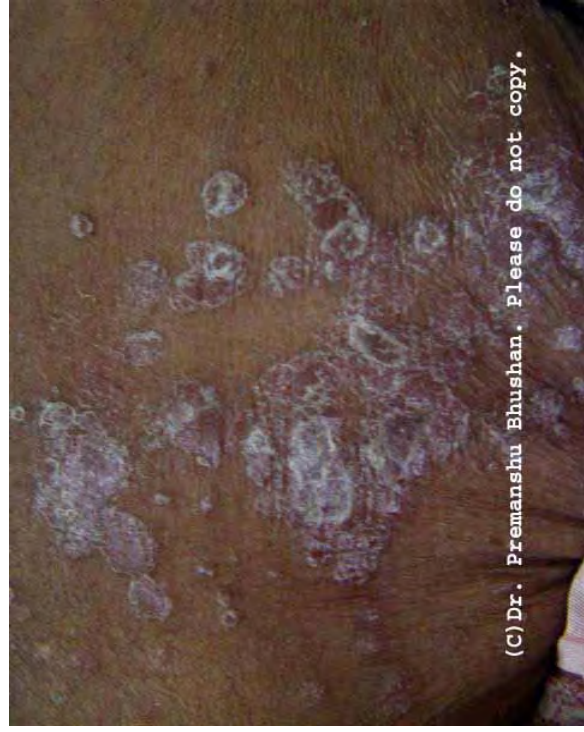


Psoriasis

- Well defined, deeply erythematous plaques, usually symmetrical on extensors
- Silvery (because of air trapped between scales), micaceous scale



Psoriasis

- Grattage test (Auspitz sign)



- Koebner's phenomenon



- Wornoff's ring

Guttate psoriasis

- Small raindrop like <1 cm sized plaques, symmetrically distributed on trunk
- Comes in crops
- Associated with Streptococcal sore throats
- Mainly in children
- Antibiotic (erythromycin) treatment is indicated



Pustular psoriasis

- Generalized (von Zumbusch):

- Acute, widespread, severe, life-threatening, emergency
- characterized by *lakes of pus*
- precipitated by WITHDRAWAL of SYST SEROID and others
- Rx:

- **DOC: pustular psoriasis is oral retinoid = acitretin**

- Methotrexate
- PUVA



Nail psoriasis: (10-50%)

- Pitting (random, irregular, deep and large) = Thimble pitting

Other causes of nail pitting;

- Alopecia areata (patterned pits),
Nail biting and trauma, eczema
- Onycholysis and oil-drop sign
- Subungual hyperkeratosis



Arthropathic psoriasis: 5-10%

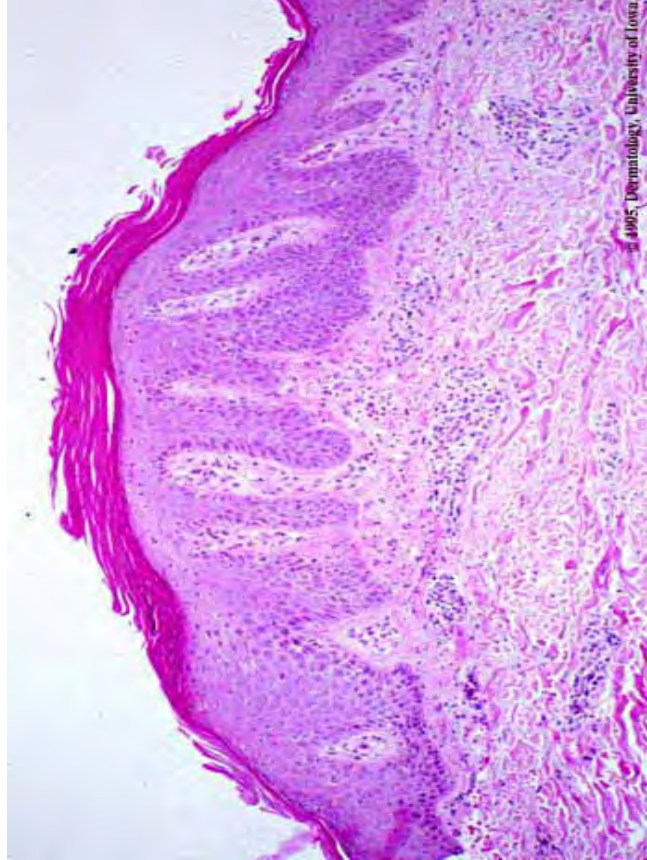
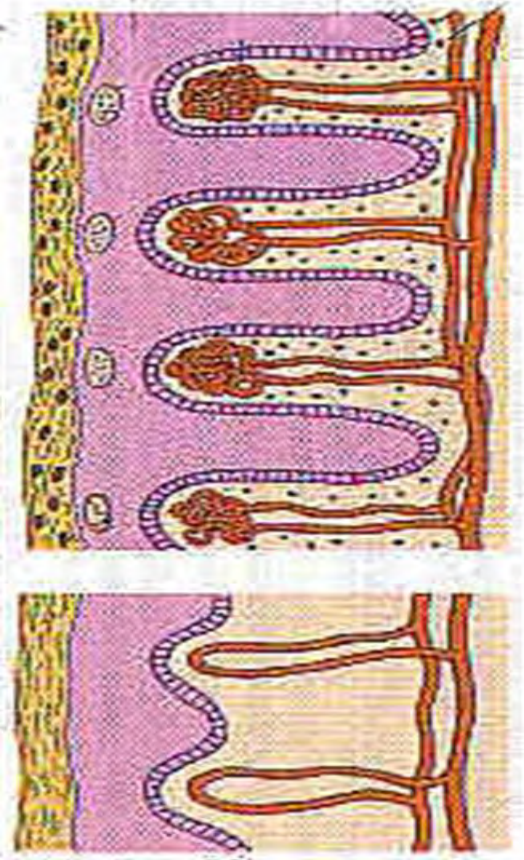
- HLA B-27
- Asymmetrical oligoarthritis: **MC**. One or few joints of the hand and feet leading to **sausage digits**.
- Distal IP joint disease: **most characteristic** but not most common.
- Arthritis **Mutilans**: destructive arthritis of fingers and toes with “**opera glass deformity**” or “**pencil in cup**” deformity.



(C) Dr. Premanshu Bhushan. Please do not copy.

Psoriasis: Histology

- HK with PK
- Munro's microabscess
- Hypogranulosis
- Acanthosis and papillomatosis with rounding and elongation of rete ridges
- Spongiform pustules of Kogoj
- Suprapapillary thinning
- Upper dermal vessel dilatation and tortuosity with mononuclear infiltrate



Lichen Planus

- Idiopathic inflammatory disease of skin with significant MUCOSAL and NAIL involvement
- CMI mediated autoimmune disease with possible association with HCV
- KOEBENERIZATION is characteristic



Lichen Planus

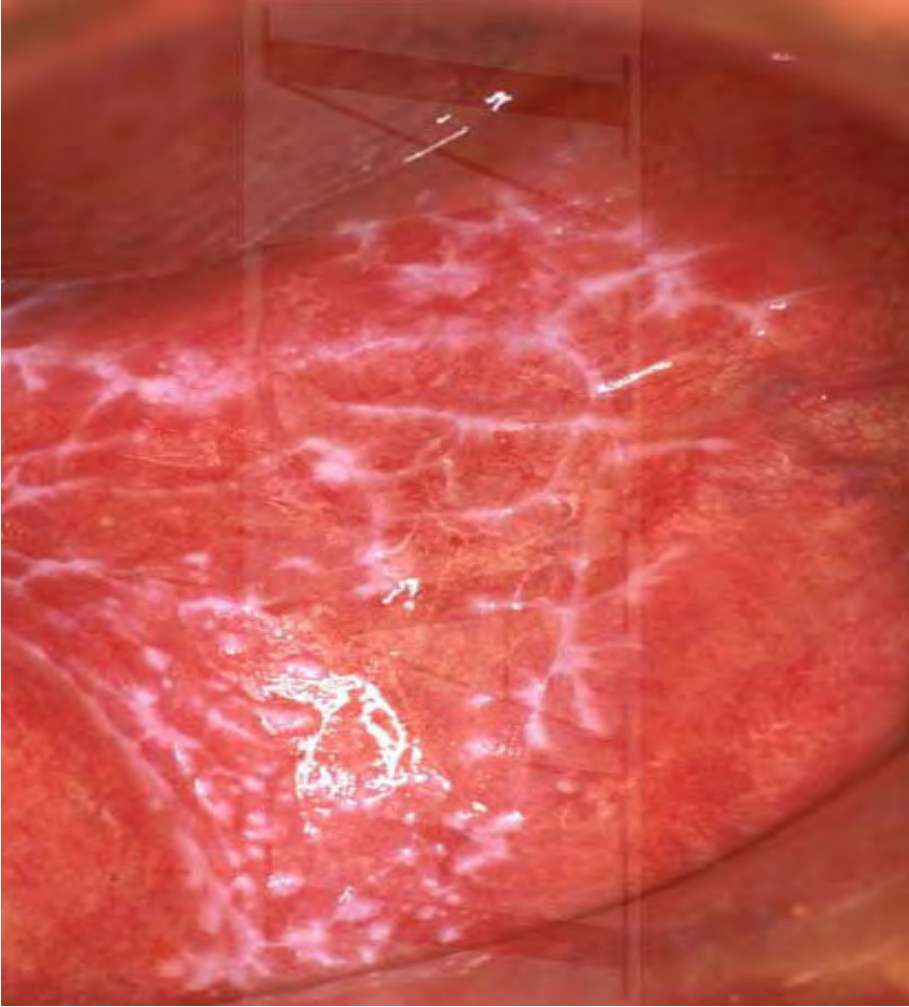
- **5 P's:** *pruritic, purple or violaceous, polygonal, plane topped, papules & plaques*
- White reticulate lines: *Wickham striae: Tyndall effect due to focal hypergranulosis*
- Flexor aspect of wrist, lumbar area, scalp, penis, oral mucosae and shins
- Possible nail involvement



Lichen Planus

Mucosal LP:

- 50% of pt
- Net-like white, non-removable, reticular pattern is *most characteristic*
- More chronic



Lichen Planus

Nail LP:

- 10-25% of pt
- Longitudinal ridging and grooving and scarring leading to **dorsal pterygium formation,**
- Difficult to treat



Lichen Planus

Scalp LP: Lichen planopilaris or follicular LP

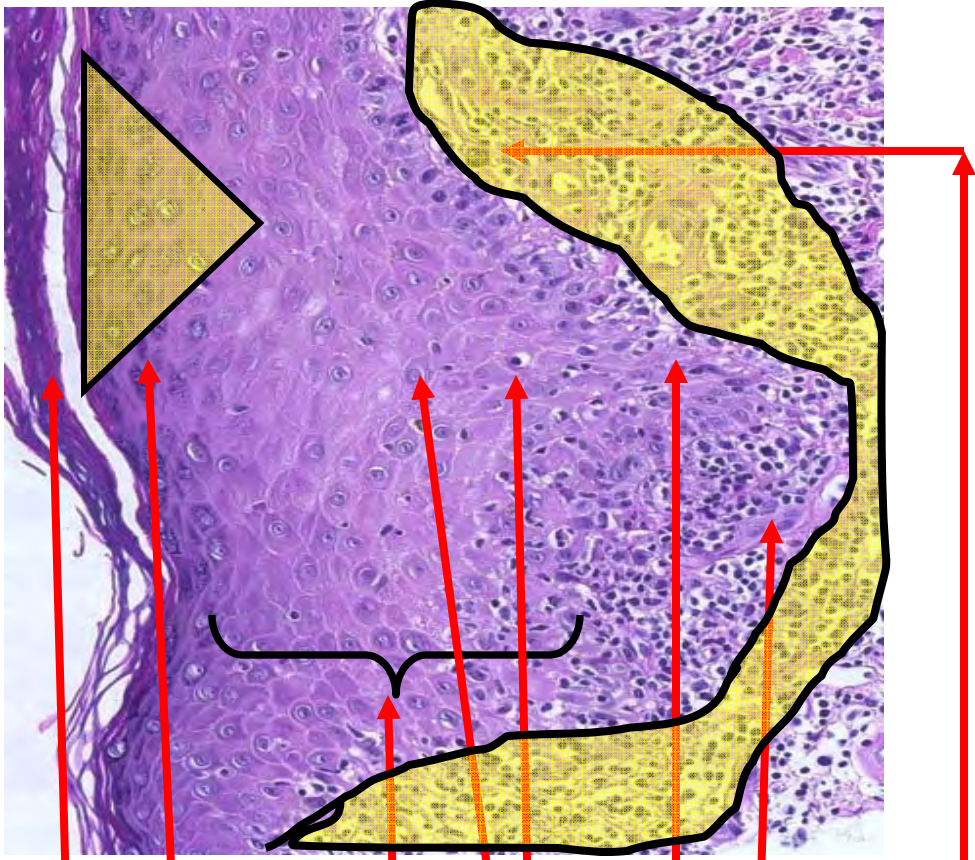
- follicular LP
- papules with atrophic scarring alopecia.
- Difficult to treat



