Dermatology

MiniOSCE

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Content


General

Definitions – Primary Lesions

Name	Definition	Seen in
Poikiloderma	is a combination of atrophy, reticulate hyperpigmentation and telangiectasia.	
Horn	is a keratin projection that is taller than it is broad	
Telangiectasia	is the visible dilatation of small cutaneous blood vessels	- Rosacea, - Topical steroids
Comedo	is a plug of greasy keratin wedges in a dilated pilosebaceous orifice. Open comedones are 'blackheads'. The follicle opening of a closed comedo is nearly covered over by skin so that it looks like a pinhead sized, ivory colored papule.	
Burrow	is a linear or curvilinear papule with some scaling caused by a scabies mite	- Scabies
Patch	is a large macule	- Melasma - Vitiligo
Hematoma	is a swelling from gross bleeding	
Ecchymosis (**Bruise**)	is a larger extravasation of blood into the skin or deeper structures	- Trauma, - Post-surgery

Definitions – Primary Lesions

Name	Definition	Seen in
Purpura	describes a larger macule or papule of blood in the skin. Such blood-filled lesions do not blanch if a glass lens is pushed against them	HSP
Petechiae	are pinhead-sized macules of blood in the skin	- Vasculitis, - Clotting disorders
Papilloma	is a nipple like projection from the skin	
Tumor	hard to define, it is based more correctly on microscopic pathology than on the clinical morphology. We keep it here as a convenient term to describe an enlargement of the tissues by normal or pathological material or cells that form a mass. Usually more than 1 cm in diameter. Because the word tumor scare patients so they can be called large nodules especially if they are not malignant	
Erythroderma	generalized redness of skin that may be scaly (exfoliative) or smooth	- Eczema, - Psoriasis, - Lichen planus, - Cutaneous lymphoma
Erythema	is redness caused by vascular dilatation	- Urticaria - Cellulitis

Definitions – Primary Lesions

Name	Definition	Seen in
Papule	is a small solid elevation of skin <0.5 cm in diameter	- Acne, - Lichen Planus
Plaque	is an elevated area > 2 cm in diameter but without substantial depth	- Psoriasis - Pityriasis rosea
Macule	is a small flat area < 0.5 cm in diameter of altered color or texture	- Freckles, - Lentigines
Vesicle	is a circumscribed elevation of skin < 0.5 cm in diameter and containing fluid	- HSV - Chicken pox - Impetigo
Bulla	is a circumscribed elevation > 0.5 cm and containing fluid	- Pemphigus, - Pemphigoid
Pustule	visible accumulation of pus in the skin	- Acne, - Pustular psoriasis
Abscess	localized collection of pus in a cavity > 1 cm in diameter. Usually they are nodules and the term purulent bulla is sometimes used to describe a pus-filled blister that is situated on top of the skin rather than within it	- Conglobate acne, - Carbuncle
Angioedema	diffuse swelling caused by edema extending to the subcutaneous tissue	

Definitions – Primary Lesions

Name	Definition	Seen in
Wheal	is an elevated white compressible evanescent area produced by dermal edema. It is often surrounded by a red axon-mediated flare. Usually they are < 2 cm, but some are huge	
Nodule	solid mass in the skin > 0.5 cm in diameter, in both width and depth, which can be seen to be elevated (exophytic) or palpated (endophytic)	- Erythema nodosum, - PAN

Definitions – Secondary Lesions

Name	Definition	Seen in
Pigmentation	either more or less than surrounding skin, can develop after lesions heal.	
Stria (stretch mark)	is a streak like linear atrophic pink, purple or white lesion of the skin caused by changes in the connective tissue.	- Steroids - Pregnancy
Lichenification	an area of thickened skin with increased markings.	- Eczema
Atrophy	is a thinning of skin caused by diminution of the epidermis, dermis or subcutaneous fat. When the epidermis is atrophic it may crinkle like cigarette paper, appear thin and translucent, and lose normal surface markings. Blood vessels may be easy to see in both epidermal and dermal atrophy.	- Topical Steroids - Lichen Sclerosus
Scar	is a result of healing, where normal structures are permanently replaced by fibrous tissue.	- Acne - Keloid
Sinus	is a cavity or channel that permits the escape of pus or fluid.	
Scale	is a flake arising from the horny layer. Scales may be seen on the surface of many primary lesions	- Psoriasis - Lichen planus
Keratosis	is a hornlike thickening of the stratum corneum	

Definitions – Secondary Lesions

Name	Definition	Seen in
Crust	may look like a scale, but is composed of dried blood or tissue fluid.	- Impetigo - Echyma - Shingles
Ulcer	is an area of skin from which the whole of the epidermis and at least the upper part of the dermis has been lost. Ulcers may extend into subcutaneous fat, and heal with scarring.	
Erosion	is an area of skin denuded by a complete or partial loss of only the epidermis. Erosions heal without scarring.	- Pemphigus - Eczema
Excoriation	is an ulcer or erosion produced by scratching	- Scabies - Eczema
Fissure	is a slit in the skin	- Eczema

Definitions

Name	Definition	Seen in
Kobner Phenomenon	Induction of new lesion in normal skin by trauma or scratching	- Psoriasis - Lichen planus - Vitiligo - Warts
Parakeratosis	Nuclei are retained in the horny layer “stratum corneum	
Piebaldism	Absence of melanocytes in certain areas of the skin and hair, leads to patches of skin and hair that are lighter than normal - Mode of inheritance: Autosomal Recessive (AR)	
Ophiasis	Loss of hair in the shape of a wave at the circumference of the head	- Alopecia areata
Auspitz Sign	Appearance of punctate bleeding spots when scales are scrapped off	- Psoriasis
Psoriasis	immunologically mediated chronic inflammatory skin disease , characterized by well-defined salmon-pink plaques bearing large adherent silvery centrally attached scales. - Mode of Inheritance: AD, or AR	
Spongiosis	Edema in the epidermis	- Eczema
Tzank Smear	Scraping of an ulcer base to look for tzank cells	- Viral infection (Herpes)

Definitions

Name	Definition	Seen in
Acantholysis	loss of intercellular connections, such as desmosomes, resulting in loss of cohesion between keratinocytes, seen in diseases such as pemphigus vulgaris. It is absent in bullous pemphigoid, making it useful for differential diagnosis	
Poikiloderma	Combination of atrophy, reticulate hyperpigmentation, and telangiectasia	

❖ **Mention the functions of the dermo-epidermal junction (DEJ):**

1. Mechanical support
2. Encourages adhesion, growth, differentiation, & migration of the overlying basal cells
3. Acts as a semi-permeable filter that regulates the transfer of nutrients and cells

❖ **Name the cell with the following function:**

A. Vitamin D synthesis: Keratinocytes
B. Melanin production: Melanocytes
C. Immunity: Langerhans cells

❖ **Write 4 questions you ask for a patient that comes to your clinic complaining of rash (Dermatological Hx):**

a. Onset
b. Progression
c. Associated Sx: Itching
d. Exacerbating/Reliving factors
e. Family history

❖ **Name the adhesion molecules of the epidermis:**

- cadherins (subgroups E, N, P, M), integrins, selectins, and the immunoglobulin gene family.

❖ **Name the 3 fibers in the dermis:**

a. Collagen
b. Elastic fibers
c. Reticulin

❖ **Mention 2 types of dendritic cells in the epidermis:**

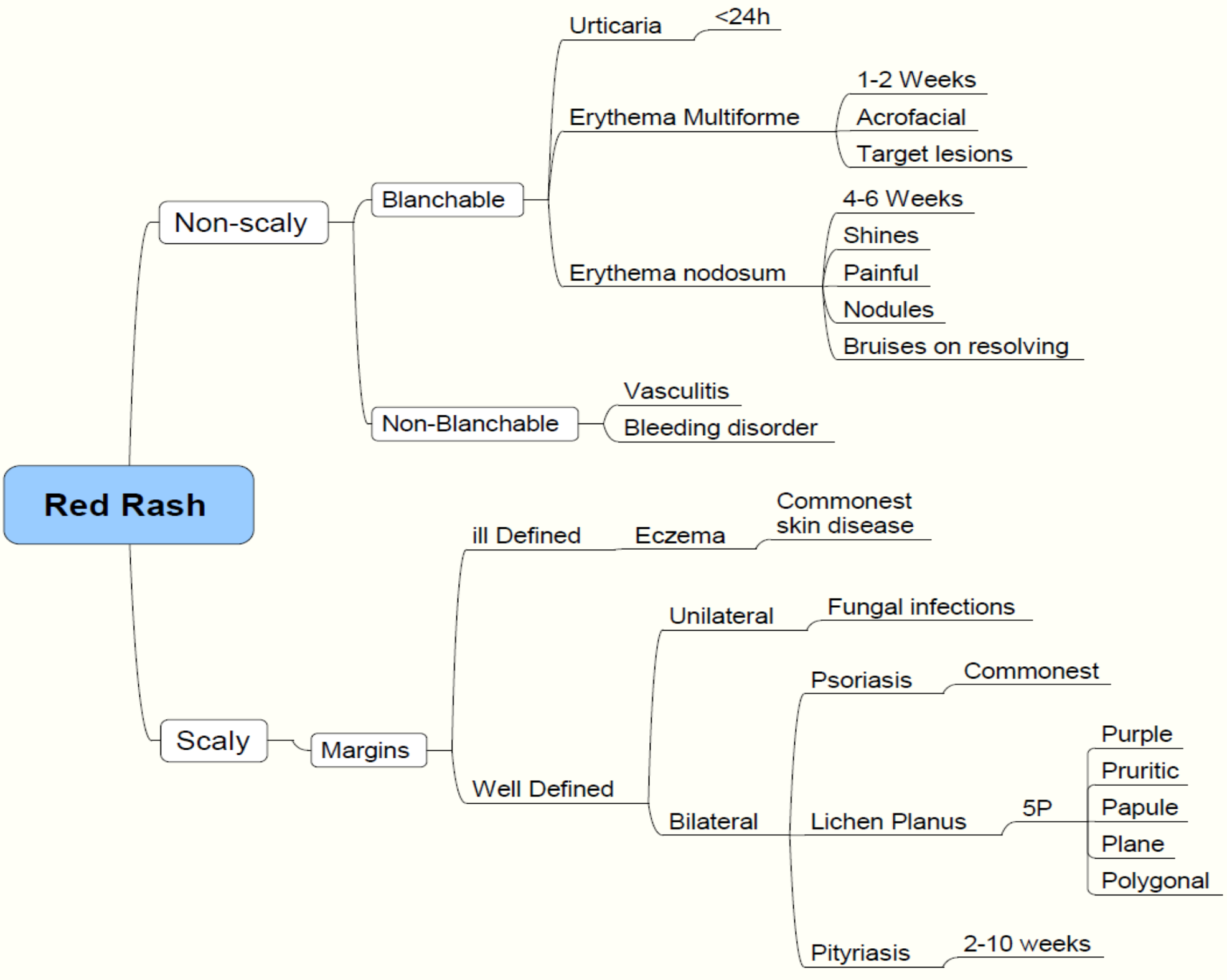
a. Melanocytes
b. Langerhans cells

❖ **Name the function of the skin:**

- Barrier
- Shock absorber
- Temperature regulation
- Insulation
- Sensation
- Lubrication
- Vitamin D synthesis
- Immunological function: innate & adaptive

❖ **Mention 3 patters of cutaneous arrangement:** (Not Sure)

- the dermatomes (Head zones), the relaxed skin tension lines (Langer's lines), and the naevoid lines of Blaschko, indicating a neural, haematogenic, or embryogenic background in their pathogenesis

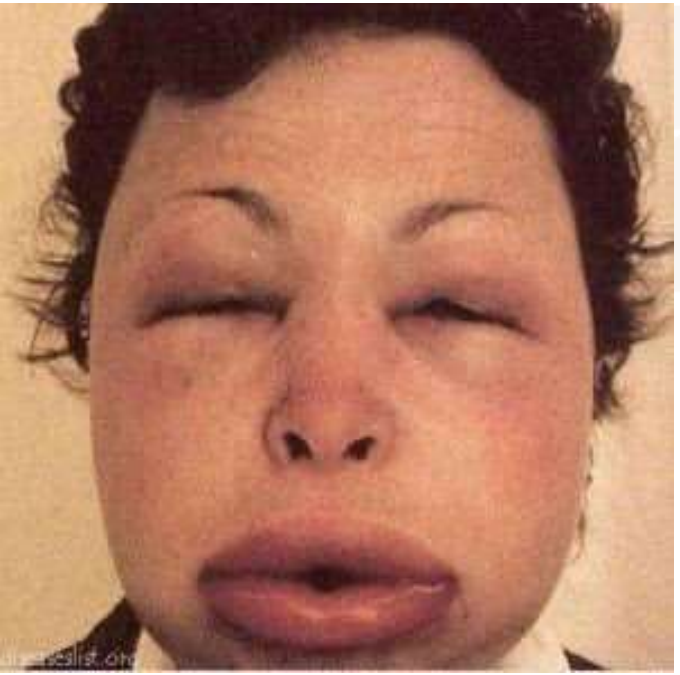

Red Rash
Non-scaly
Blanchable
Urticaria
<24h
Erythema Multiforme
1-2 Weeks
Acrofacial
Target lesions
Erythema nodosum
4-6 Weeks
Shines
Painful
Nodules
Bruises on resolving
Non-Blanchable
Vasculitis
Bleeding disorder
Scaly
Margins
ill Defined
Eczema
Commonest skin disease
Well Defined
Unilateral
Fungal infections
Bilateral
Psoriasis
Commonest
Lichen Planus
5P
Purple
Pruritic
Papule
Plane
Polygonal
Pityriasis
2-10 weeks

Urticaria (Hives)

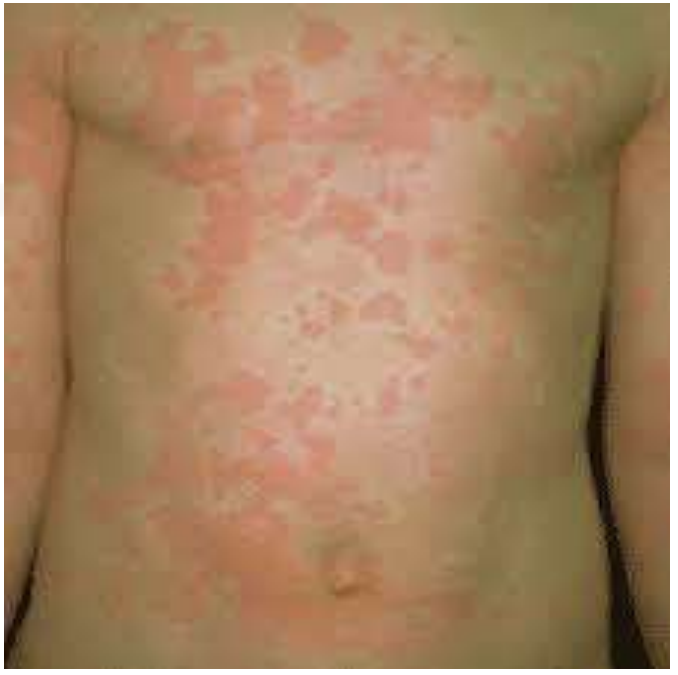
❖ **What is the Dx?** Urticaria + Angioedema

❖ **Differentiate between urticaria and angioedema according to the (site, color, duration and associated Sx)?**

	Urticaria	Angioedema
Site	- Found anywhere in the skin surface - Edema in the dermis layer	- Mostly at the junctions between skin and mucus membranes (peri-orpital/peri-oral) - Edema in subcutaneous tissue
Color	- Bright red/pink	- Less red, less demarcated
Duration	- Resolve within 24 hr	- Hours to days (> 24 hr)
Associated Sx	- Itching	- Swelling of the tongue and laryngeal mucosa - Mild itching



❖ **Describe the rash:**
Pink wheals around the chest and the abdomen region



❖ Name 4 clinical differences between urticaria and erythema multiforme:

Criteria	Urticaria Multiforme	Erythema Multiforme
Morphology	- Annular wheal with central pallor or ecchymosis. - Duration of wheals < 24 hr - Often angioedema on the face and extremities	- Erythematous papules - Target lesions - Eventually central necrosis or vesicles - Duration > 7 days
Location	- Universal	- Palms and soles
Urticarial Dermographism	- Yes	- No
Mucosal involvement	- No, eventually mild edema	- Eventually necrosis
Sx	- Pruritis	- Burning, mild pruritis
Triggers	- Infections - Medicine - Food	- Infections: Herpes (mc)
Rx	- Antihistamines	- Topical steroid ointments - Systemic steroids with spread lesions

❖What is the major & minor criteria for the Atopic dermatitis (Hanifin & Rajka Criteria)?

Major feature	Minor feature
1. Pruritus	1. Xerosis
2. Typical morphology and distribution	2. Pityriasis alba
1) Under the age of 2 years: face, trunk, and extensor involvement	3. Periorbital eczema or orbital darkening
2) Over the age of 2 years: face, neck, and flexural involvement	4. Periauricular eczema
3. Personal or family history (atopic dermatitis, asthma, allergic rhinitis)	5. Cheilitis
	6. Tendency towards on-specific hand or foot dermatitis
	7. Scalp scale
	8. Perifollicular accentuation
	9. Nipple eczema
	10. Itch when sweating
	11. White dermographism
	12. Skin prick test reactivity
	13. Elevated serum IgE
	14. Tendency towards cutaneous infections

A Patient presents with a wheal skin rash and was diagnosed with Urticaria:

- **What is the triple response of Lewis?**
  is a cutaneous response that occurs from firm stroking of the skin, which produces an initial red line, followed by a flare around that line, and then finally a wheal. The triple response of Lewis is due to the release of histamine.

