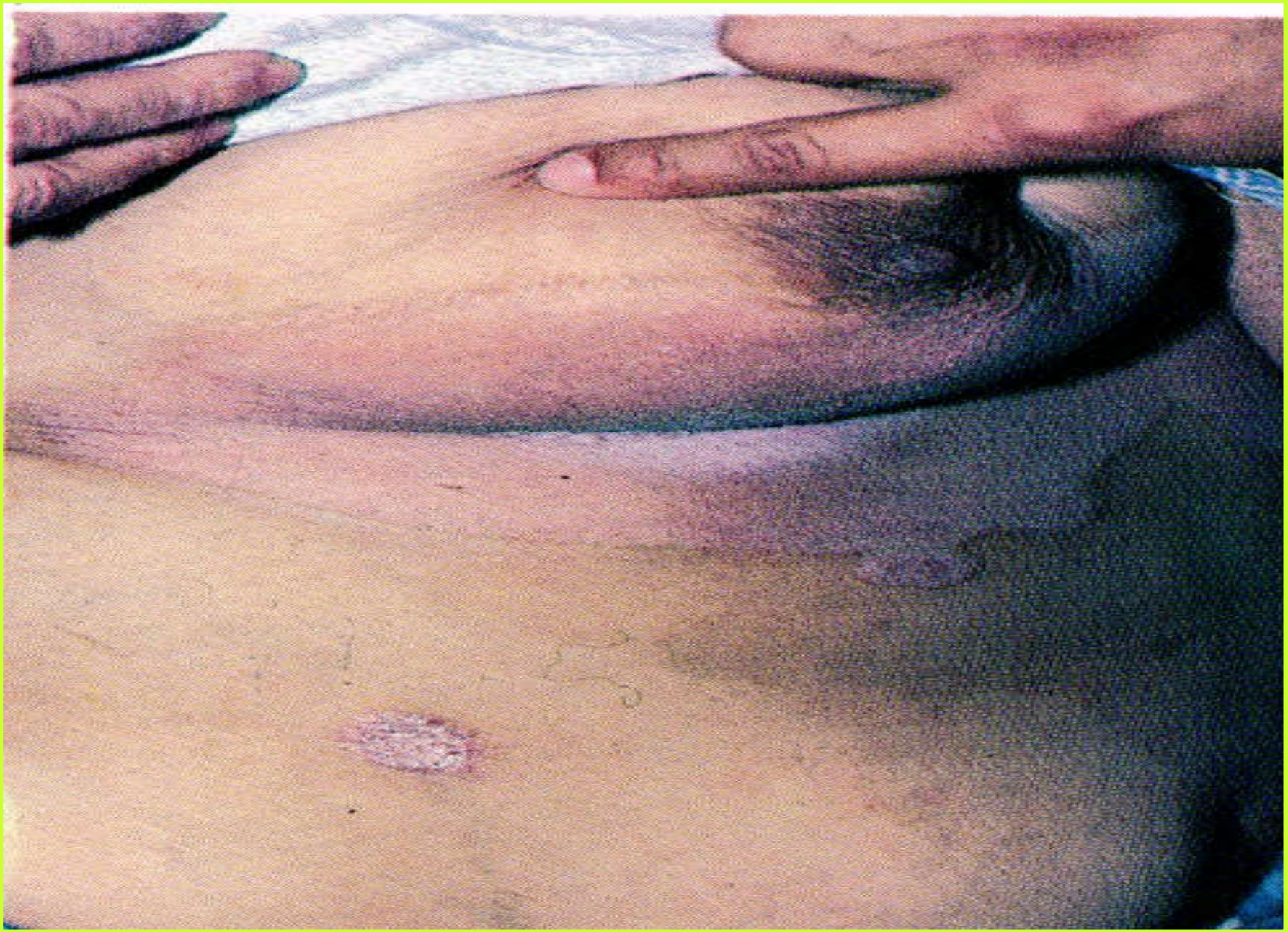
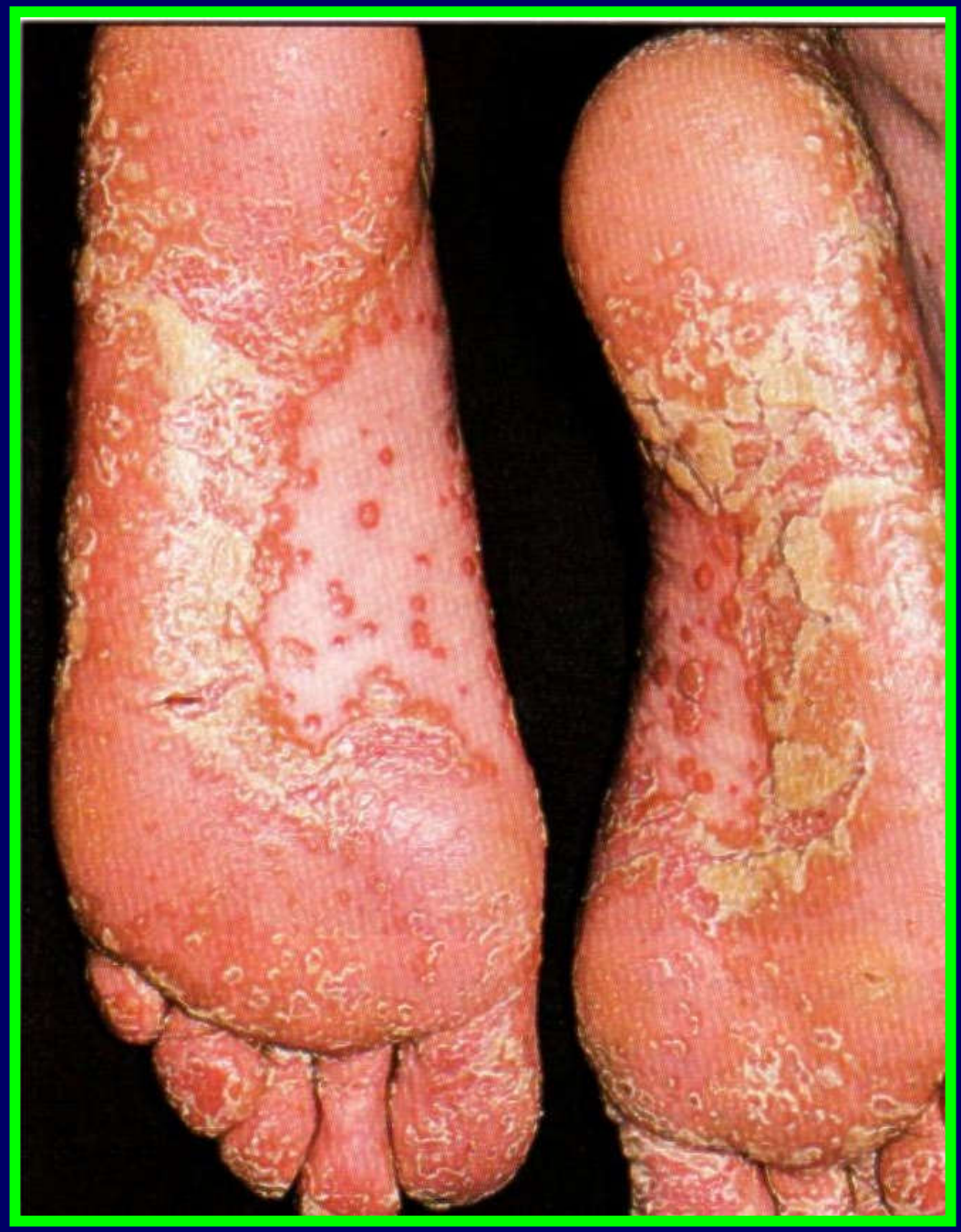
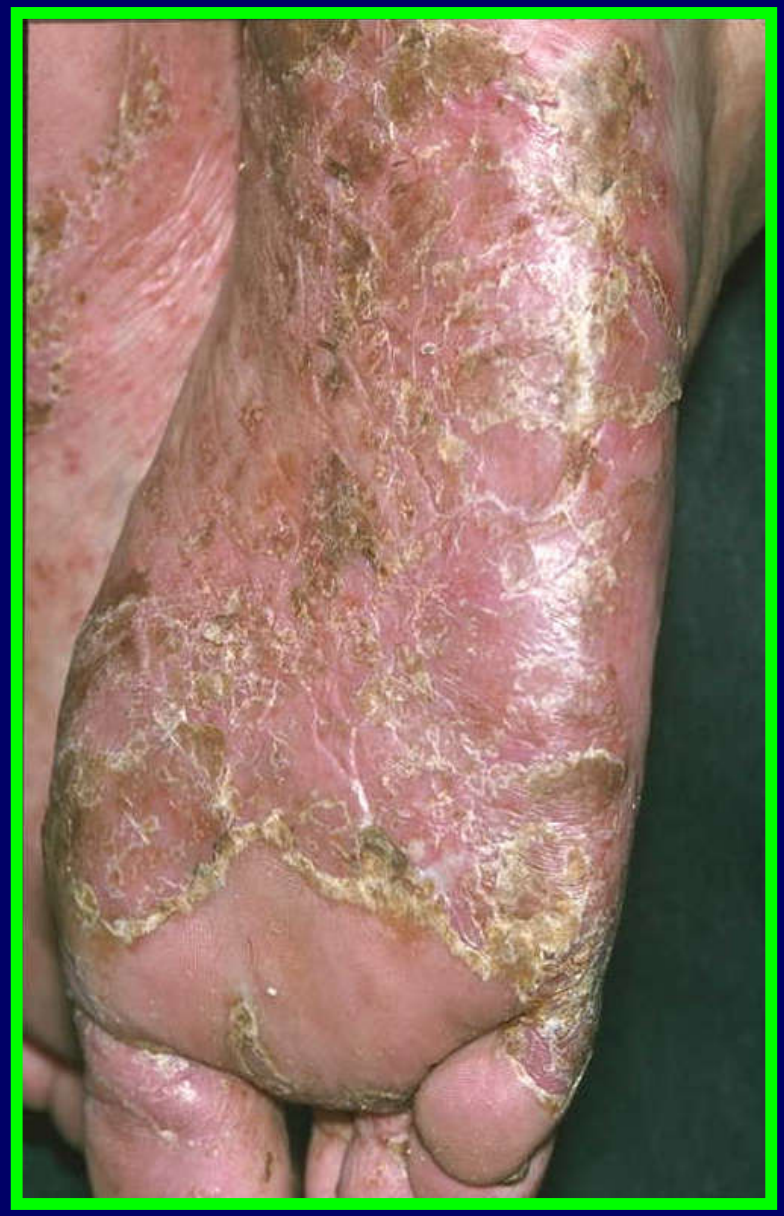