Lichen Planus

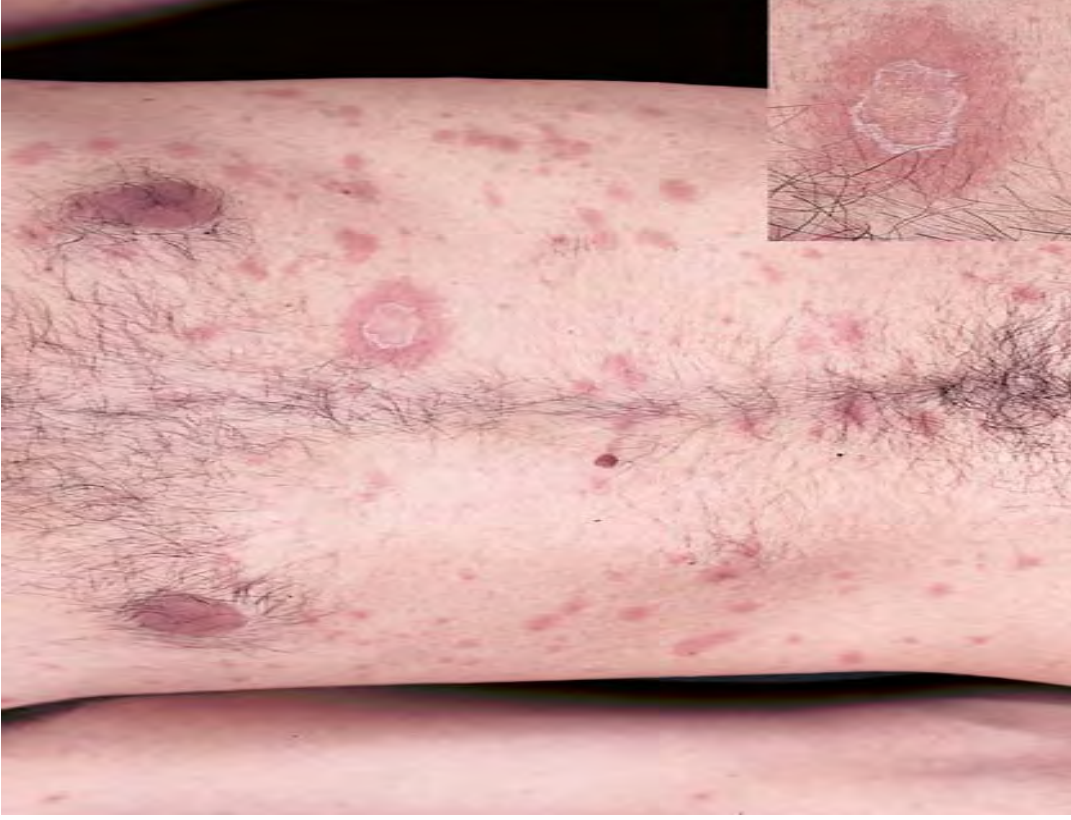
Histology

- *Hyperkeratosis without PK*
- *focal wedge shaped hypergranulosis*
- *irregular acanthosis (saw toothing)*
- *Civatte or colloid bodies (Apoptotic),*
- *basal cell degeneration (BCD),*
- *MAX-JOSEPH space*
- *band-like infiltrate of lymphocytes at the DEJ.*
MOST CH.



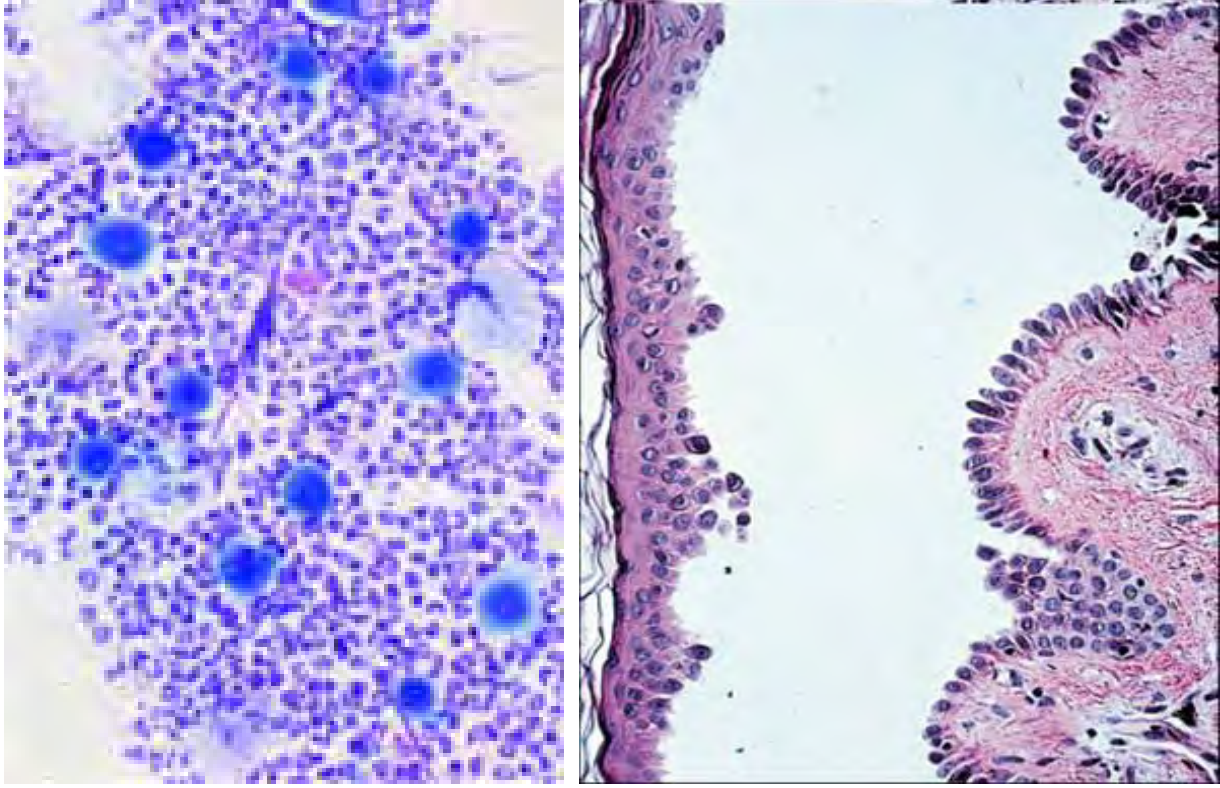
PITYRIASIS ROSEA:

- Etiology: ? (*HHV7*).
- C/F:
 - **herald patch** is followed in a few days to weeks by **eruption of multiple smaller lesions** following **skin lines** in a **"fir tree"** pattern with typical peripheral **collarette scale**
 - **Course:** *Spontaneous resolution* after 4-8 weeks.
 - **Differential Diagnosis:** *Secondary syphilis* is an important differential



Pemphigus vulgaris • Clinical appearance



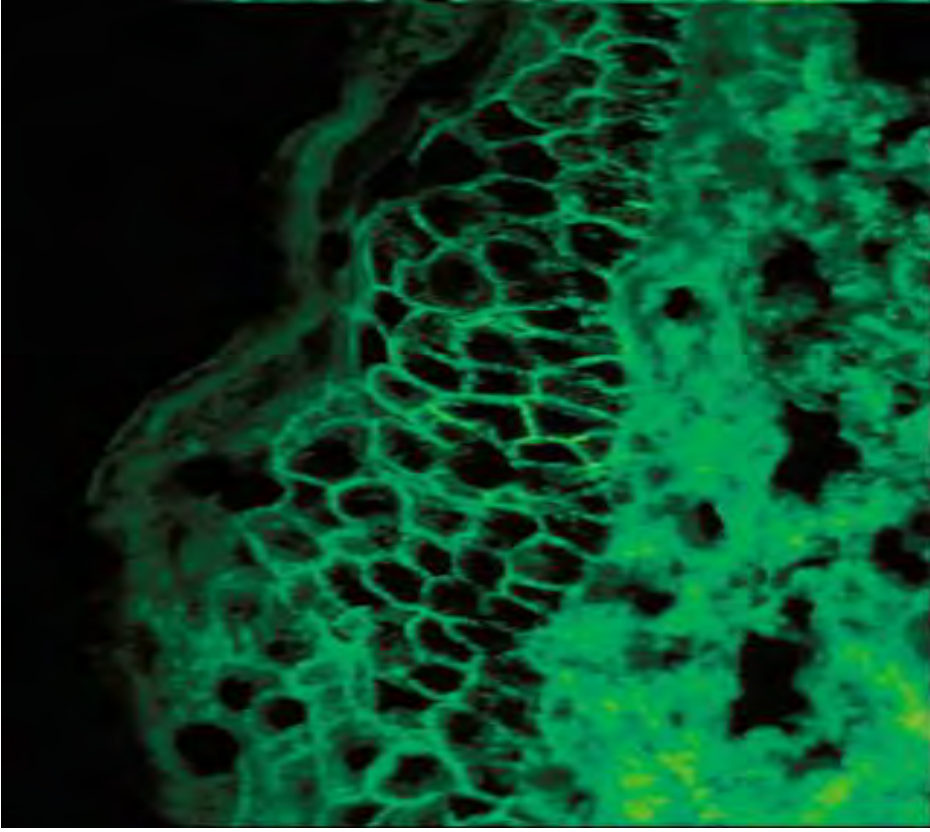


Pemphigus vulgaris

- Tzanck smear: characteristic acantholytic cells.
- Skin biopsy: Fresh blister (<48hr) shows Suprabasal cleavage, acantholysis with row of tombstone appearance.

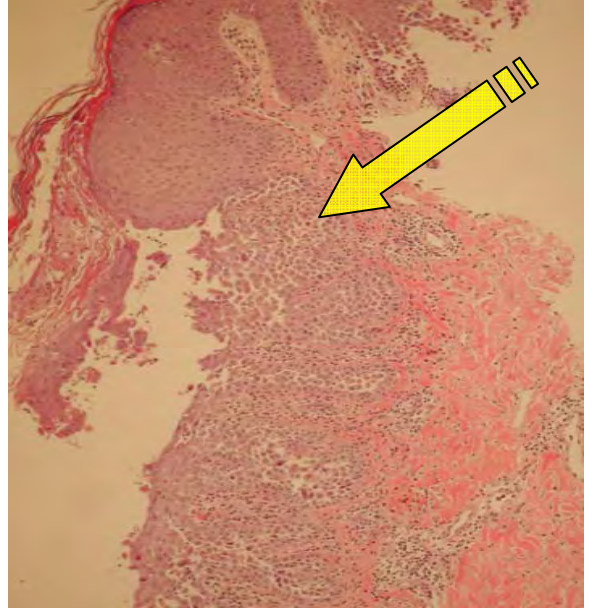
Pemphigus vulgaris

- Skin biopsy for Direct Immunofluorescence (DIF): Perilesional skin shows the presence of intercellular IgG and C3 deposition within the epidermis in a Fish Net Pattern.



