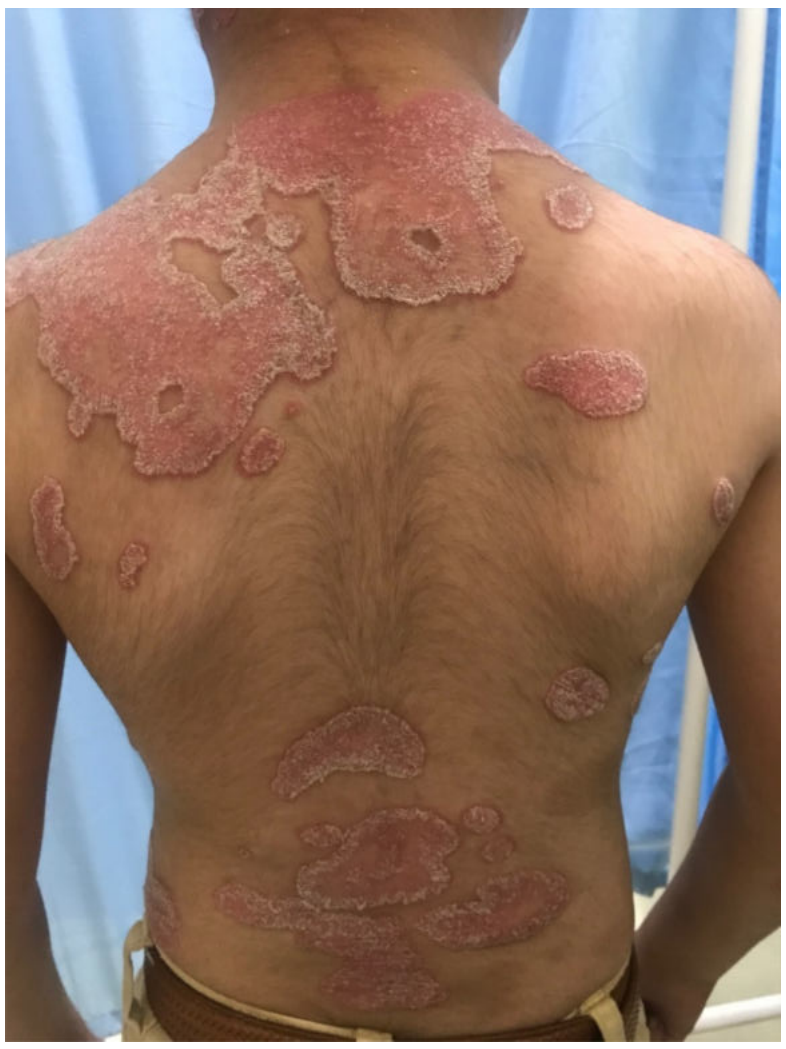
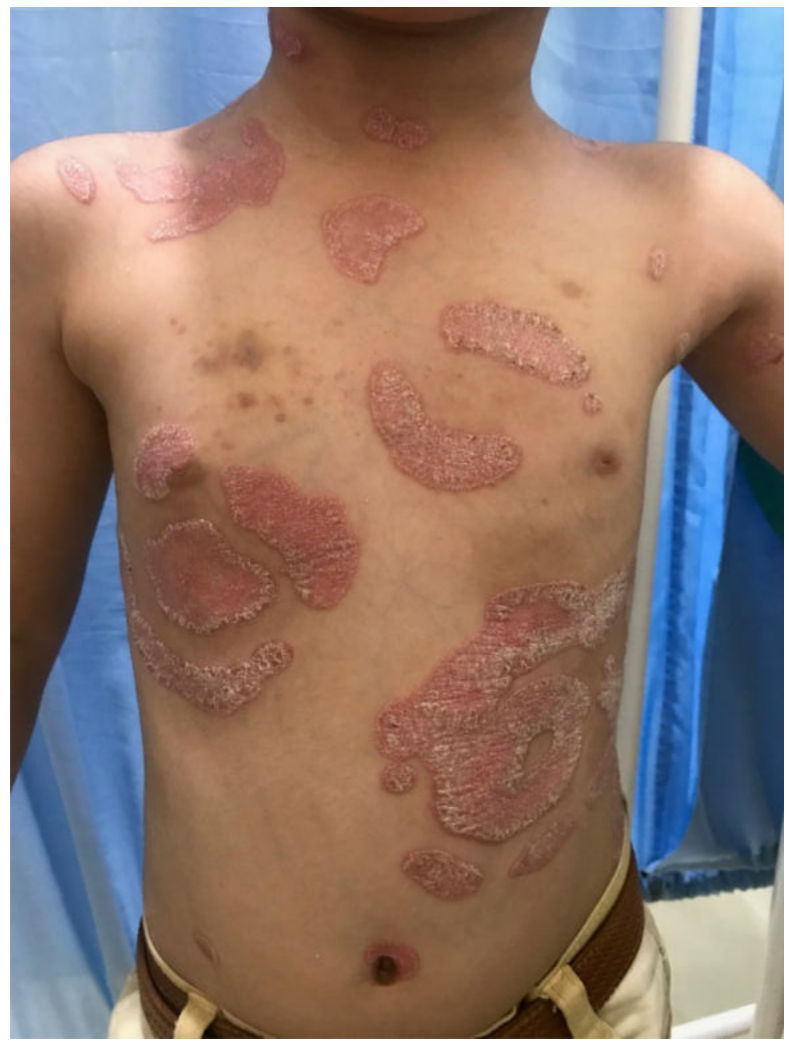
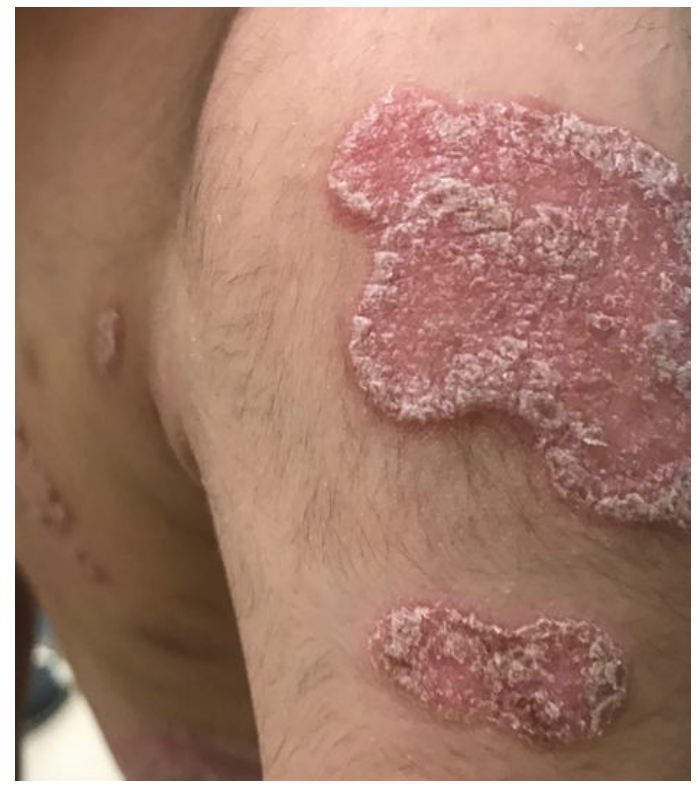
Psoriasis -I

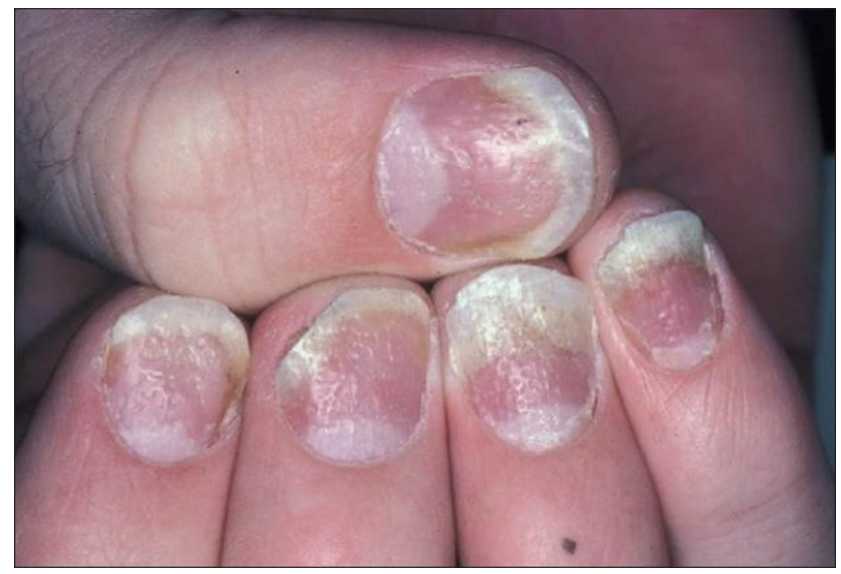
PSORIASIS

- A chronic disorder with polygenic predisposition
- Characterized by erythematous scaly papules and plaques;
- Sites: scalp, elbows, knees, hands, feet, trunk, and nails.
- Triggering environmental factors: trauma, infection (streptococcal sore throat), or medication.
- Severe forms like pustular psoriasis and erythrodermic psoriasis can occur
- Psoriatic arthritis : 10%–25% of patients







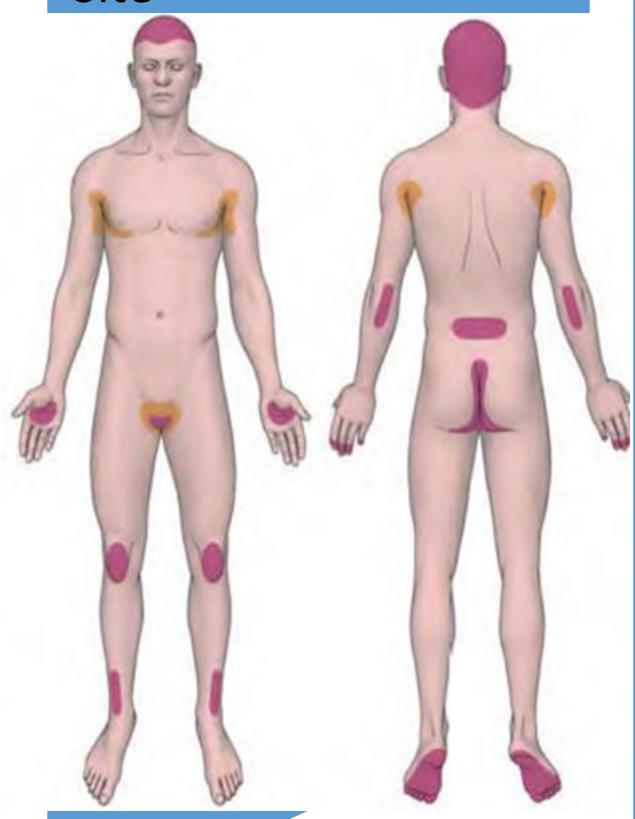


Case 1: 21 year old

History & Cutaneous examination

History
- Duration
- Seasonal variation
- Joint pain
- Sore throat
- Stress
- Alchohol
- Smoking
- HIV
- Systemic illness
- Prior treatment