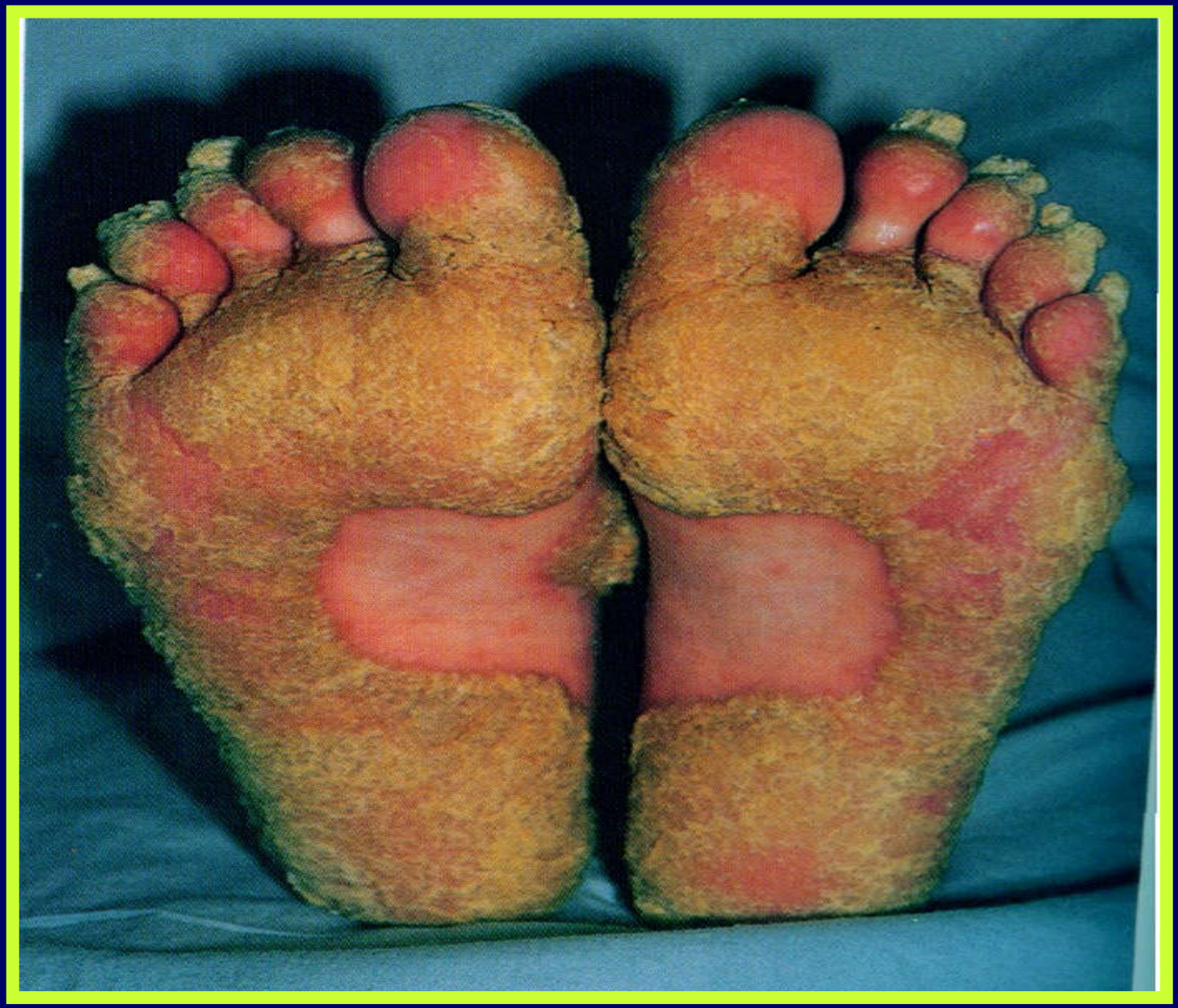
Flexural psoriasis

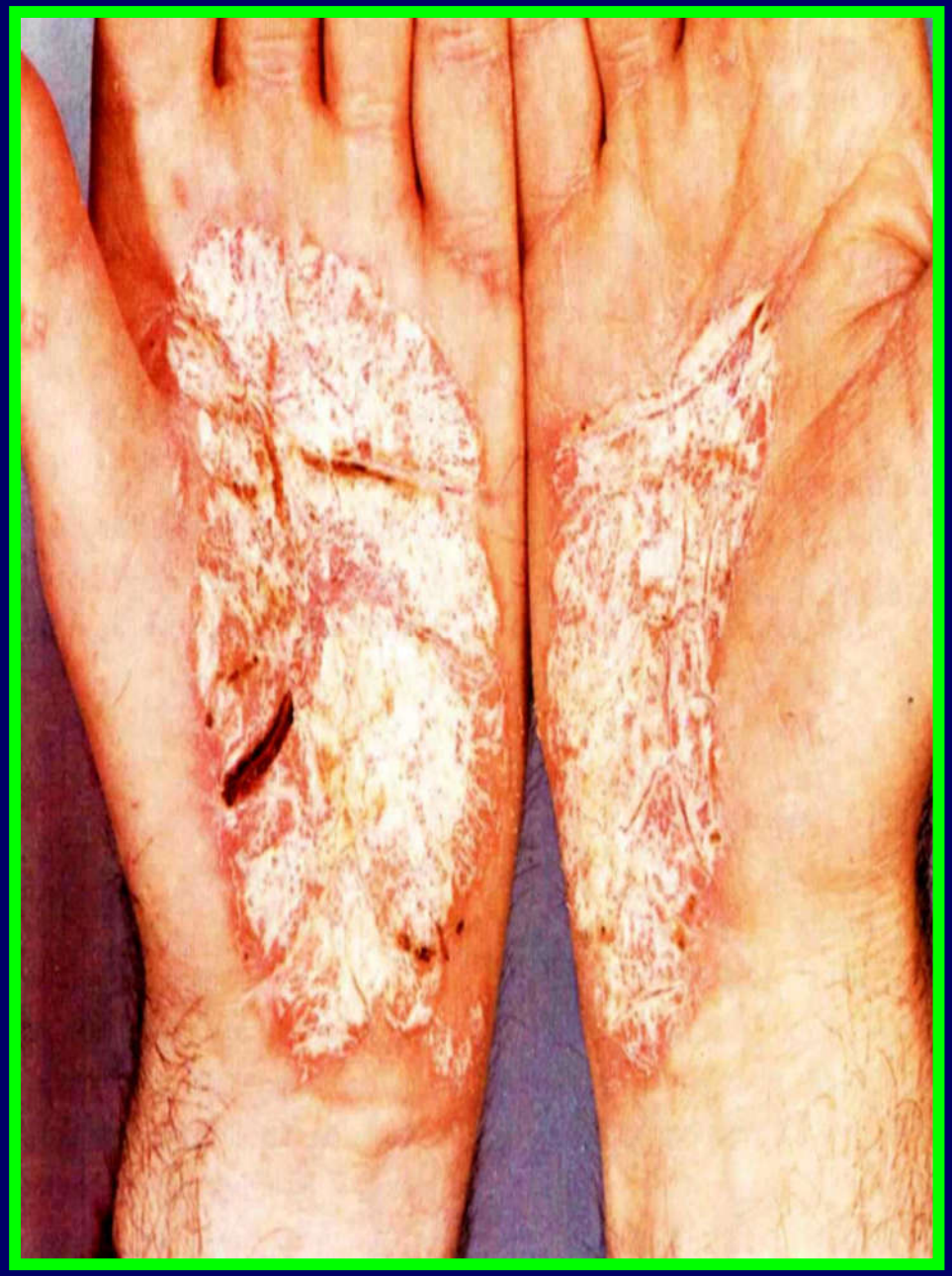


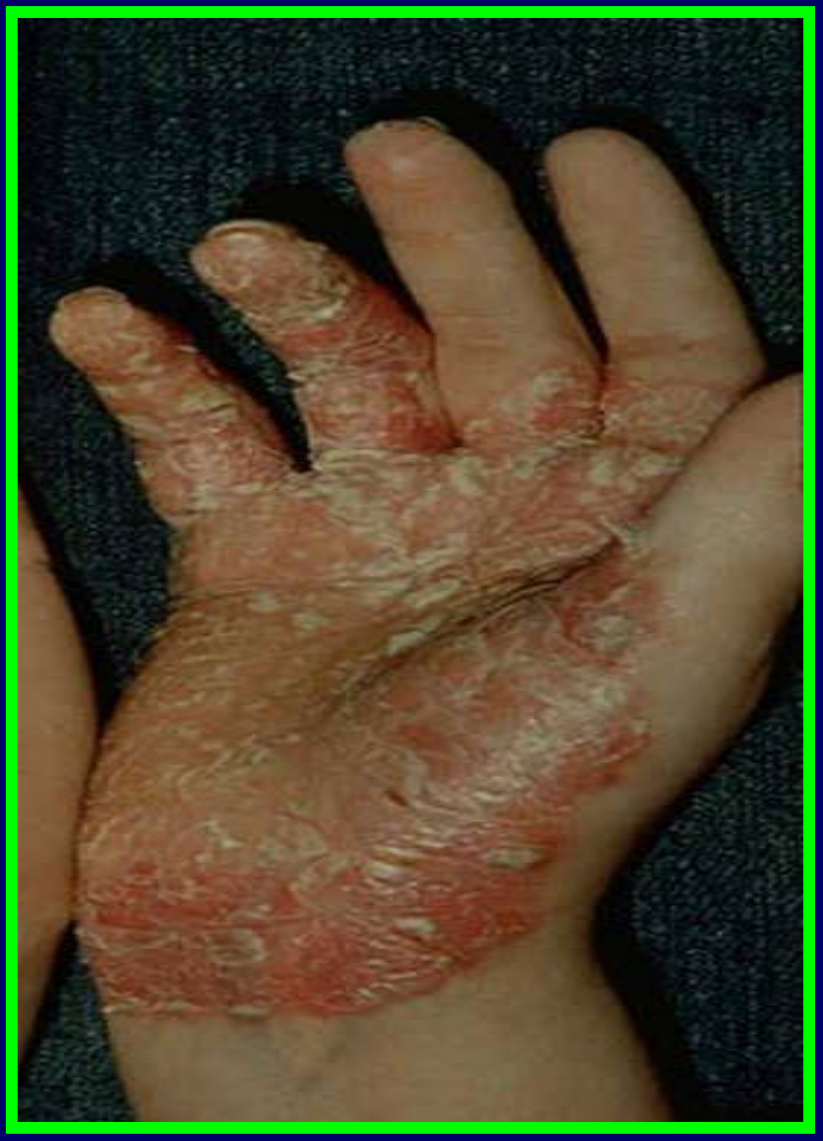




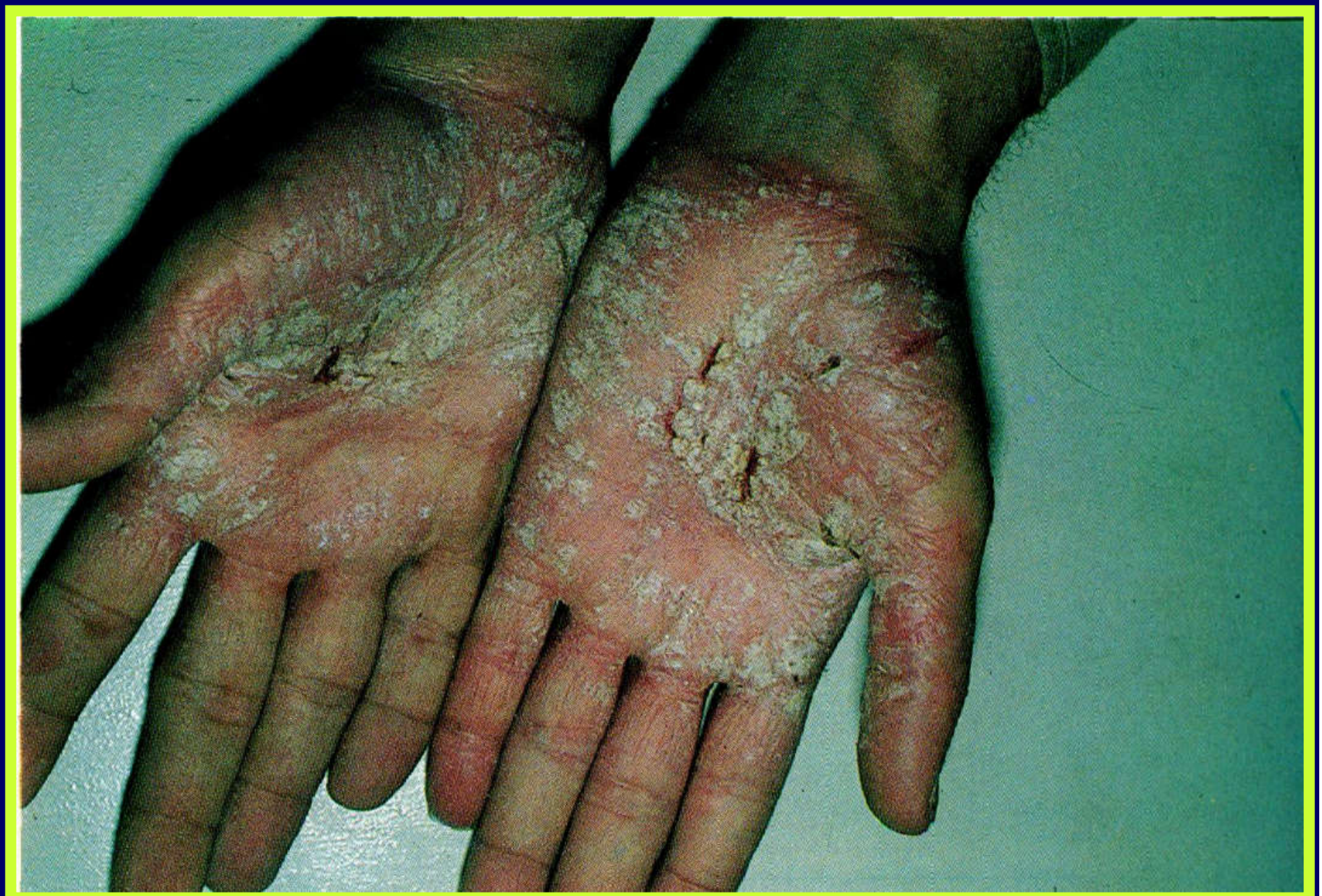
Psoriasis of soles