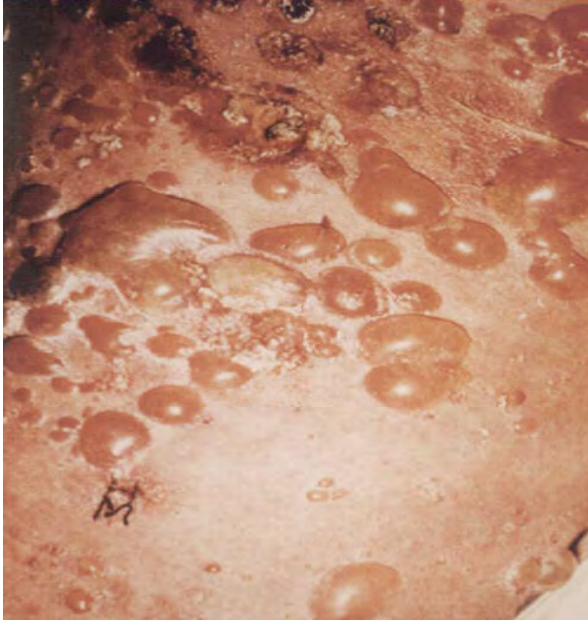
HAILEY-HAILEY DISEASE: (FAMILIAL BENIGN PEMPHIGUS)

- AD disease
- minute vesicles, erosions, crusting, fissures and foul smell in the intertriginous areas
- caused by a defect in calcium pump of cadherin junctions (desmosomes) of epidermal cells leading to acantholysis (ATPase2C1).
- It can be confused with intertrigo, candidiasis & tinea cruris.
- **(IMP: Histologically appearance is likened to a “dilapidated or crumbling Brick-wall”)**



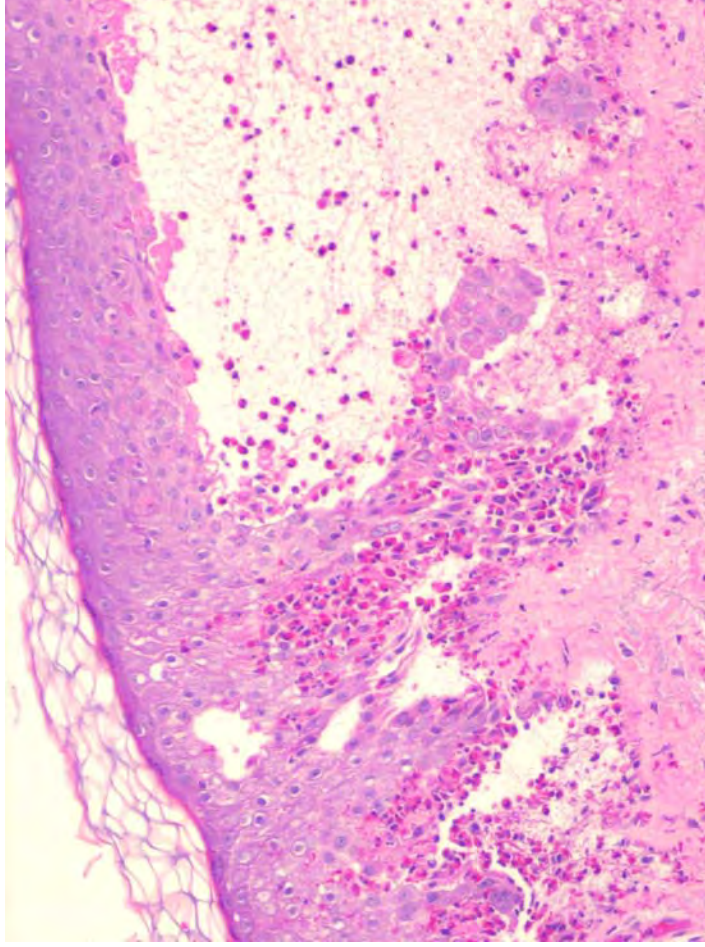
Bullous pemphigoid

- Prototype of subepidermal blistering dis
- commoner than pemphigus vulgaris & occurs in old age (i.e. >60)
- *autoantibody reacting with basement membrane zone: major & minor bullous pemphigoid antigens (BP AG 1&2 with 230 & 180 KD respectively)*
- autoantibodies localize to the **epidermal side (ROOF) of NaCl split skin**



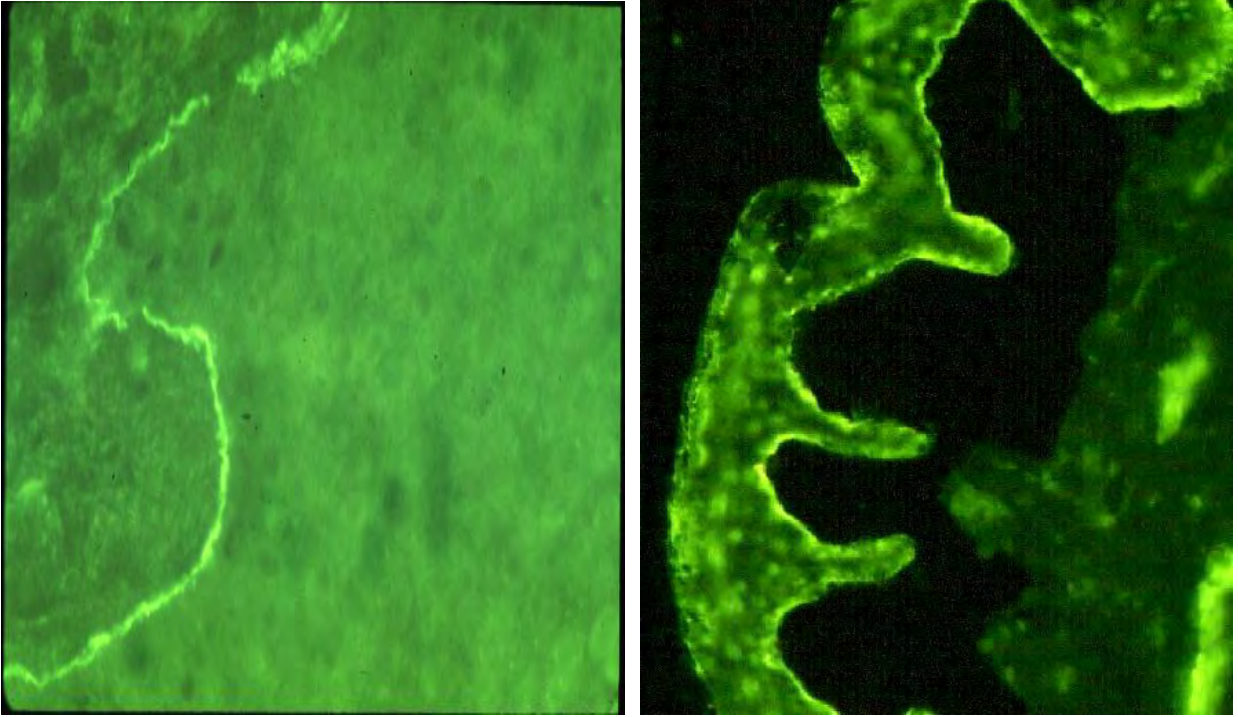
Bullous pemphigoid

- Tzanck smear:
No acantholytic cells, many eosinophils, few neutrophils
- Histology:
subepidermal blisters i.e. intact epidermis forms the roof, with mixed dermal infiltrates, especially eosinophils.



Bullous pemphigoid

- DIF: linear deposition of C3 +/- IgG at DEJ
- Salt split IF: antibodies in the roof of salt split



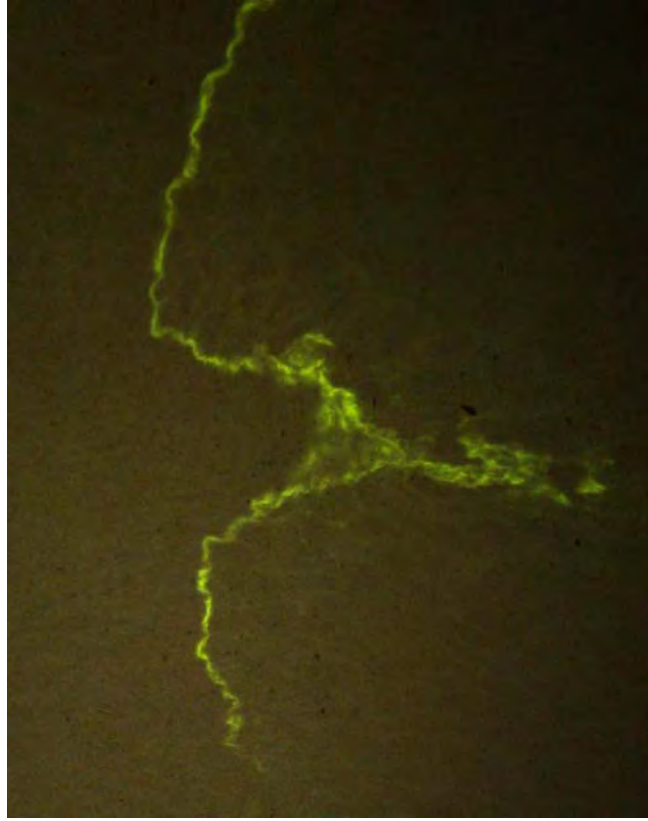
LINEAR IGA DISEASE

- Clinical Picture



LINEAR IGA DISEASE

- **Histology:**
the picture resembles DH or BP.
- **DIF:**
Characterized by **linear IgA deposition** in basement membrane zone (BMZ).



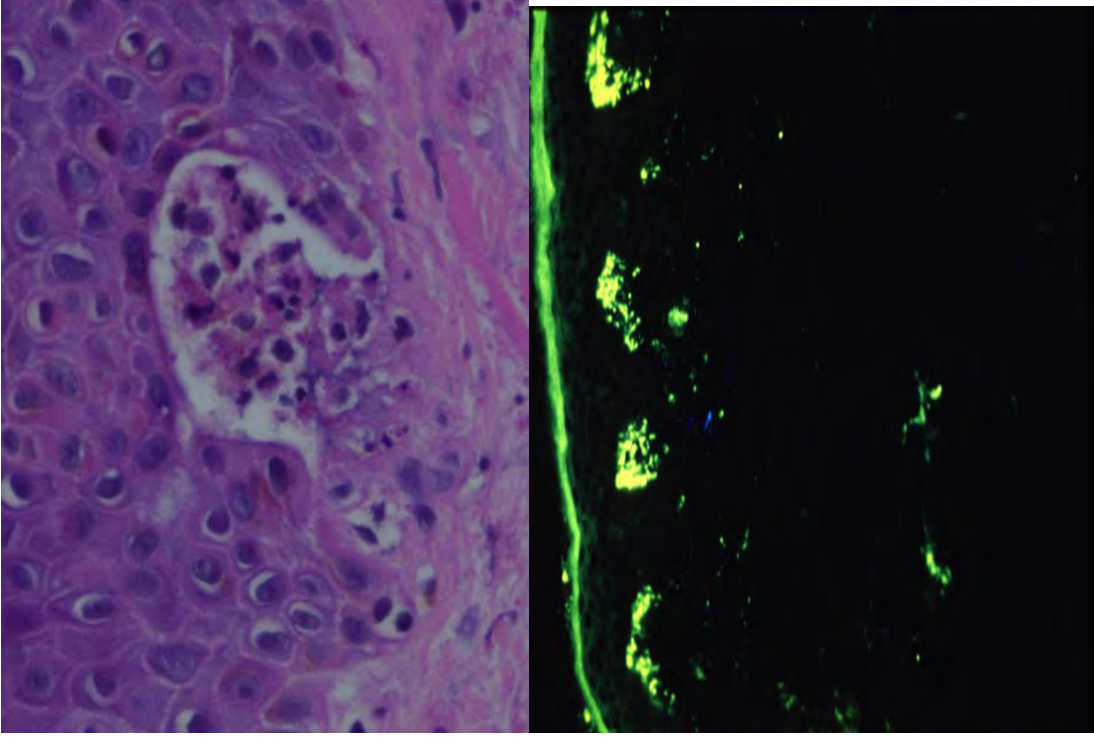
DERMATITIS HERPETIFORMIS

- Intense itching
- **Grouped paurovesicles** which are usually excoriated and scabbed and needs to be differentiated from Scabies and acute atopic dermatitis.
- The sites of predilection are **elbows and knees, buttocks, upper back and face.**
- Intact vesicles seldom seen since they are ruptured by self scratching. Lesions heal with no scarring.