Site



Type of lesions
- Primary
  - Papules
  - Plaques
- Secondary lesion
  - Scales

Nails

Palms

Soles

Scalp

Mucosa

Morphology

Colour
- Erythematous
- Hyperpigmented
- Size
- Margin
  - Well defined
- Consistency
  - Indurated

CHRONIC PLAQUE-TYPE PSORIASIS

➢Clues to diagnosis

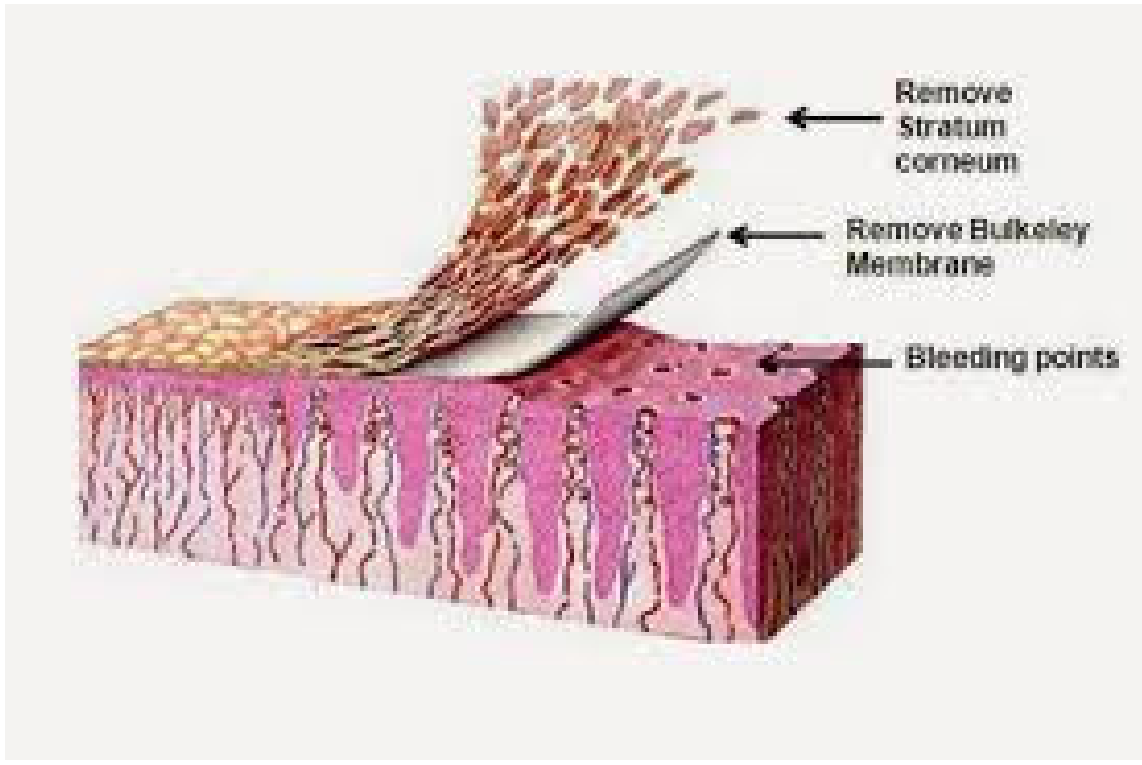
- Red ('salmon pink'),sharply demarcated, indurated plaques surmounted by 'silvery white', micaceous scales
- Monomorphic and distributed relatively symmetrically
- Extensor surfaces of the limbs. over scalp, trunk
- Nail findings
- Auspitz sign positive
- HPE

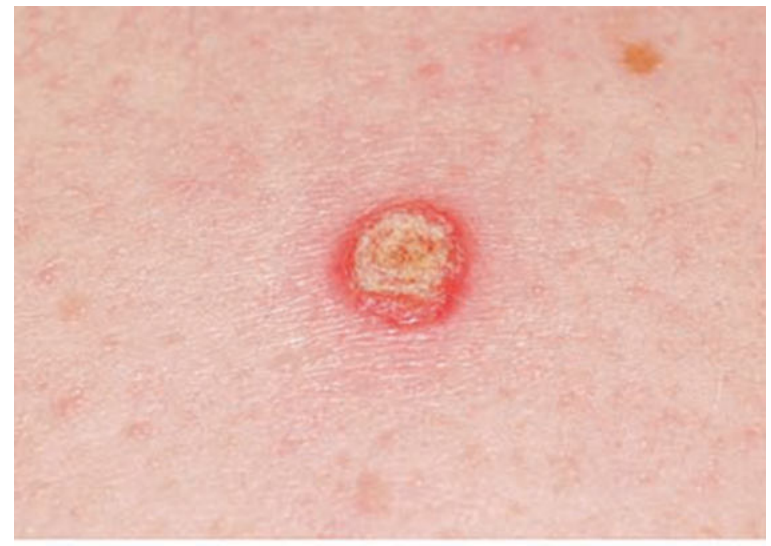
Grattage test & Auspitz sign

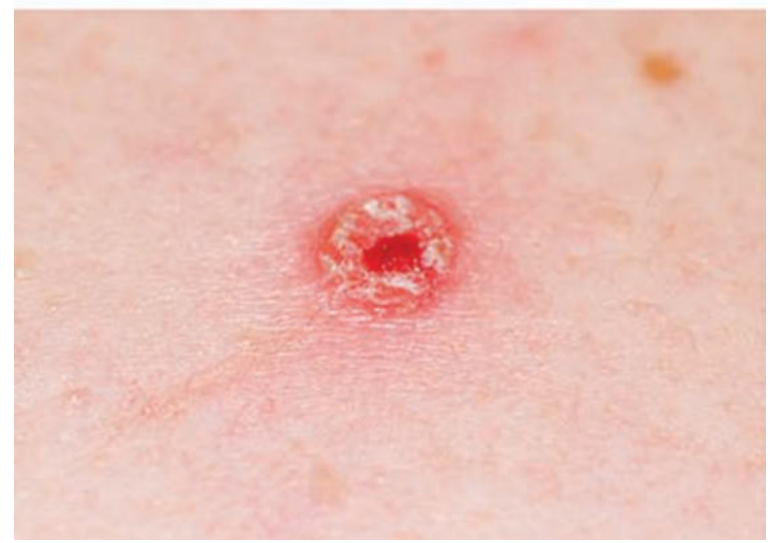
- **Auspitz sign:** Heinrich Auspitz (1835-86)

- **Grattage test** - Scales in a psoriatic plaque can be accentuated by grating with a glass slide

1. Gently scraping lesion with a glass slide accentuates the silvery scales (Grattage test positive). Scrape off all the scales
2. Continue to scrape the lesion – glistening white adherent membrane (Burkley's membrane) appears
3. On removing the membrane, punctate bleeding points become visible



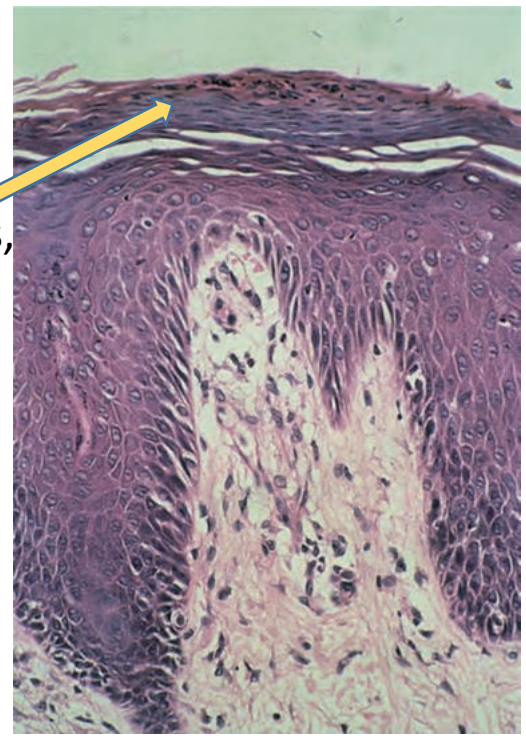




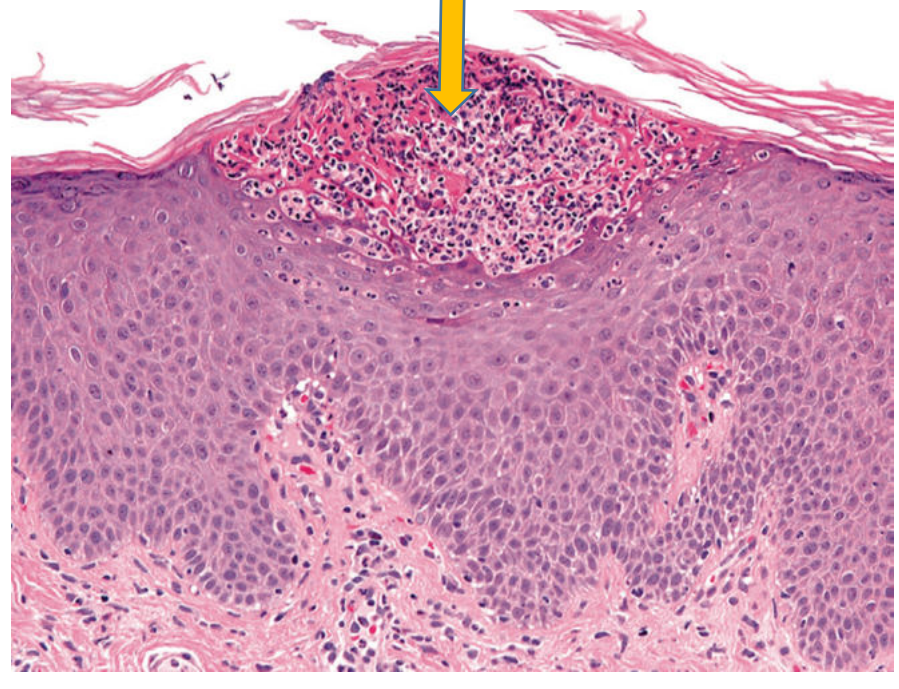
HPE chronic plaque psoriasis

- Hyperkeratosis and confluent parakeratosis
- **Neutrophilic microabscesses in corneal layer/upper epidermis**
- Hypogranulosis
- Regular acanthosis
- Regular elongation of rete ridges called **“squaredoff”rete ridges,**
- **Suprapapillary thinning**
- Dilated capillary loops in papillary dermis