- **Give 3 causes of Acute Urticaria:**
  - it is based on the Type: "The difference between acute/chronic is the duration - 6 months"
  a. Physical: Cold, Solar, Heat, Cholinergic, Aquagenic, Dermographism, Delayed pressure
  b. Autoimmune
  c. Hypersensitivity
  d. Pharmacological: non-allergic, aspirin, NSAIDS, ACEI, Morphine
  e. Contact: Latex, Foods
  f. Endogenous: infections, hyperthyroidism, cancer, lymphoma

- **Name the internal organs that might be affected by angioedema:**
  a. Oropharynx
  b. Respiratory Tract (RS)
  c. Gastrointestinal Tract (GI)

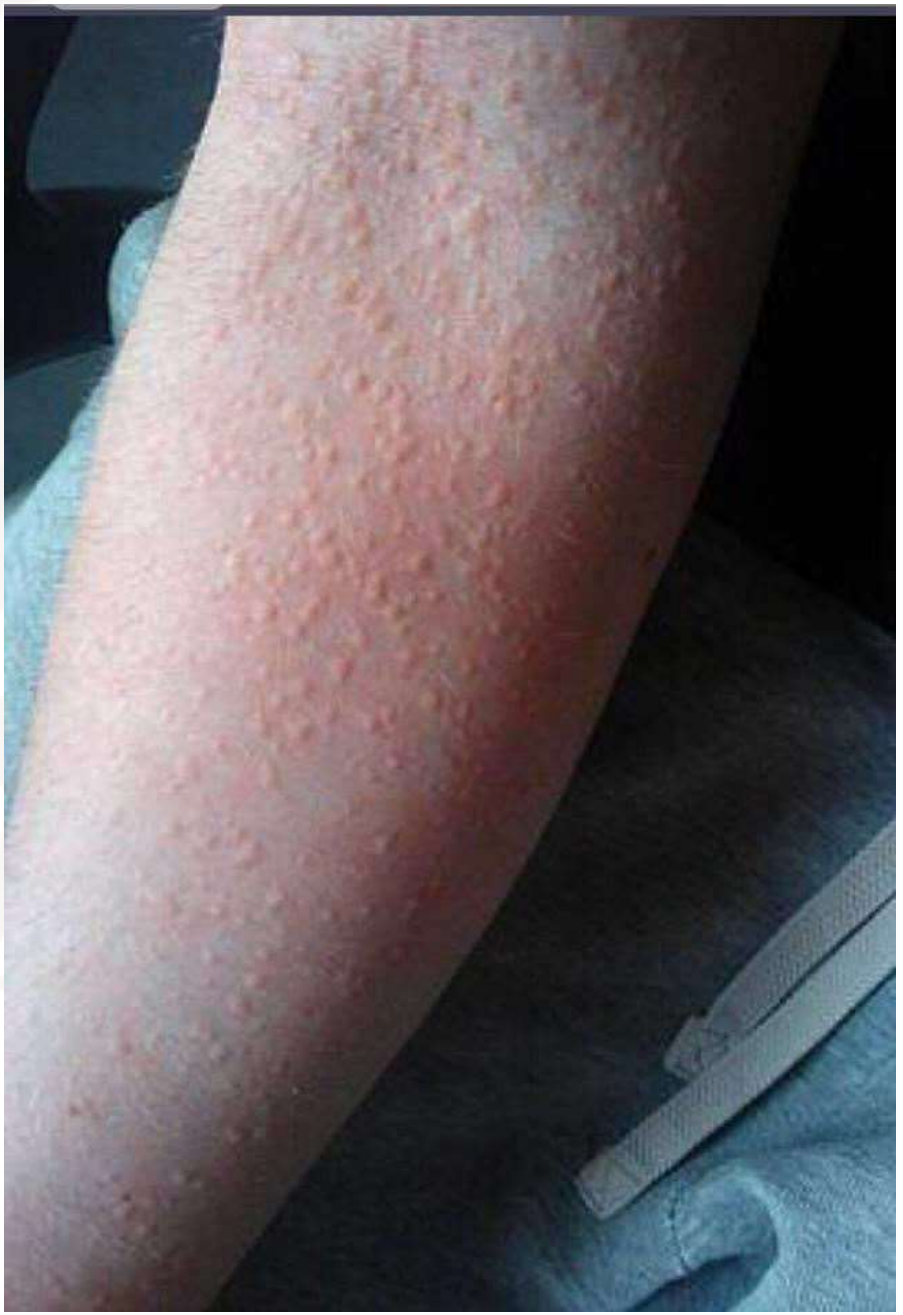
- **The patients suffered from hypotension, dizziness, and tachycardia, what would your diagnosis be and what would your treatment be?**
  - Anaphylactic Shock, I would give epinephrine

30 years old pt complain of rash for 2 months, complaining of these lesions appear on trunk and extremities for 2 hours after excessive exercise, embarrassment, hot shower

- **What is your Dx?**
  - Cholinergic urticaria type of physical

- **What the pathogenesis of this condition?**
  - the vessels over-act to Acetylcholine
  Produced by anxiety, heat, sexual excitement, or exercise

- **Describe this pic:**
  - Small multiple wheals on the forearm

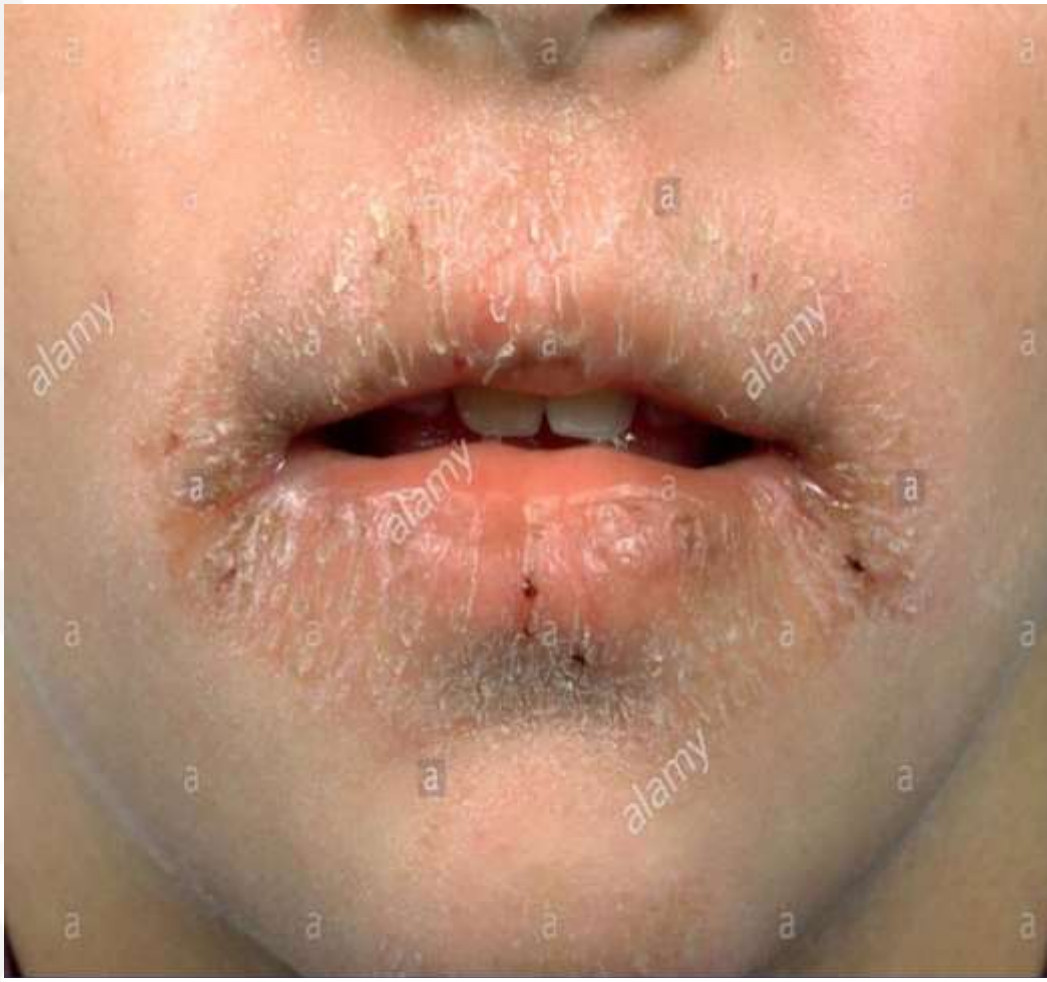


A child with a history of lip licking developed an itching around his lips:

- **What's your Dx?**
  - Contact irritant dermatitis

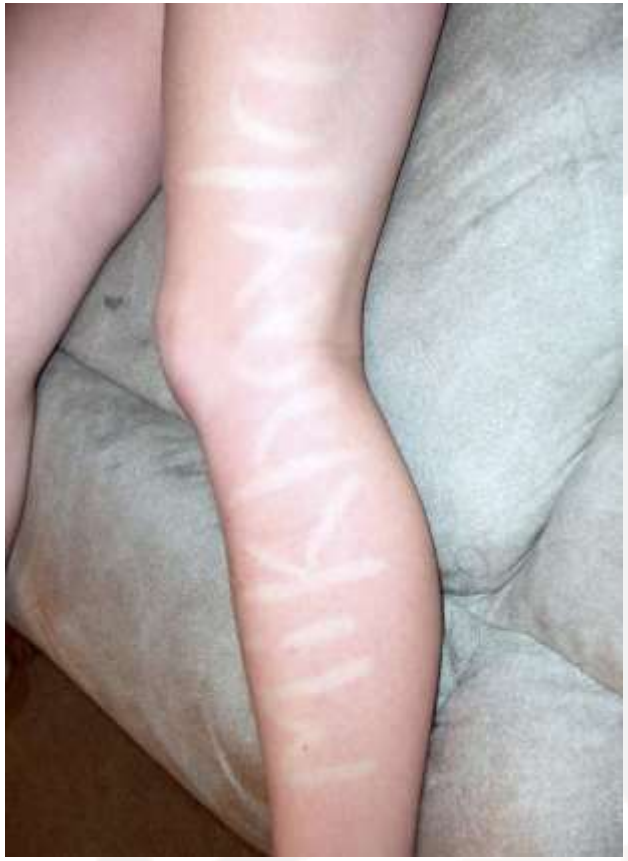
- **Give one differential diagnoses?**
  - Allergic irritant dermatitis
  - Atopic Eczema

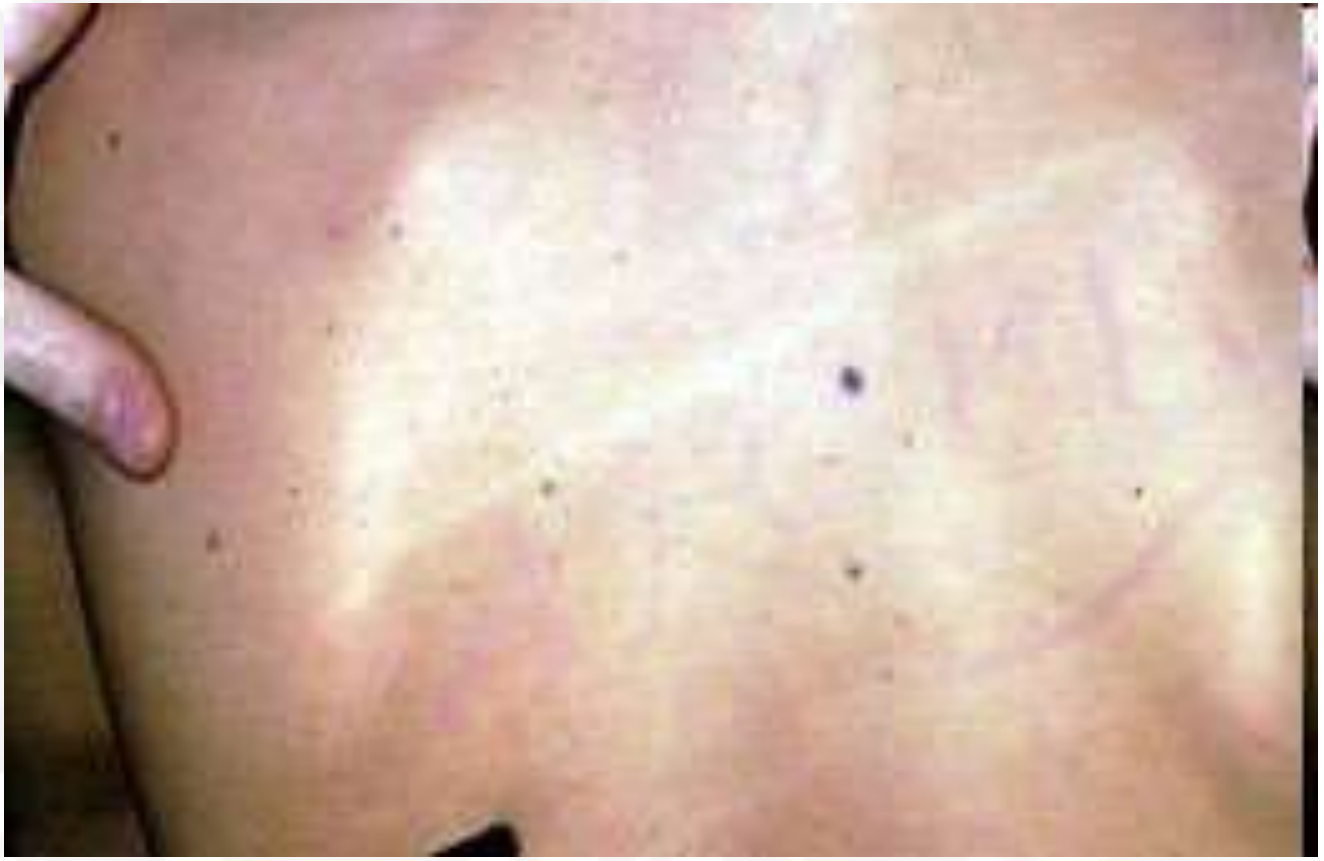
- **What's the management?**
  a. Avoidance
  b. Topical steroids and emollients



This patient developed this rash, individual lesions stayed for less than 24h

- **Describe the rash:**
  - a large red area most probably a wheal with red margin around it
- **What is your Dx?**
  - Urticaria
- **What is the main mediator?**
  - Histamine
- **What is the 1st line of treatment?**
  - Anti-Histamine

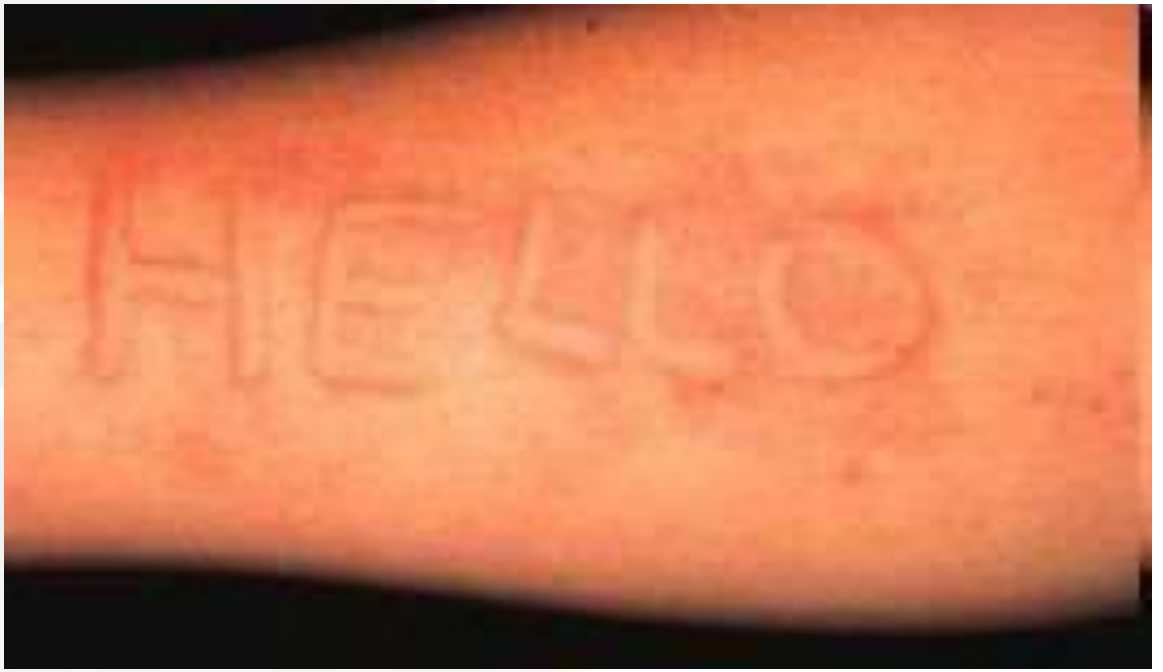




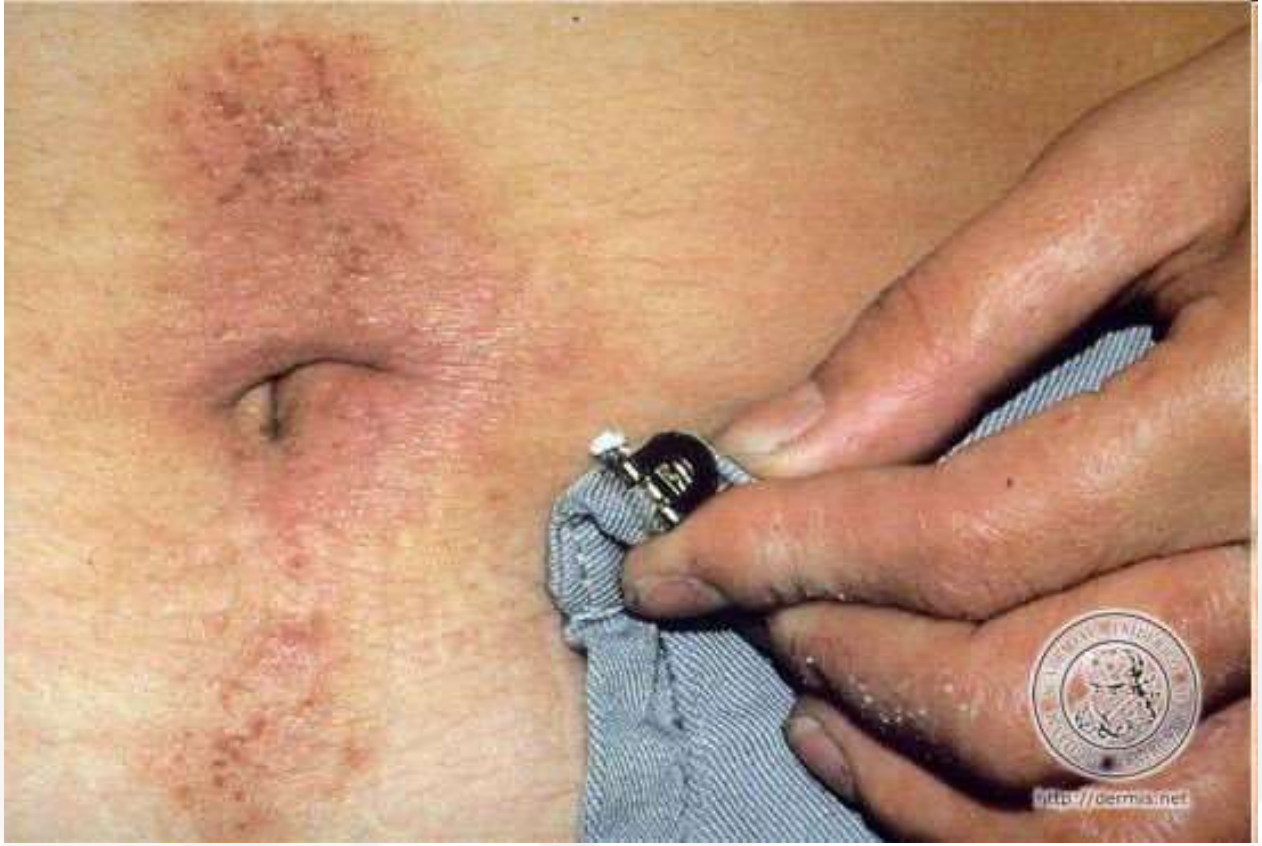
❖ **What is this phenomenon?** White dermographism