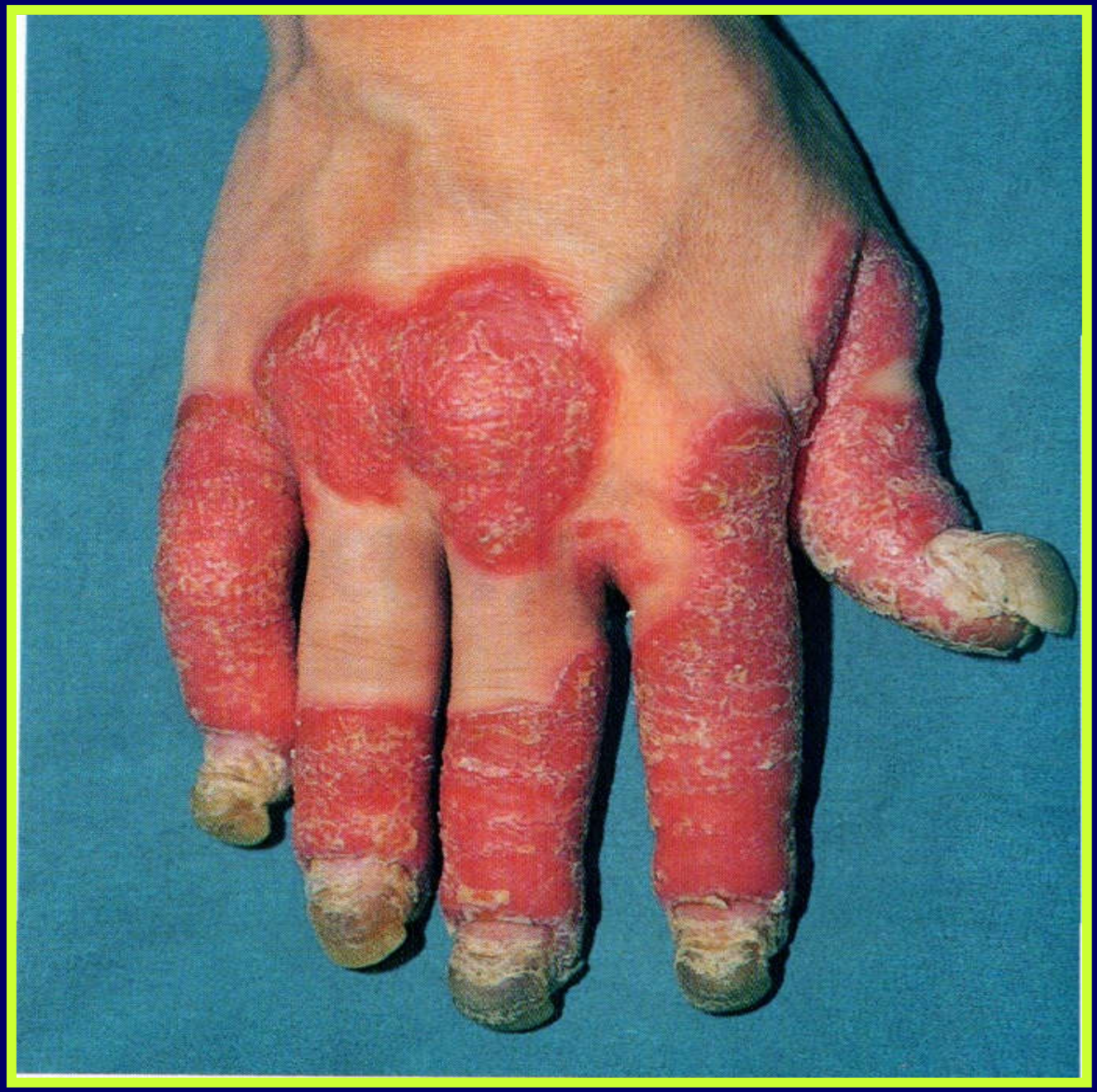


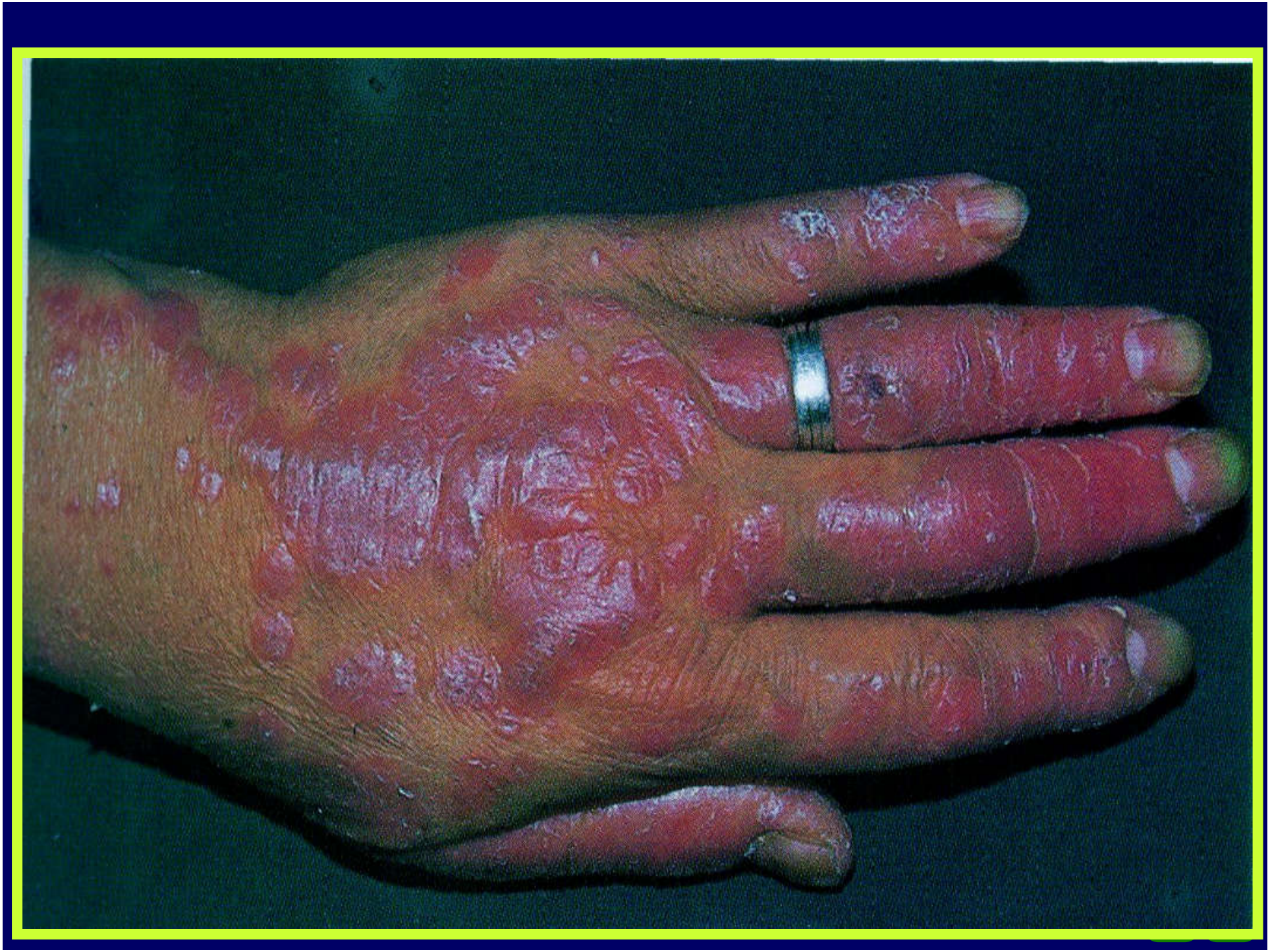


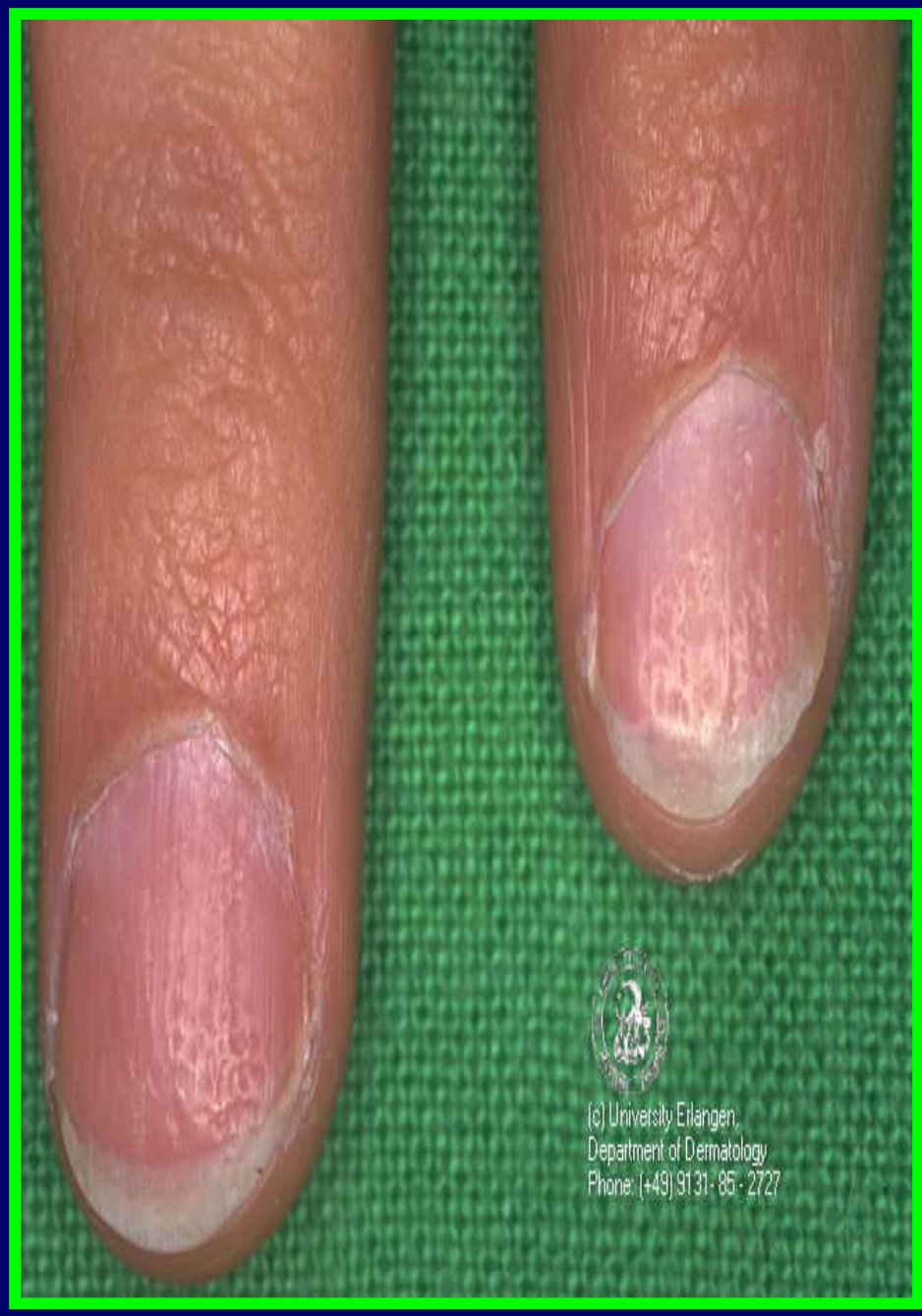


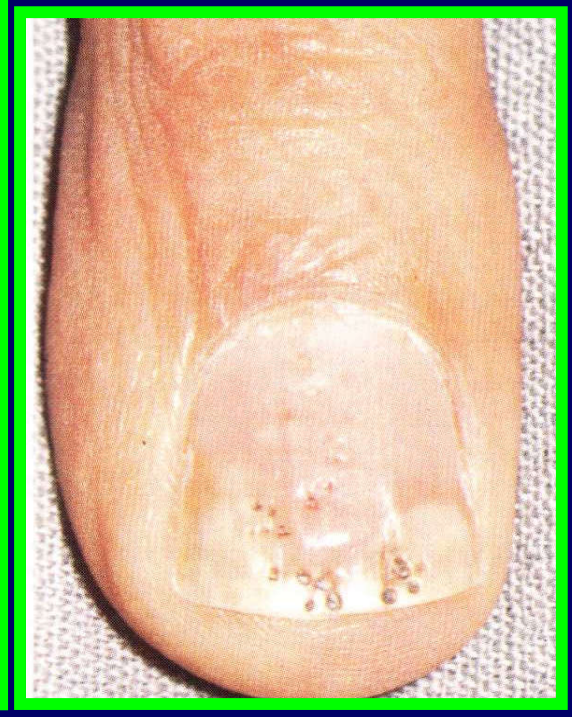
Psoriasis of palms











Psoriasis of nails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