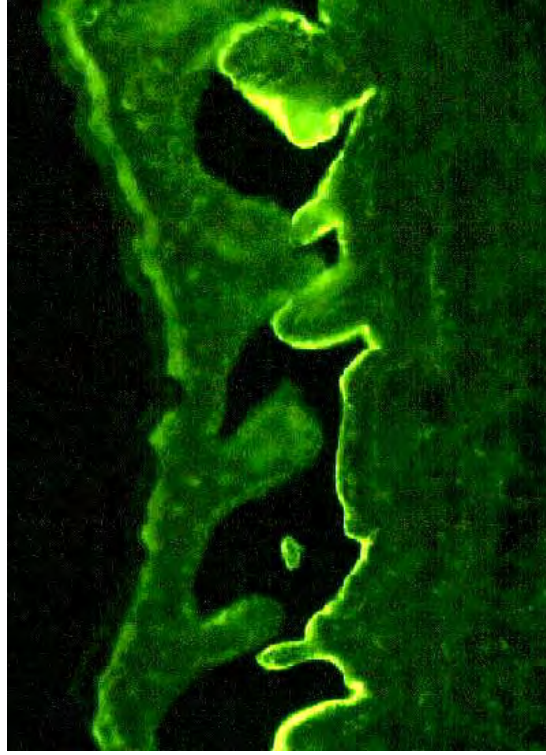
DERMATITIS HERPETIFORMIS

- Histology: Neutrophilic Microabscess in dermal papillary tip is characteristic.
- DIF: It shows granular IgA deposition in BMZ.
- Screening for the presence of celiac disease.
- Provocation test: iodides in diet or patch.



EPIDERMOLYSIS BULLOSA ACQUISITA (EBA)

- An acquired IMMUNOBULLOUS disease mimicking BP
- Bullae tend to occur at sites of trauma.
- The IgG in these patients binds to the anchoring fibrils (COL 7A1) attached to the Lamina densa.
- EBA can be differentiated from BP on a salt-split DIF only (here in BASE of split)



EPIDERMOLYSIS BULLOSA CONGENITA



- Genetically inherited
- No AUTOANTIBODIES
- MECHANOBULLOUS → Trauma prone sites
- 3 main types:
 - EB simplex: **K-5/14**: split thru basal layer without much sequale
 - EB junctionalis: **Laminin 5, $\alpha_6\beta_4$ integrins**: split thru lamina lucida with significant scarring
 - EB dystrophicans: split thru lamina densa/ sublamina densa (**defective Collagen 7**) → severe scarring mainly in AR form

Irritant CD

- **Commonest irritants:**
- ***Water (MC)***, soaps, solvents, alkalis, acids, feces and urine → *Napkin dermatitis, detergents, solvents and vegetables etc* → ***Housewives' eczema.***



ACD

- Individual susceptibility
- Requires sensitization or priming
- Latency
- Memory T cells are involved
- delayed hypersensitivity reaction (Type IV)
- Patch test
- MC: Nickel



ACD

- ***Airborne allergic contact dermatitis (ABCD):***

- *Airborne allergens*
- *Exposed sites*
- *May spread to all over body*
- *Parthenium hysterophorus (congress grass) is commonest cause of ABCD in India.*
- *Sesquiterpene lactone*



ATOPIC DERMATITIS



Phases of AD:

- *Infantile: Face & flexures, trunk f/b extensors when crawling*
- *Children: Flexures*
- *Adults: Flexural*

ATOPIC DERMATITIS

ATOPIC STIGMATA:

- *The lateral thinning of the eyebrows is termed "Hertoghe's sign" .*
- *A deep fold (Dennie-Morgan-fold) can be found under the lower lid*





ATOPIIC DERMATITIS

ATOPIIC STIGMATA:

- *Hyperlinear palms*
- *P. Alba:*
 - *white area (alba) with scaling (pityriasis.),*
 - *common in children, atopics, dry skin and malnutrition.*
 - *Usually multiple ill-defined patches on face, neck upper trunk*
- *Keratosis pilaris: Antenna sign*

ATOPIC DERMATITIS *ATOPIC STIGMATA:*

- *Increased incidence of infections: Eczema herpeticum or Kaposi's varicelliform eruption: severe widespread HSV infection*



Seborrheic dermatitis

- *distinctive morphology*: Red lesions covered with yellowish, greasy scales
- *distinctive distribution*: (scalp, face and upper trunk) which are areas rich in sebaceous glands.
- **infants: Scalp (Cradle Cap)**
- Severe course with *HIV and Parkinsonism*. Also associated with *Cerebrovascular accidents*.
- Rx: topical antifungals, selenium sulfide and steroids



ASTEATOTIC ECZEMA (XEROTIC ECZEMA, ECZEMA CRAQUELE)

- elderly and people with dry skin
- *winter*
- reduction of in skin surface lipid
- Extensor extremities → *dry, slightly scaly and criss-crossed on the surface (crazy-paving)* to produce a reticulate pattern with *minimal inflammation*

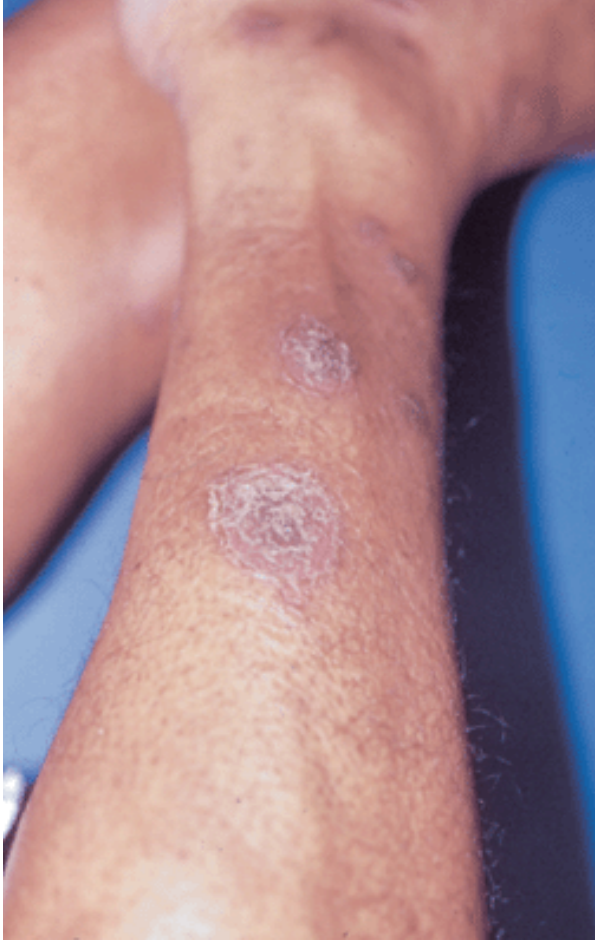


LICHEN SIMPLEX (CIRCUMSCRIBED NEURODERMATITIS)

- *circumscribed area of lichenification*
- Chronic itching and rubbing
- Idiopathic
- Easily accessed sites: wrists, elbows, ankles, back of neck, genitalia



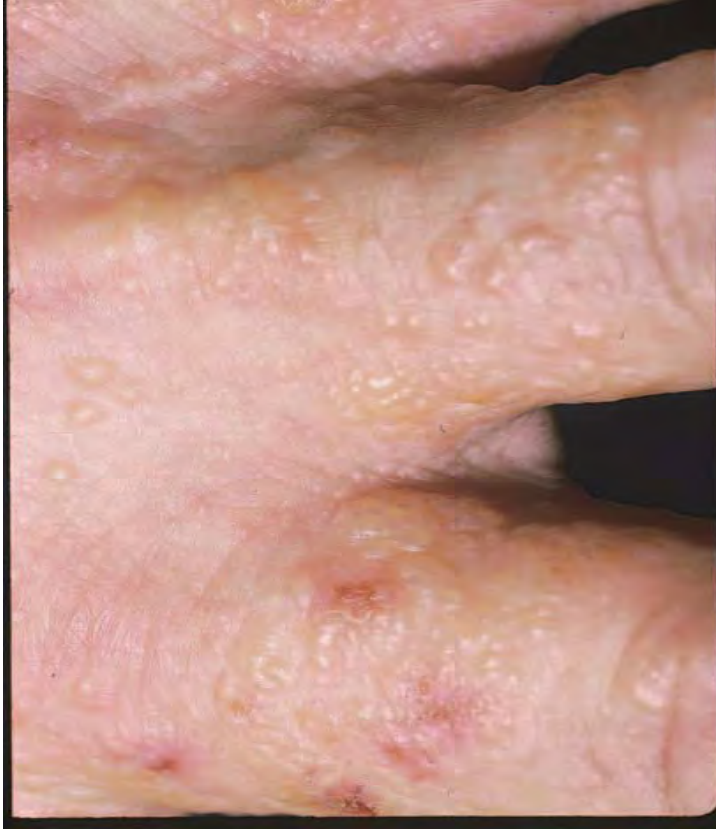
Nummular dermatitis (Discoid Eczema)



- *circular or oval plaques of eczema with a clearly demarcated margin.*
- *coin-shaped, 1 to 5 cm in diameter itchy plaques.*
- *There are commonly distributed on the extremities*
- *Usually symmetrical*

Popmopholix or Dishydriotic eczema

- *vesicular palmo-plantar dermatitis*
- *deep-seated **Tapioca or sago-grain like vesicles** on palms and soles and sides of fingers,*
- Etiology: Idiopathic, allergic contact reactions (nickel), atopy,
- Dyshidriosis is NOT a must.
- Management:
 - self resolving in 2-4 weeks
 - topical corticosteroids, on occasion short course of systemic corticosteroids



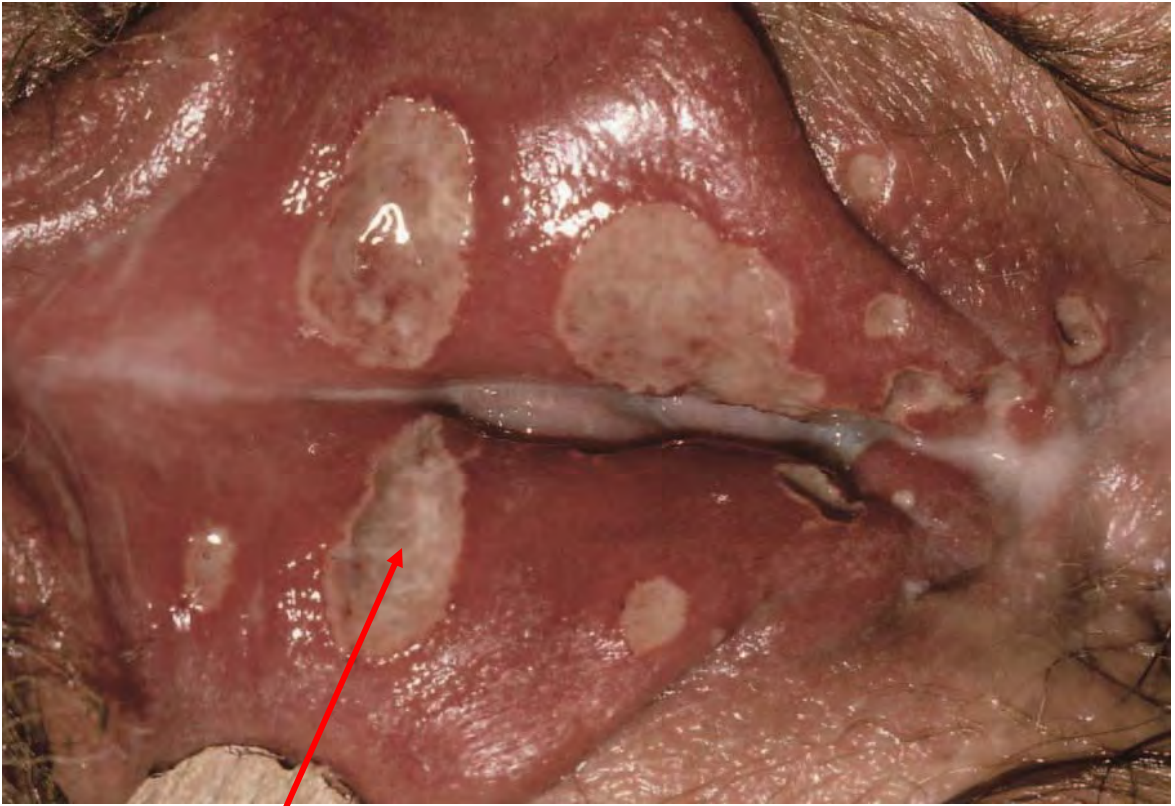


CHANCRE

- Clinical picture

CHANCROID

- Chancroid
- Giant Chancroid



Herpes genitalis

- Primary HG



- Recurrent HG



LGV • Sign of Groove



Granuloma Inguinale (Donovanosis)