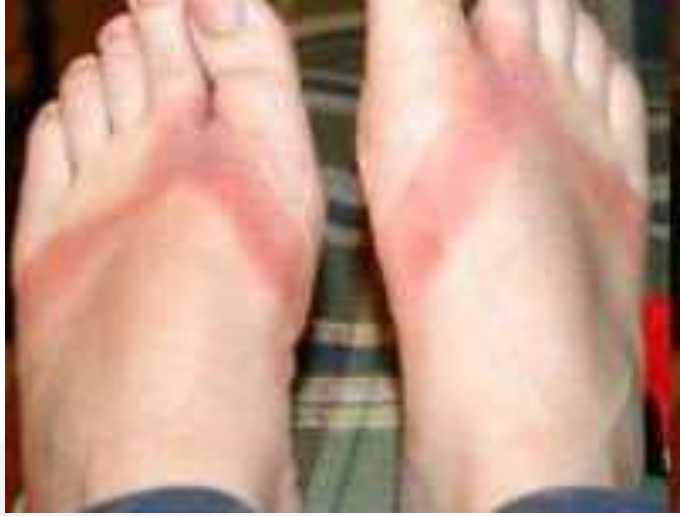
❖ **What does it indicate?** Atopy

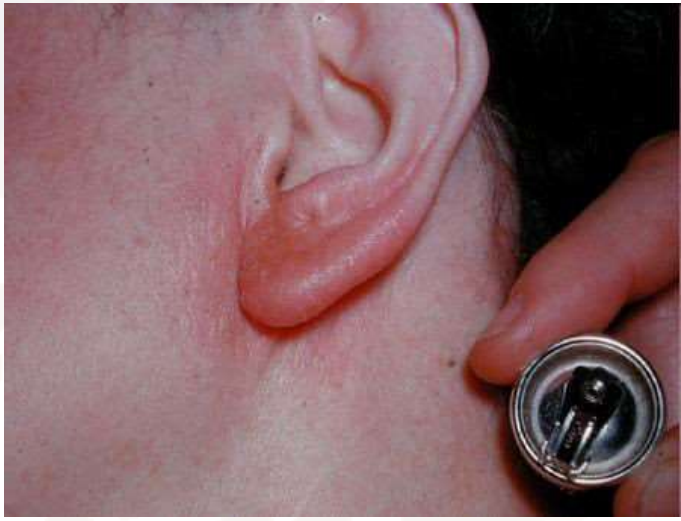
A 25-year-old woman presents with twelve-month history of a generalized itchy rash. A light scratch resulted in the appearance shown



- **What is the diagnosis:** red dermographism
- **What condition is associated with it:** urticaria (wheals)
- **What is the treatment:** anti histamine





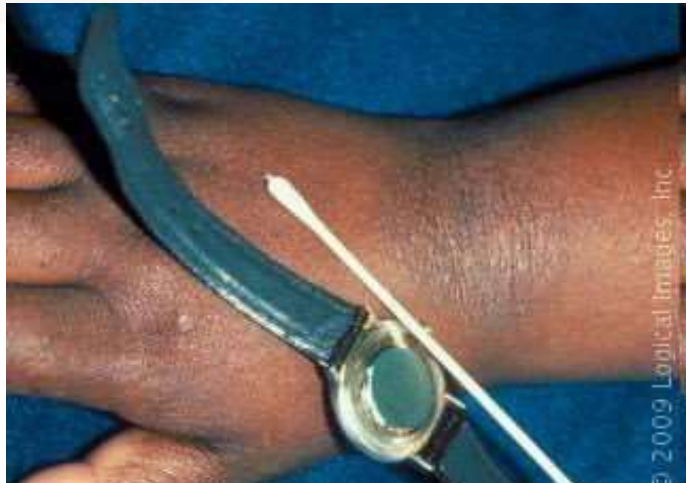


- **What test will help confirming the allergen in this patient:**

  Patch test

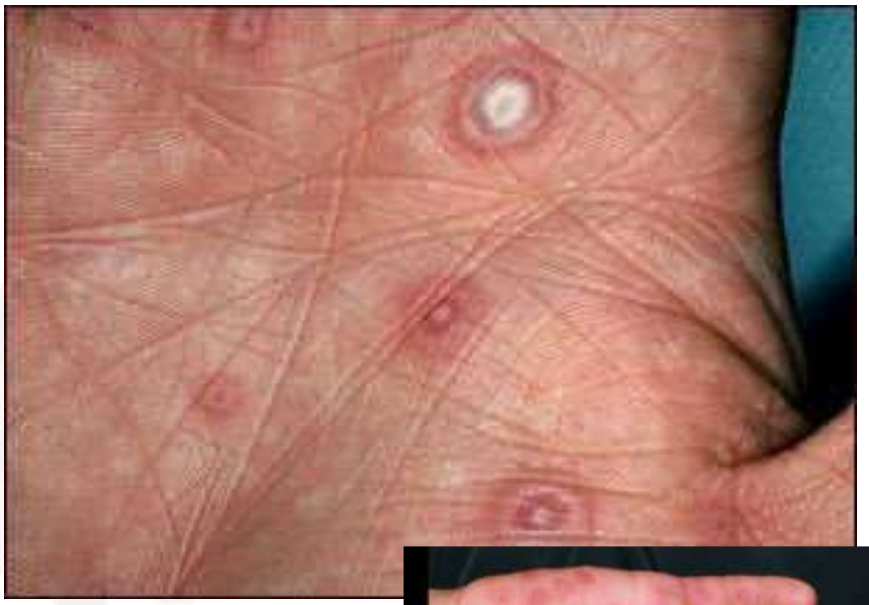
- **What is the most common allergen?**

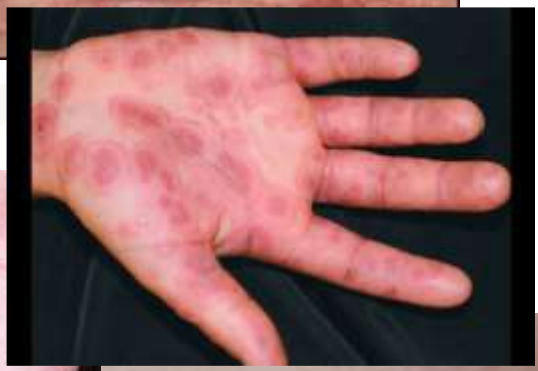
  Nickle

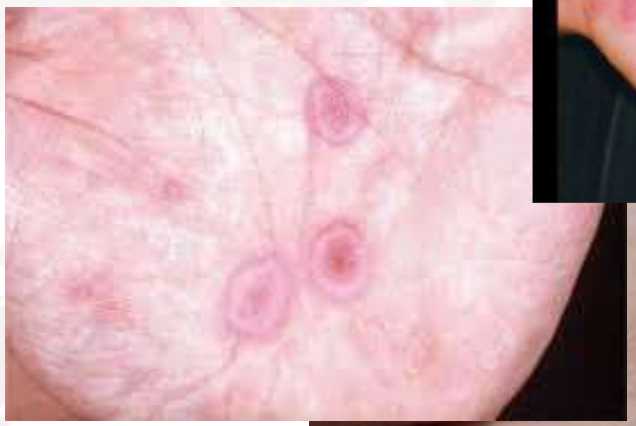


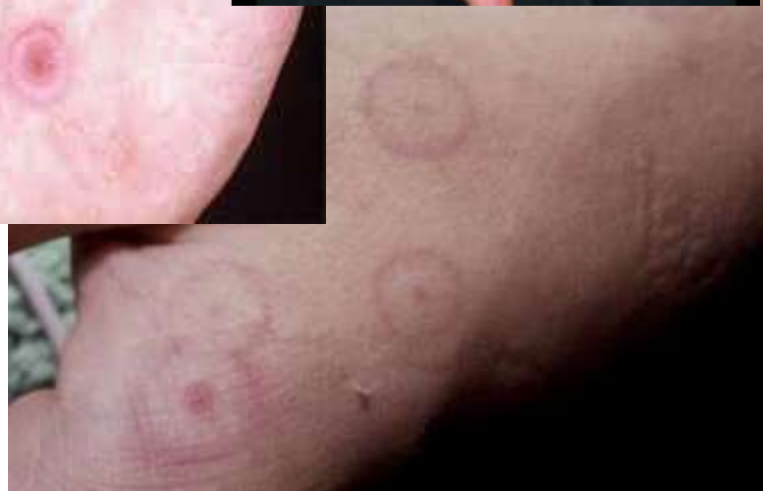
Reactive Erythema

The patient has this rash on both hands and face for the past 1 week, he had several similar lesions over the past year, she also has hx of painful lesions around her lips:

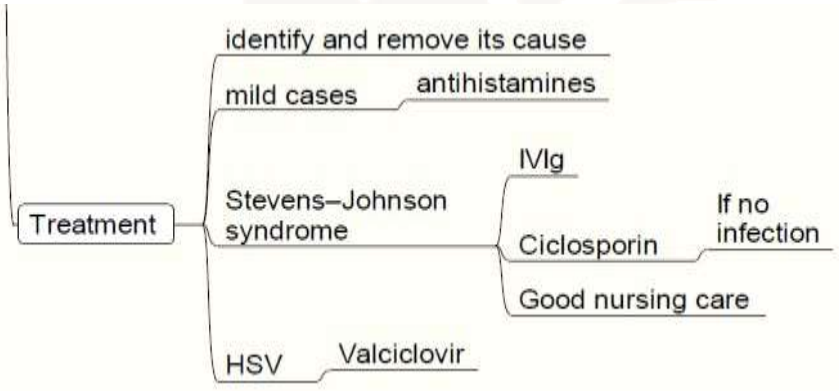








- **What is the Dx?** Erythema multiforme (EM).
- **Describe this lesion.** Annular, Multiple target shaped nodules, non scaly, well defined margin, no clear pattern of arrangement, distributed over the dorsum of the hand.
- **What is the most common cause for this?** Herpes simplex virus (HSV) 50%
- **Mention 2 other causes?** Bacterial, fungal, parasitic infections, pregnancy
- **What is the next step in physical examination?** Diascopy
- **What will you see on Diascopy?** Blanchable
- **Name other sites you might find it in?** Acrofacial, palms, soles, forearms, legs, face
- **Mention 2 lines of treatment for this case.**



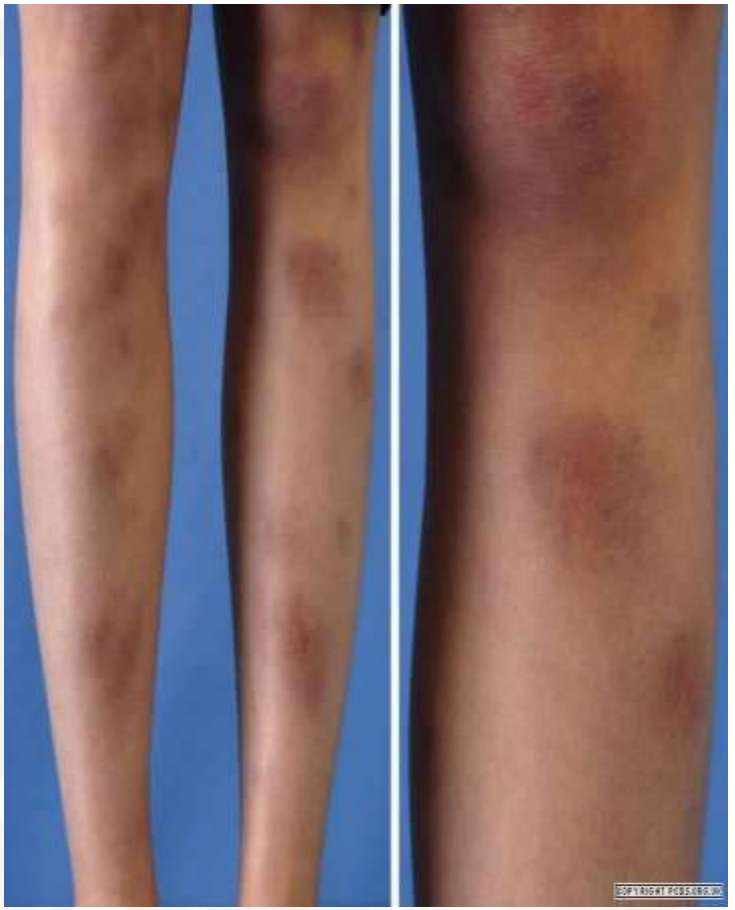
❖ **What is the Dx?** Erythema Nodosum

❖ **Describe these lesions:**
- Type: nodules
- Shape: ill-defined, red, shiny, not scaly
- Arrangement: non-specific
- Distribution: bilateral, over the lower limbs

❖ **Mention 2 underlying causes for Erythema nodosum:**
a. Infections: viral, mycoplasma, chlamydia, bacterial, fungal
b. Systemic diseases: sarcoidosis, IBD (CD, UC), Bechet's disease
c. Drug-induced: OCP, Sulphonamides
d. Pregnancy

❖ **Name 3 infectious causes of Erythema nodosum:**
a. Strep
b. TB
c. Leprosy
d. Brucellosis
e. EBV
f. Hep B
g. Mycoplasma

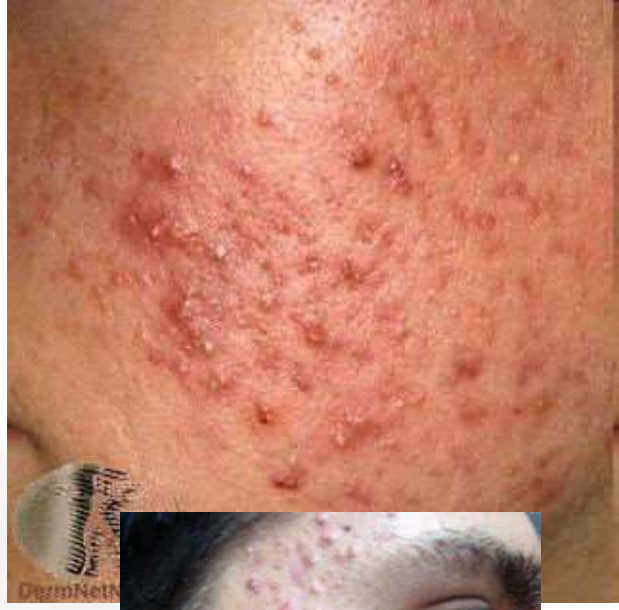
❖ **Erythema nodosum: primary lesions, course:**
- It starts as a tender red nodule
- Course: it resolves within 6-8 weeks

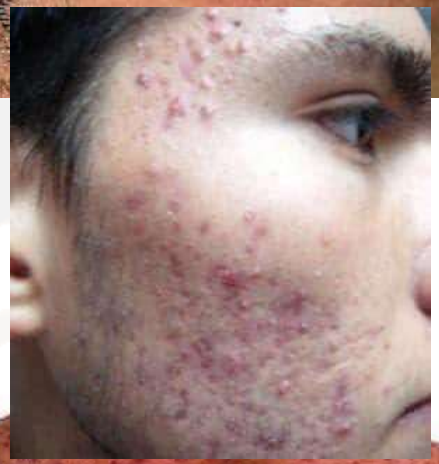


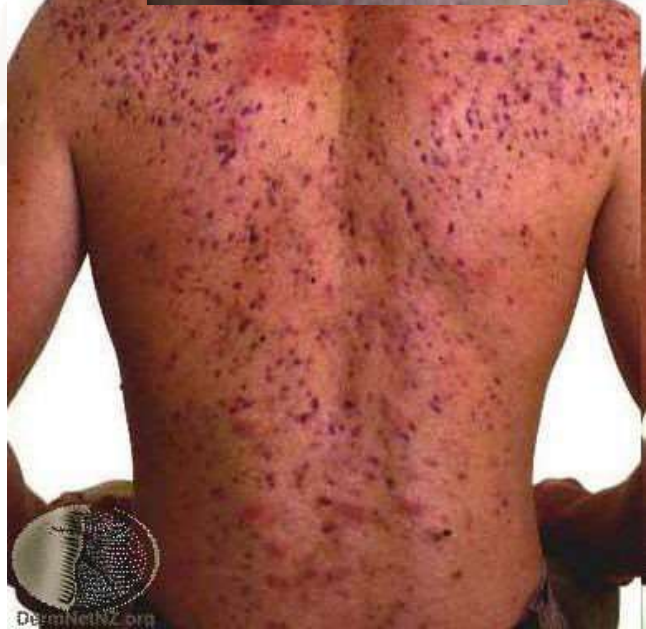
❖ **How to treat it?**
- Identify and eliminate the cause
- Bed rest and leg elevation
- NSAIDs
- ABx


Acne

A young male patient comes complaining of comedons, pustules and papules on his face and back.