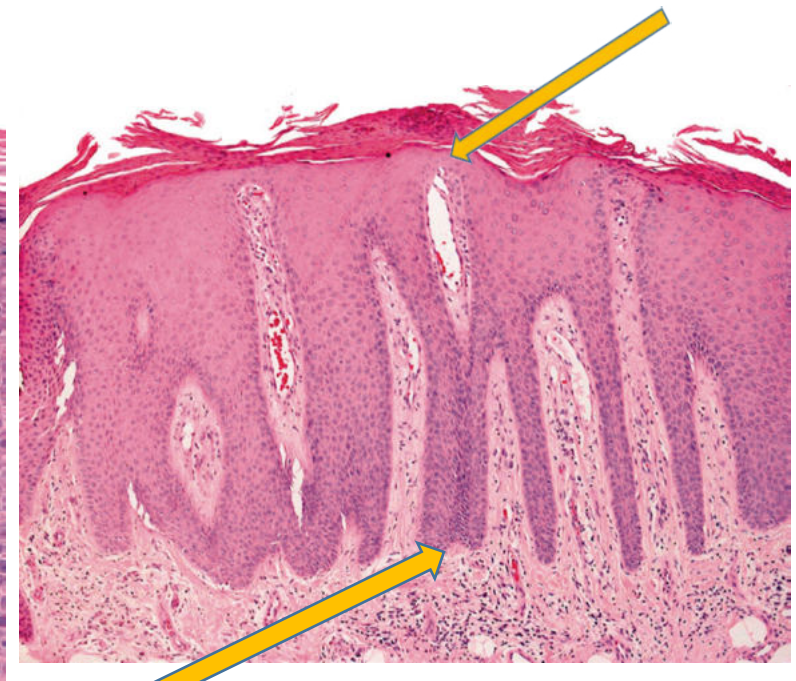
Hyperkeratosis, parakeratosis



Munro's microabscess

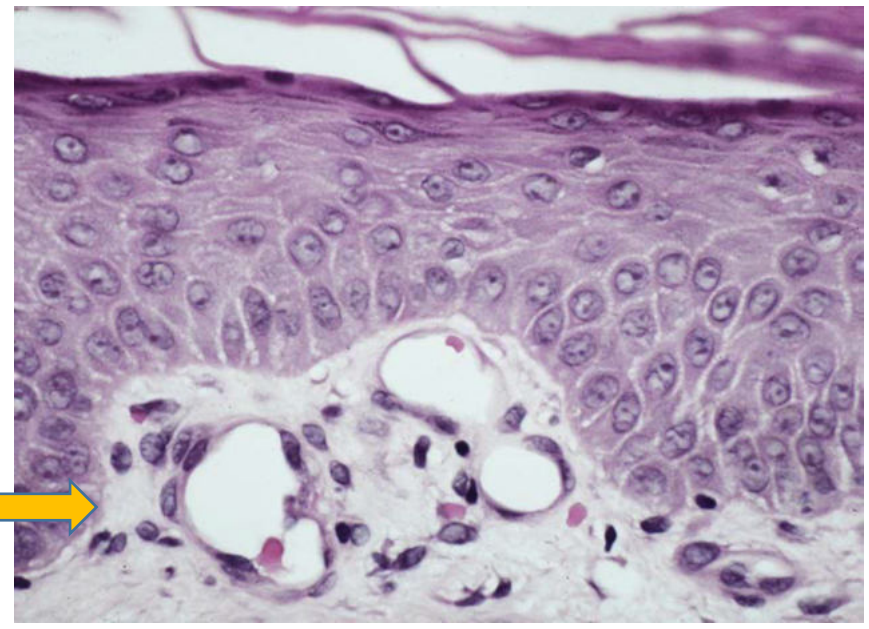


Suprapapillary thinning



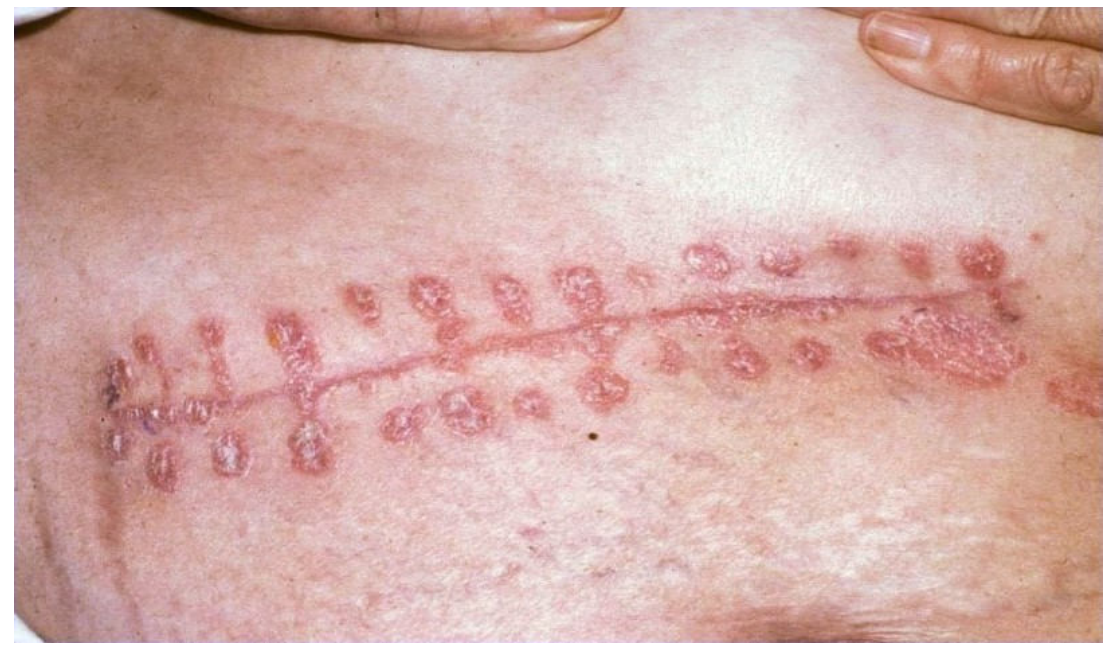
“squaredoff”rete ridges,

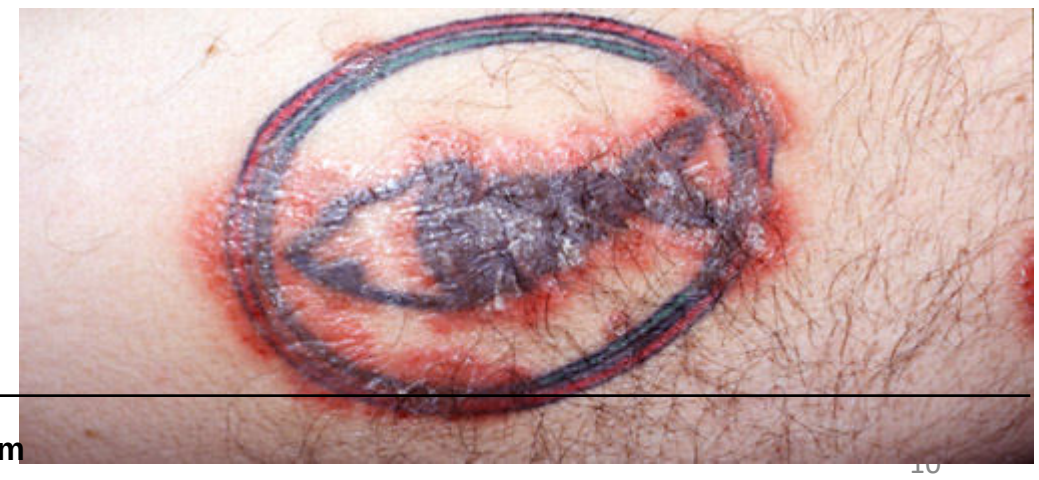
Dilated capillary loops



Koebner phenomenon (isomorphic response)

- traumatic induction of psoriasis on nonlesional skin
- during flares of disease
- all-or-none phenomenon (i.e., if psoriasis occurs at one site of injury it will occur at all sites of injury)
- occurs 7–14 days after injury
- Seen in upto 25% of patients





Classification

Morphology / natural history based

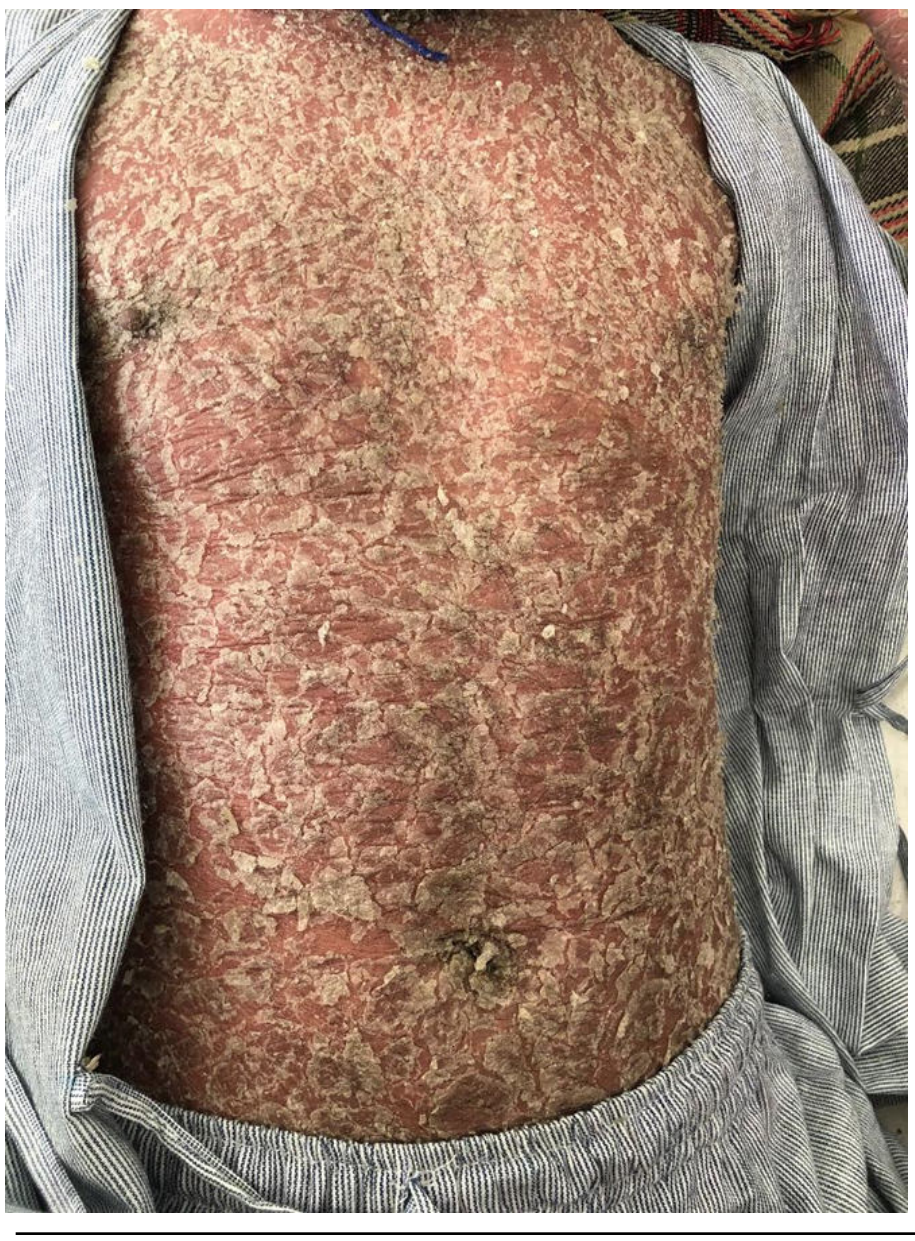
- Chronic Plaque psoriasis
- Acute guttate psoriasis
- 'Unstable' psoriasis
- Erythrodermic psoriasis
- Pustular psoriasis
- Atypical psoriasis
  - Verrucous
  - Elephanthine
  - Rupoid
  - Ostraceous