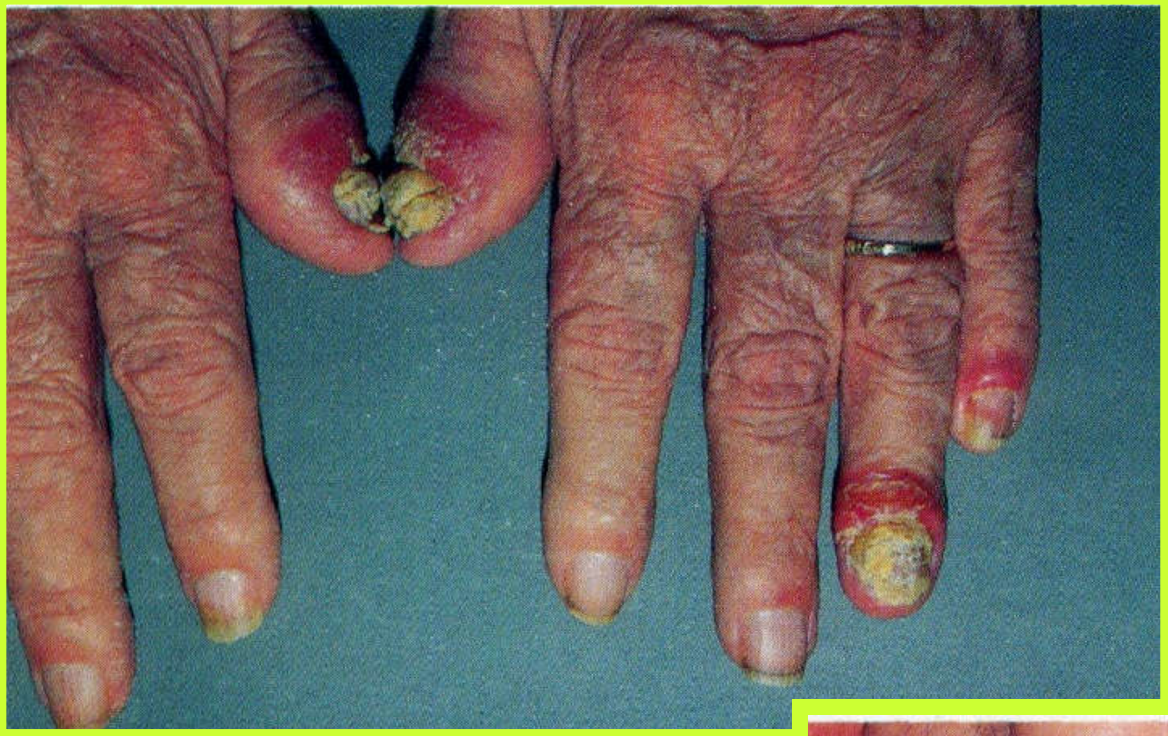
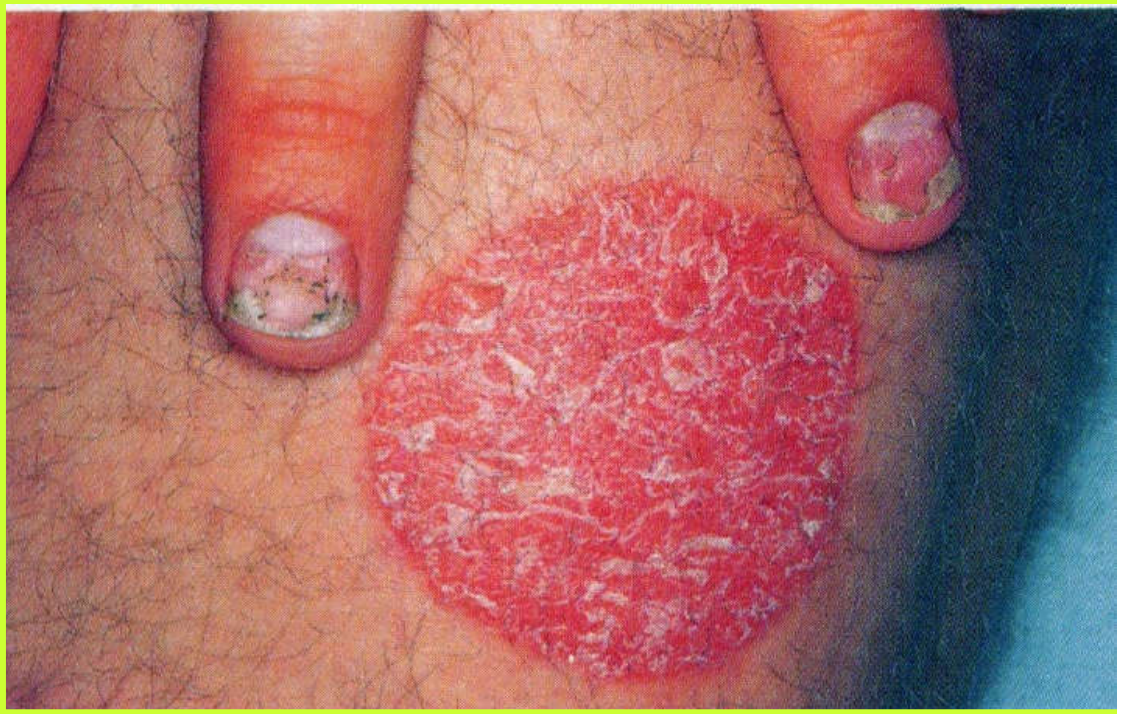
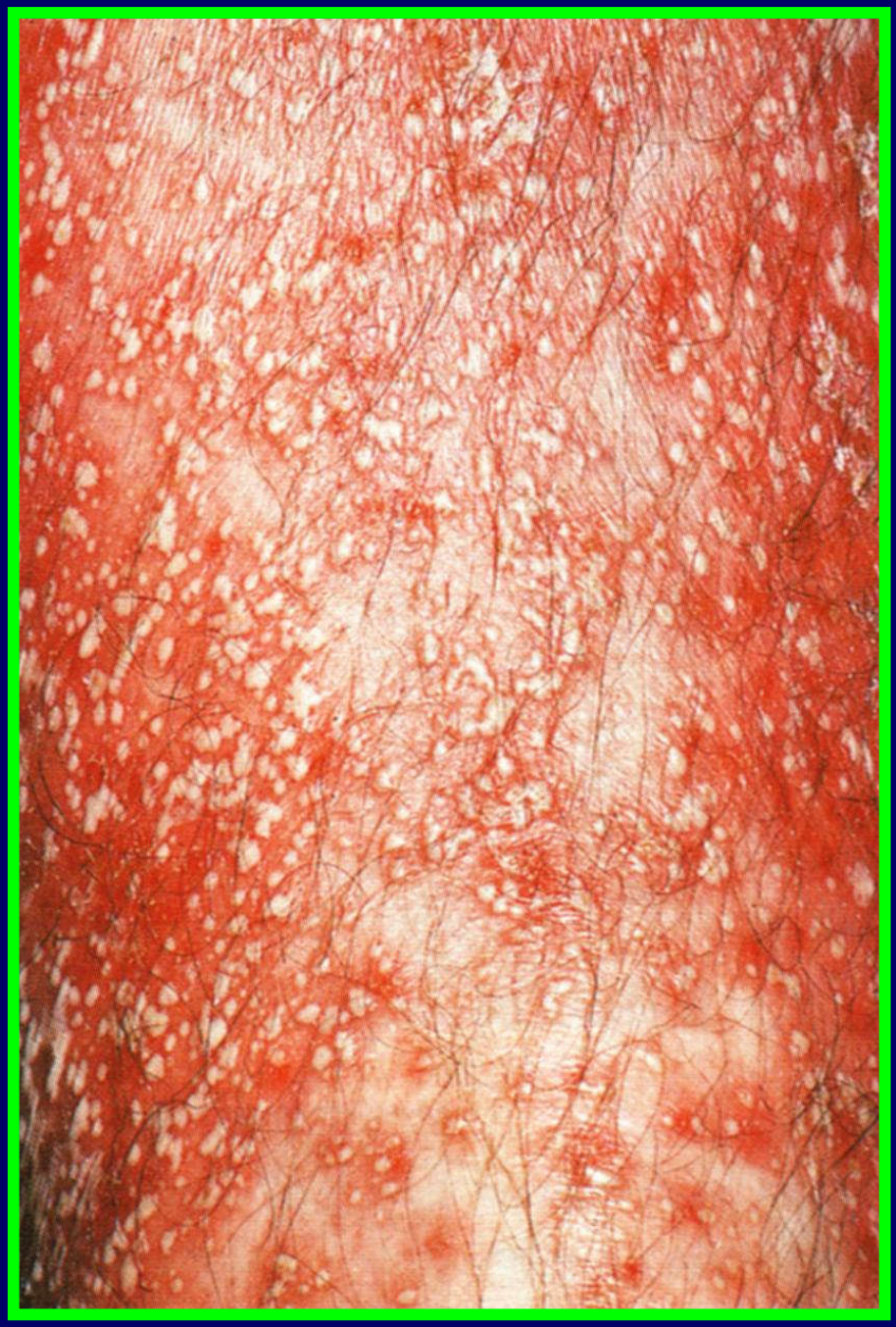
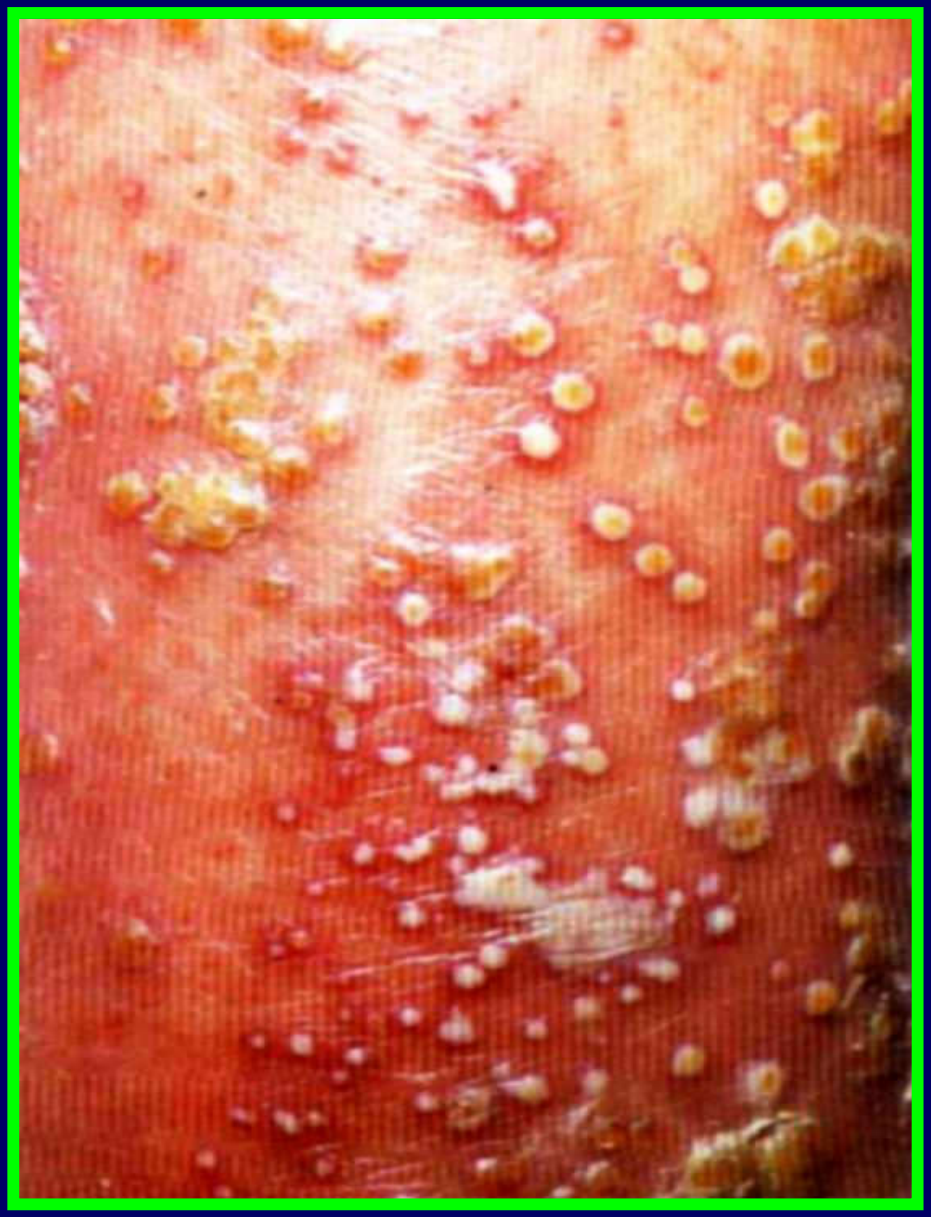
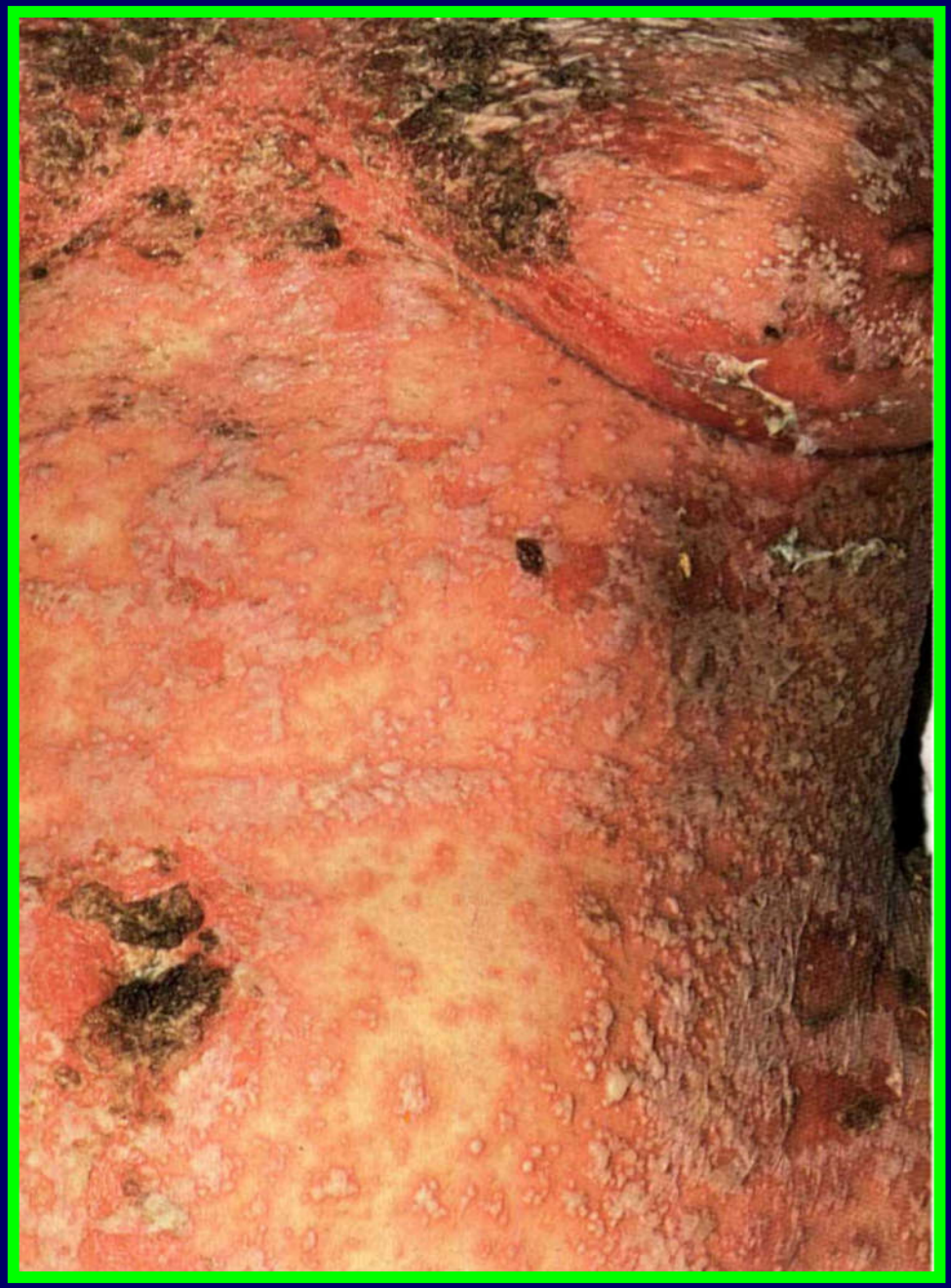