- **What is your Dx and define it?**
  - Acne: is a disorder of the pilosebaceous apparatus characterized by comedones, papules, pustules, cysts & scars

- **Mention two points for the pathogenesis of acne:**
  a. Poral occlusion
  b. Hormonal
  c. Increased bacterial colonization
  d. Sebum over production

- **Describe the lesion:**
  - Multiple postural lesion on the left check with erythematous background, and a slight number of comdeons

- **What is the primary lesion?** Comedon

- **Give 2 variants for this disorder:**
  a. Conglobate
  b. Fulminans
  c. Infantile
  d. Exogenous
  e. Excoriated
  f. Drug-induced
  g. Late onset

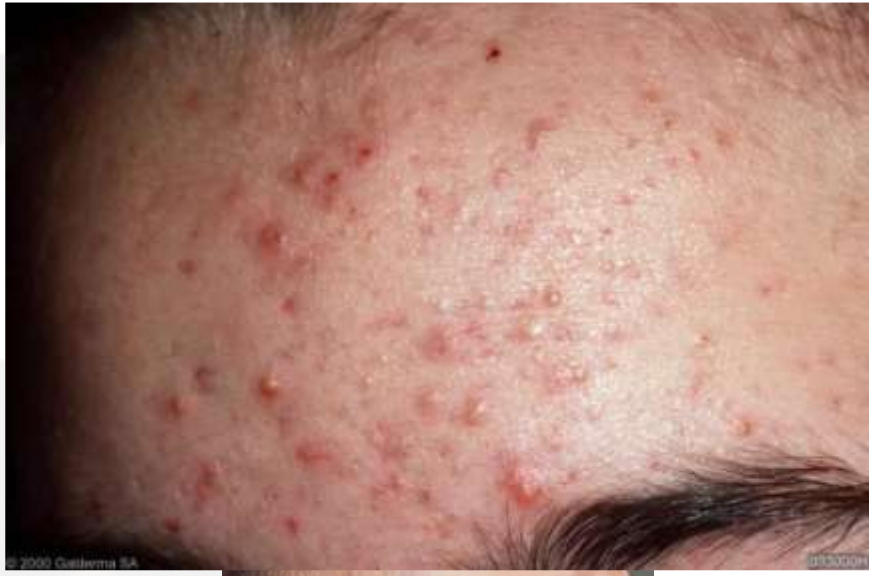
- **Name 2 complications:**
  a. Scars,
  b. post-inflammatory hyperpigmentation,
  c. Depression
  d. Infections

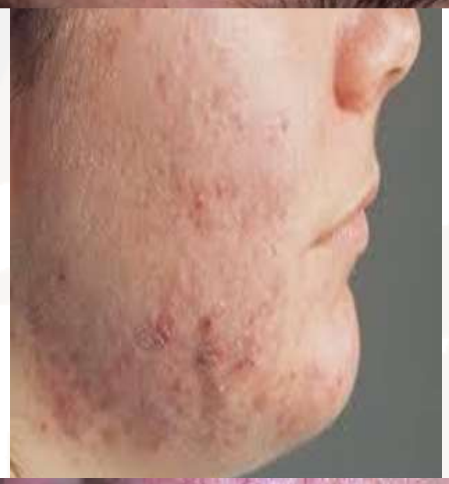
- **What is the best Rx?** Systemic isotretinoin

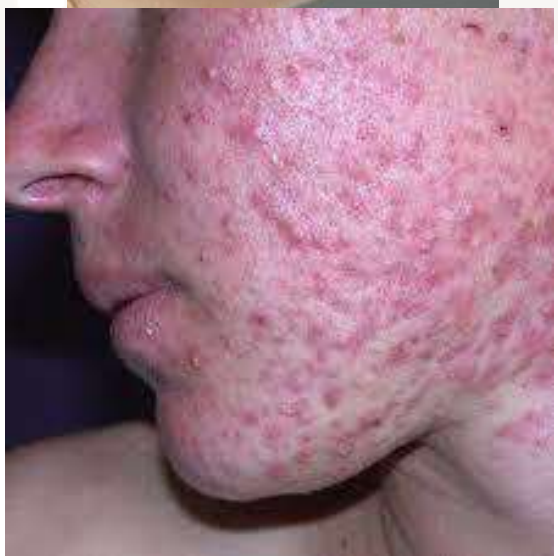
- **Name 2 topical treatments used?**
  - Acrylic acid, retinoid antibiotic

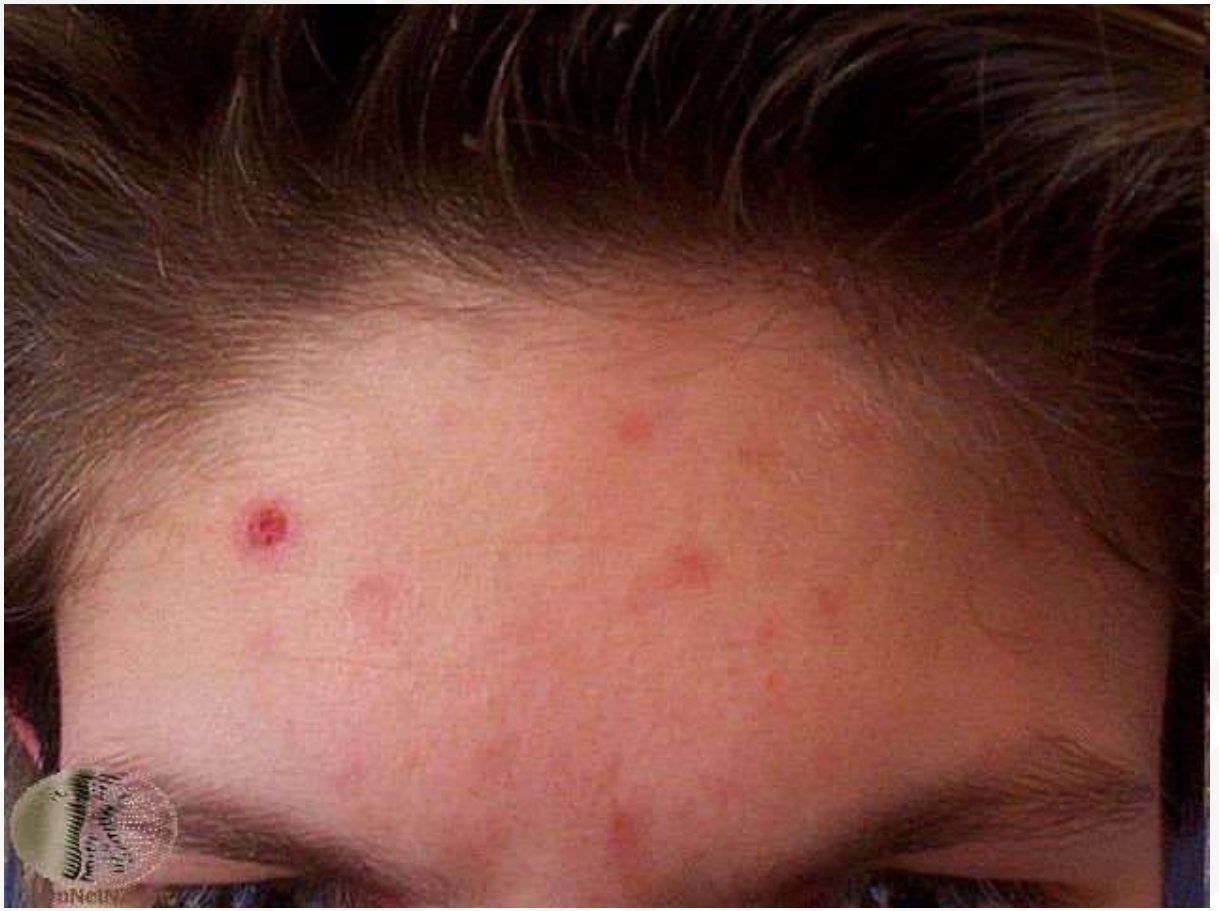
- **Name 3 lines of systemic treatment:**
  a. Systemic antibiotics
  b. Systemic isotretinoin
  c. Metformin
  d. Hormonal therapy

- **If the patient had scars, what is the treatment of choice and mention the side effects for it:**
  - Isotretinoin: hair loss, hearing loss, headache, increased ICP









❖ **Name the condition?** Excoriated acne

❖Name 2 clinical differences between Acne and Rosacea:

IS IT ACNE OR ROSACEA?

	ACNE	ROSACEA
SYMPTOMS	• Pimples • Whiteheads • Blackheads • Inflammation	• Redness in center of face • Pimples • Itching

Rosacea vs. Acne: What's the Difference?

	Rosacea	Acne Vulgaris
Areas Affected:	Central region of the face, usually the cheeks and nose, sometimes the chin or forehead.	Primarily the face, but the back, chest and shoulders may also be affected to a lesser degree.
Symptoms:	Typically starts as a redness, sometimes with tiny dilated blood vessels becoming visible. Bumps and pimples may appear as inflammation increases, and the eyes may feel gritty or appear bloodshot. In advanced cases, the nose may become swollen from excess tissue.	Characterized by a great variety of lesions, with blackheads often predominant. Pimples, bumps and nodules may also develop on the face and other affected areas. The skin may become oily from overly active sebaceous glands.
Treatment:	Prescription oral and topical medications and avoidance of lifestyle factors that may trigger flare-ups.	Over-the-counter acne preparations and prescription medications for severe cases.

DIFFERENCE BETWEEN ACNE AND ROSACEA

ACNE

ROSACEA

SYMPTOMS

- IF OIL PRODUCED BY THE SKIN BLOCKS A PORE, IT BECOMES INFECTED OR INFLAMED, A PIMPLE FORMS – A RAISED RED SPOT WITH A WHITE CENTER
- ACNE CAN CAUSE BLACKHEADS, WHITEHEADS, OR PAINFUL CYSTS (AS WELL AS PIMPLES)
- SKIN CAN BE OILY FROM OVERACTIVE SEBACEOUS GLANDS, ESPECIALLY IN THE T ZONE
- REDNESS IS LOCALISED TO THE PIMPLES AND THERE IS NO REDNESS IN IN AREAS WITHOUT PIMPLES

- TYPICALLY STARTS AS A REDNESS IN THE MIDDLE OF THE FACE
- BROKEN CAPILLARIES OFTEN VISIBLE
- BUMPS AND PIMPLES MAY APPEAR AS INFLAMMATION INCREASES, (BUT NO BLACK OR WHITE HEADS)
- EYES MAY FEEL GRITTY OR APPEAR BLOODSHOT
- IN ADVANCED CASES, THE NOSE MAY BECOME SWOLLEN FROM EXCESS TISSUE

AREAS AFFECTED

PRIMARILY THE FACE, USUALLY THE JAW AND T ZONE, BUT BACK, CHEST AND SHOULDERS MAY ALSO BE AFFECTED

JAW

T ZONE

SHOULDER

CENTRAL REGION OF THE FACE, USUALLY CHEEKS AND NOSE, OCCASIONALLY CHIN OR FOREHEAD

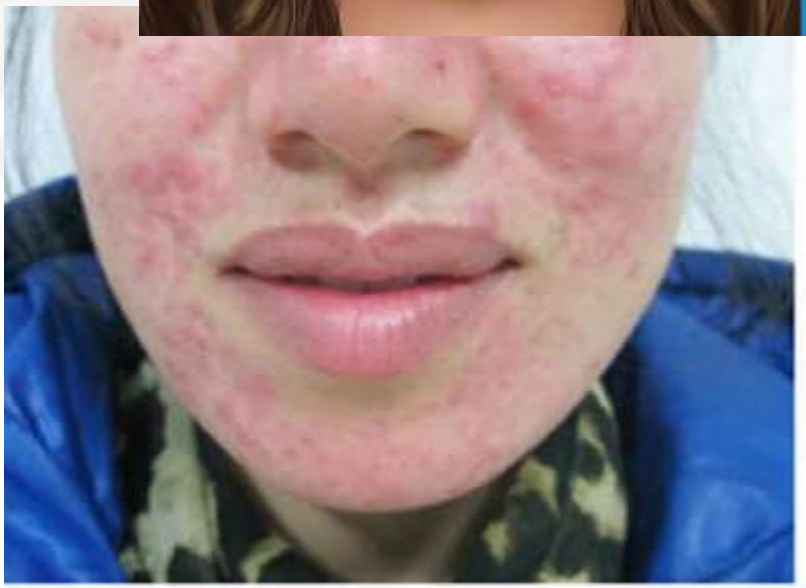
CHEEKS

NOSE

FOREHEAD


ROSACEA
ACNE


Acne
Rosacea
VS



Rosacea

Acne


Eczema

❖ **Characteristic of chronic eczema:**

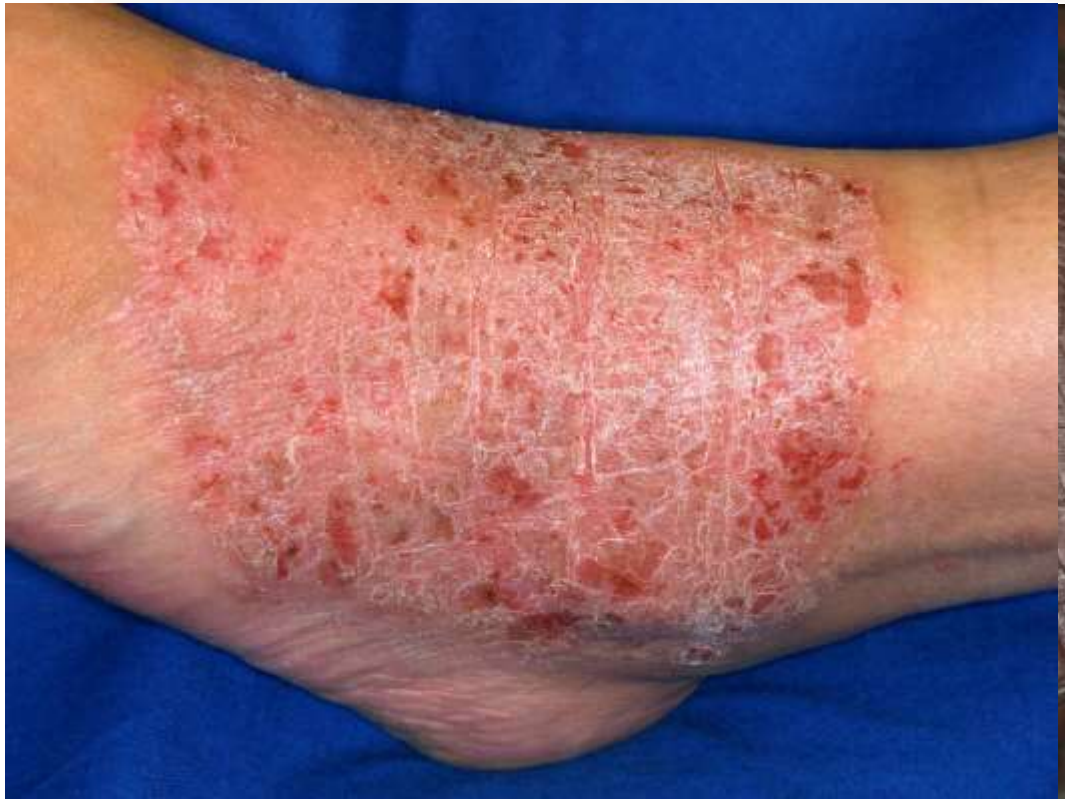
- Lichenification is a characteristic sign of eczema chronicity (seen in the pictures)