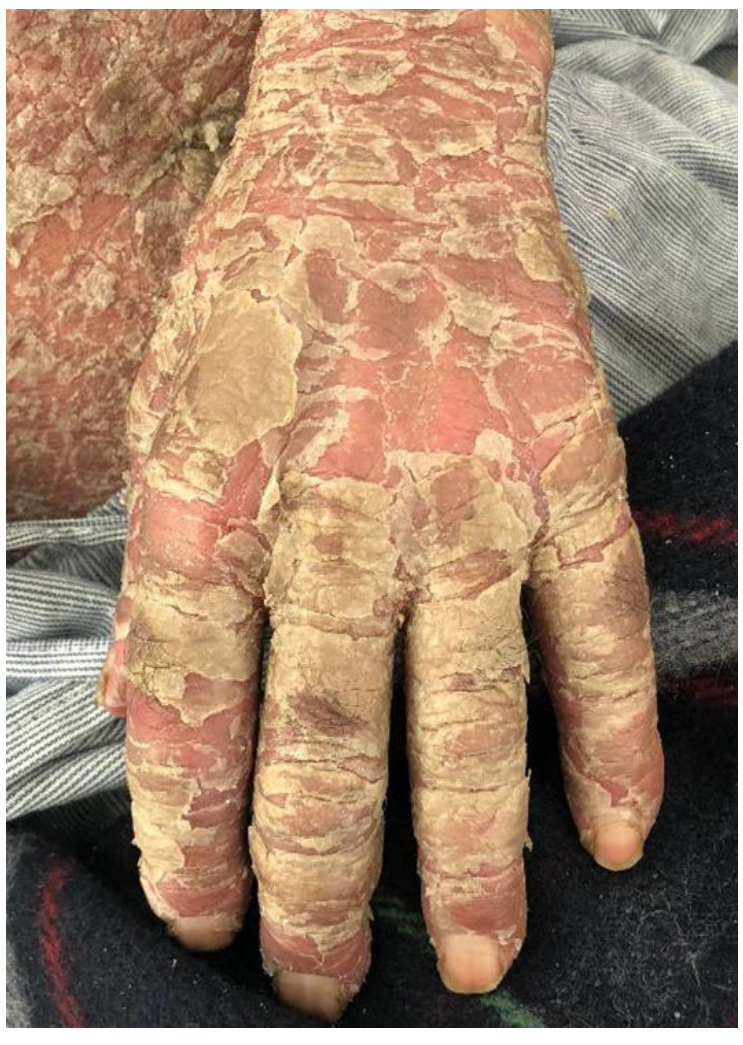
Site based

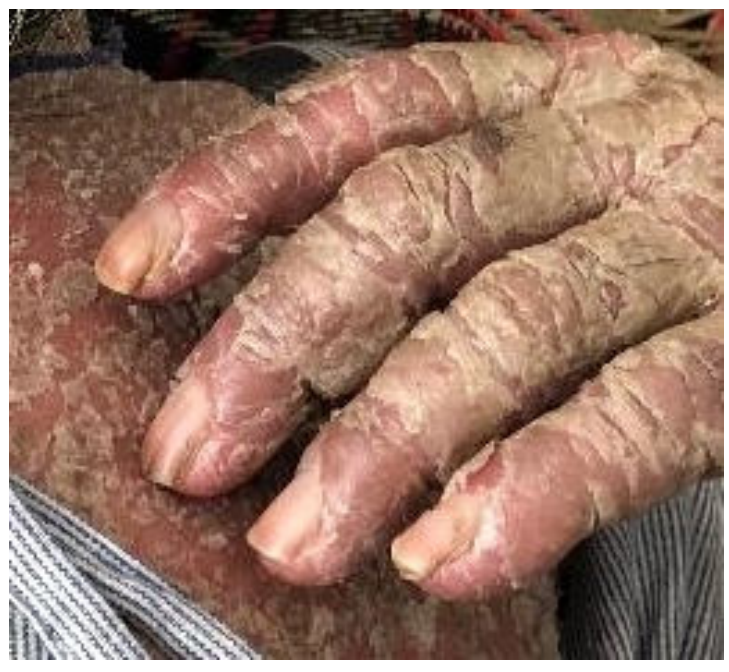
- Scalp psoriasis
- Follicular psoriasis
- Sebopsoriasis
- Flexural/inverse psoriasis
- Genital psoriasis
- Non-pustular palmoplantar
- Nail psoriasis
- Mucosal lesions
- Ocular lesions

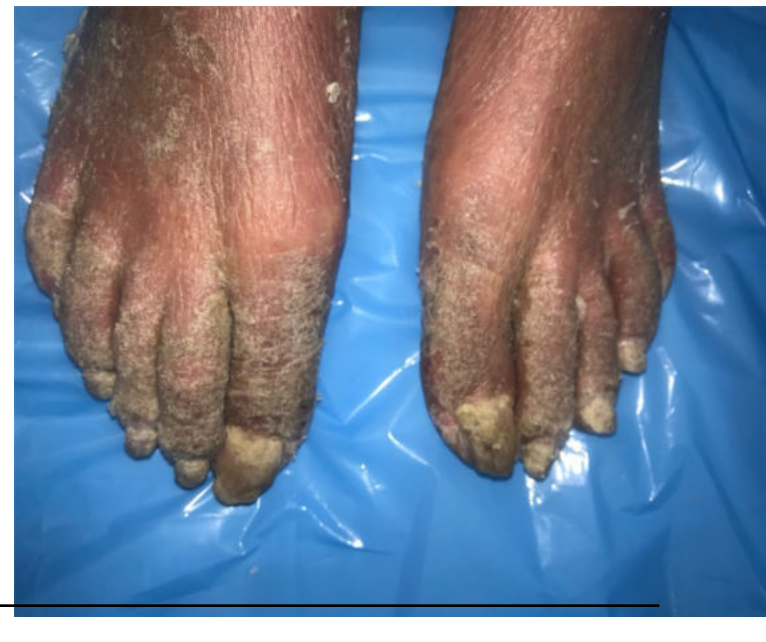
Other specified forms

- Linear and segmental psoriasis
- Psoriasis in childhood, old age
- Photoaggravated psoriasis
- Drug-induced/exacerbated
- HIV-induced / exacerbated









Case 2: 54 year old man

Psoriatic erythroderma

- Clues to diagnosis
  - Personal or family history of psoriasis
  - H/O withdrawal of drugs
  - Typical psoriatic plaques
  - Large lamellar scales
  - Nail changes (oil-drop, pits, onycholysis)
  - Arthritis
  - HPE typical changes of psoriasis
- Management options
  - Acitretin
  - Cyclosporine A
  - PUVA, NB-UVB
  - Methotrexate
  - Anti-TNF agents

Pustular psoriasis classification

Generalized

1. Acute generalized (von Zumbusch).
2. Subacute annular and circinate

- Acute generalized pustular psoriasis of pregnancy (GPPP or impetigo herpetiformis).
- Infantile and juvenile generalized pustular psoriasis.