- Clinical picture

Syphilis

SECONDARY SYPHILIS:

- **Systemic:** fever, malaise, anorexia
- **Skin:** (in 75%):. The lesions are *symmetrical, polymorphic (never Vesico-bullous);, asymptomatic affecting palms and soles.*
- **Buschke Olendroff sign (BO sign) +:** rebound tenderness



Syphilis: S2

- Generalized lymphadenopathy
- Mucosal involvement (in 1/3rd): over genitalia and mouth:
 - *Mucous patches:*
 - **Snail-track ulcer:**
 - **Condylomata lata**



Infectivity: Mucous patches > C lata > Chancres > S2 skin lesions

URETHRAL DISCHARGE: Gonorrhea

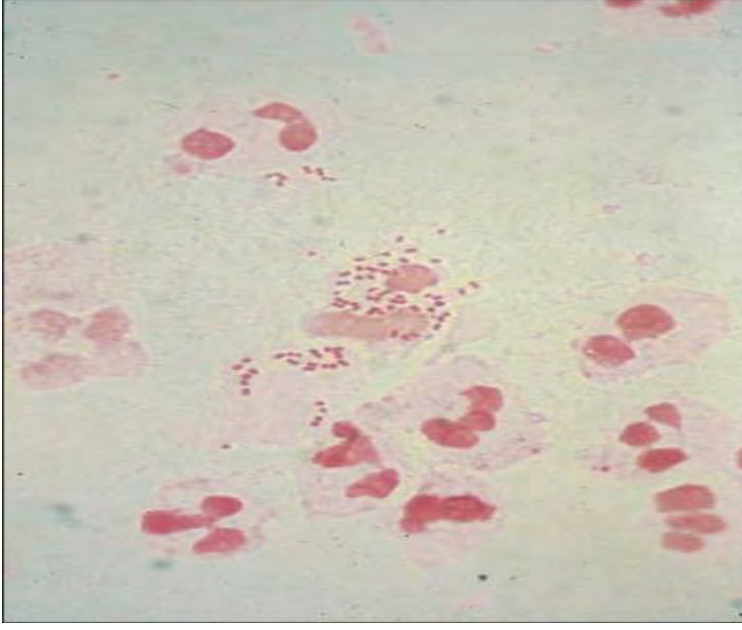
- *Neisseria gonorrhoeae*
(gonococcus) GNDC
- Incubation period: 1-10 days
- MALES:
 - *acute gonococcal urethritis* → burning micturition, frequency, purulent discharge per-urethra
 - NOT ALWAYS *frankly purulent* and patient may be asymptomatic.
 - complicated by *Tysonitis, periurethral abscess, littritis, cowperitis, prostatitis, seminal vesiculitis and epididymitis*.



URETHRAL DISCHARGE

DIAGNOSIS:

- Gram's staining. Presence of *GNDC* inside the *PMN's* is *diagnostic of Gonorrhoea*. (95% sensitive and specific in males while sensitivity is less in *cervical, rectal, oropharyngeal cases* → *Do a culture.*)
- **Culture:** on *Thayer-Martin* medium. *Transport on Stuart's medium*
- There is *no useful serological test for gonorrhoea*.



TREATMENT:

- *Cefixime* or *ceftriaxone*
- **V.V. IMP:** **Syndromic approach** advocates **ADDING drug for Chlamydia**
For all cases of urethral discharge:
Cefixime 400 mg stat + Azithromycin 1 g stat.

GENITAL WARTS: CONDYLOMA ACUMINATA

- HPV: 6, 11 most commonly; Types 16, 18, 31, 33, and 35 are strongly associated with genital dysplasia and carcinoma.
- **C/F:** Multiple, soft, filiform papules, discrete with some coalescing to raspberry-like lesions, on the glans penis and prepuce or perianally.
- **Diagnosis:**
 - primarily **clinical**;
 - **Acetowhitening:**
 - **Pap smear** All women should have an annual Pap smear.



TT

Skin lesions

- Number: 1-3
- Symmetry: Localized
- Size: Large
- Borders: Regular: Well-defined raised border and depressed center (*saucer right side up*)
- Sensation: Total anesthesia
- Hair: Total loss
- Surface: Dry and scaly



BT

Skin lesions

- Number: Single or few (3-10)
- Symmetry: Localized
- Size: Large → small
- Borders: Well-defined but with areas of poor definition (***Serrated***); → ***Satellite lesions*** near margins
- Sensation: Significant hypesthesia
- Hair: Significant loss
- Surface: Significantly Dry +/- scaly



Skin lesions

BB

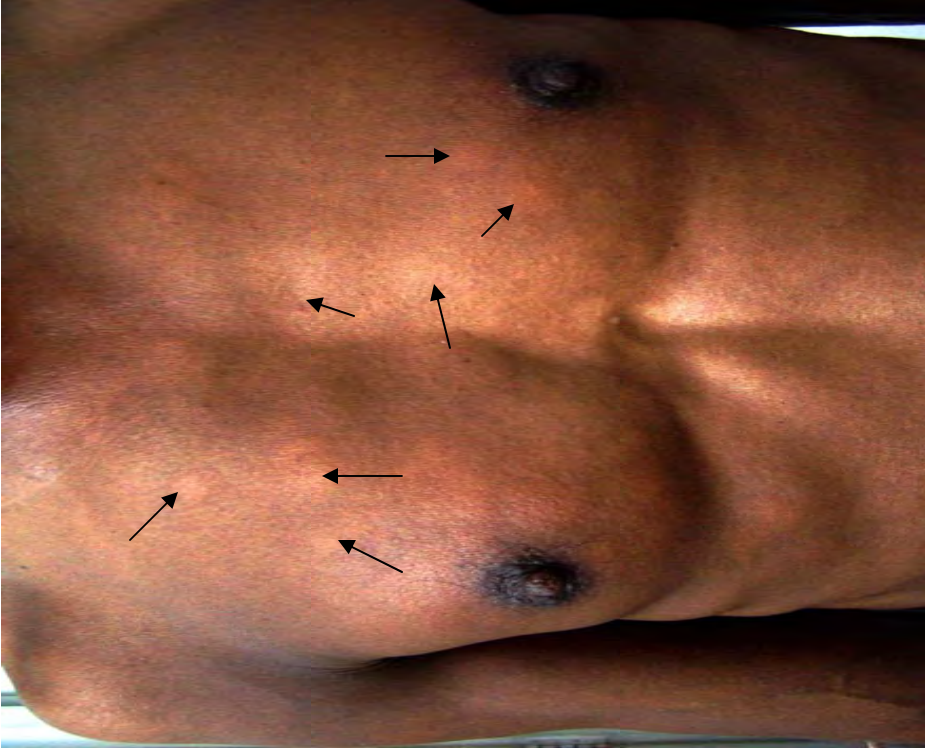
- Number: Several (10-30):
- Symmetry: Asymmetrical
- Size: small > large
- Borders:
 - → Both well defined and ill defined lesions coexist (*polymorphic*) in *equal number*
 - → *Bizarre geographical* lesion
 - → *Annular* lesions
 - → *Swiss cheese* or *punched out* lesions are characteristic
- Sensation: Mild-moderate hypesthesia
- Hair: mild loss
- Surface: dry/ shiny



Skin lesions

- Number: Numerous, uncountable
- Symmetry: B/L symmetrical
- Size: small
- Borders: Ill-defined
- Sensation: Normoaesthetic
- Hair: normal
- Surface: shiny

LL



LL: Other Imp Details

- *oil-smear appearance*
- shiny and succulent nodules.
- infiltration of the facial skin especially over the forehead, the zygoma, the chin, and the earlobes
- lateral madarosis
- depressed nasal bridge
- leonine facies.
- Nasal symptoms (stuffiness, epistaxis) → crusting & earliest symptoms.



LL: VARIANTS

- **LUCIO LEPROSY (lepra bonita or beautiful leprosy):**
 - Shiny, thickened skin, loss of body hair, and widespread sensory loss without distinct leprosy lesions on skin.
 - variety of LL Hansen's disease.
 - Usually in Mexico, central America



- **HISTOID LEPROSY:**
 - firm, succulent papules or nodules ON rather than within the skin.
 - **relapse, primary dapsone resistance** and rarely de novo also in LL.
 - They have a **characteristic histology of bundles of spindle cells** a la dermatofibroma
 - **highly bacillated** but WITHOUT globi.

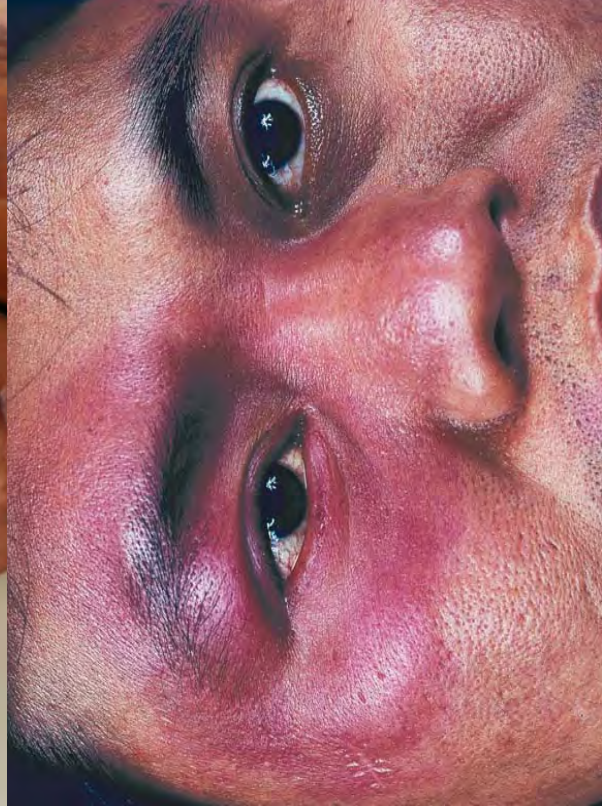
Leprosy: Some Imp Details

- **Deformities** are major cause of morbidity with leprosy. Hand deformities include mainly *claw hand* (Ulnar nerve paralysis). *Foot drop* is commonest complication in foot.
- trophic ulcerations.



Type-1 Lepra Reaction

- erythema, edema, and tenderness of the existing skin lesions without new lesions
- In downgrading type some new lesions may appear
- Resolving lesions desquamate
- Neuritis is the major complaint and can lead to significant deformities.
- Sometimes there is SILENT neuritis



Type-2 lepra reaction

- Systemic features are SEVERE: fever, malaise, arthralgias, Myalgias
- Cutaneous lesions: ENL: multiple, symmetrical, tender, erythematous, S/C nodules in CROPS on face, extremities and trunk.
- They heal in 3-7 days with bruise like changes
- Existing skin lesions remain unchanged



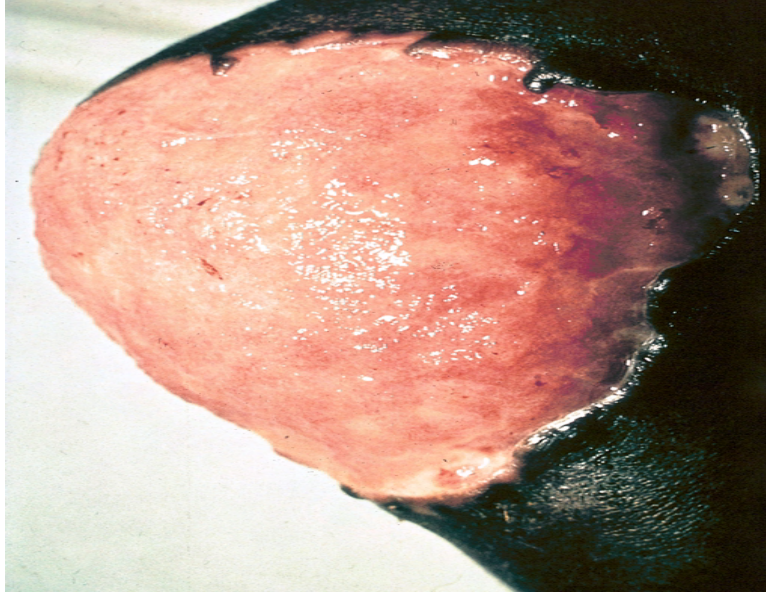
ATYPICAL MYCOBACTERIAL CUTANEOUS INFECTION:

- *M. marinum*: **Swimming pool granuloma or Fish Tank Granuloma**
- **C/F**: Red-brown asymptomatic papules which enlarge into plaques with verrucous surface at the site of *inoculation* (extremities) in individuals working with aquarium etc, usually **without LN enlargement** but sometimes spread along lymphatics gives a *sporotrichoid pattern*.
- **Rx**: ATT poorly effective. **Minocycline** is most effective drug.