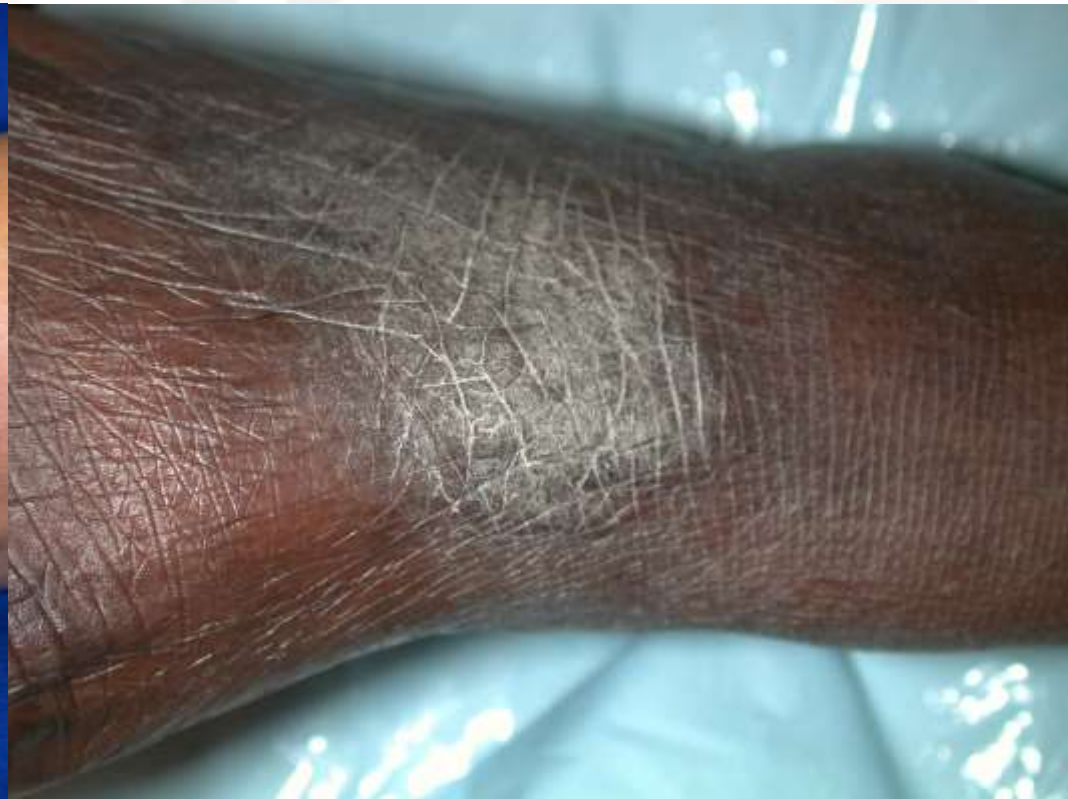
❖ **Mention the types of endogenous eczema:**

a. Seborrheic

b. Atopic

c. Discoid





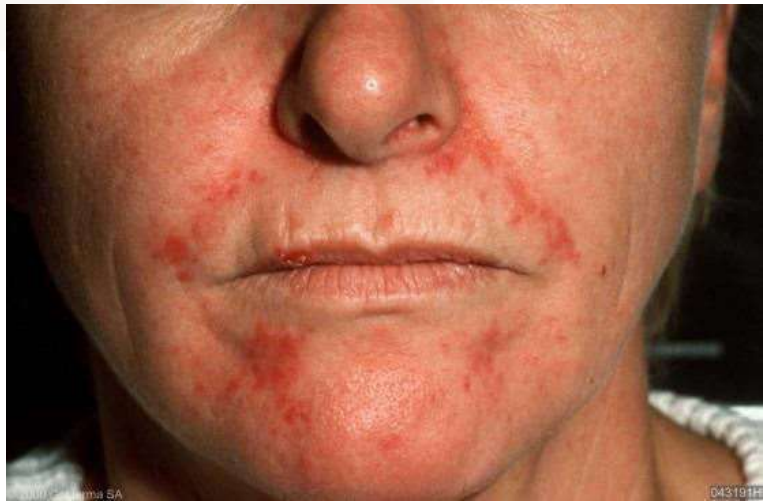
The patient complain of this yellowish greasy scales and a rash on his chest:

❖ **What is the Dx?** Seborrheic eczema

❖ **What is the name of chest rash?**
- Seborrheic folliculitis or Malassezia folliculitis

❖ **Mention 2 places for seborrheic eczema:**
a. Red scales: Face, scalp, ears, eyebrows
b. Dry scales: Pre-sternal, inter-scapular, trunk
c. Intertriginous: groin, armpits, umbilicus

❖ **Name 3 complications of Seborrheic Eczema:**
a. Furunculosis
b. Interiginous lesions
c. Candida infection



❖ **Give 1 DDx:** Scabies

❖ **Name 2 lines for treatment:**
a. Topical imidazole
b. Li preparation
c. Salicylic acid

A 53 year old sexually active male complains of yellow crusted lesions around the mouth, he had this condition for the last 5 years:

❖ **What is the Dx?**

- Seborrheic eczema

❖ **Name the most common groups affected:**

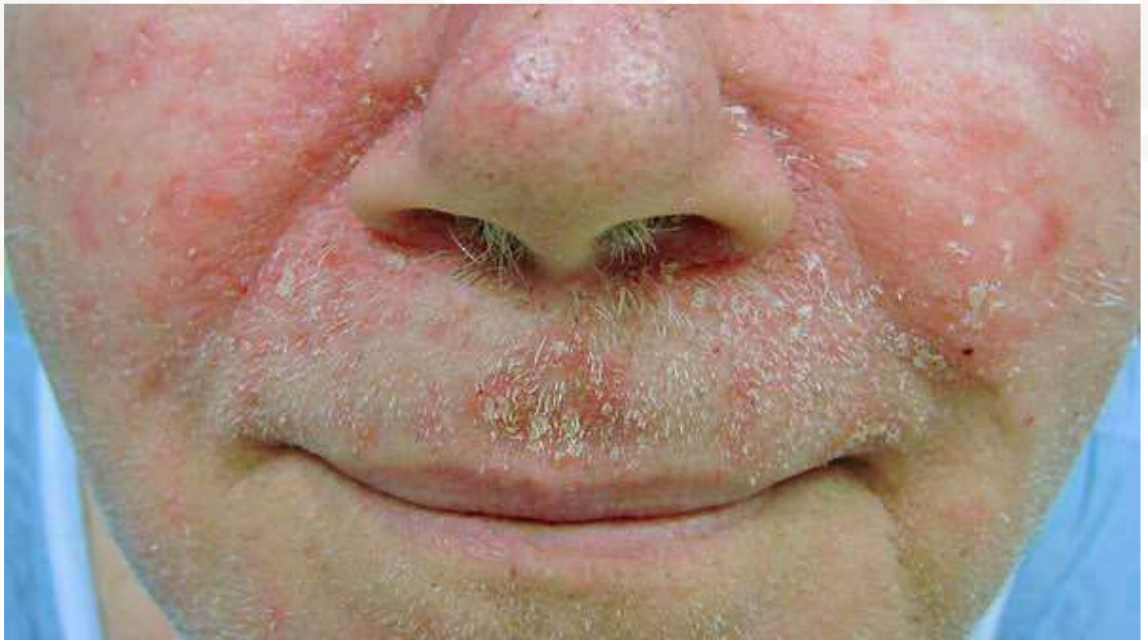
- Adult, males

❖ **Mention the yeast associated with this condition:**

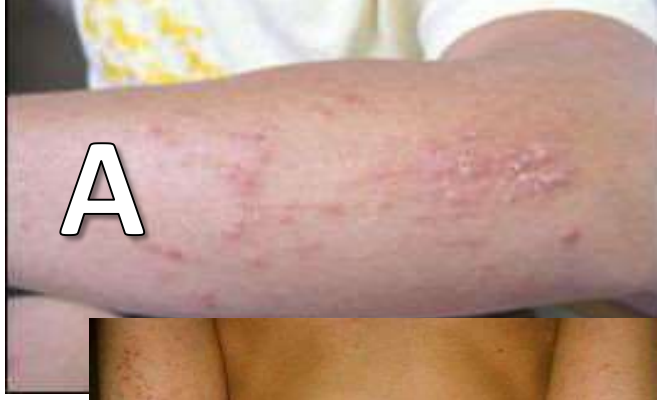
- Malasia

❖ **If this condition is resistant to all treatments, what is the likely cause?**

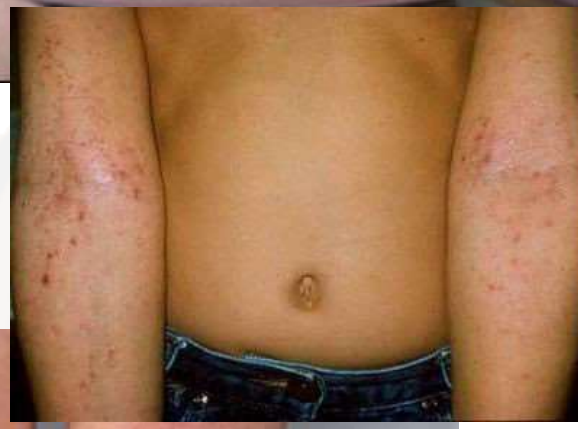
- HIV



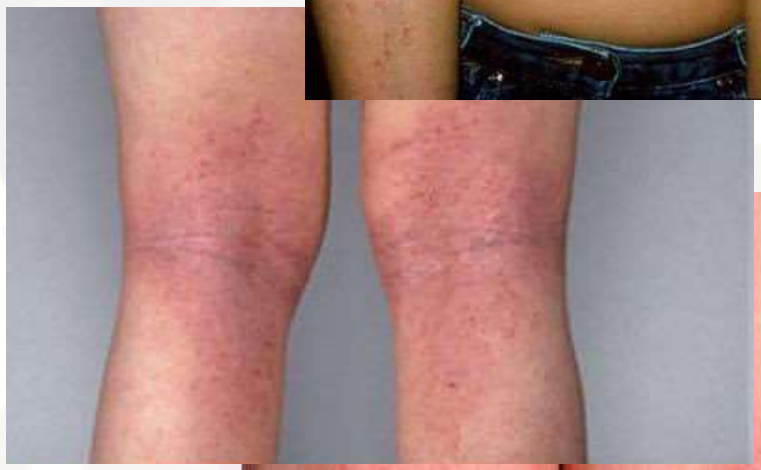
30 Year old patient came with these itchy lesions:



- **Describe the lesion (Picture A):**
  - Plaque, well demarcated, red in color, scaly with excoriation, no specific arrangement, on the forearm



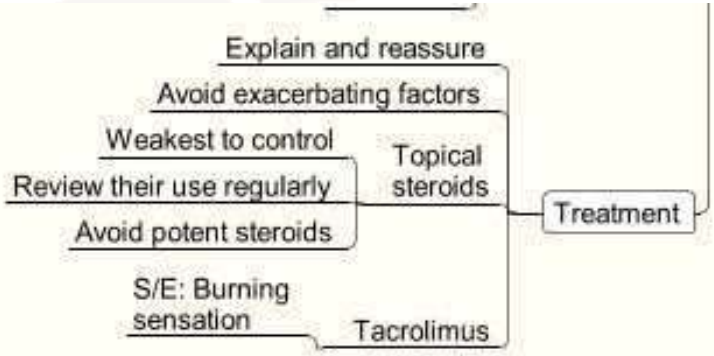
- **Describe the lesion (Picture B):**
  - the primary lesions is plaque, and the secondary is the lichenification, ill defined red dry and scaly found on the extensor surface of bilateral forearms



- **What is the Dx?** Atopic Eczema

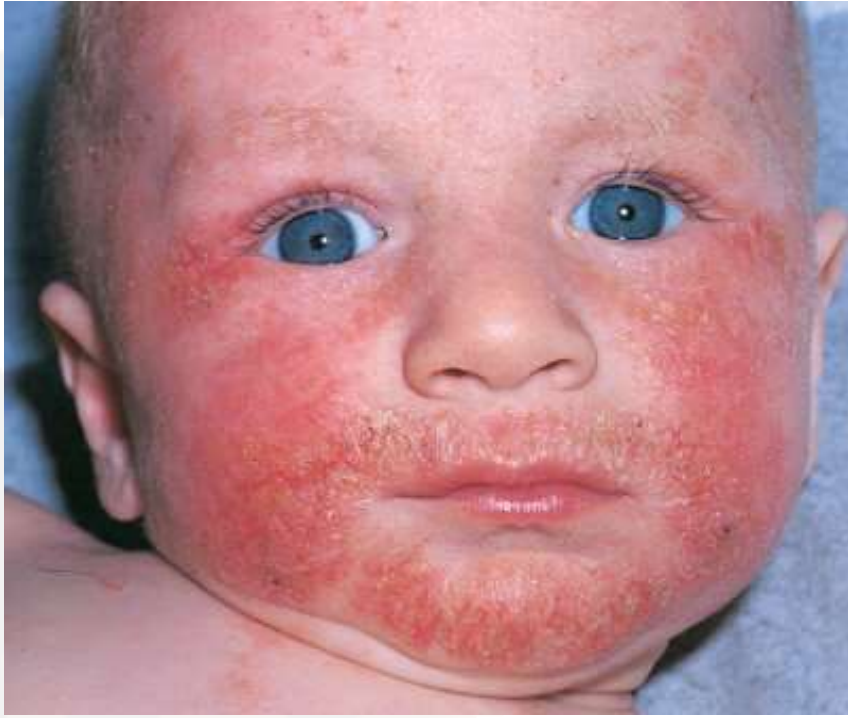
- **Mention 3 complications:**
  a. Affect sleep/work in adult, growth in children
  b. Skin infections
  c. Allergic contact dermatitis, Irritant hand dermatitis

- **Name 3 lines of treatment:**
  a. Topical steroids
  b. Tacrolimus
  c. Ciclosporin



- **What is the cardinal sign:**
  - Itching

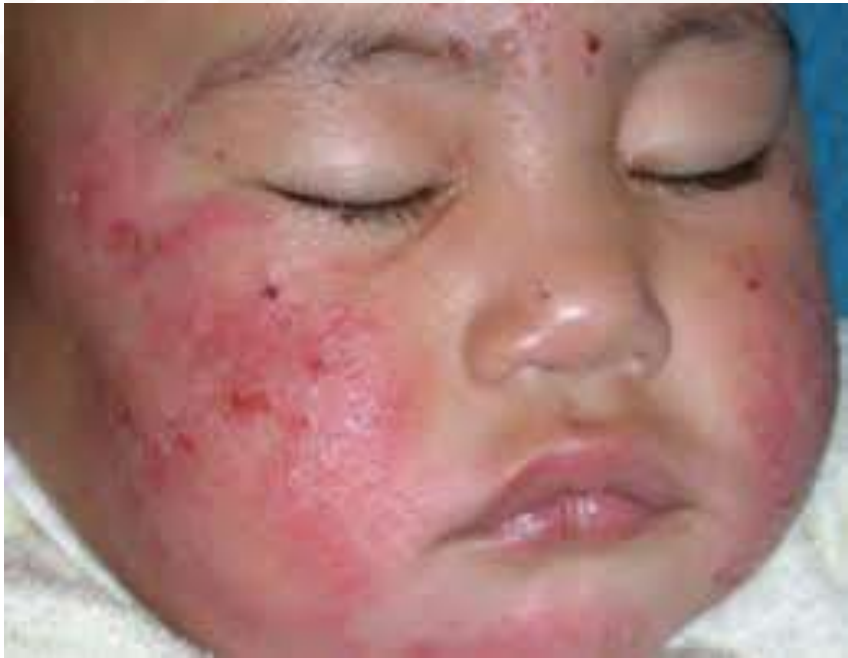
6 month old baby present with this rash for 3 months, his mother has asthma:



- **What is your Dx:**
  - Atopic Eczema

- **Name 2 skin infections that can cause it:**
  a. HSV
  b. Strep
  c. Staph aureas

- **Where do you expect the rash to be if the condition persisted till childhood:**
  - Flexure surfaces



- **Mention other conditions related to atopy:**
  - Allergic rhinitis, asthma, hay fever

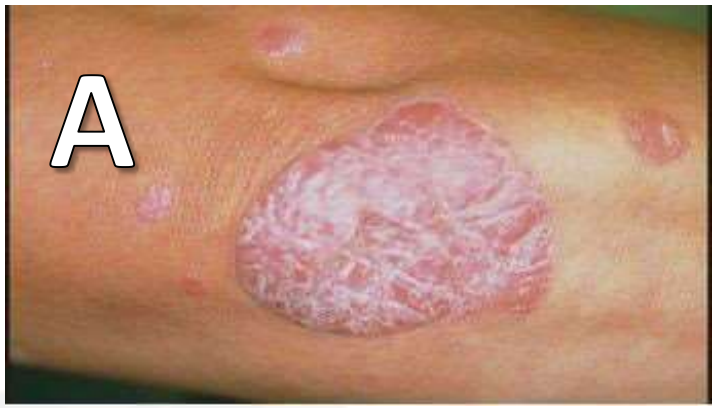
- **How to treat this condition:**
  a. Topical steroids
  b. Tacrolimus
  c. Anti-histamine
  d. Calciurin inhibitor


Psoriasis

❖ **Describe the lesion:**

A. Large, well demarcated, scaly, pink lesion on the elbow

B. Large, well defined, scaly, brownish pink, bilaterally on the back



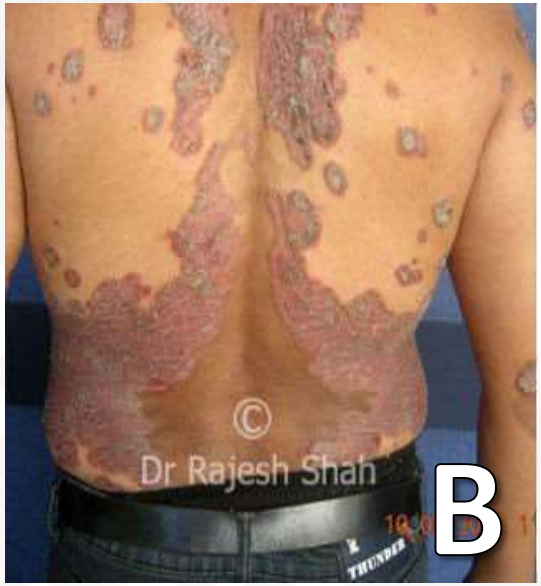
❖ **What is your Dx?** Plaque Psoriasis

❖ **Mention 2 life-long complications for chronic psoriasis:**

a. Metabolic disorders
b. Ischemic heart disease
c. Arthropathy
d. Erythroderma

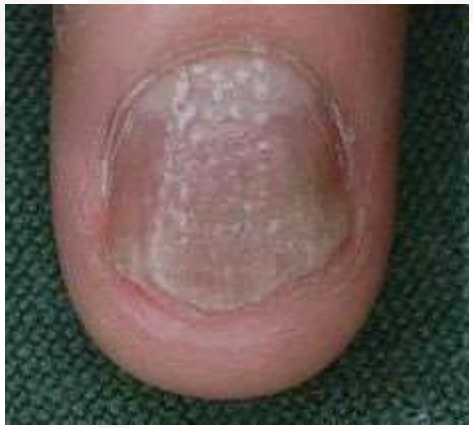
❖ **Name 2 sites for chronic psoriasis/other sites you will examine:**

a. Symmetrical sites: Elbows, knees
b. Lower back, Scalp
- Other: nails, joints, extensor surfaces