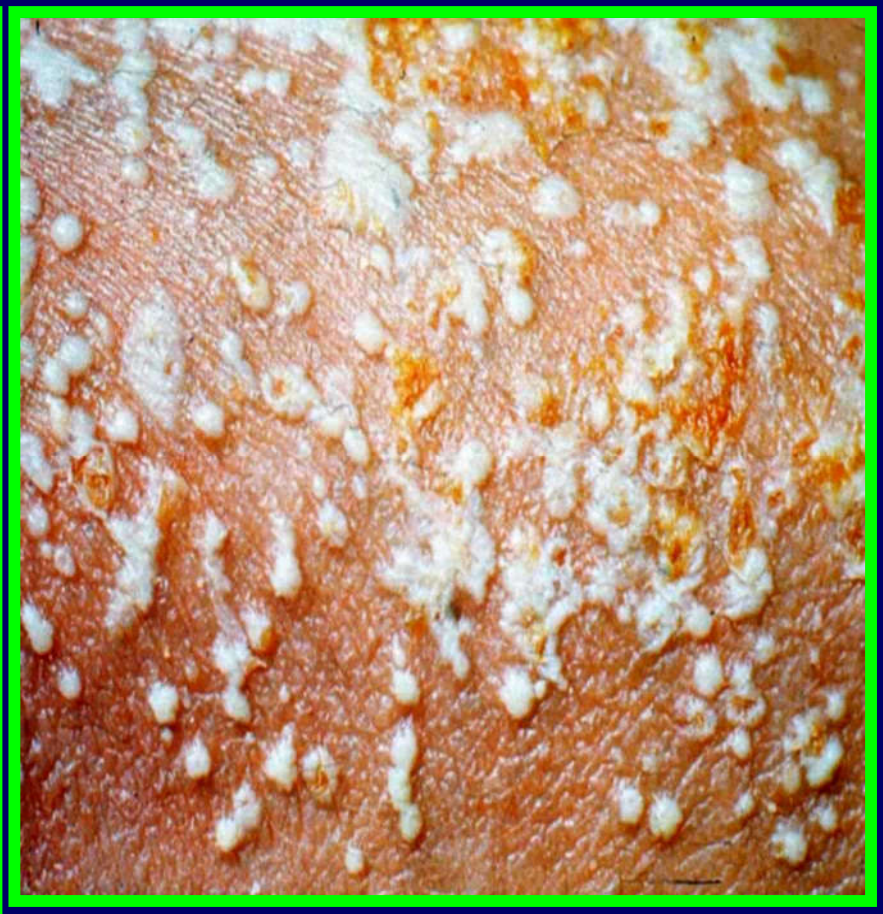




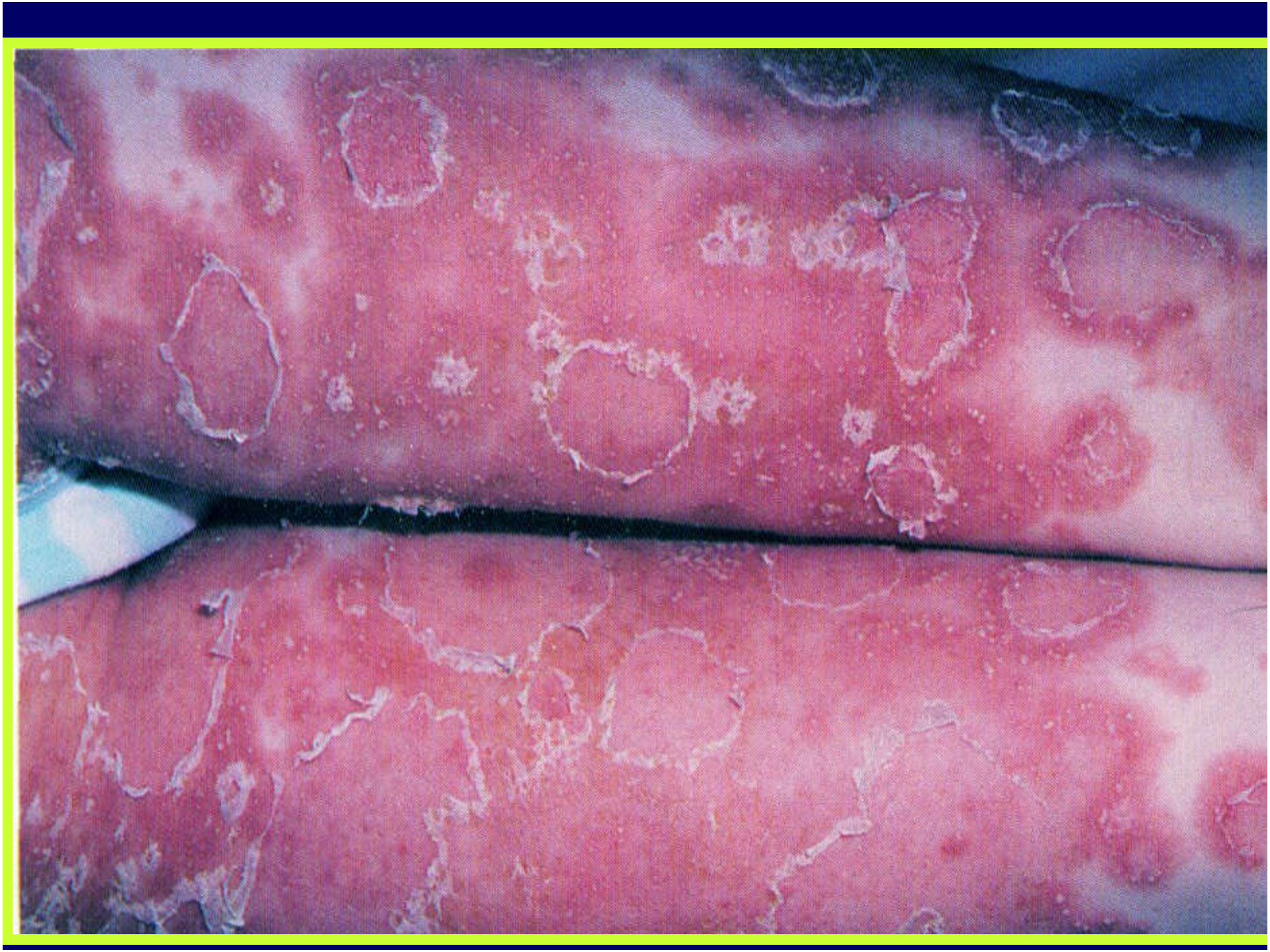


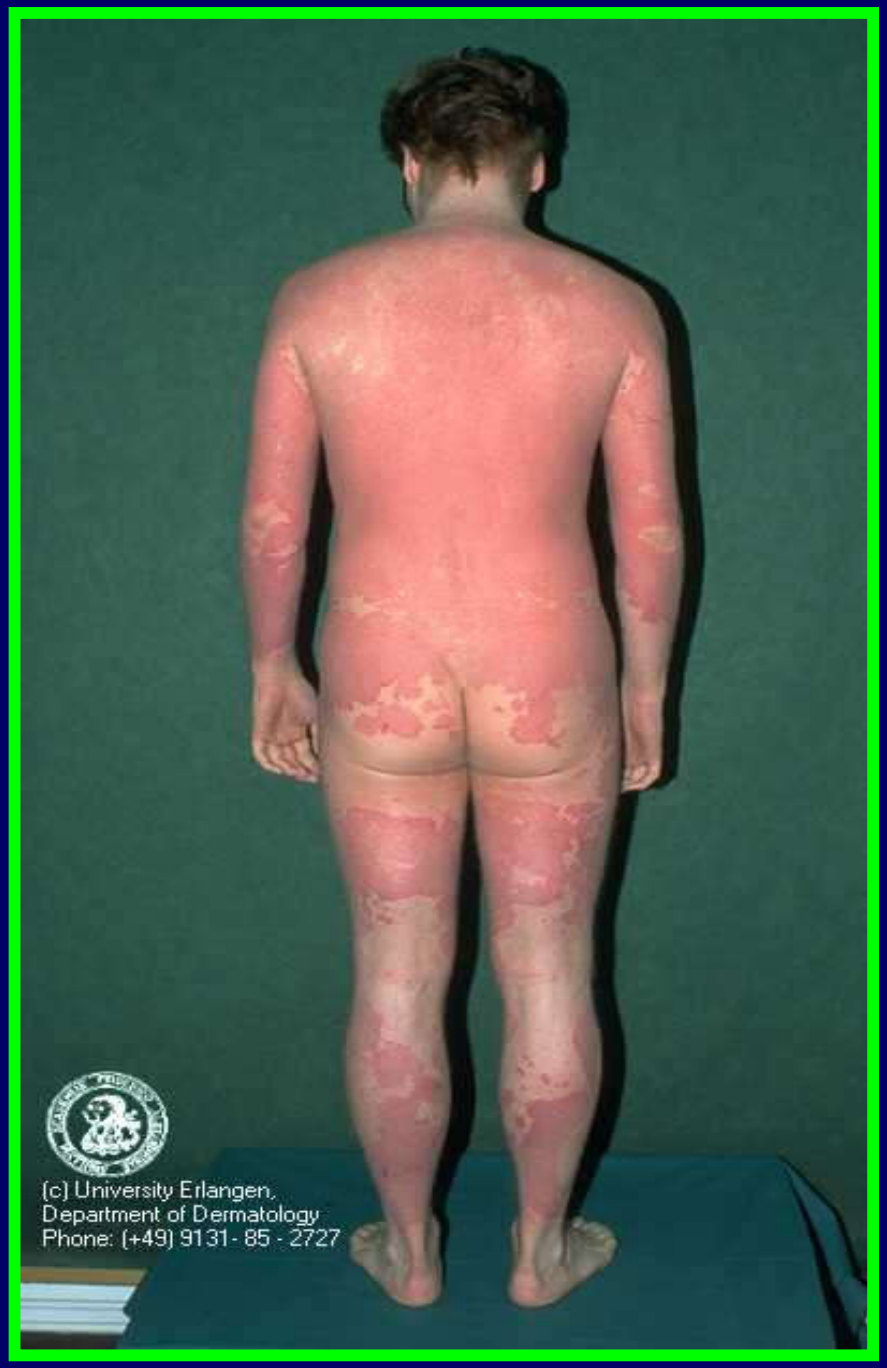
Pustular psoriasis



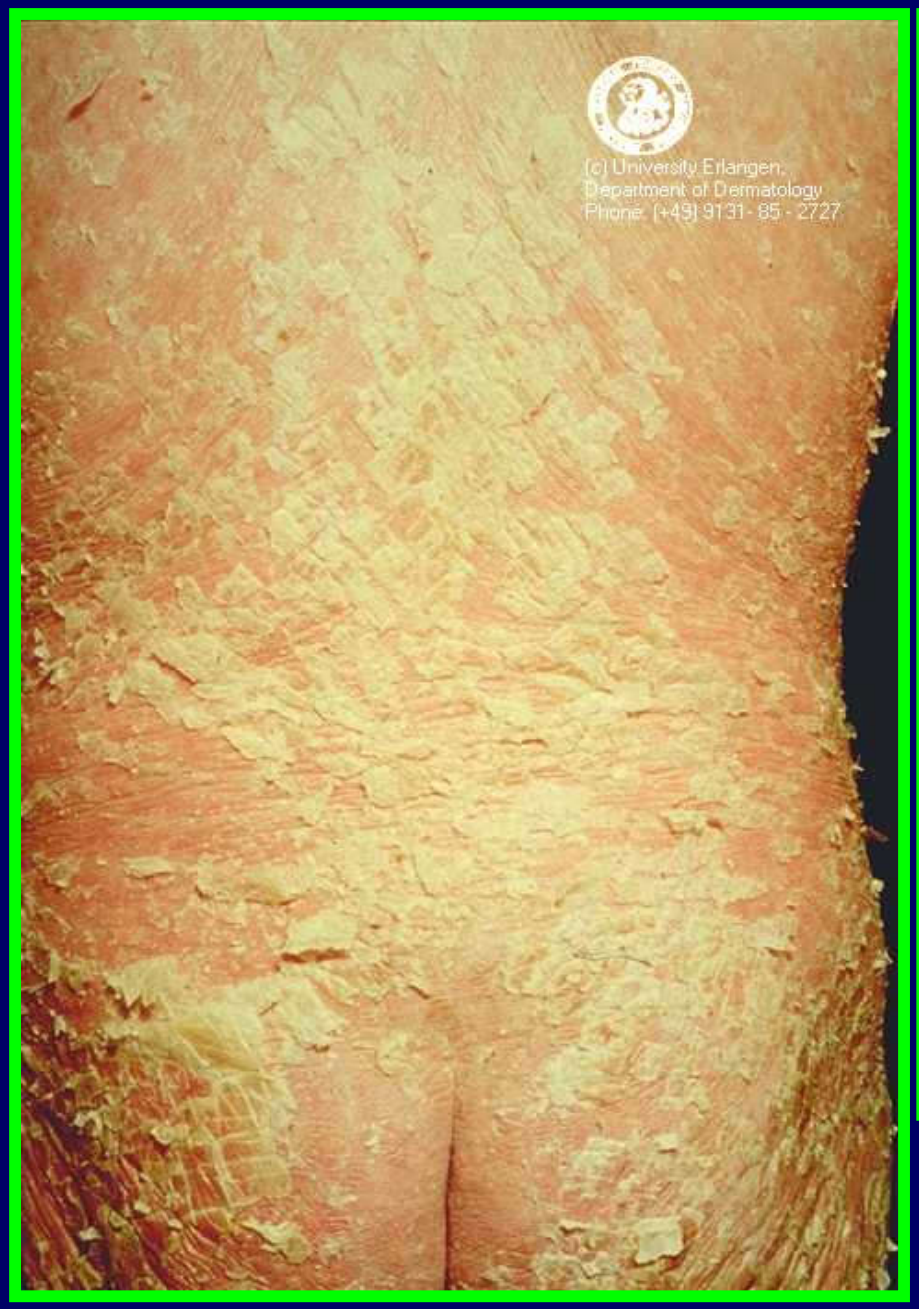


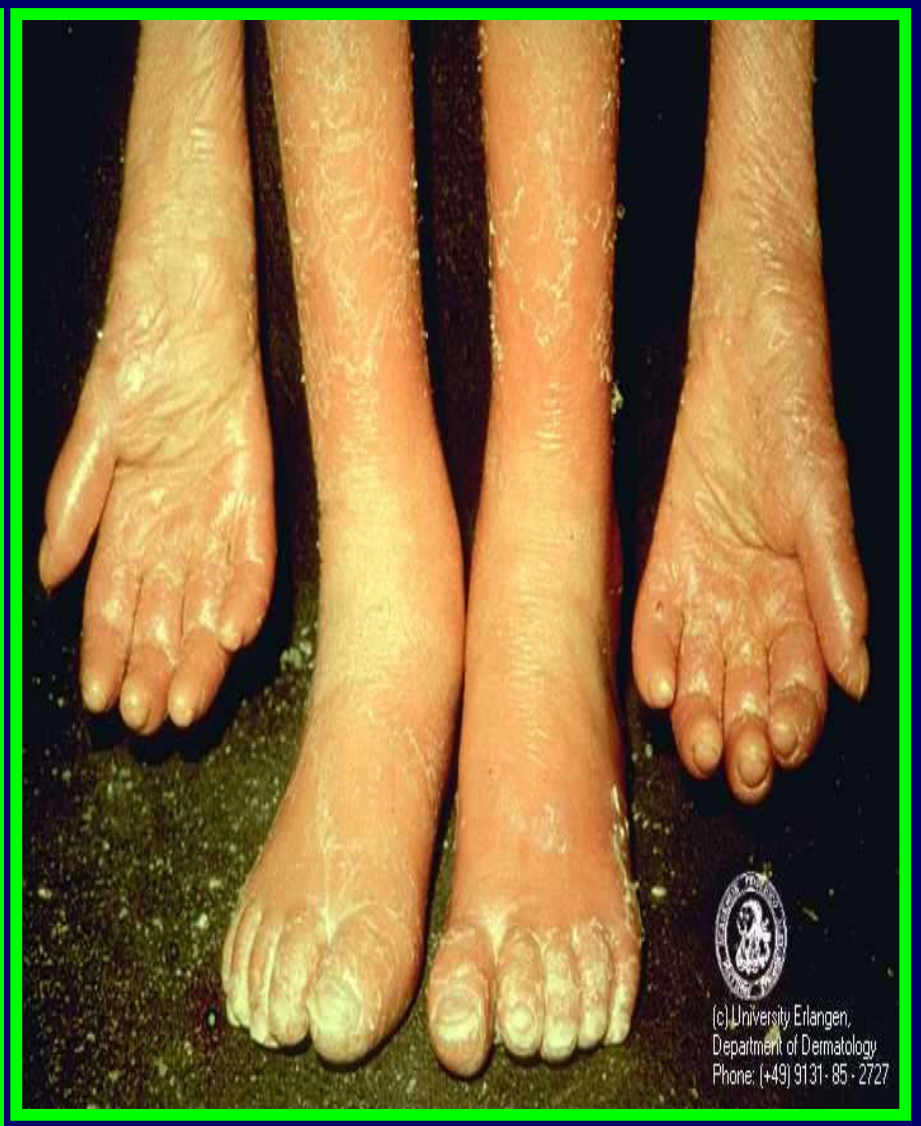
Pustular psoriasis





Erythrodermic psoriasis





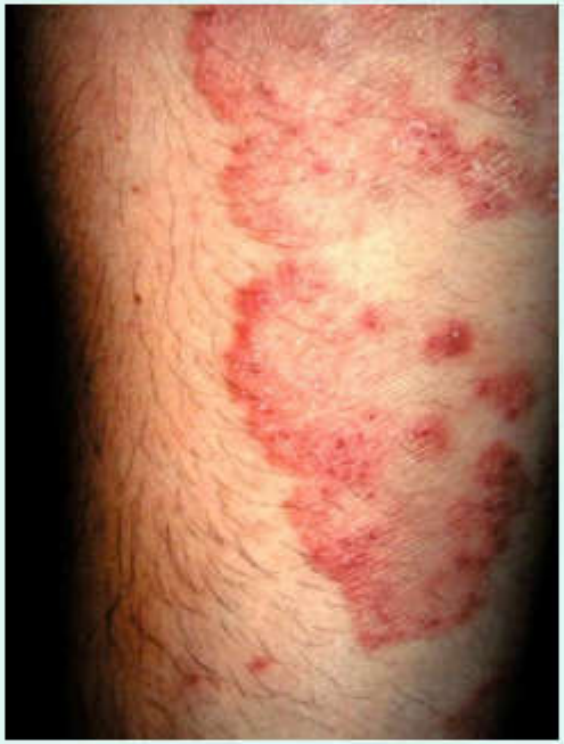
Erythrodermic psoriasis

DIFFERENTIAL DIAGNOSIS

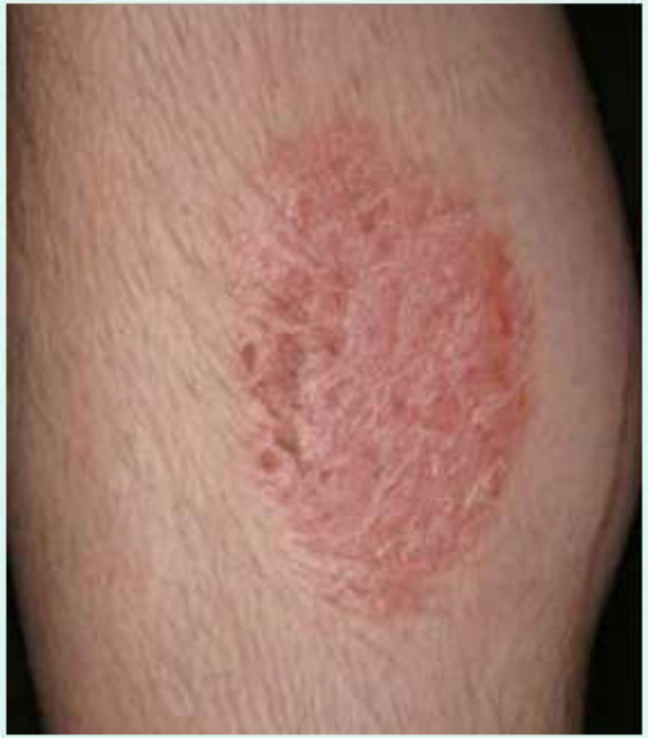
- Localised patches/plaques
  - Tinea
  - Eczema
  - Superficial basal cell carcinoma and Bowen's disease
  - Seborrhoeic dermatitis
  - Cutaneous T-cell lymphoma (mycosis fungoides)
- Guttate
  - Pityriasis rosea
  - Drug eruption
  - Secondary syphilis
- Flexural
  - Tinea
  - Eczema
  - Candidiasis
  - Seborrhoeic dermatitis
- Erythrodermic
  - Eczema
  - Cutaneous T-cell lymphoma
  - Pityriasis rubra pilaris
  - Lichen planus
  - Drug