ATYPICAL MYCOBACTERIAL CUTANEOUS INFECTION:

- ***M. ulcerans*: Buruli ulcer:**
- Develops as a *painless SC swelling* which ulcerates to form a *painless, deeply undermined grossly necrotic ulcer with exposure of underlying fat* usually present on extremities and persisting for years *without LN enlargement*
- Malnourished/ immunosuppressed
- Rx: ATT ineffective. *Excision and grafting* may be required though *Rifampicin and TMP-SMX* may be effective.



Primary TB

TB Chancre :

- 5% of Cutaneous TB (*rare*)
- Cut. *analog* of pulmonary *Ghon's complex* (skin lesion and draining lymph node)
- Well defined *painless nodule* breaking down to a *non-tender ulcer with undermined edges* occurring on *extremities and face* in mainly *children* following a *penetrating injury* associated with *regional LN enlargement* (3-8 weeks).



Secondary TB

Lupus vulgaris



- *Usually solitary, asymptomatic, well defined, red-brown annular plaque*
- *extends peripherally with central atrophy and scarring and an advancing and a receding edge.*
- *Sentinel lesions*
- *The lesion is soft on probing (gelatinous consistency) and **diascopy** reveals apple-jelly nodules)*

Secondary TB

TBVC
(Tuberculosis
verrucosa cutis)

Syn: prosecutor's
wart, anatomist's
wart

- Secondary re-infection TB in a patient with good immunity
- seen on exposed sites (feet > hand).
- Irregular, verrucous red-brown plaque with rough horny surface and deep clefts and fissures with crusting and purulent discharge.
- **LN spared** unless secondarily infected.



Secondary TB

Scrofuloderma :

Syn: TB
Colliquativa Cutis,
King's Evil



- **MC Cut. TB in India.**
- Secondary reactivation tuberculosis spread by contiguity.
- A **pre existing TB focus (Lymph Node MC, bone, joint, tendon, lacrimal apparatus etc)** breaks through the overlying skin to form a characteristic painless TB ulcer (sinus) with bluish margins and undermined edges.
- The ulcer (sinus) is fixed to underlying structure (eg. LN).
- Heals with puckered or cord-like scars.

Secondary TB

TBCO (Tuberculosis cutis orificialis)



- *Rare TB of mucosal orifices and adjacent skin in patients with advanced visceral (Genitourinary, gastrointestinal and pulmonary) TB due to autoinoculation.*
- *Clinically presents as PAINFUL shallow ulcers at the skin near mouth, anus, and urethral meatus.*

TUBERCULIDS

Lichen scrofulosorum:



- *Grouped lichenoid papules with perifollicular pattern over the trunk.*
- found in *children* or young adults
- Sweat gland and perifollicular epitheloid cell granuloma without caseation

Bacterial Infections

- **ERYSEPLOID:** rare infection caused by *Erysiplothrix* in *fisherman, butchers* presenting as painful, tender, erythematous lesion with a purplish hue.

ERYTHRASMA:

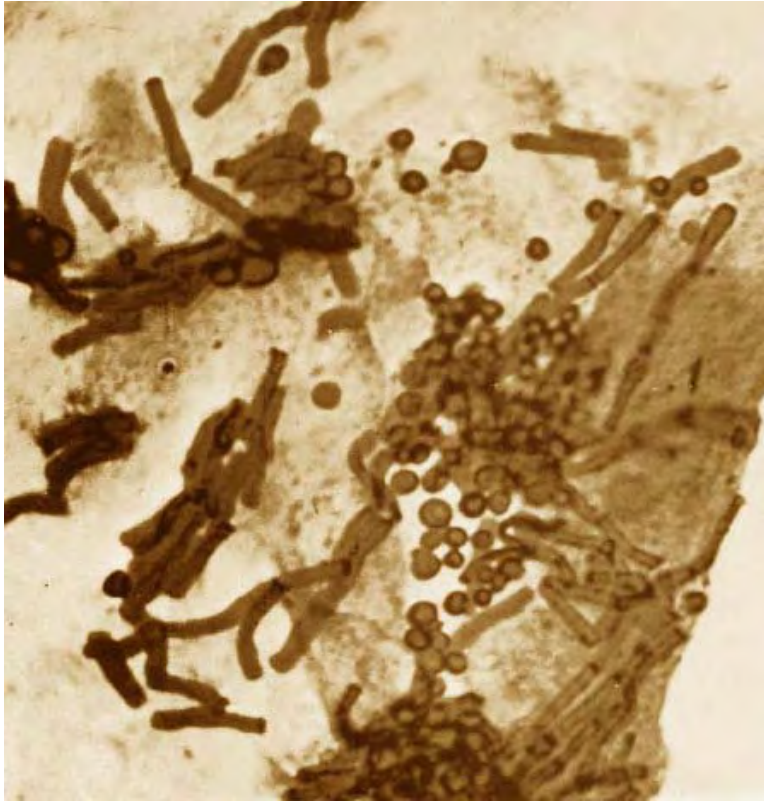
- *Corynebacterium minutissimum.*
- reddish-brown, scaly and finely wrinkled macules in **Axillary and genitocrural areas.**
- characteristic "**coral-red**" fluorescence under Wood's light.
- Rx: 1) Oral erythromycin
2) Topical : clindamycin, whitfield's ointment or miconazole



Pityriasis versicolor:



Clinical Picture



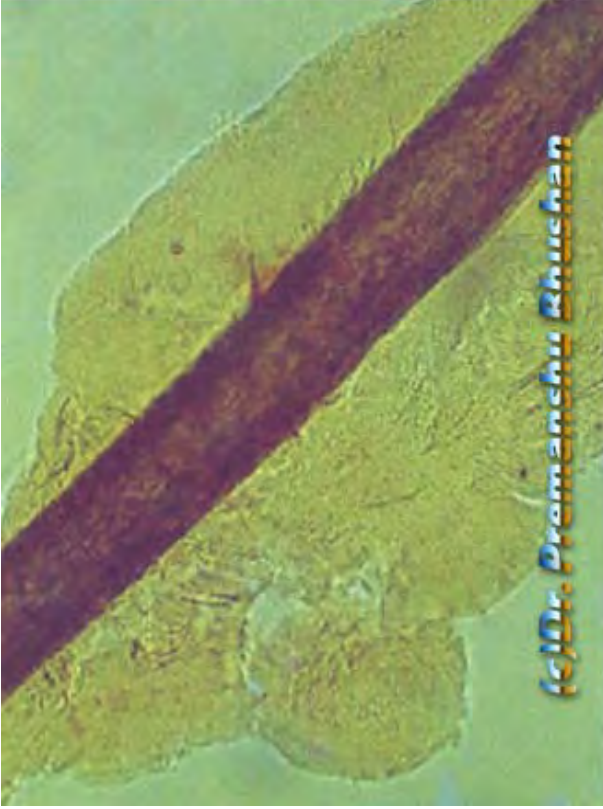
KOH: Spaghetti & Meatball

Tinea nigra

- *Exophiala (Phaeoannellomyces) werneckii*
- *Brown or black asymptomatic annular lesions*
- **Palms/ soles**
- Western Hemisphere
- Rx: topical keratolytics (sulfur/ salicylic acid), scraping, antifungal



Piedra



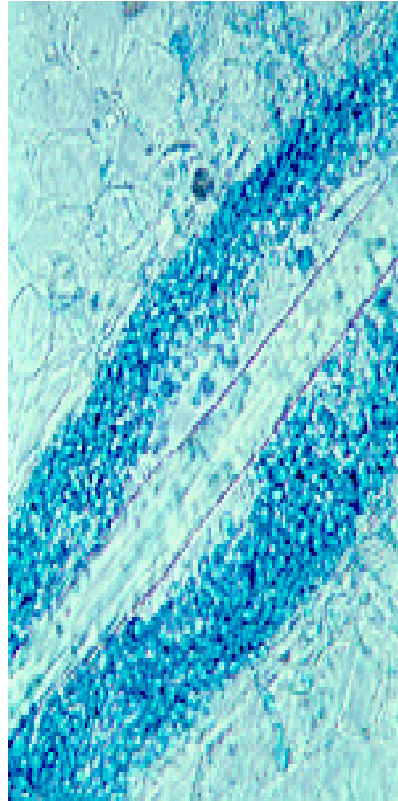
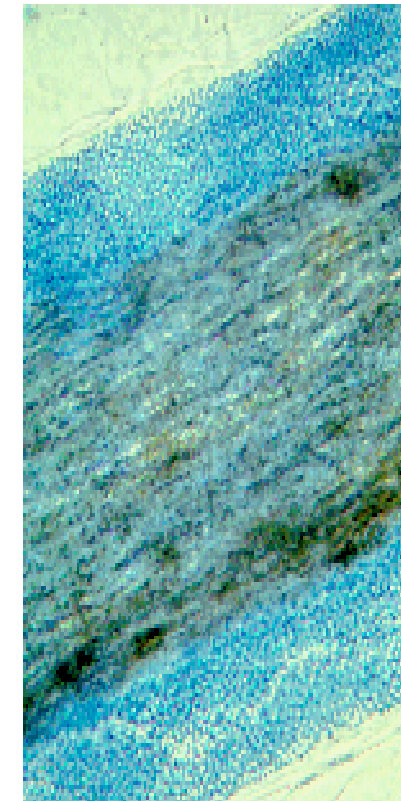
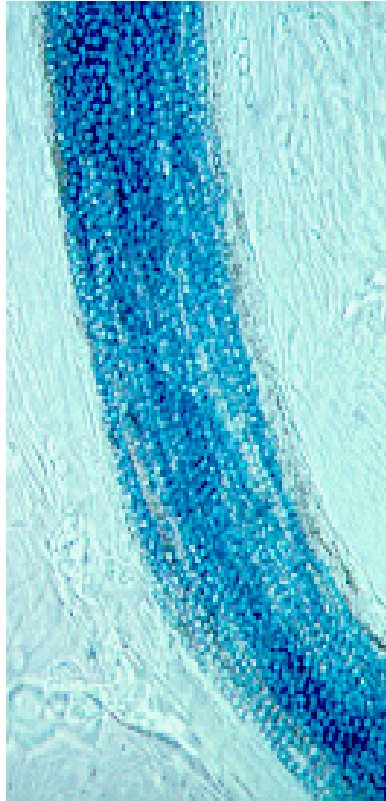
- ***superficial infection of hair shaft***
- **Nodules** along the hair-shaft: nodule is the ascomycete fruiting body of the fungus, known as an ascostroma
- In tropics
- does not fluoresce under Wood's light
- ***Trichosporon beigelii*** → white **Piedra** → **easily detached**
- ***Piedra hoartae*** → black **Piedra** → **very adherent**
- Rx: SHAVING, salicylic acid, Azoles, Formalin shampoos