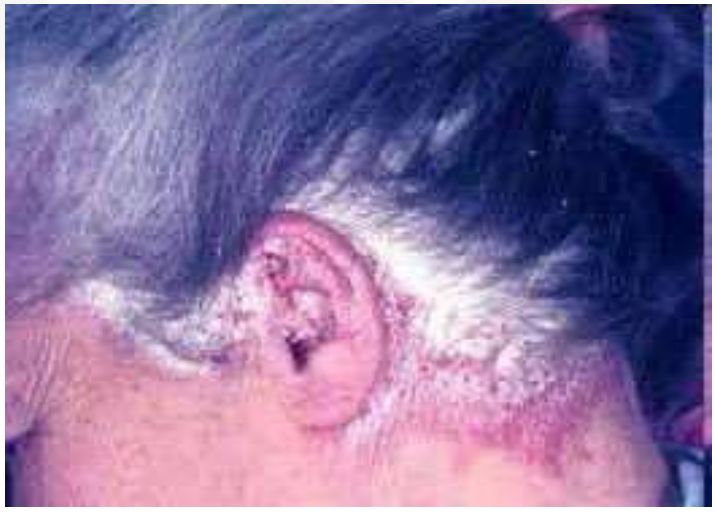
❖ **Name the drugs that exacerbate Psoriasis:**

a. Beta-blockers
b. Anti-malarian drugs
c. Steroid withdrawal rebound



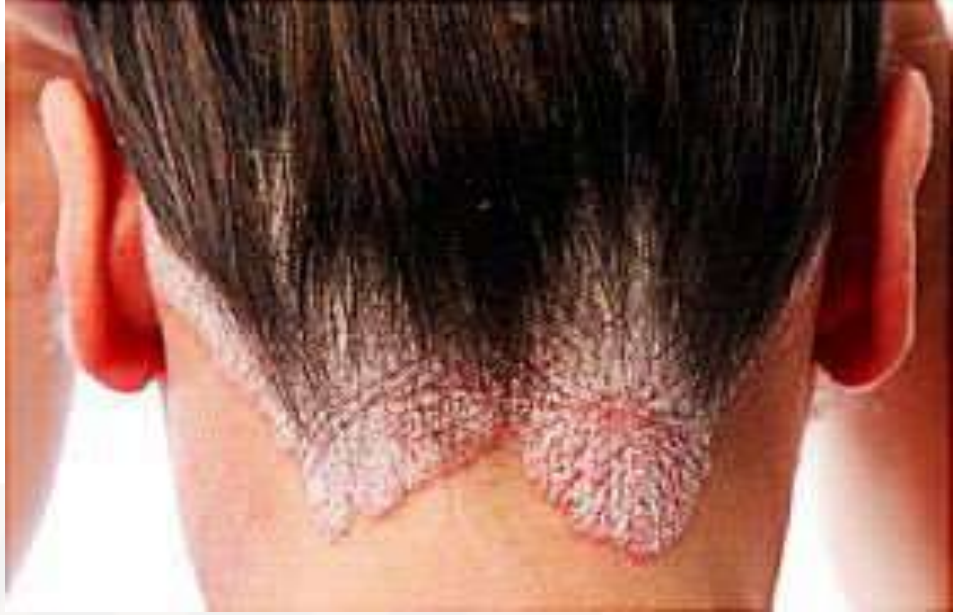
❖ **What is the Mx for Psoriasis:**

a. Reassurance
b. Topical treatment
c. UV
d. Systemic combination



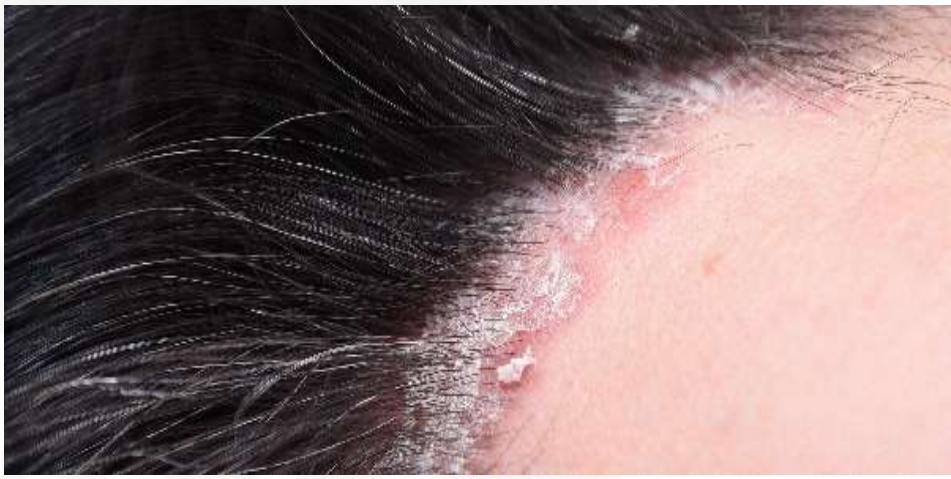
❖ **Describe the lesion:**

- **Type**: plaque
- **Shape** :well defined margin, salmon-pink, silver scale on top of it, overflows beyond hair line
- **Distribution** :on scalp



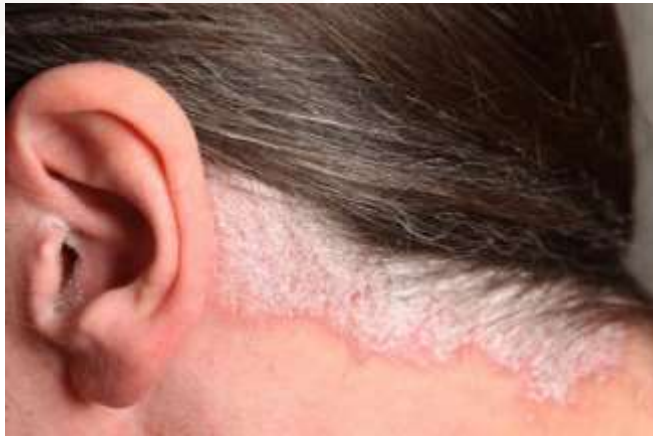
❖ **Mention 4 Systemic lines of Mx:**

a. Acitretin
b. Methotrexate
c. Cyclosporine
d. Biologics (Infliximab)

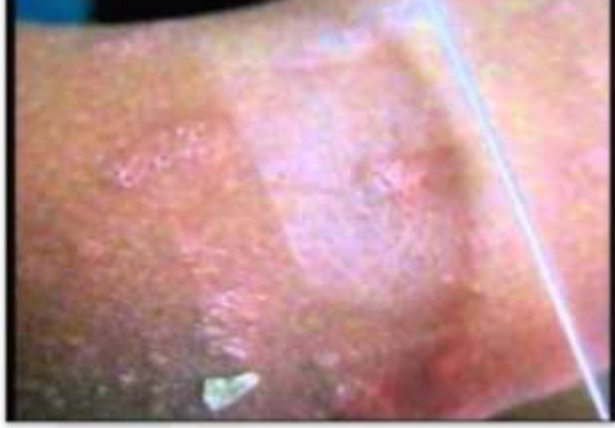


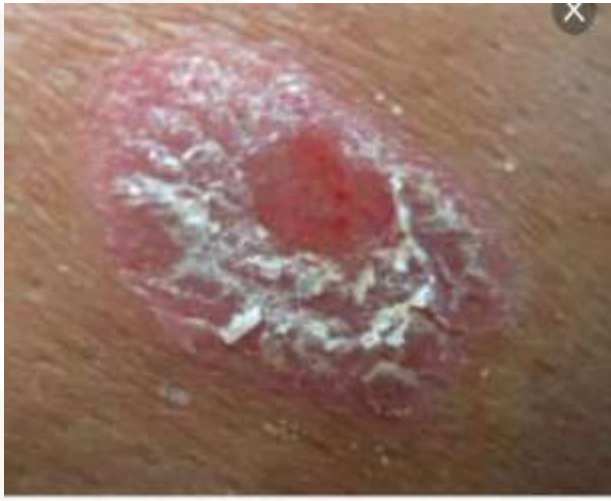
❖ **How to differentiate seborrheic dermatitis and scalp psoriasis?**

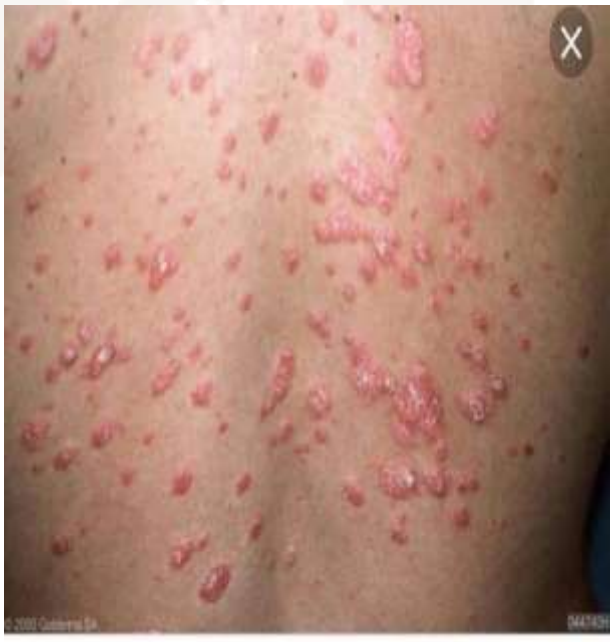
Psoriasis	Seborrheic Dermatitis
lumpy	Less lumpy
Well defined margin	Not will defined
Overflows beyond hair line	Doesn’t
Silver Scales	Yellow Greasy Scales



Patient came to your clinic with this presentation after strep pharyngitis infection, you scratch it and blood appears as in the picture seen:







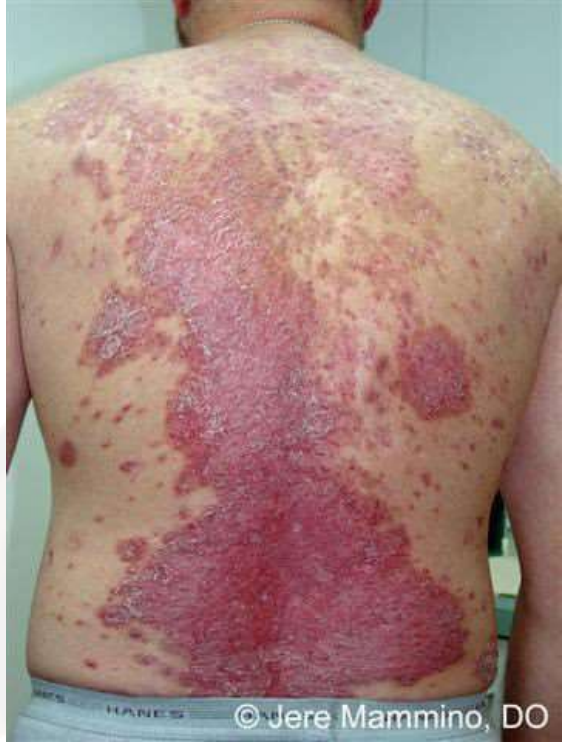
- **Name the sign and which disease is it seen in?**
  - Auspitz sign, seen in psoriasis

- **What is the pathogenesis behind it?**
  - Auspitz's sign is the appearance of punctate bleeding spots when psoriasis scales are scraped off, there's irregular thickening of the epidermis with thinning over dermal papillae with dilated and tortuous loops of capillaries in dermal papillae, so when you scratch and remove the scale pinpoint bleeding is seen.

- **Describe the lesion (back lesions):**
  Multiple papules and plaques , red to salmon pink in color with silver scales ,well-demarcated on his back , bilaterally .

- **What is the prognosis for this disease?**
  The rash clears in few months, but plaque psoriasis may develop later on (Good Prognosis)

A 45 years old male came to your clinic complaining of this mildly itching lesions which appeared before 2 years:



- **Describe the lesion:**
  - TSAD: salmon pink, scaly, well defined plaque, with no specific arrangement, distributed in the lower back and buttock

- **Mention 2 topical treatments:**
  - Vit. D analogue, Retinoids, Corticosteroid, Dithranol, Coal Tar

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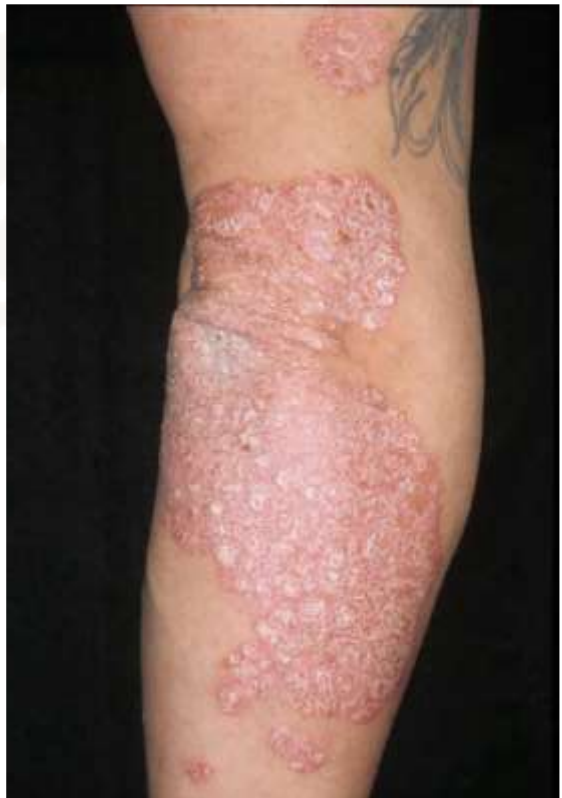
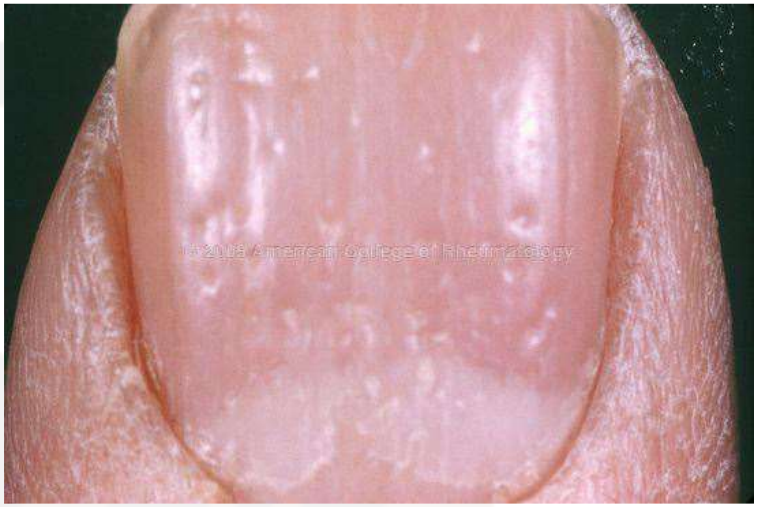
A 20 year old female came to your clinic complaining of this lesion, there is also a family history:



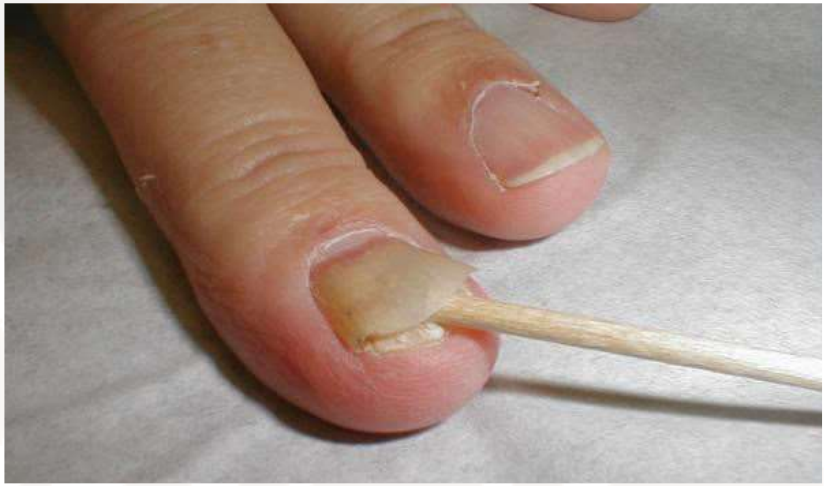
- **Describe the lesion:**
  - TSAD: salmon pink, silver scales, well defined plaque with no specific arrangement, distributed in the forearm (extensor surface)

- **Mention 2 triggering factors:**
  - Trauma, infection, hormonal, sunlight, drugs, smoking, alcohol, emotion

A 23-year-old male patient comes to the office complaining of the following, he's father and brother are diagnosed with psoriasis.