- Palmoplantar
  - Tinea

LOCALISED PATCHES/PLAQUES

- **Tinea corporis**
  - Affects body
  - Lacks symmetrical lesions
  - Presence of peripheral scale and central clearing



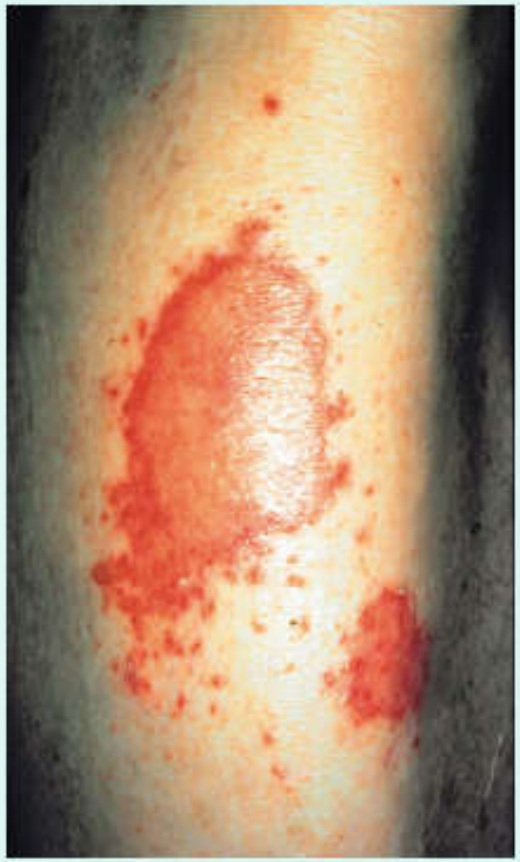
Tinea coporis



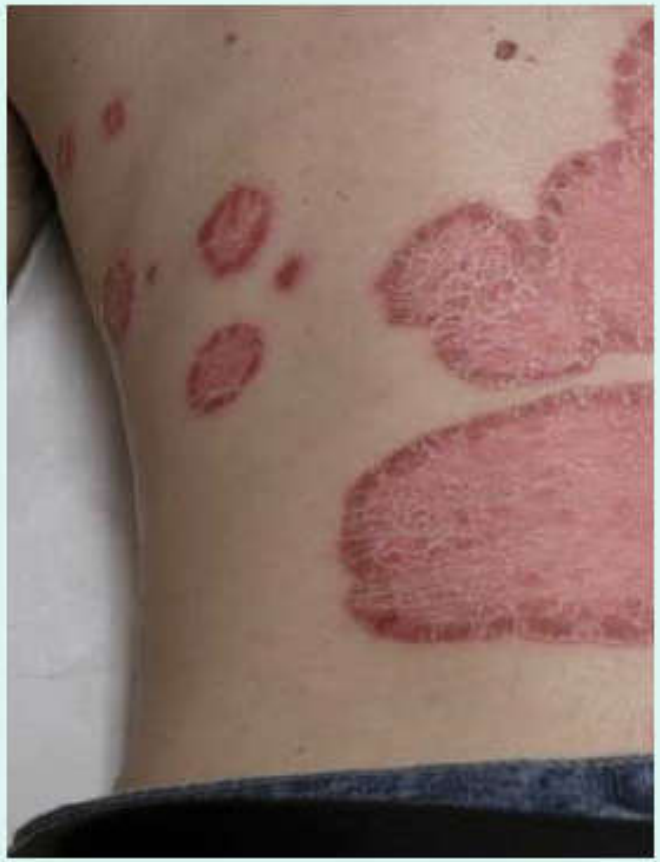
Psoriasis

LOCALISED PATCHES/PLAQUES

- **Discoid eczema**
- Individualised patches more pruritic than psoriasis
- Lack silvery scale
- Less vivid colour than psoriasis



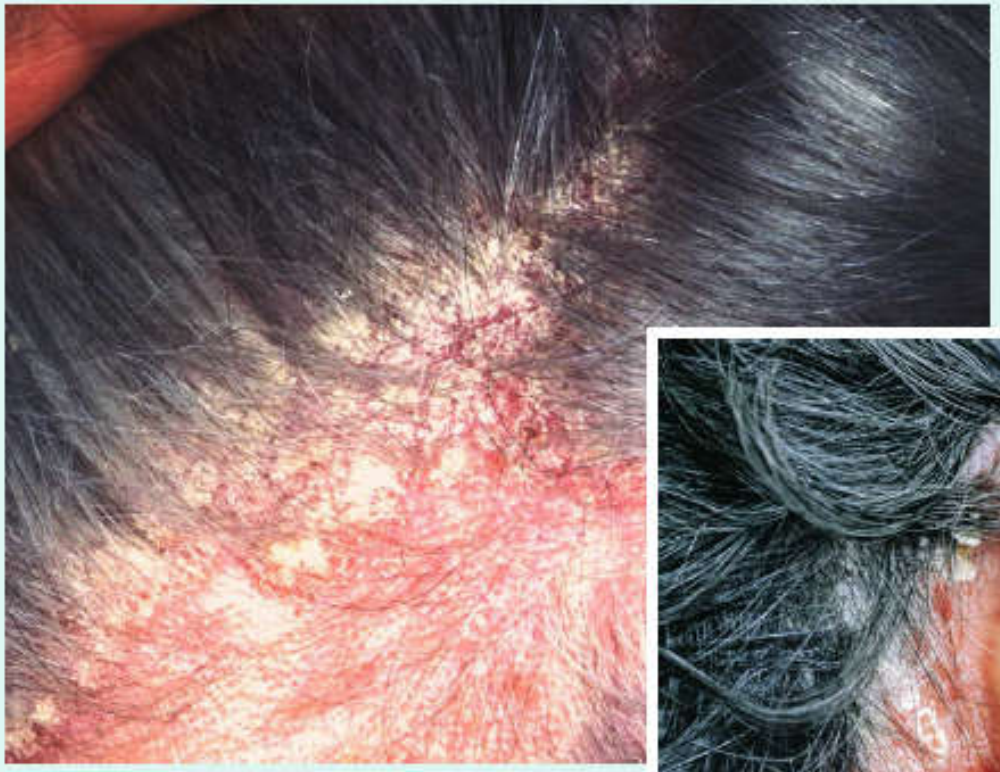
Discoid eczema



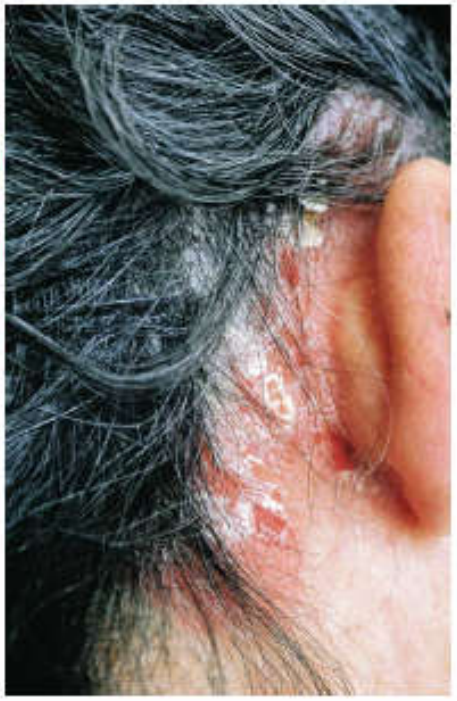
Psoriasis

LOCALISED PATCHES/PLAQUES

- **Seborrhoeic dermatitis**
- Characterised by yellowish scaling and erythema
- Localised to many of the same areas as psoriasis
- Diffuse scaling differs from sharply defined psoriasis plaques
- Affects furrows of face (facial psoriasis is generally restricted to hairline)