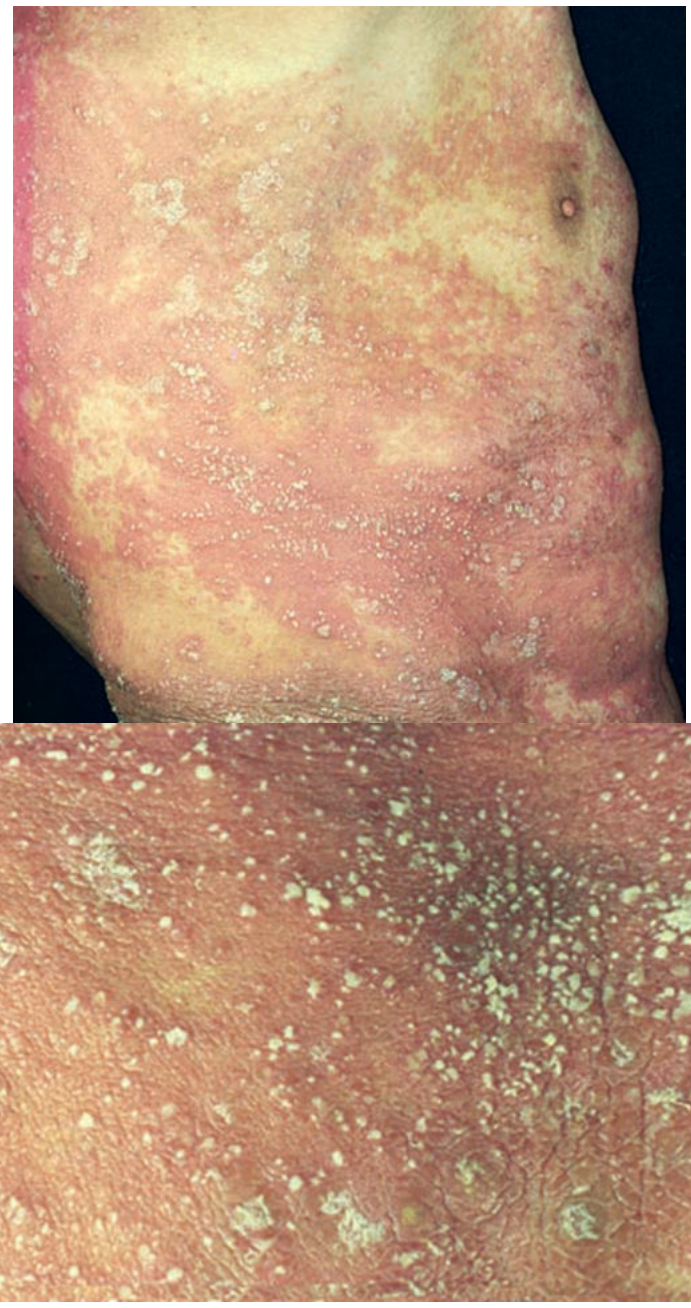
Localized

1. Palmoplantar pustulosis.
2. Acrodermatitis continua of Hallopeau

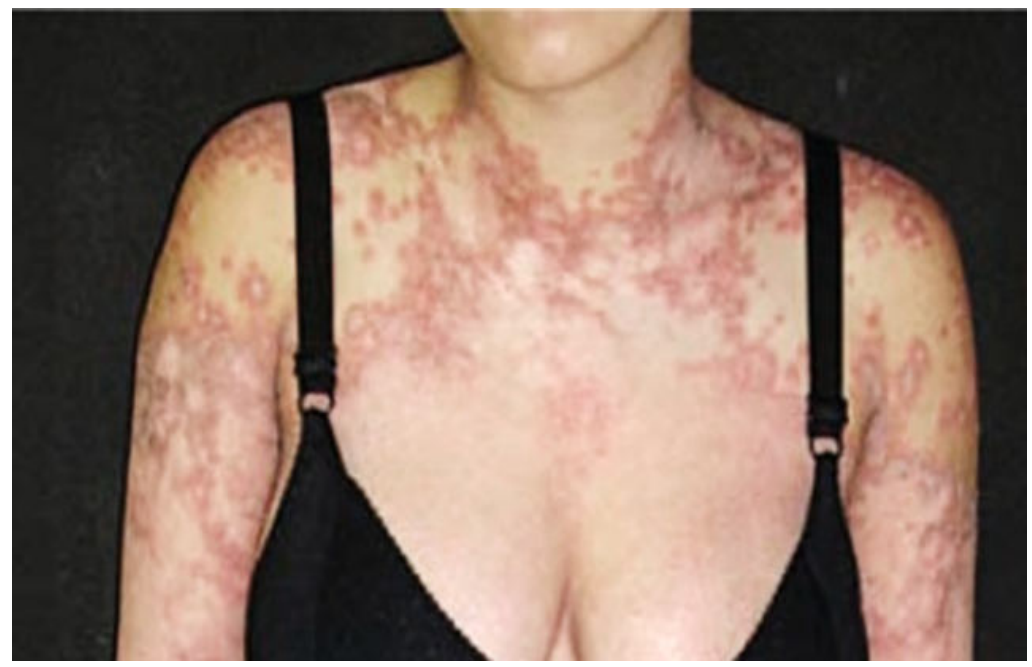
Triggering factors

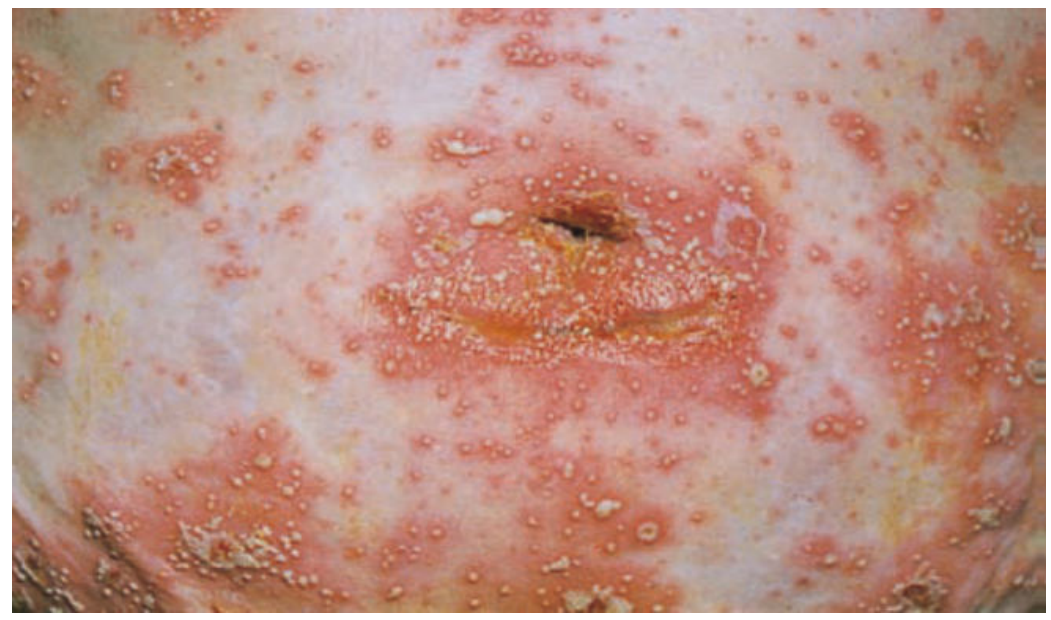
- Corticosteroids withdrawal
- Coal tar
- Infection
- Pregnancy
- Stress
- Hypocalcaemia

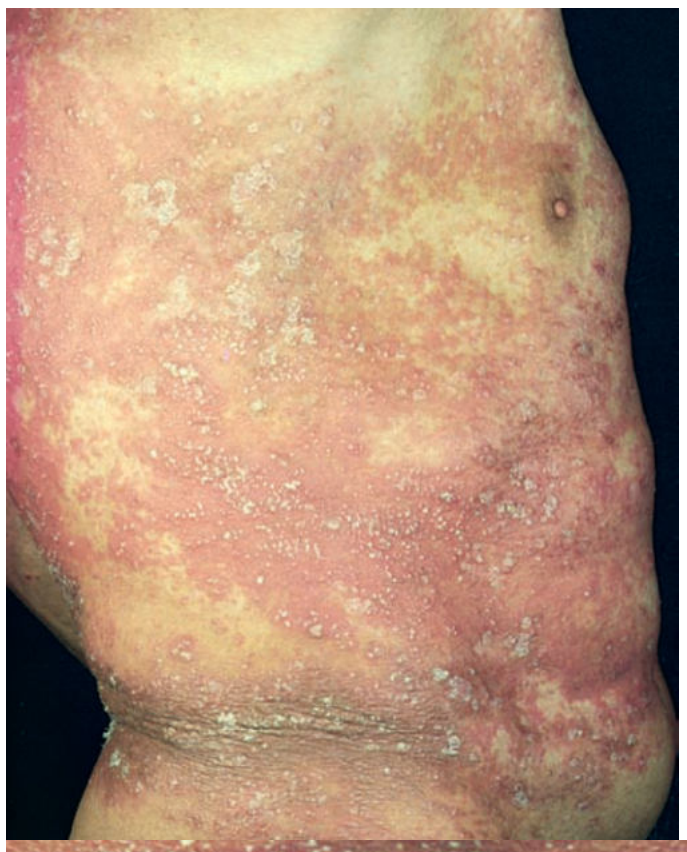
Case 3: 54 year old man

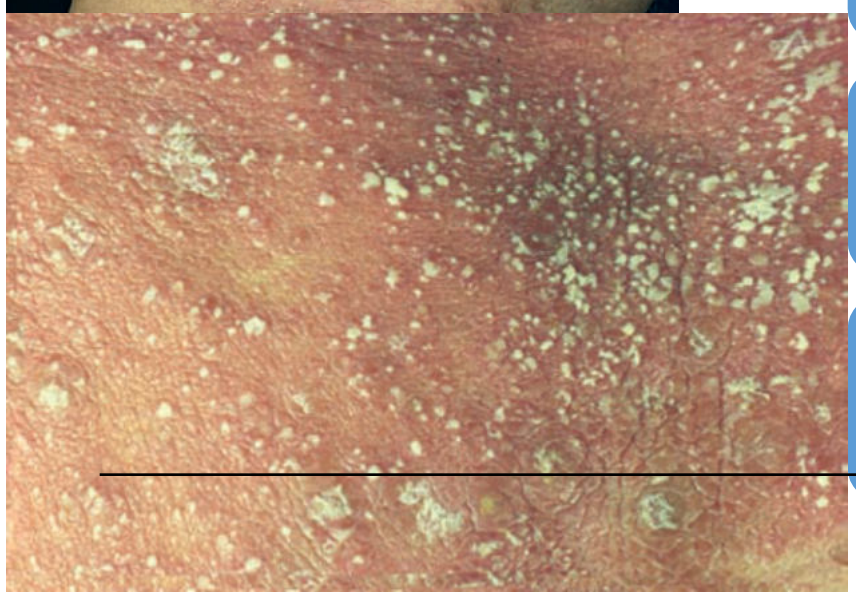


Case 4: 54 year old man









Acute generalized (von Zumbusch).

Abrupt onset, high fever, malaise, burning in skin

Fiery-red erythema topped by pinpoint sterile yellow pustules

Waves of fever and pustulation
Coalescing lesions > "lakes" of pus

Deleterious germline mutations in IL36RN

Leukocytosis, elevated ESR or CRP, plasma albumin, calcium low.