Tinea capitis

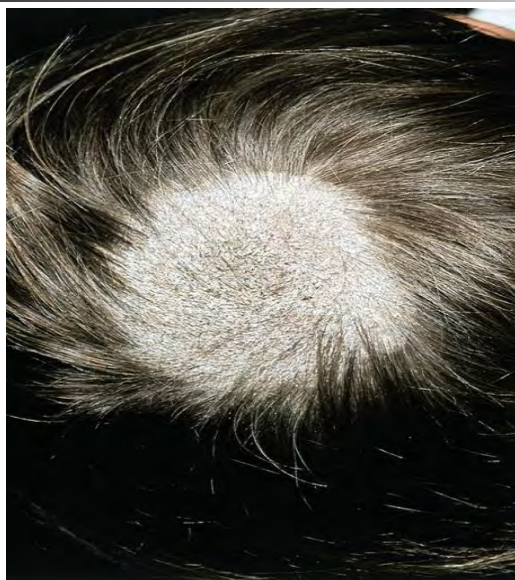
- ECTOTHRIX



- ENDOTHRIX



Tinea capitis: NON-Inflammatory



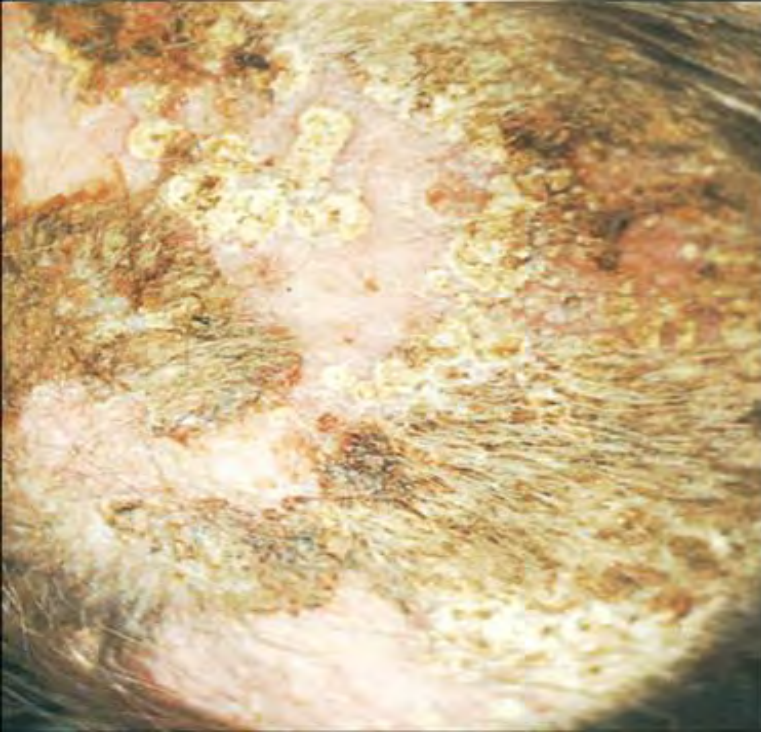
CATEGORIES	CLINICAL APPEARANCE
Grey patch	• Ectothrix • <i>Microsporum sp.</i> • Greenish fluorescence • one or several patches of scaly scalp with hairs broken just above the level of the scalp • hair is lusterless and gray (covered with arthrospores)
"Black dot"	• Endothrix • <i>T. tonsurans, violaceum</i> • hairs are notably fragile and break easily at the level of the scalp → looks like "black dots".

Tinea Capitis: Inflammatory

- **KERION:**
 - Severe *tender, inflammatory, boggy, cystic swelling with easily plucked hair*
 - Caused by zoophilic organisms (*M. canis*, *M. nanum*, *T. equinum*, *T. mentagrophytes* var. *mentagrophytes*)
 - Scarring alopecia
- **Agminate folliculitis:**
 - Less severe inflammation than kerion with sharply defined, dull red plaques studded with follicular pustules.
 - Caused by zoophilic species



Tinea Capitis: Inflammatory



- FAVUS: honeycomb
- *T. Schoenleinii*
- Jammu & Kashmir
- *cup shaped yellow scutula covered with crusts & foul smell*
- endothrix-style growth, but without the arthroconidia
- channels are formed within the hair shaft → as air bubbles move along these channels in KOH mount
- Woods lamp: bluish fluorescence
- Scarring alopecia

T faciei/ barbae

- Facei: children, females:
 - Sharply marginated, erythematous, scaling, and crusted plaques Note asymmetry.
 - May be associated with T. capitis
- Barbae:
 - adult males → shaving with infected material
 - closely resembling tinea capitis, with invasion of the hair shaft.
 - Pustular folliculitis
 - Easily removable hair
 - Rarely KERION
- **Tinea Incognito:** Picture modified by *steroid application*



T. corporis/ cruris

- Annular lesions with peripheral enlargement and central clearing & scaling, sharply marginated plaques with or without pustules or vesicles, usually at margins.
- fusion of lesions produces gyrate patterns.
- *T. rubrum*

CRURIS: *Synonym*: “Jock itch” , Dhobi itch”

- similar lesions in groin area



T. mannium

- unilateral (dominant) scaling particularly in the skin creases and the nails are usually involved
- *“one hand, two feet” distribution is typical of epidermal dermatophytosis of the hands and feet.*
- After treatment, recurs unless onychomycosis of fingernails, feet, and toenails is eradicated
- Fissures and erosions provide portal of entry for bacterial infections



T. pedis (Athlete's foot):

- infection of the toe *web-spaces and the soles*.
- There are 3 main clinical patterns.
- *Chronic Plantar Scaling = Dry or "Moccasin" type.*
- *Bullous Tinea Pedis:* Sudden eruption of pruritic or painful vesicles on the soles. The eruption is usually unilateral. It is usually caused by ***T. Mentagrophytes***.
- *Interdigital Tinea Pedis:* Peeling, maceration and fissuring occurs frequently in the lateral *toe clefts* (4th and 5th).



Onychomycosis (T. Unguium)



- Etio: *T. rubrum* (MC).
- Types:
- (1) DSO (MC):
- Initial Infection of Nail bed and hyponychium.
- *distal nail edge onycholysis with subungual debris, subungual hyperkeratosis and discolouration*
- (2) PSO (LC):
- *Nail fold → nail plate*
- *IMP: Seen Mostly in IMMUNOCOMPROMISED AND HIV.*
- Rx: **DOC: TERBINAFINE** X 6-12 weeks [Griso: 6 (fingernail)-12 (toenail) months].

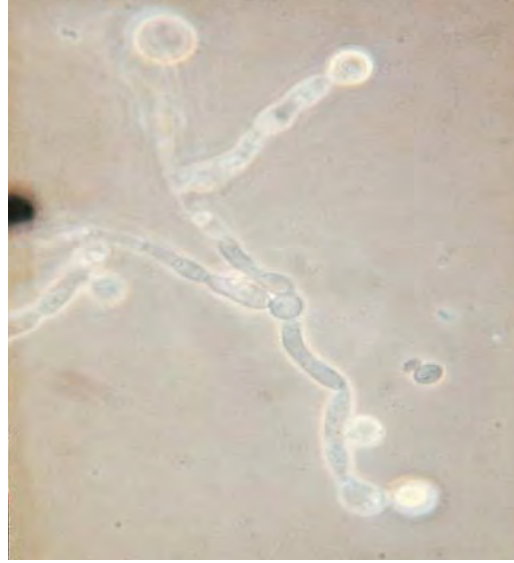
Candidiasis

- *moist, flexural sites.*
- *Pustules (Sattelite) at the edges are characteristic. Shows Pseudohyphae in KOH prep.*
- *more common at the extremes of age and during pregnancy.*
- *Predisposing factors:*
 - diabetes mellitus, pregnancy,
 - broad-spectrum antibiotics,
 - obesity, dentures,
 - Cushing disease, uremia,
 - malignancy and immunodeficiency.

Topical treatment

Nystatin, imidazole cream, amphotericin lozenges (in oral candidiasis = **swish and spit**)

Systemic treatment: AMP-B DOC in disseminated Candidiasis. Oral fluconazole, itraconazole, ketoconazole



SPOROTRICHOSIS

- ETIO: *Sporothrix schenckii* (Dimorphic)
- C/F:
 - patients working with plants and *farmers*
 - follows *penetrating injury* by plant product (*thorn*)
 - months after the injury there is subcutaneous nodule which breaks down to form chronic ulcer (Fixed Cutaneous Sporotrichosis =15%)
 - Lymphangitic form (85/%) is characterized by appearance of a *chain of similar dermal nodules along the draining lymphatics* in a linear configuration (Sporotrichoid pattern)
 - Other sporotrichoid infections: *M. marinum*, *kansasii*
- **LAB:** Biopsy shows *foreign body granuloma* with *cigar shaped bodies* and *asteroid bodies* surrounded by *eosinophilic material*.
- **TREATMENT:** Saturated Sol. of KI.



PEDICULOSIS CORPORIS

- affects the *poor and neglected* and flourishes in *overcrowded, dirty situations*
→ Transmission is mainly by direct close body contact or by sharing infested clothing
- **seen on the clothing only (NOT on body) esp. the inner lining of clothing including the seams of underpants..**
- *Intense pruritus*
- Excoriation with *secondary bacterial infection* and *hyperpigmented* changes are common.
- predilection for the *upper back*.
- **Treatment: *It is the clothing rather than the patients which require treatment*** → Laundering or boiling the clothing and bedding is essential. The patient should bath thoroughly with soap and water.



PEDICULOSIS PUBIS:

- crab louse (*Phthirus pubis*)
- *confined to the pubic and anal hair, but in hirsute or heavily infested patients, the chest hair, arm and leg hair, as well as the axilla, beard and eyelashes can be infested.*
- **attach themselves to hairs** with their strong back legs
- The **nits attach themselves to the hair** and probably are nourished by apocrine secretion.



PEDICULOSIS PUBIS:

- *all classes of society, as opposed to other varieties of lice*
- **sexually transmitted disease** although this is not always the case.
- Blue black colored pigmented macule on the sides of trunk and inner aspect of thighs (**Maculae ceruleus** = **taches Bleues** = **Tache Bleuâtres**) may be present.
- **Rx:**
 - **pt + sexual partners**
 - Screen for other STDs
 - **SHAVING THE HAIR**
 - Permethrin, lindane
 - Eyelids: permethrin or physostigmine or petroleum jelly





PAPULAR URTICARIA:

- **PAPULAR URTICARIA (lichen urticatus) is a hypersensitivity reaction pattern to insect/arthropod bites like mosquitoes, bed bugs, other insects seen in rainy season etc.**
- **multiple, itchy, reddish and excoriated papules**
- **on exposed parts of body**
- **recurrent**
- **mainly in children.**

Cutaneous leishmaniasis

- OLD WORLD: (*L. major*, *L. tropica*):
- **Vector**: sandfly **Phlebotomus**.
- Purely cutaneous form also known as **Baghdad Boil, Oriental Sore, Delhi Boil, Kandahar sore and Lahore Sore**. (pt. from Rajasthan)
- Exposed skin of face and extremities
- It is of two types viz. **moist or rural type** characterized by ulcer formation and **dry or urban type** with non ulcerating chronic erythematous, succulent and infiltrated nodules
- Lesions may become annular with central clearing, scarring and crusting → **VOLCANO sign**



Post Kala-azar Dermal Leishmaniasis (PKDL)

- *L. donovani*
- many years after *incompletely treated visceral Leishmaniasis* patients develop either
 - (a) *macular hypo or depigmented macules* on face, arms and upper trunk *simulating LL Hansen's or,*
 - (b) *Warty, infiltrated papular lesions* in the central area of face near nose and mouth (***Muzzle sign***).



Dermatological diagnostics

- **Acetowhitening:** subclinical condylomata acuminata.
- **Diascopy (VITROPRESSION):**
 - distinguish erythema from purpura
 - *Apple Jelly Nodules: Lupus vulgaris*
- **Darier's sign: *urticaria pigmentosa (cutaneous mastocytosis)***
- **Grattage test & Auspitz's sign:** slight scratching of a scaly lesion reveals
 - initially fine scales
 - **candle wax** scales
 - red **Berkley's membrane**;
 - **punctate bleeding points (Auspitz sign)**
- suggests of psoriasis. (*others: Darier's disease and actinic keratosis*)



Dermatological diagnostics

- **Nikolskiy sign** : an indicator of active acantholysis → distinguish between intraepidermal and subepidermal blistering diseases →
 - Pemphigus (vulgaris/ foliaceus)
 - S.S.S.S.
 - epidermolysis bullosa
 - toxic epidermal necrolysis/ SJS (Pseudo Nikolskiy)



Dermatological diagnostics

- **Antenna sign:**
grossly plugged follicular prominences showing a long strand of keratin protruding when examined in light seen in Keratosis Pilaris.
- **Buttonholing sign:**
NF 1 (with central vertical pressure the lesion disappears under the skin)



Dermatological diagnostics

Carpet Tack Sign: or **carpet en tack sign:** removal of adherent scales in **DLE** reveals downward projection of scales which are follicular plugs



- **Dimpling sign:** dermatofibroma.