Dermatitis

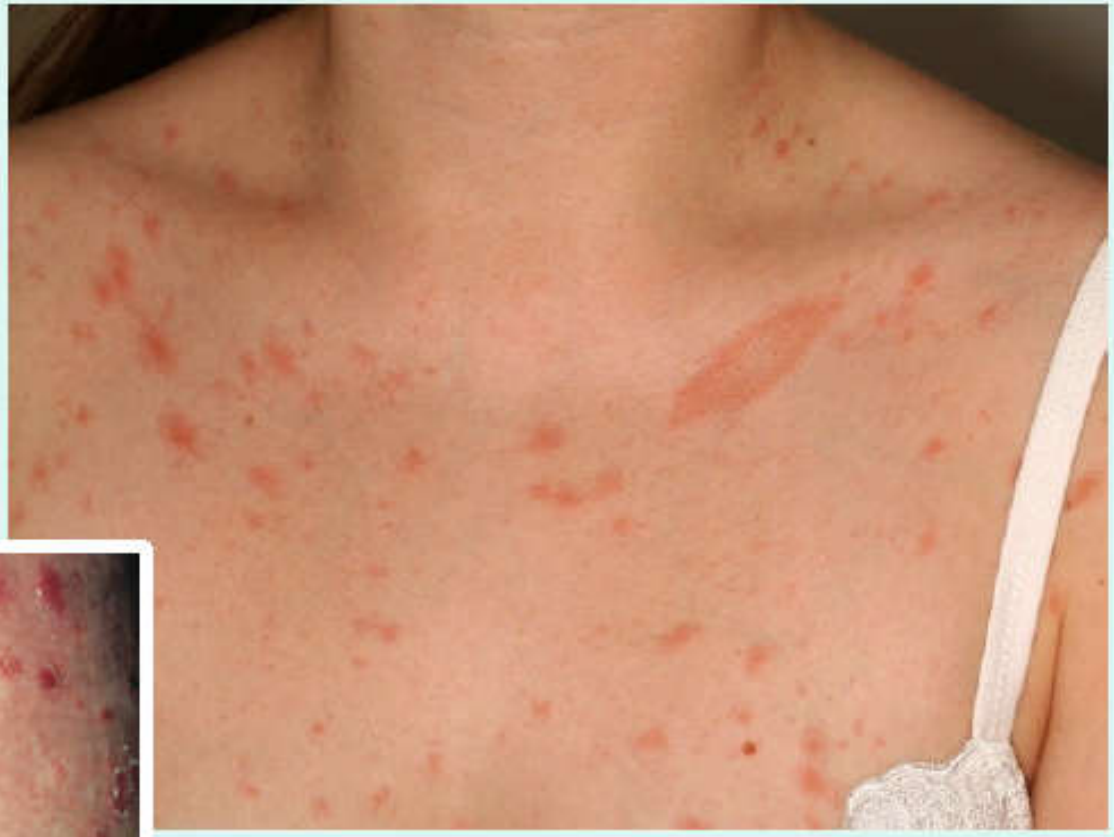


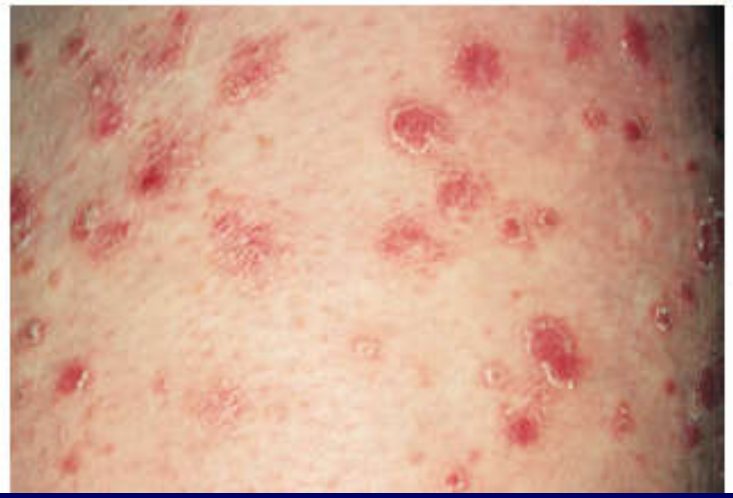
Psoriasis

GUTTATE PSORIASIS

– **Pityriasis rosea**

- Difficult to distinguish from acute guttate psoriasis
- Presents first as single large patch, progresses to a truncal rash of multiple red scaly plaques ('Christmas tree' distribution)
- Resolves over 8–12 weeks



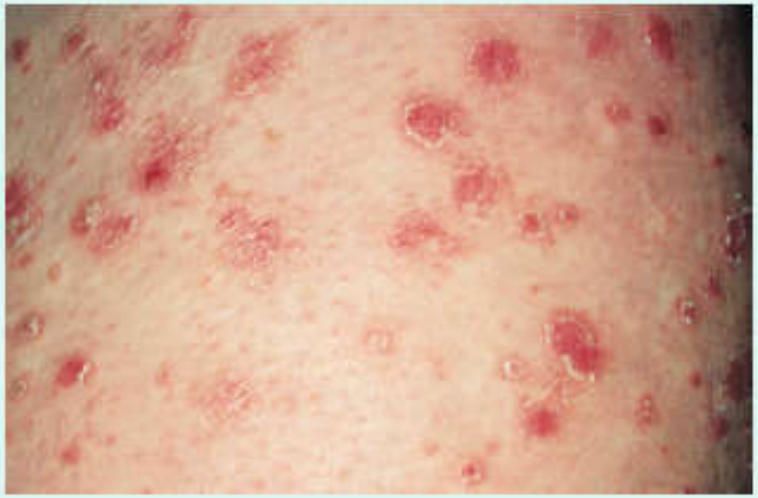


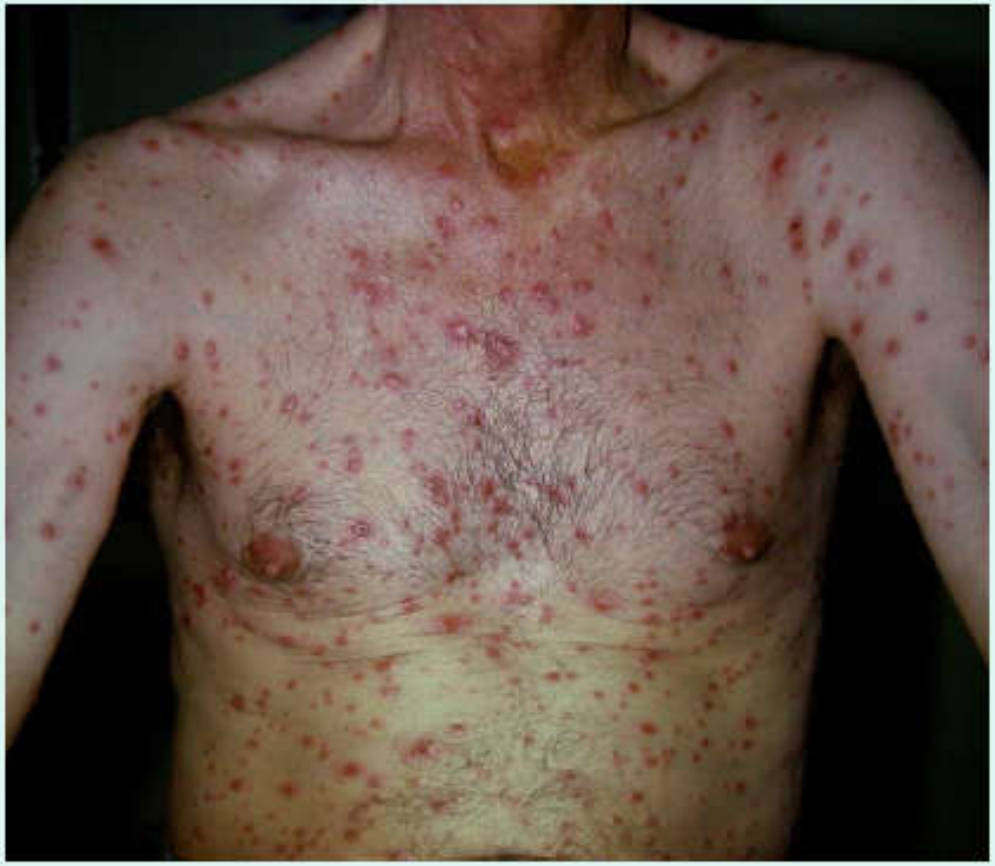
< Psoriasis ^ Pityriasis rosea

GUTTATE PSORIASIS

– **Secondary syphilis**

- Search for characteristic primary syphilitic lesion, lymphadenopathy, and lesions of face, palm and soles
- Conduct serology and skin biopsies to confirm

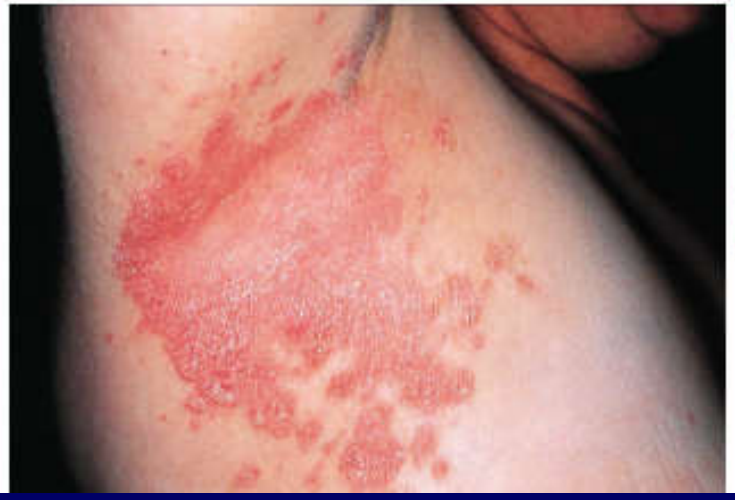


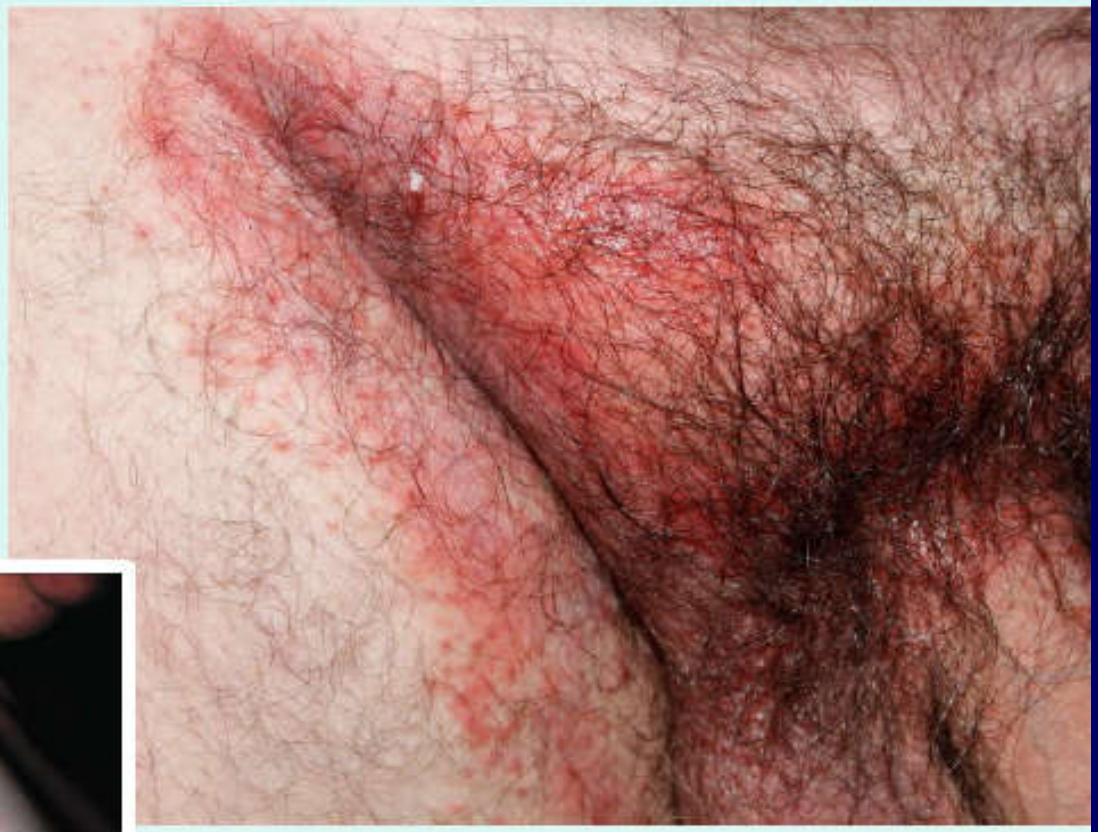


< Psoriasis ^ Secondary syphilis

FLEXURAL PSORIASIS

- **Tinea cruris**
  - Affects groin area
  - Characterised by central clearing with advancing edge
  - Non-silvery lesion with fine scale, particularly at periphery
  - Lesion frequently extends more on left side