Kogoj's spongiform pustules on HPE

last trimester of pregnancy

persist upto childbirth maybe beyond

recurs in subsequent pregnancies

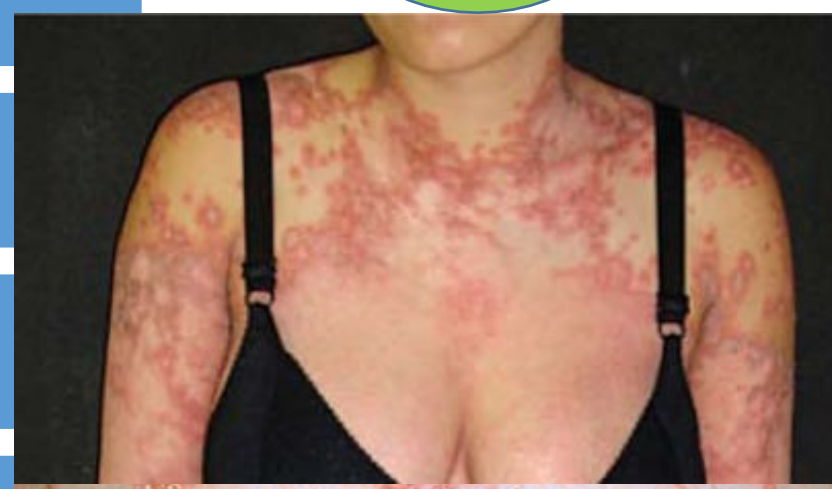
usually starts in the inguino-genital region

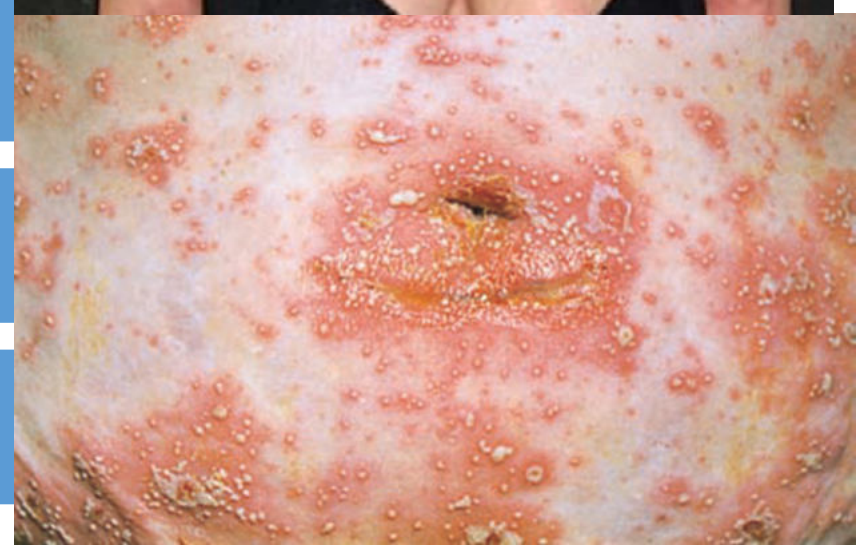
High fever with severe constitutional symptoms

death due to cardiac or renal failure

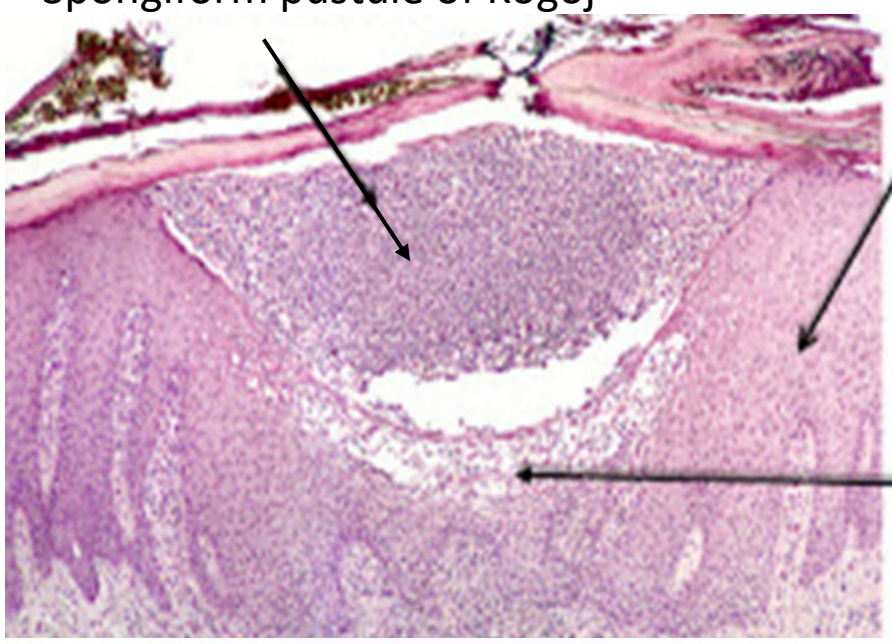
stillbirth, neonatal death or fetal abnormalities

GPPP



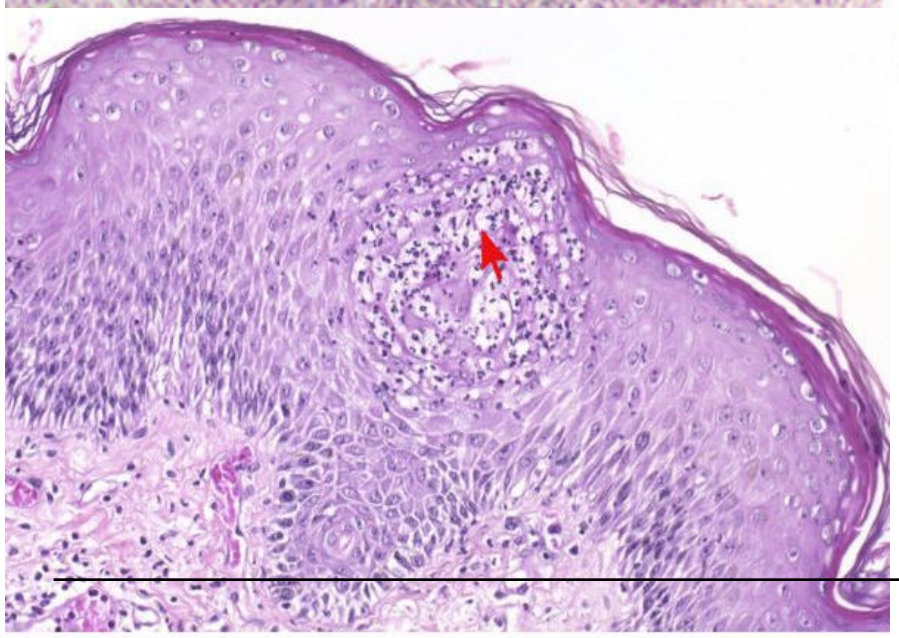


Spongiform pustule of Kogoj



Acanthotic epidermis
with Psoriasiform blunted rete ridges

Neutrophils
infiltrating into
epidermis



Spongiform pustules of Kogoj

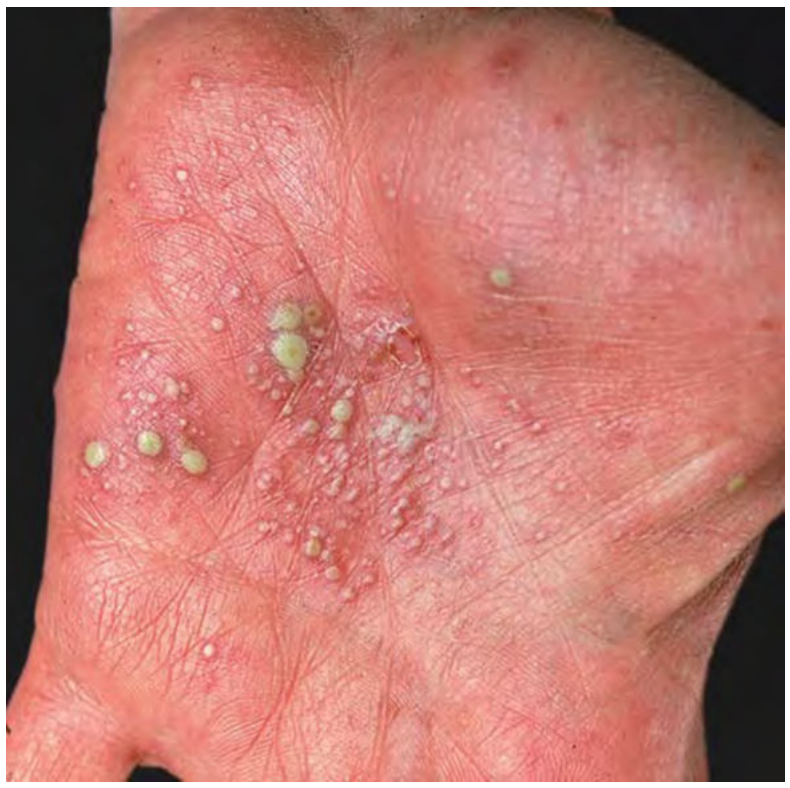
Complications
Hypocalcemia
Bacterial superinfection
Sepsis
Dehydration
ARDS

Management
Etretinate
Methotrexate
Cyclosporine
Infliximab

+ oral corticosteroids in GPPP

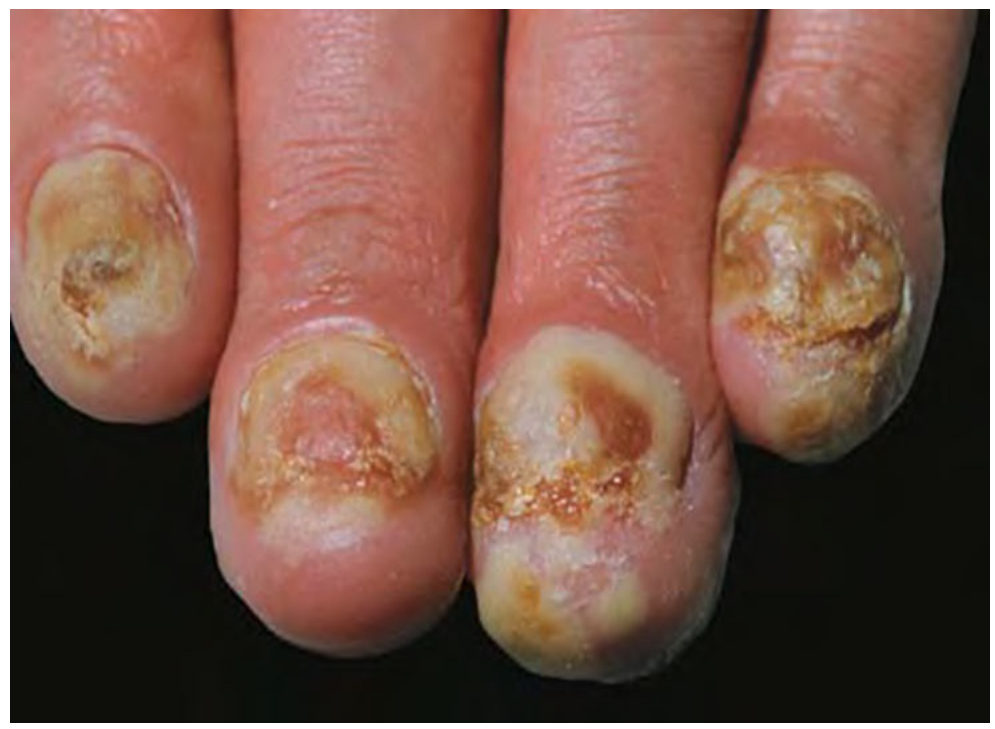
Palmoplantar Pustulosis

- Chronic relapsing eruption limited to palms and soles.
- Numerous sterile, yellow, deep-seated pustules that evolve into dusky-red crusts.