Dermatological diagnostics

- **Koebeners' Phenomenon:**
Spread of lesions of same morphology (**isomorphic phenomenon**) at the site of trauma. Characteristically seen in **Lichen planus**, **psoriasis**, **vittiligo** and by Auto-inoculation in Verruca, Molluscum contagiosum
- **Dermographism:** Physical urticaria, Normal
- **White Dermographism:**
AD



Annular/ Figurate lesions:

- **Granuloma annulare:** annularly arranged papules over dorsum of hands in diabetes.
- **Erythema annulare centrifugum:** variable causes, supposed to be a *hypersensitivity reaction* to many causes including drugs, infections and malignancies. Lesions spread centrifugally while clearing in center at a rate of around 5 mm/day with a characteristic **trailing scale**.



Arrangement of lesions

- **Erythema multiforme:**
Target lesions, drugs and herpes/mycoplasma infections.
- **Erythema chronicum migrans:** In Lyme's disease small papules develop into gradually enlarging annular lesions and clearing from center and is long lasting (1-3 months).



Arrangement of lesions

- Erythema gyratum repens: Associated with malignancies with wood grain pattern of rings. → Most common: **LUNG Ca**
Most characteristic: Breast Ca



• **Erythema marginatum:** In rheumatic carditis erythematous annular plaques develop on mainly trunk and extensor extremities which are transient and keep on coming and going

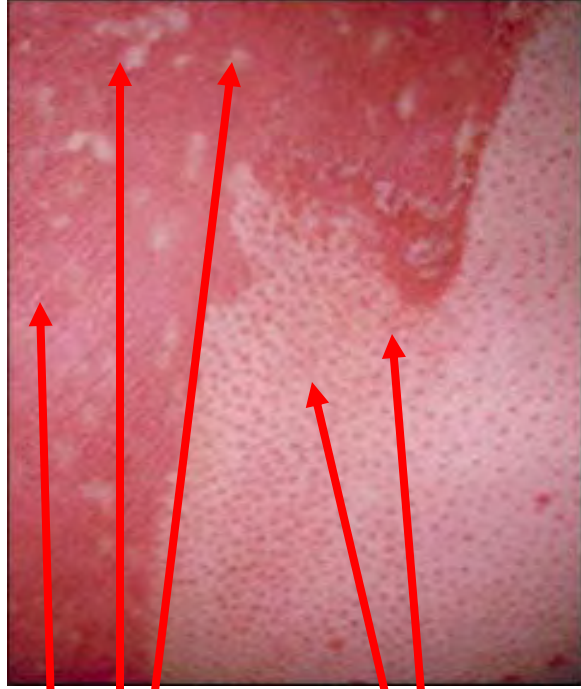


- Necrolytic Migratory Erythema: Seen in Glucagonoma.

PITYRIASIS RUBRA PILARIS:

An uncommon cause of erythroderma, where the underlying defect is abnormal keratinisation:

- *Palmoplantar keratoderma (PRP Sandal)*
- Red (salmon colored) patches with **islands of sparing**
- Papules: perifollicular hyperkeratotic over dorsum of hands and trunk





Reiter's disease

- KDB

- Circinate balanitis

SJS/ TEN



SJS



TEN

DERMATOMYOSITIS (DM)/ (PM)

SKIN: photosensitive rash

- Pathognomic skin findings:
 - GOTTRON'S PAPULES:
Small violaceous to red, flat topped papules with central depression over dorsal IP and MCP joints.
 - GOTTRON'S SIGN:
Confluent macular violaceous erythema (CMVE) over the same sites, Elbows, malleoli etc. (IMP: in SLE the CMVE SPARES the joints)



DERMATOMYOSITIS (DM)/ (PM)

- Characteristic skin findings:
 - HELIOTROPE Rash: violaceous or purplish periorbital erythema and edema
 - Nail fold telangiectasia and cuticle-dystrophy
 - V sign: CMVE in the V area of neck; SHAWL sign: CMVE over shoulder girdle
 - Linear CMVE on dorsum of hands tracking along the tendons (Dowling's lines)
 - MECHANICS' hand: non pruritic, hyperkeratotic, symmetrical, fissured, scaly and hyperpigmented hands.



DLE: CHRONIC CUTANEOUS LE (CCLE)



Scleroderma: MORPHEA

- Cutaneous sclerosis alone without systemic involvement.
- Ivory colored plaques with a peripheral rim of violaceous color and the surface is shiny, smooth and bound down with loss of hair (Scarring Alopecia) and sweat glands and in late stages even nerves



Scleroderma: MORPHEA



Types:

- **Circumscribed or localized:** usually on trunk.
- **Linear scleroderma:** upper or lower extremity especially in children.
- **Frontoparietal (en coup de sabre):** linear scleroderma occurring on the head with or without hemiatrophy of face. PARRY ROMBERG SYNDROME: **[SAFE]** Seizures, Alopecia, Facial hemiatrophy Exophthalmos

Scleroderma: MORPHEA

- **Generalized morphea:** widespread morphaeic plaques over trunk and limbs.
- **Pansclerotic (Morphea profunda):** involvement (trunk, extremities, face, and scalp, with sparing of fingertips and toes) of **dermis, fat, fascia, muscle, bone.** Mostly seen with linear morphea. Can lead to severe contractures and disability.



LICHEN SCLEROSUS ET ATROPHICUS (LSA):

- atrophic, porcelain-white, angular, well-defined, indurated papules or plaques, and characteristic follicular dilatation & keratotic plugs, known as *dells* occurring most commonly on the **ANOGENITAL SKIN** of both sexes. It is more common in females than males (10:1).
- The *epidermal changes differentiate it from morphea.*



Fixed drug eruption

- Persistent purplish erythema that lasts 4-8 weeks, can be bullous and recurs at the same spot on taking the drug again
- Heals with hyperpigmentation
- Genitals and acral extremities

- Drugs commonly implicated:

- Barbiturates
- OCP
- NSAIDs
- Foscarnet (penile ulcers)
- Sulfonamides
- Phenolphthalein
- Allopurinol
- Dapsone

**BOND
Fixed
Shiny
PAD**



Xeroderma pigmentosum: (AR)



Melanopenic diseases



- **Nevus depigmentosus (Achromicus):** stable, congenital, off-white macules, unilateral, may have rounded borders or irregular along lines of Blaschko but usually without underlying skeletal or other abnormality.
- **Hypomelanosis of Ito:** bilateral, along embryonal skin fusion lines (**Blaschko's lines**), **marble cake pattern or fountain-spray pattern**; 60 to 75% have systemic involvement—CNS, eyes, musculo-skeletal system.

Dermal Melanocytosis: Hamartomas



- Nevus of Ota: periorbital speckled slate gray pigmentation → PERSIST
- Nevus of Ito: similar pigmentation of the acromioclavicular areas: PERSIST

Dermal Melanocytosis: Hamartomas



- Mongolian Spots: congenital gray-blue macular lesions, which are characteristically located on the lumbosacral area in ~80% of Asians and disappear in early childhood

Nutritional dermatoses:

- Kwashiorkor:
 - Flaky or enamel paint dermatosis and flag sign
- Vit A deficiency and EFA def:
 - PHRYNODERMA
- Riboflavin def:
 - Deficiency causes Keratoconjunctivitis, Angular stomatitis, Chelitis, Perleche and smooth tongue. It can also cause genital scaly and patchy rashes. **(Oro-Oculo-Genital syndrome).**



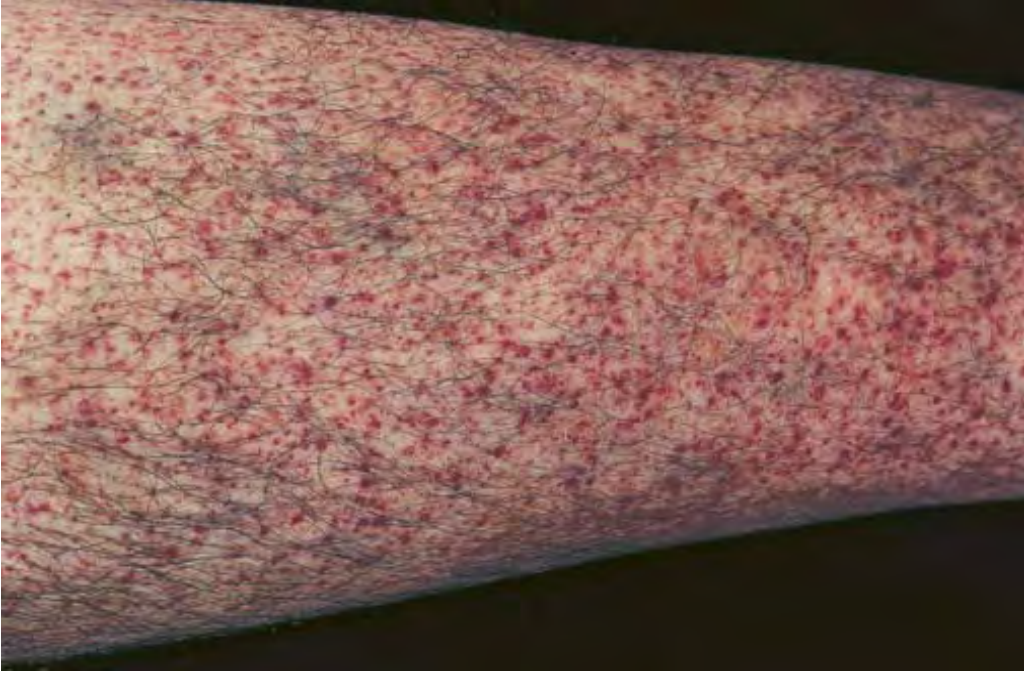
Nutritional dermatoses:

- Niacin def: pellagra:
 - Diarrhoea, Dermatitis and Dementia
 - symmetric, photosensitive and photo-exacerbated rash
 - initially diffuse erythema with itching → vesicles which lead to heavy, Dry-Brown crusting, Hyperkeratosis and lichenification on being ruptured.
 - The rash on neck is called **“Casal’s Necklace”** while that on the dorsum of hands are called the **“Glove”** or **“Gauntlet” of Pellagra**. (Similarly **Boot of Pellagra** over feet.)



Nutritional dermatoses:

- Vit C def: SCURVY
 - Hemorrhagic signs: includes hemorrhagic gingivitis, perifollicular petechiae and subperiosteal hemorrhages leading to pseudoparalysis in childhood.
 - Hyperkeratosis of hair follicles: Presents as rough, pointed, follicular papules the hair of which has a “**swan-neck**” or “**Cork-Screw**” appearance mainly over upper arms, buttocks, thighs, calves, shins etc.
 - Hematologic abnormalities: Anemia, ↑capillary fragility test etc.



Nutritional dermatoses:

- Zn def: Acrodermatitis enteropathica (AR)
 - Diarrhea, Alopecia and Dermatitis
 - periorificial & acral moist, crusted with large erosions and peripheral scales.
 - Low serum zinc levels but inc on oral dosing
 - ZEBRA STRIPED Hair



Necrobiosis lipoidica diabetorum

- More common in young female diabetic patients.
- **symmetrical, well defined, irregular, brown-red plaques on both shins and feet.** Sometimes, it may appear on the face, arms and trunk. The epidermis is **atrophic and delicate vessels** occur over the surface. Chronic stage may present as Ulcers.
- **Treatment** : unsatisfactory; I/L steroids
- Does not correlate with normalization of hyperglycemia.



Pseudo Xanthoma Elasticum

- Defective elastin
- distinctive peau d'orange surface pattern resulting from closely grouped clusters of yellow (chamois-colored) papules in a reticular pattern on the neck, axillae, and other body folds
- Angioid streaks and hemorrhages in retina



Neutrophilic dermatosis

- Pyoderma gangrenosum presents with chronic painful ulcers with irregular geographical borders
- MC on legs
- Associated with Ulc. Colitis and Crohn's



Neutrophilic dermatosis

Sweets Syndrome:

- ***Associated with***
 - *Idiopathic*
 - *Infections*
 - *Drugs*
 - *Malignancies (leukemias)*
 - *IBDs & other autoimmune diseases*
 - *Pregnancy*
- ***Acute, Febrile neutrophilic dermatosis***
- ***Skin lesions are tender, erythematous asymmetrical papulo-nodules which at times may look pseudovesicular***
- ***Wonderful response with STEROIDS & Potass. Iodide***



Neurofibromatosis-1



STURGE- WEBER syndrome



Tuberous Sclerosis Complex



Ichthyosis

- Lamellar Ichthyosis
 - AR
 - Defective TRANSGLUTAMINASE
 - ABSENT GRANULAR layer
 - Onset within 1 yr/birth
 - Plate like thick brown scales
 - Scarring with ectropion etc possible