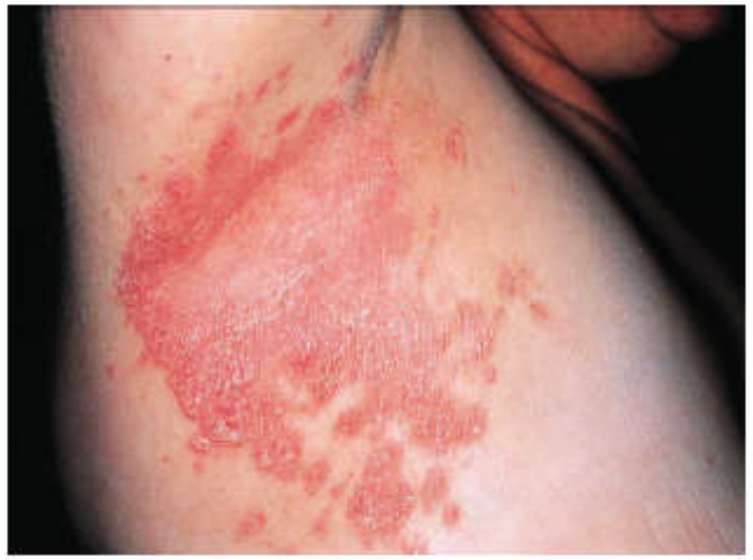




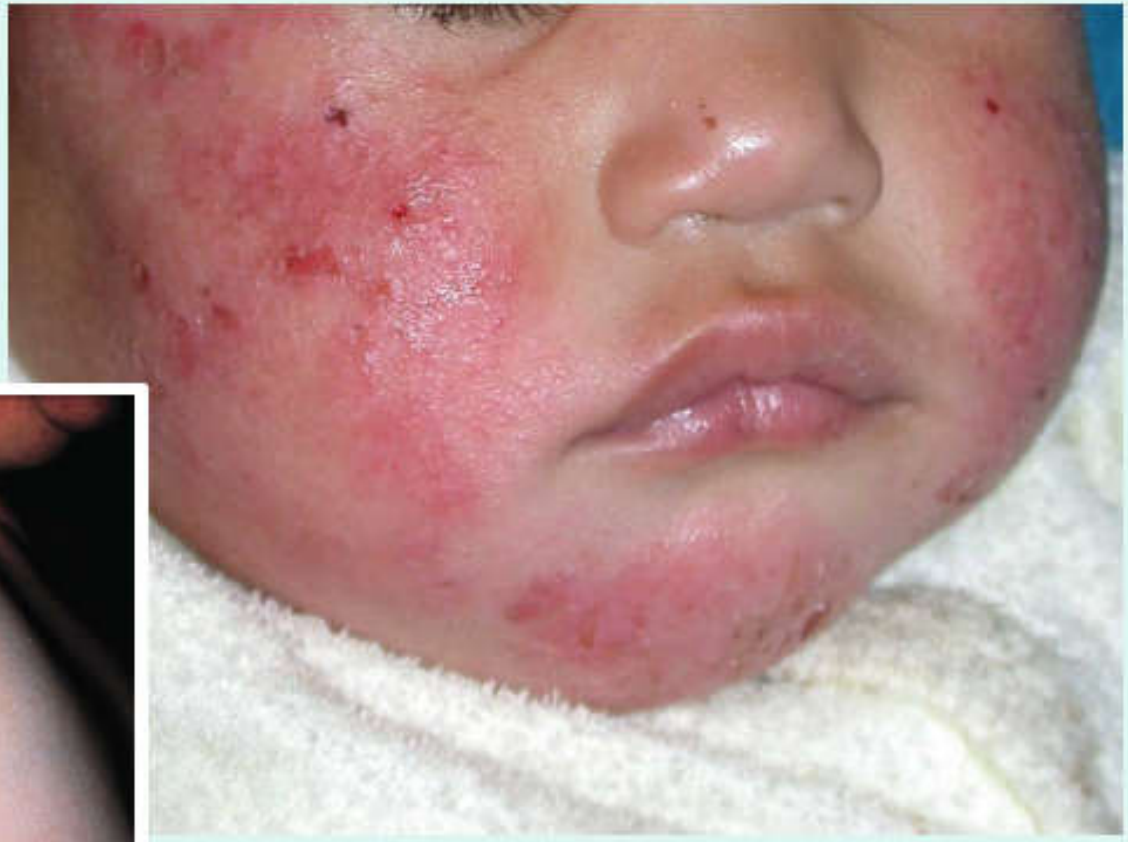
< Psoriasis ^ Tinea cruris

FLEXURAL PSORIASIS

- **Atopic eczema**
  - Often associated with asthma and hay fever
  - Lacks classic psoriatic nail involvement and sharply demarcated scaly plaques



< Psoriasis

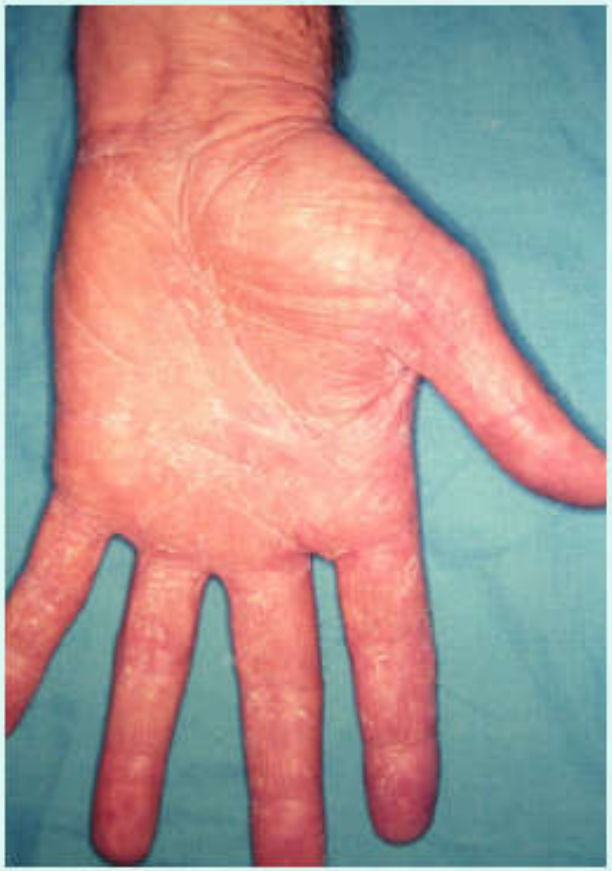


^ Atopic eczema

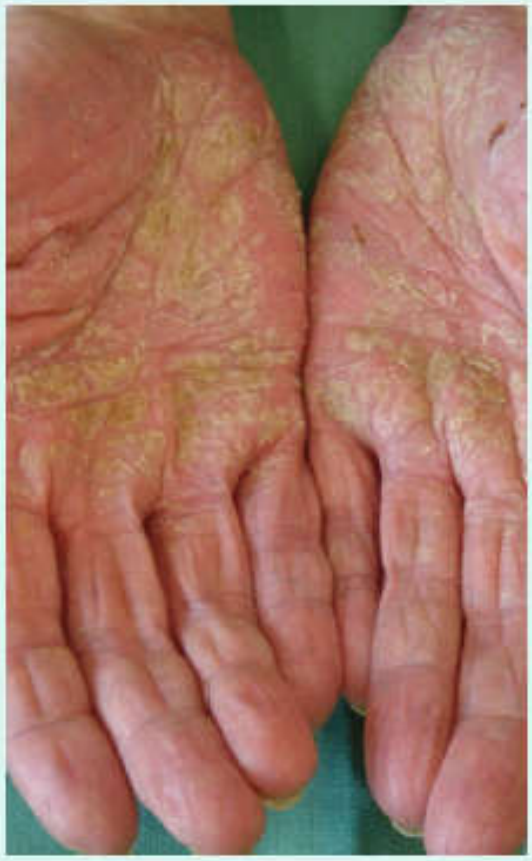
PALMOPLANTAR PSORIASIS

– **Tinea manum**

- Ringworm of hands
- Fine powdery scale, particularly involving palms and palmar creases
- Usually asymmetrical



Tinea corporis



Psoriasis

MANAGING PSORIASIS

- Before starting treatment
  - **Establish relationship of trust with patient**
  - **Provide patient with information**
    - Emphasise benign nature of disease
    - Explain that psoriasis tends to be chronic and recurrent

MANAGING PSORIASIS

- Determine clinical setting before selecting treatment, considering
  - Disease pattern, severity and extent
  - Sites of disease
  - Coexistent medical conditions
  - Patient's perception of disease severity
  - Time commitments and treatment expense
  - Previous treatments for psoriasis

TREATMENT OPTIONS FOR PSORIASIS

- Stepwise approach is advised
- Treatments include:
  - General measures and topical therapy
  - Phototherapy
  - Systemic and biological therapies
- Combination therapies : may reduce toxicity and improve outcomes

TREATING PSORIASIS: GENERAL MEASURES

- Reduce/eliminate potential trigger factors:
  - Stress
  - Smoking
  - Alcohol
  - Trauma
  - Drugs
  - Infections

Treatment of Psoriasis

Topical therapy:

- Corticosteroids
- Tar preparations
- Salycilic acid ointment 3% – 5%
- Vitamin D_3 analogue (Calcipotriol)
- UVB

OTHER THERAPIES

- Phototherapy
- Systemic therapies
- Biological agents

PHOTOTHERAPY

- For psoriasis resistant to topical therapy and covering > 10% of body surface area
- Immunomodulatory and anti-inflammatory effects
- Three main types of phototherapy:
  - Broadband UVB
  - Narrowband UVB
  - PUVA (administration of psoralen before UVA exposure)
- Treatment usually administered 2–3 times/week

Systemic therapy:

Indicated for *erythrodermic, pustular or arthropathic psoriasis*

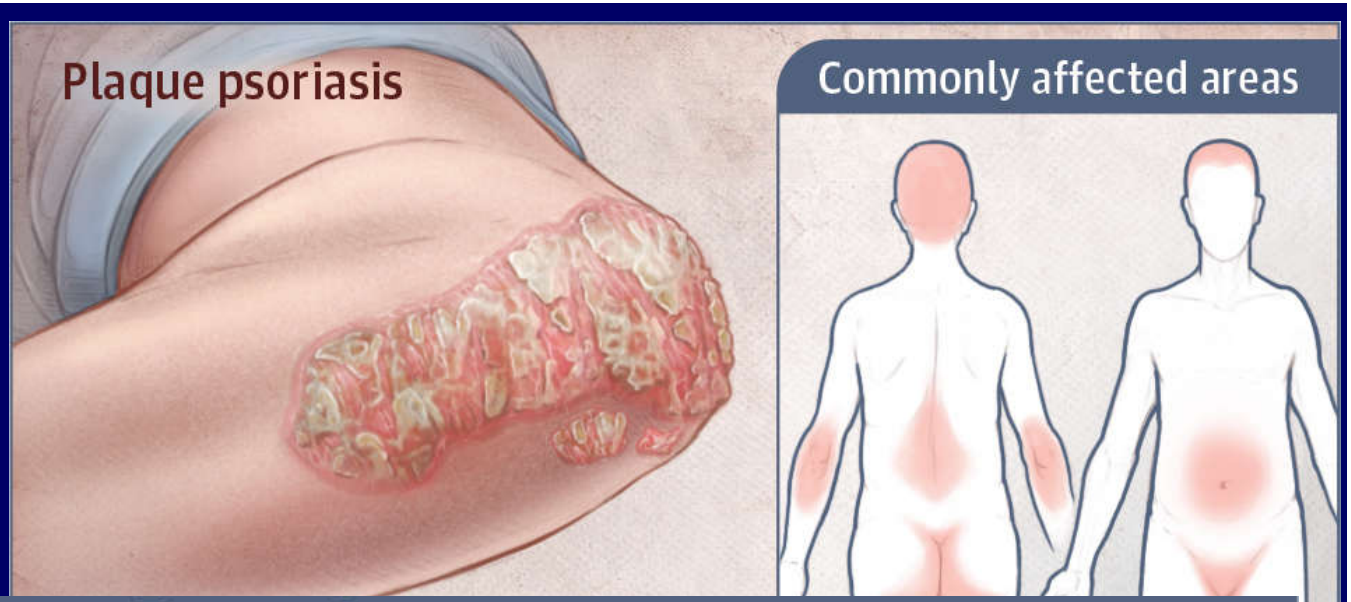
- Corticosteroids
- PUVA therapy
- Methotrexate
- Cyclosporine A
- Retinoids

BIOLOGICAL AGENTS

- Proteins derived from living organisms that exert pharmacological actions
- For adults with moderate-to-severe chronic plaque-type psoriasis who are candidates for phototherapy or systemic therapy
- Most administered sub-cutaneously

DIAGNOSIS AND MANAGEMENT OF PSORIASIS: SUMMARY

- Chronic, inflammatory disease of skin
- T-cell mediated disorder
- Classic presentation characterised by red, scaly plaques
- Management should address both medical and psychological aspects
- Treatments include topical therapy, phototherapy, systemic therapy and biological agents



Commonly affected areas

Types of treatment

Associated disorders

Psoriatic arthritis
Depression
Cardiovascular disease
Metabolic syndrome
Inflammatory bowel disease

Please, don't hesitate to contact me for any further information

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