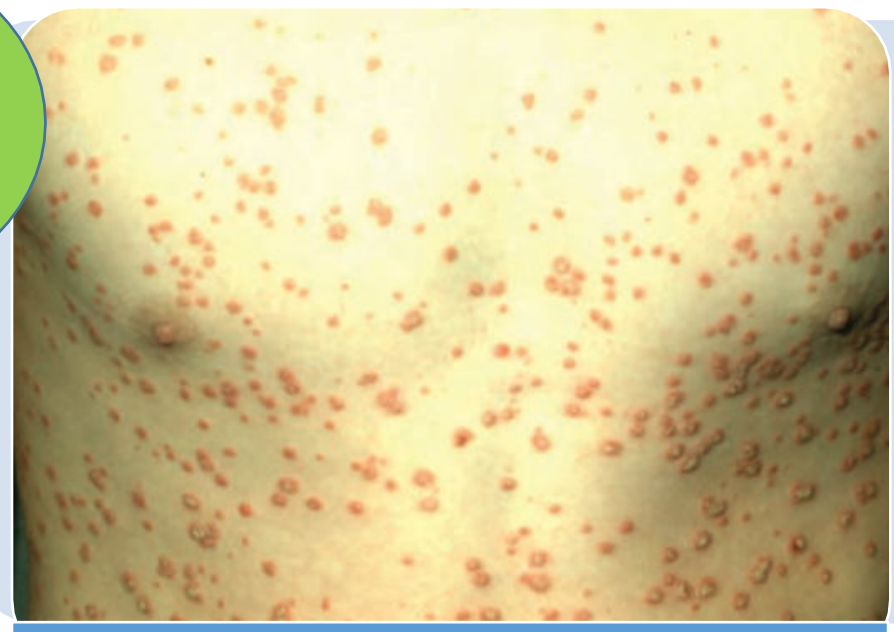


Acrodermatitis continua of Hallopeau

- acral pustule formation,
- subungual lakes of pus
- destruction of nail plates.
- permanent loss of nails and scarring.



Guttate psoriasis



Rule out

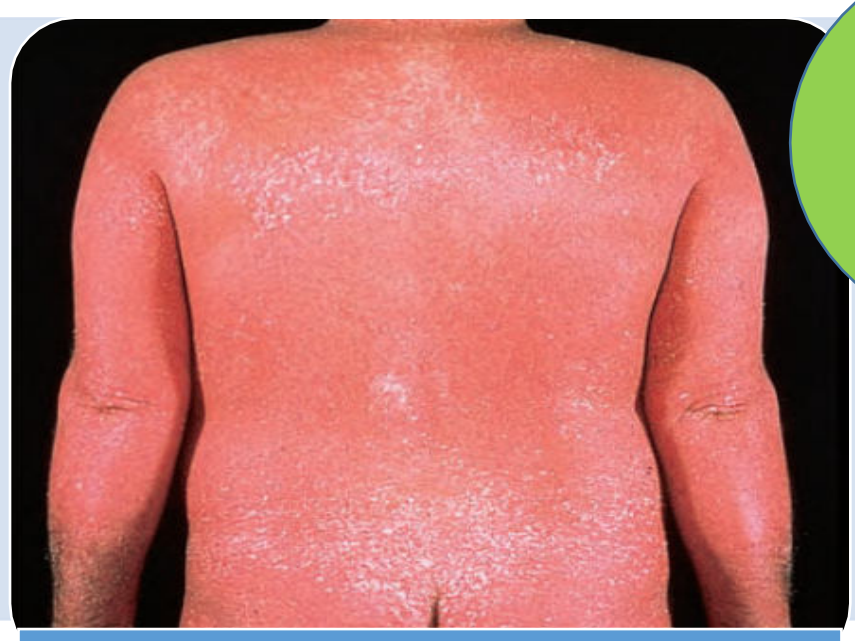
Eruptive LP

P rosea

PLC

Secondary syphilis

Unstable psoriasis



H/o

withdrawal of systemic or potent topical steroids,

tar or dithranol,

Acute infection

hypocalcaemia

severe emotional upset

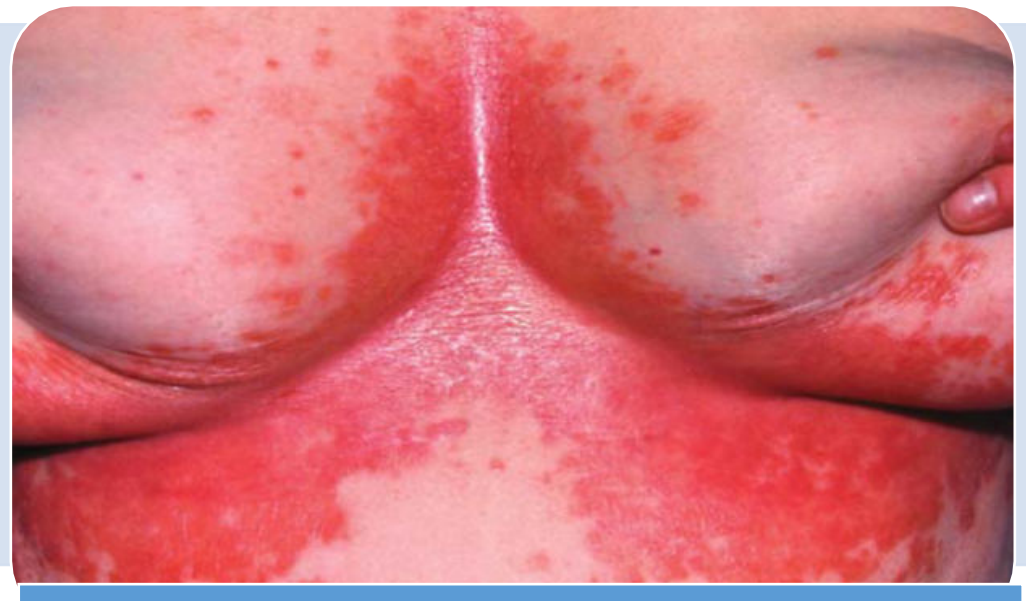
www.FirstRanker.com

Scalp psoriasis

d/d Seborrheic dermatitis

- Greasy yellowish scales
- Does not extend beyond hairline
- Ill defined areas of involment

Flexural psoriasis



d/d

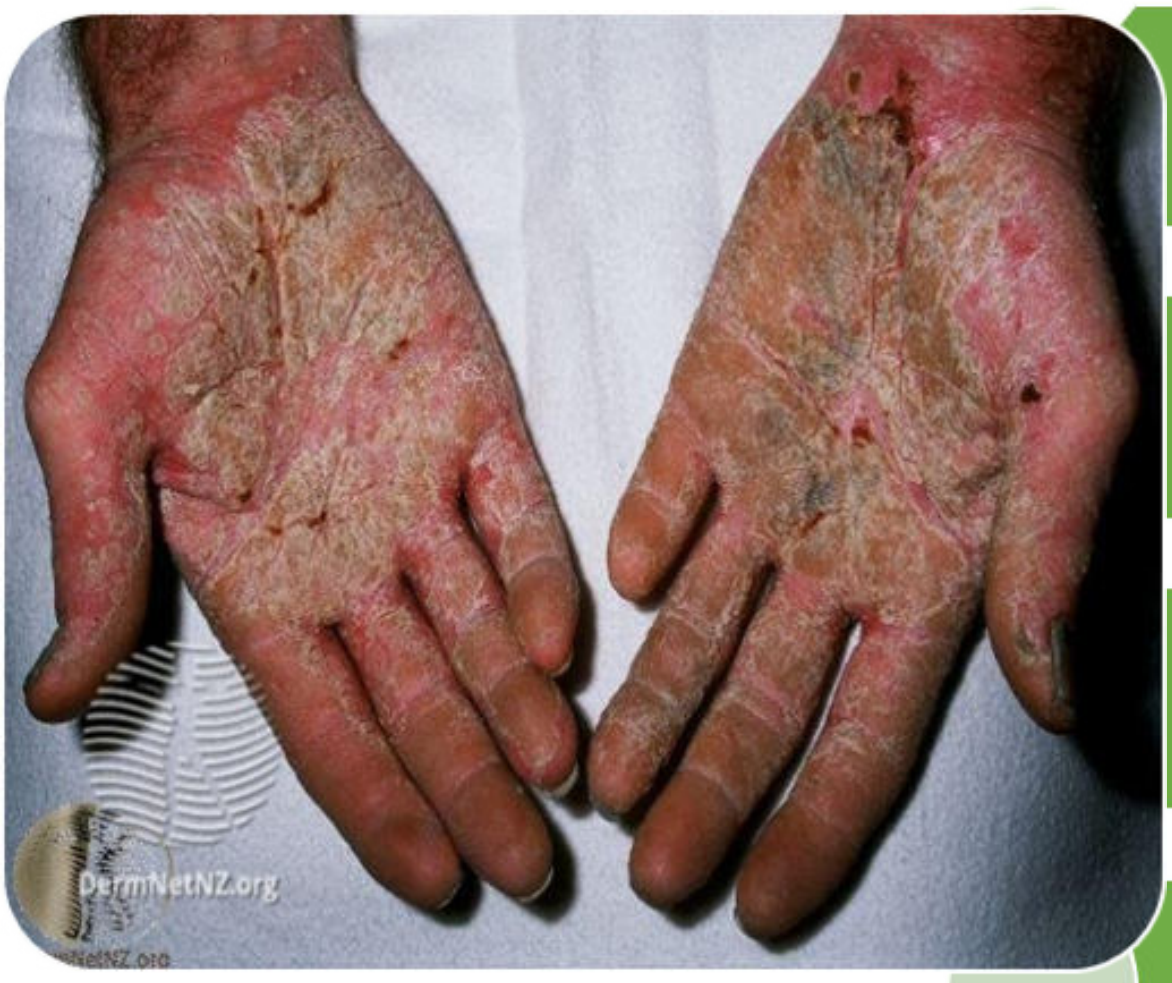
Tinea, candidiasis, intertrigo

Seborrheic dermatitis

Langerhans cell histiocytosis

Hailey-Hailey disease

Non-pustular palmoplantar psoriasis



A sharply defined edge at the wrist, forearm or palm

absence of vesiculation in history

knuckles frequently show a dull-red thickening

Nail changes

Topical PUVA
Coal tar + Steroid
Acitretin Methotrexate
Recalcitrant PPP – etanercept

Dd hyperkeratotic eczema

Nail psoriasis

Proximal matrix	Pitting, onychorrhexis, Beau lines
Intermediate matrix	Leukonychia
Distal matrix	Focal onycholysis, thinned nail plate, erythema of the lunula
Nail bed	"Oil drop" sign or "salmon patch," subungual hyperkeratosis, onycholysis, splinter hemorrhages
Hyponychium	Subungual hyperkeratosis, onycholysis
Nail plate	Crumbling and destruction plus other changes secondary to the specific site
Proximal and lateral nail folds	Cutaneous psoriasis

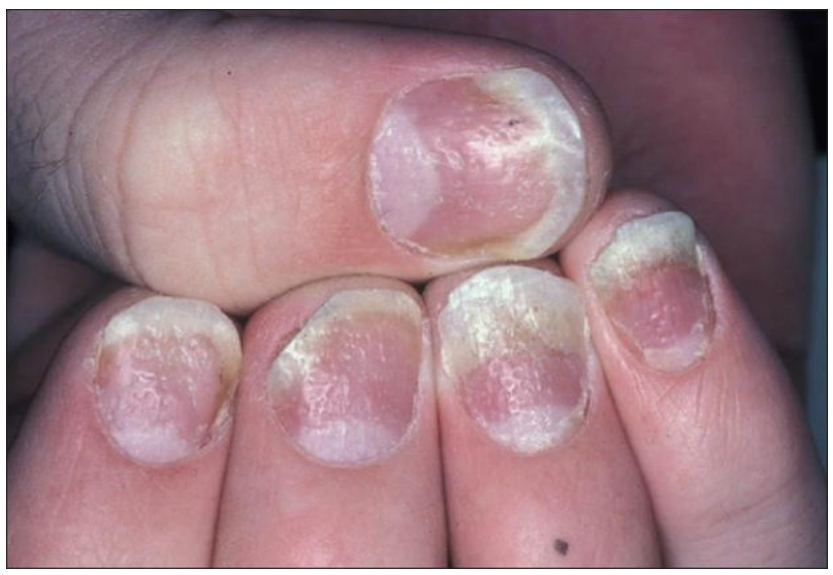
Nail involvement increases with

Age
Duration
Extent
Ps arthritis

Diagnostic techniques

Dermoscopy
Videodermoscopy
Capillaroscopy
Ultrasound
Optical coherence tomography
Confocal laser scanning microscopy (CLSM)

PITS



proximal nail matrix psoriasis>>> parakeratotic cells in nail plate >>> sloughed off >>> pits

➢**psoriatic suspected**

- > 20 fingernail pits per person
- >60 total pits per person

➢**Length of pit** –

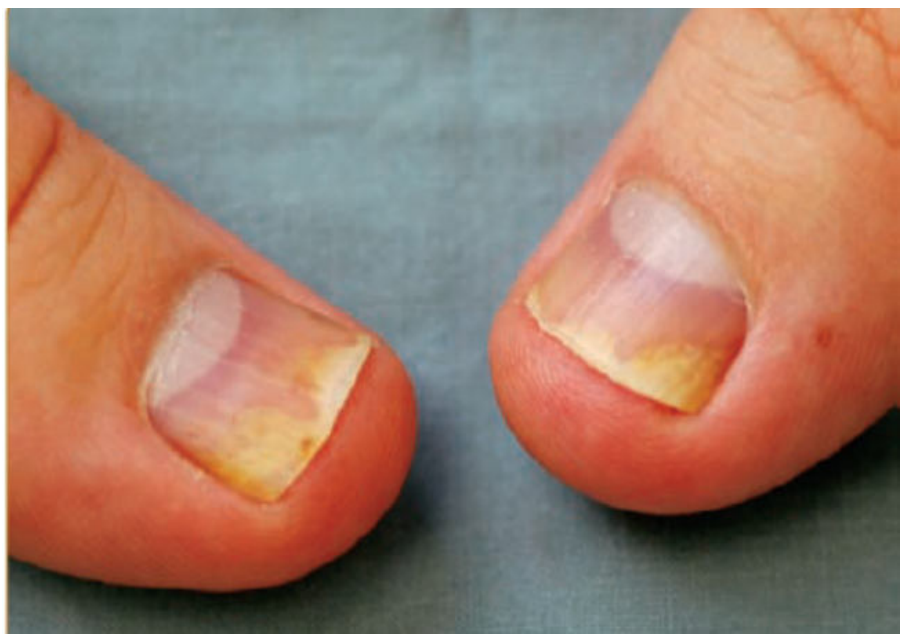
length of time, matrix was affected

➢**Depth of pit**

involvement of intermediate + ventral matrix + dorsal matrix

Dogra A, Arora AK. Nail psoriasis: the journey so far. Indian J Dermatol. 2014;59(4):319-33

Oil spot or Salmon patch

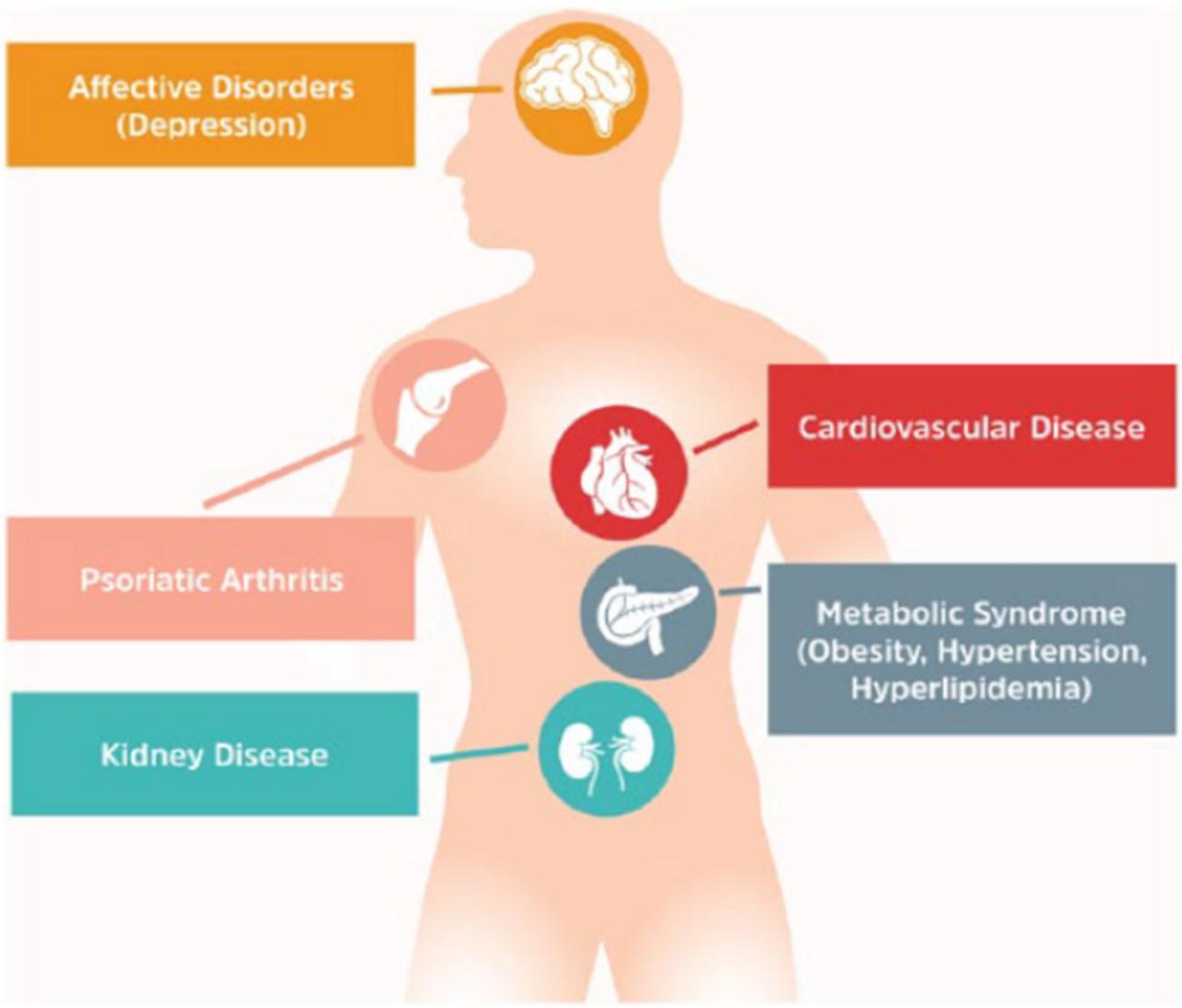


focal nail bed parakeratosis >> focal onycholysis >> serum and cellular debris accumulate and become entrapped

Dogra A, Arora AK. Nail psoriasis: the journey so far. Indian J Dermatol. 2014;59(4):319-33

More commonly affects [redacted]	More commonly affects [redacted] (7-10 times more commonly)
There are usually [redacted] affected	Only one or a [redacted] affected
[redacted] are very [redacted] seen	Pits are rarely seen
Loss of nail transparency is less frequent	[redacted]
[redacted] erythematous brownish halo at the proximal edge of [redacted]	No such halo can be appreciated
[redacted] on the skin or psoriatic arthritis	The clinical picture is associated with tinea pedis, repeated trauma, or work predisposing to fungal infection
Nail plate on histopathology shows no fungal hyphae or spores, nail bed hyperplasia and hypergranulosis seen	Nail plate and hyponychium show presence of fungal hyphae or spores
[redacted]	No hypergranulosis seen
[redacted]	[redacted] fungal elements
[redacted]	PAS staining positive due to prescence of fungal elements

Co-morbidities in psoriasis



- Malignancy
- Autoimmune diseases
- **Nonalcoholic fatty liver disease**
- Chronic obstructive pulmonary disease
- Obstructive sleep apnea
- Bone disease
- Parkinsonism
- **Psychosocial effect**
- Psychiatric disorders
- Alcohol abuse
- Smoking
- Migraine

Higher disease severity and younger at diagnosis have a higher risk

Will it work?????

Mild plaque psoriasis <10% BSA without psoriatic arthritis

FIRST LINE
Coal tar
Dithranol
Calcipotriol
Potent steroid
Salicylic acid
Tazorotene

SECOND LINE
Local NB-UBV or PUVA
Excimer laser

CONTRAINDICATIONS FOR COAL TAR

- Unstable plaque psoriasis in a phase of progression
- Pustular psoriasis
- Erythrodermic psoriasis

Moderate to severe plaque psoriasis without psoriatic arthritis

FIRST LINE
NB-UBV or PUVA

SECOND LINE
Acetretin
Apremilast
Ciclosporin
Methotrexate

THIRD LINE
Biologicals

Moderate to severe plaque psoriasis with psoriatic arthritis

FIRST LINE
Apremilast
Methotrexate

SECOND LINE
Biologicals

THIRD LINE
Combination therapy

Thank you