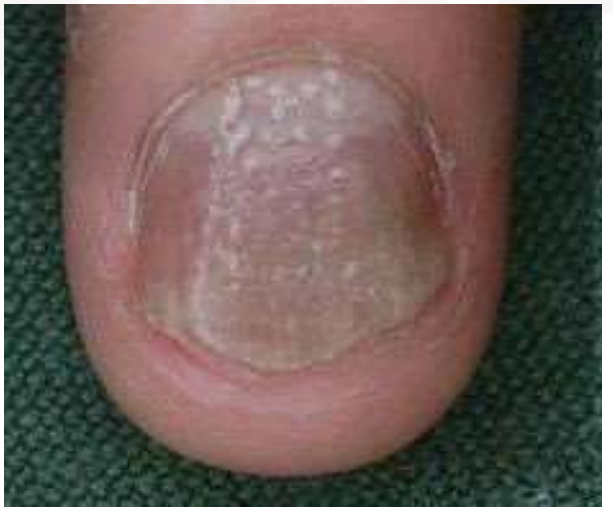


- **What the Dx?**
  - Nail Psoriasis



- **Mention the finding from the picture.**
  - Thimble pitting
  - Onycholysis

- **What other nail changes you might see in this condition?**
  - Subangular hyperkeratosis
  - Oil spotting
  - Onycholysis
  - Splinter hemorrhage
  - Arthritis

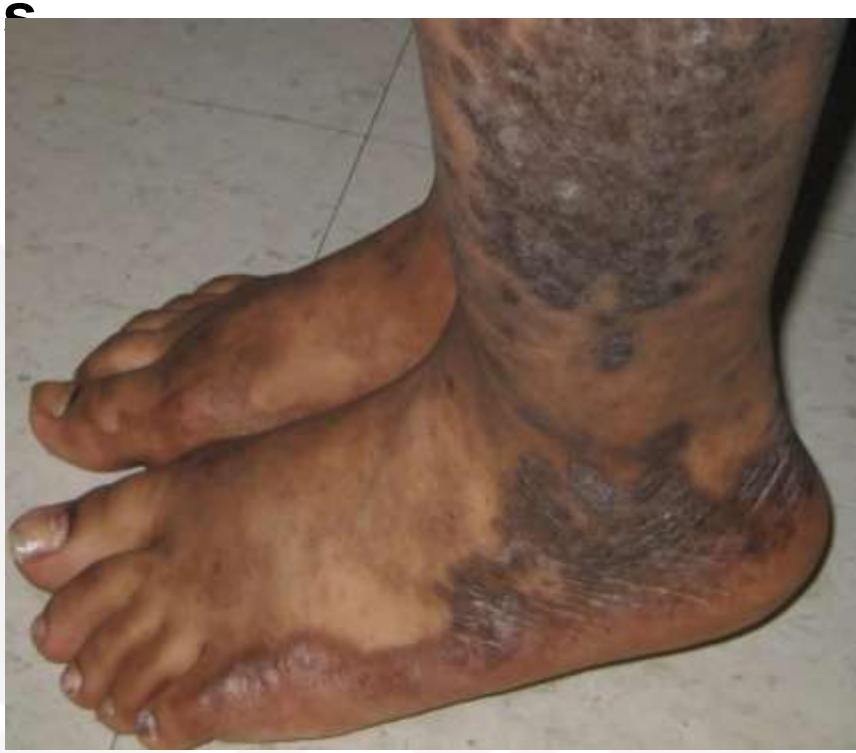


- **Give 1 DDx.** Ring worm infection

- **Describe the typical skin lesion that occur in this disorder:**
  - Salmon-like with silver scales


Lichen Planus

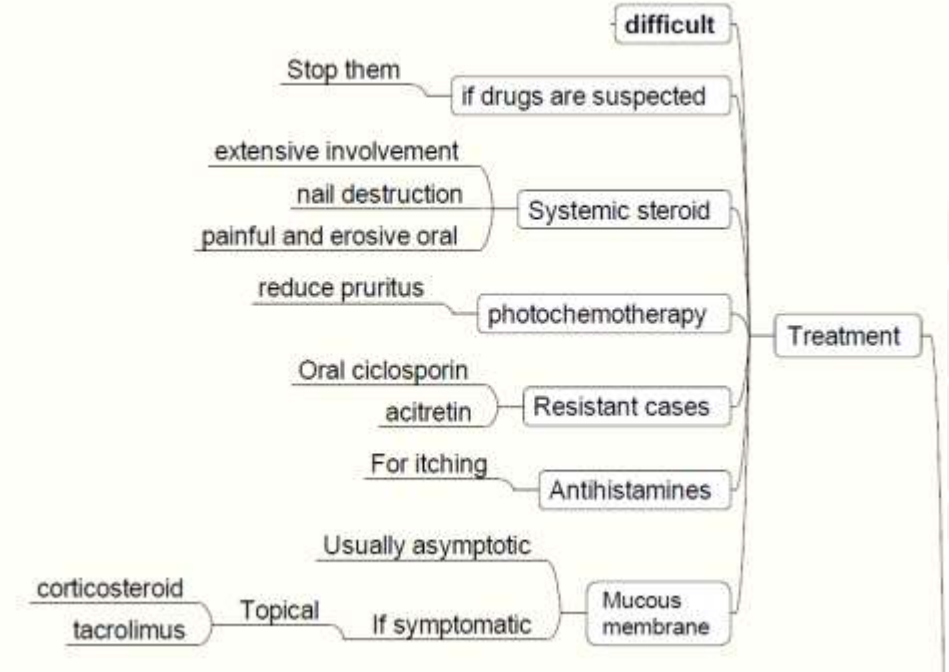
This patient develop a violaceous intensely itchy lesions on his wrists and legs



- **What the Dx?**
  - Lichen Planus

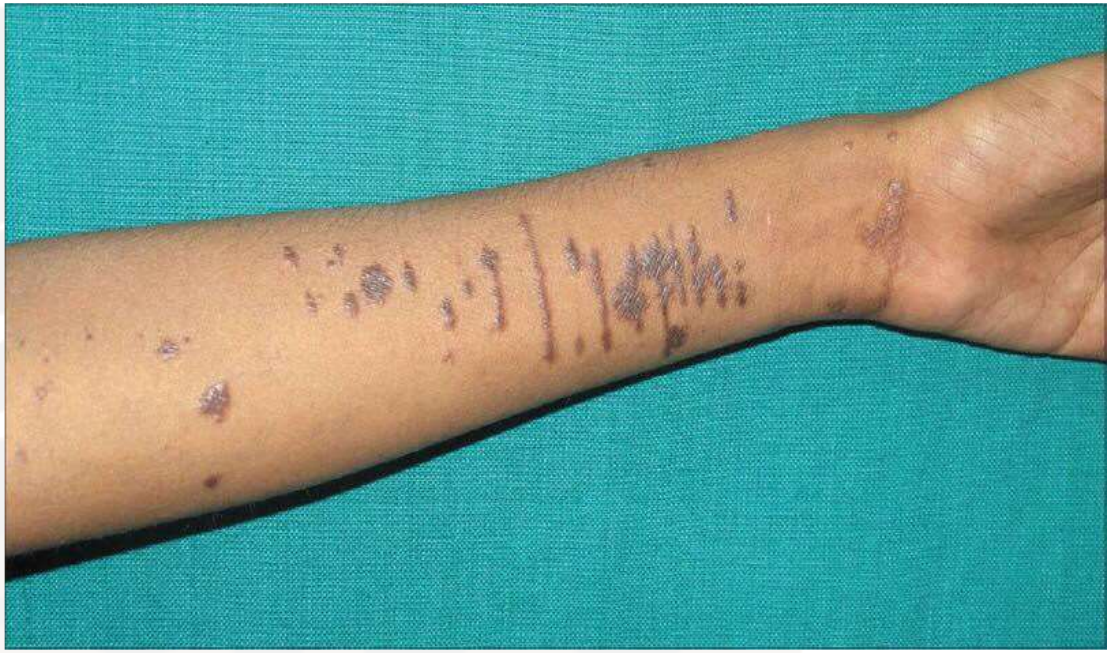
- **Describe the Picture:**
  - 5 P's + Scaly and Symmetrical

- **Mention 3 nail abnormality you can see in this disease?**
  a. Pterygium
  b. Fine grooves
  c. Destruction of the nail bed



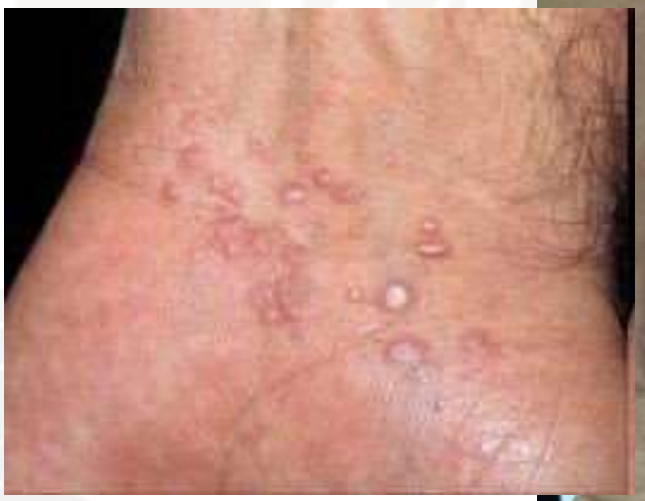
- **P** - **P**ruritic
- **P** – **P**lanar
- **P** – **P**olygonal
- **P** - **P**urple
- **P** - **P**laques
- **P** – **P**apules

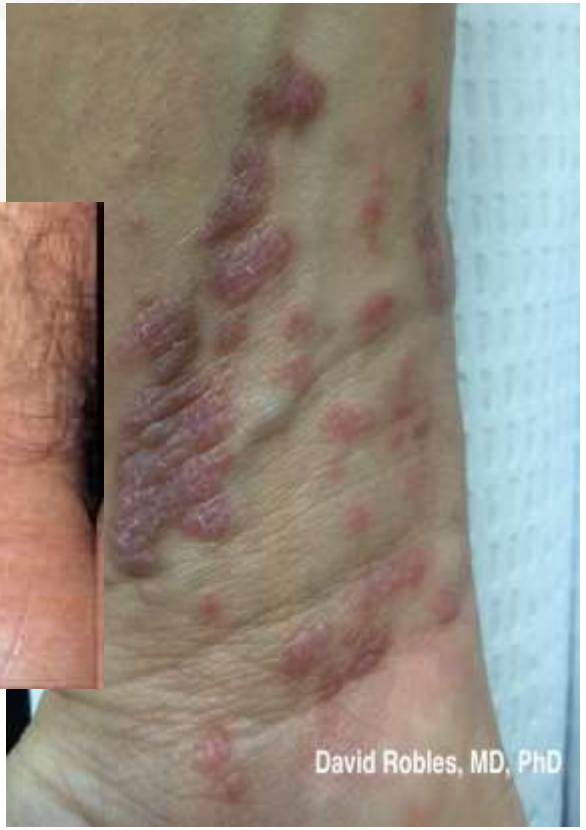
Pt complain of itchy flat-topped papule on volar aspect of his hand

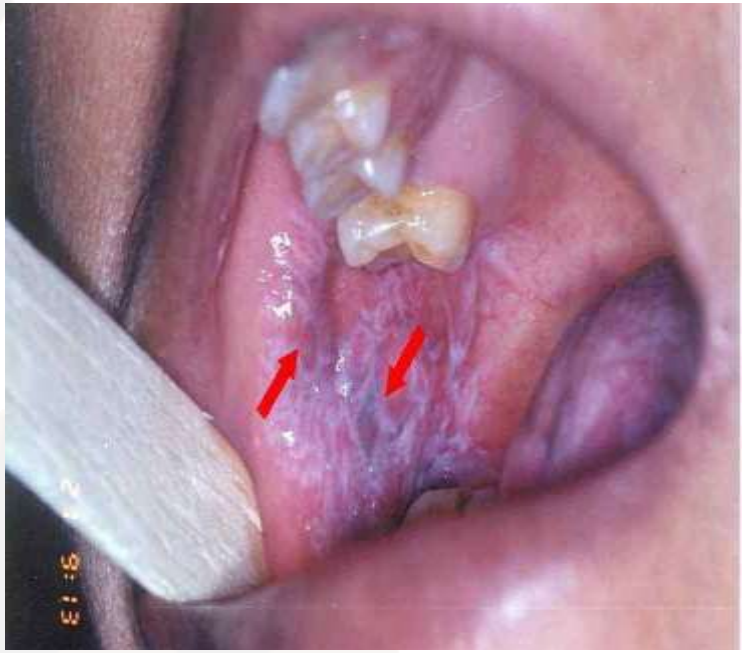


- **What is Dx?** Lichen Planus
- **Is it infectious or not?**
  - No it's immune mediated
- **What is the cause of these linear lesions on his hand?**
  - Kobner's phenomenon, it occurs from trauma mainly scratching
- **Name 4 variants for this disease:**
  a. Atrophic
  b. Hypertrophic
  c. Follicular
  d. Nails
  e. Ulcerative
  f. Bullous
  g. Linear

Lichen planus exanthematicus
Lichen planus localisatus
Lichen planus linearis
Lichen planus hypertrophicus
Lichen planus bullosus
Lichen planus erosivus
Lichen planus palmoplantaris
Lichen planus actinicus
Lichen planus nodularis
Lichen planus annularis
Lichen planus atrophicans
"Lichen planus – lupus erythematosus" overlap
Lichen planus follicularis
Lichen planopilaris
Lichen planus unguium



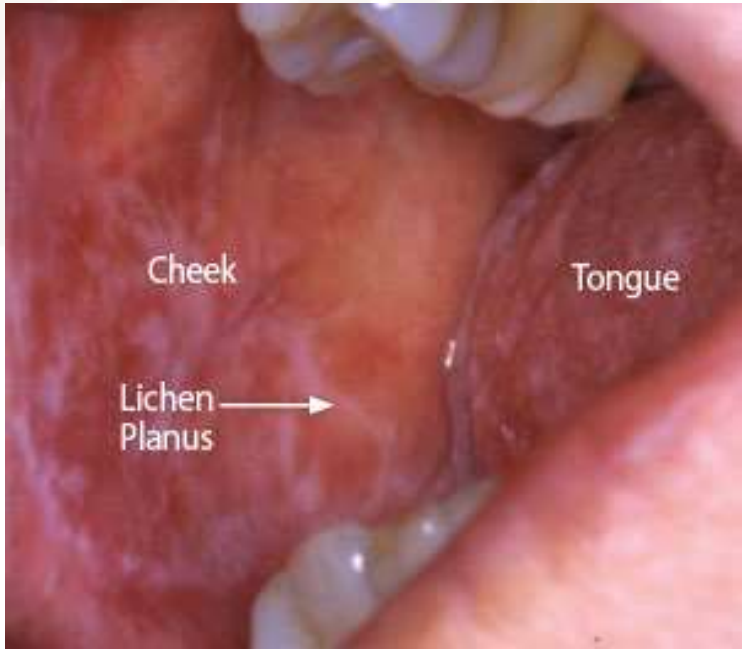




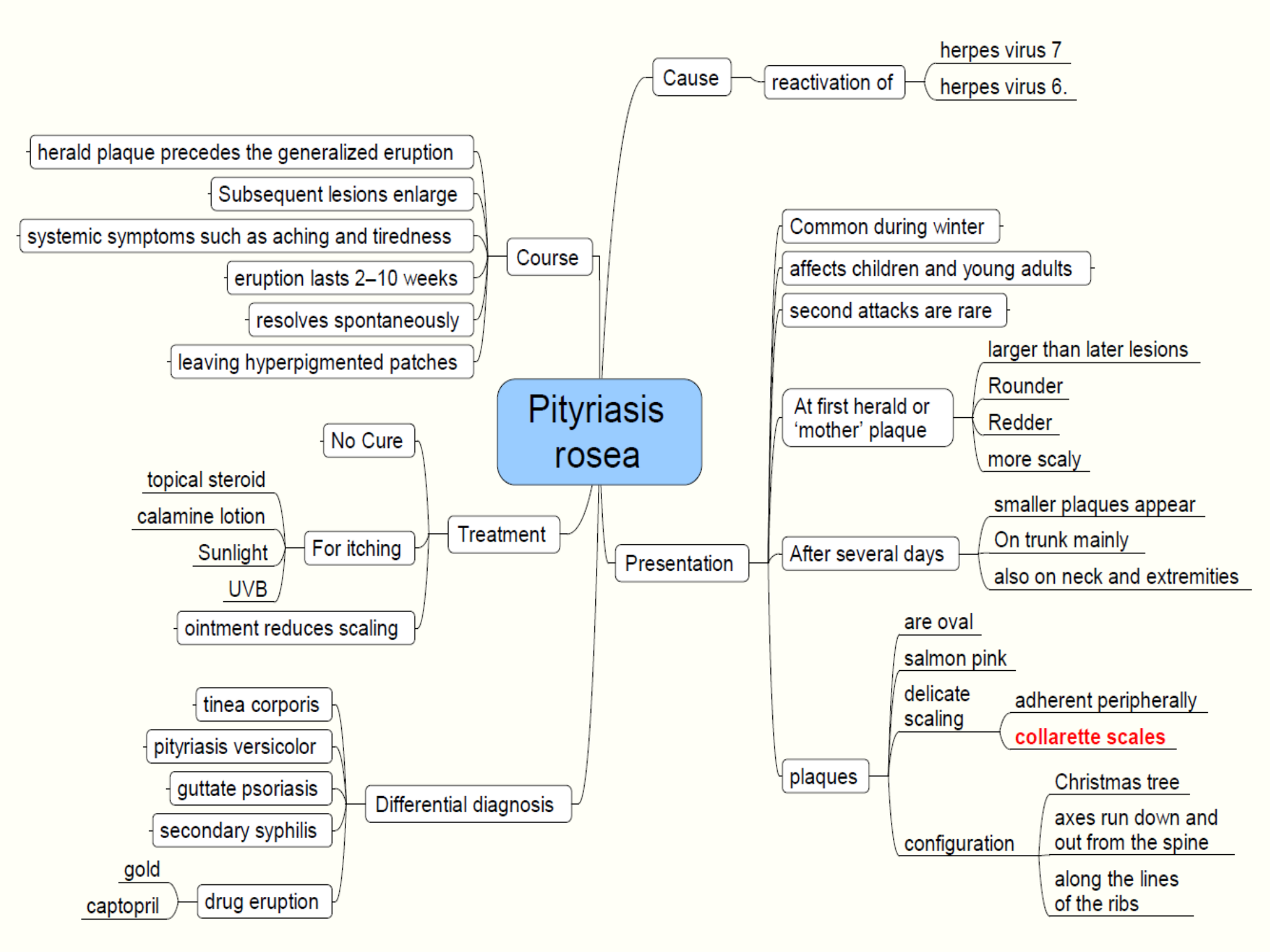
Pt has itchy papule on the his flexors:

- **Name the striae on the buccal mucosa:**
  - Lacy lines

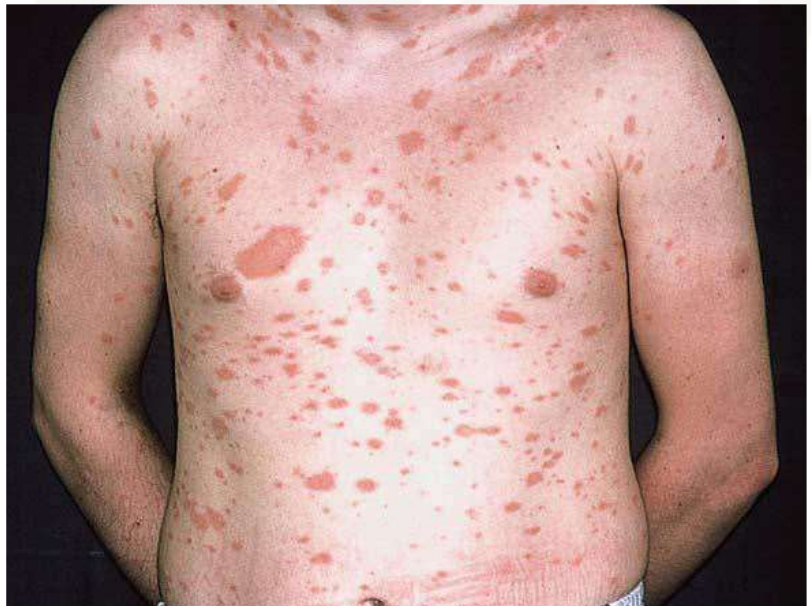
- **Mention 2 complications of the disease:**
  a. Nail, hair loss can be permanent
  b. The ulcerative variant might progress to SCC

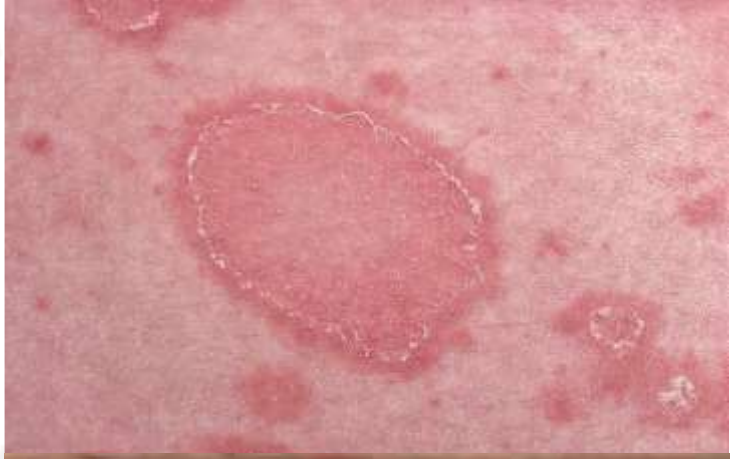


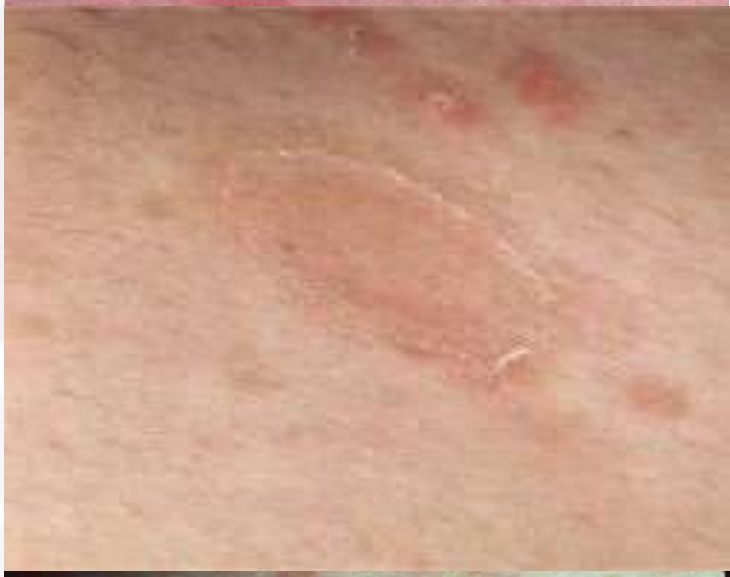
Pityriasis Rosea

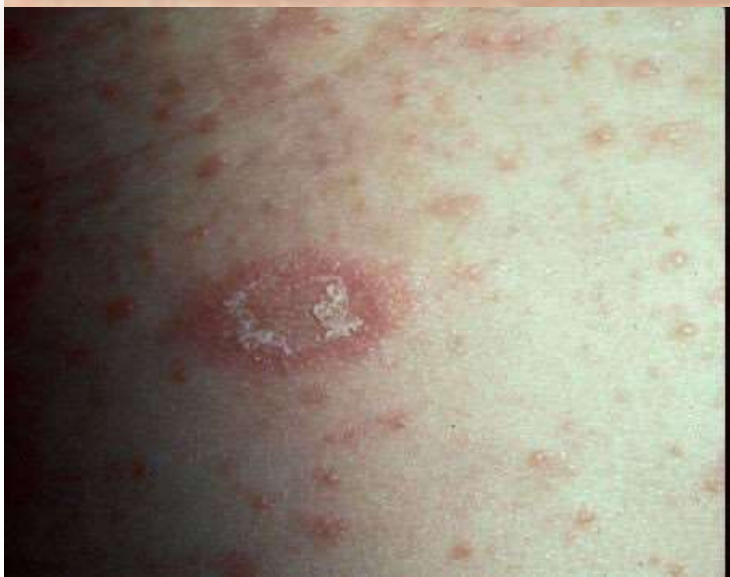

Pityriasis rosea
Cause
reactivation of
herpes virus 7
herpes virus 6.
Course
herald plaque precedes the generalized eruption
Subsequent lesions enlarge
systemic symptoms such as aching and tiredness
eruption lasts 2–10 weeks
resolves spontaneously
leaving hyperpigmented patches
Presentation
Common during winter
affects children and young adults
second attacks are rare
At first herald or 'mother' plaque
larger than later lesions
Rounder
Redder
more scaly
After several days
smaller plaques appear
On trunk mainly
also on neck and extremities
plaques
are oval
salmon pink
delicate scaling
adherent peripherally
collarette scales
configuration
Christmas tree
axes run down and out from the spine
along the lines of the ribs
Treatment
No Cure
For itching
topical steroid
calamine lotion
Sunlight
UVB
ointment reduces scaling
Differential diagnosis
tinea corporis
pityriasis versicolor
guttate psoriasis
secondary syphilis
drug eruption
gold
captopril

- **What is the Dx:** Pityriasis Rosea
- **What is the name of the large plaque:** Herald (Mother) plaque
- **What is the scale type:** Collarette
- **Describe the lesion:** oval, salmon pink, delicate scaling adherent peripherally colarrette scales
- **What is the causative organism:** Herpes virus 6, 7
- **Give 2 DDx:** Guttate psoriasis, secondary syphilis
- **Name 2 drugs that might cause this:**
  - ACEI, NSAIDs, Hydrochlorothiazide, Imatinib, Metronidazole, Gold, Terbinafine, Clozapine
- **Name a serology test used:**
  - WBC, ESR, RF
  - RPR or VDRL to differentiate it from secondary syphilis
- **How is the prognosis?**
  - eruption lasts 2–10 weeks, resolves spontaneously leaving hyperpigmented patches










Rosacea

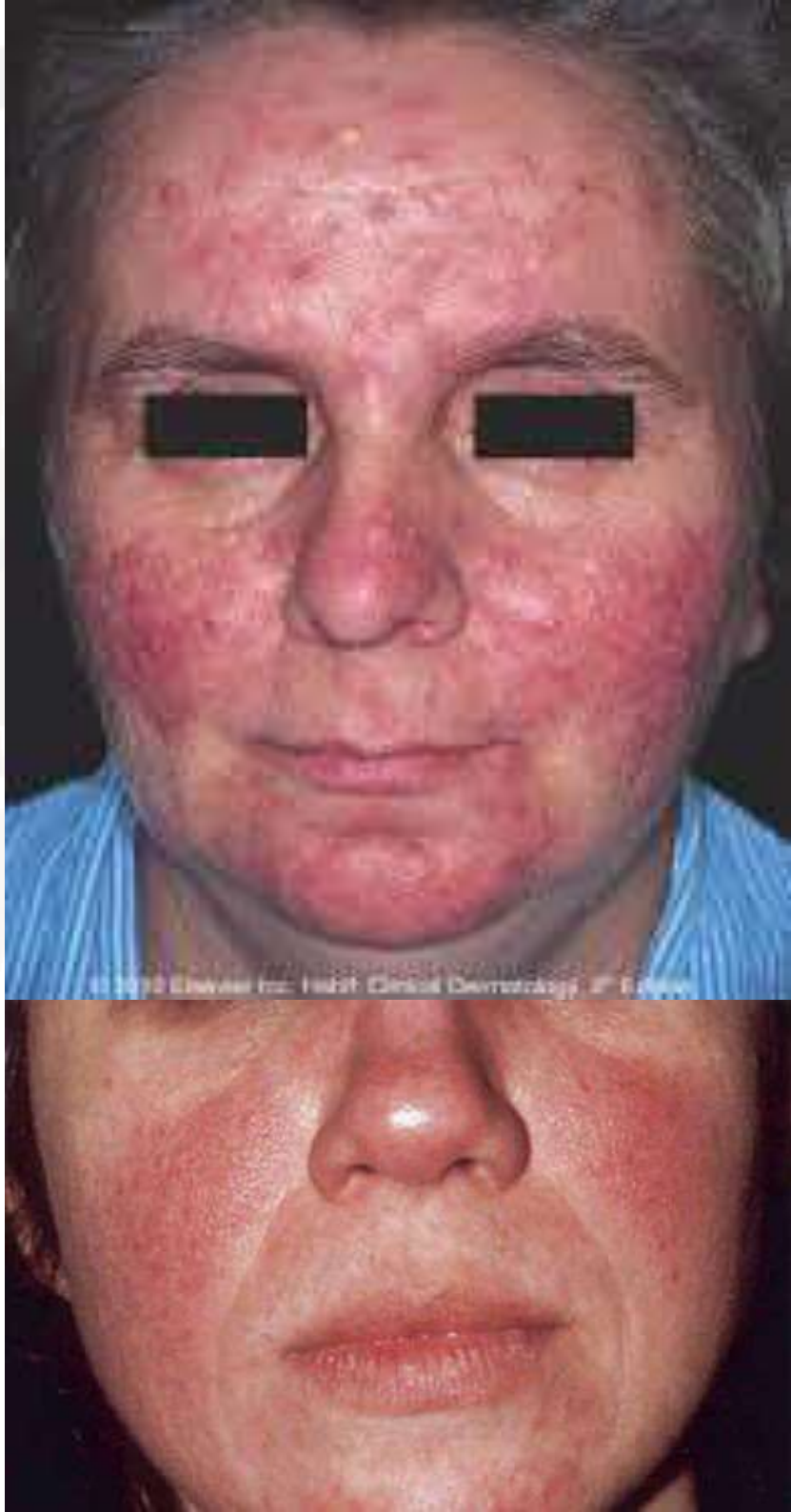
35 year old woman came to your clinic complaining of hotness and flushness on her face for 2 yr which increased in the summer

- **What's your Dx:**
  - Rosacea

- **Name 1 parasite involved in the disease:**
  Demodex folliculorum

- **Mention 2 complications:**
  a. Eye: Blepharitis, Conjunctivitis, Keratitis
  b. Rhinophyma
  c. Lymphedema
  d. Rebound flare pustules when using antibiotics

- **Mention 1 DDx:**
  - SLE,
  - Acne

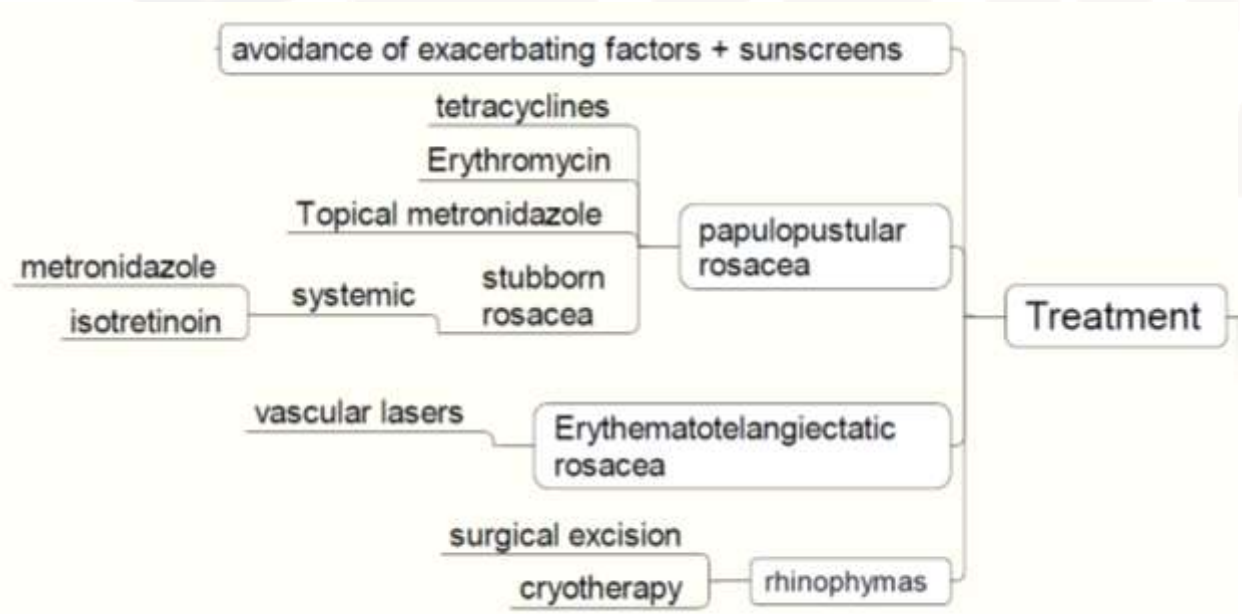


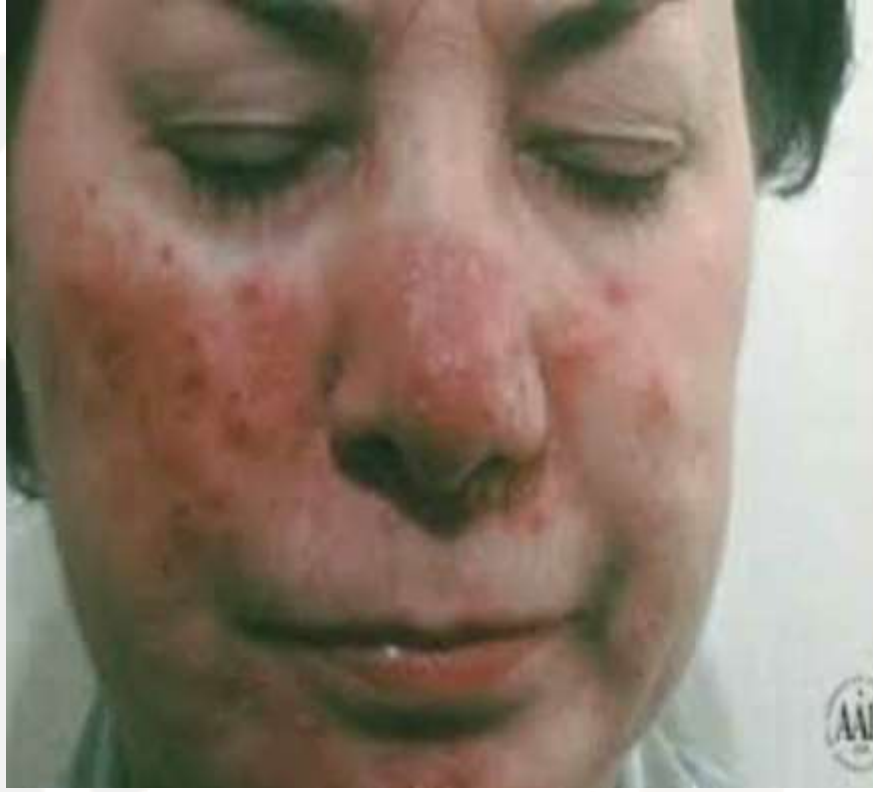
- **Name 4 types of Rosacea:**
  a. Ocular
  b. Phymatous
  c. Papulo-pustural
  d. Erythemato-telangiectatic

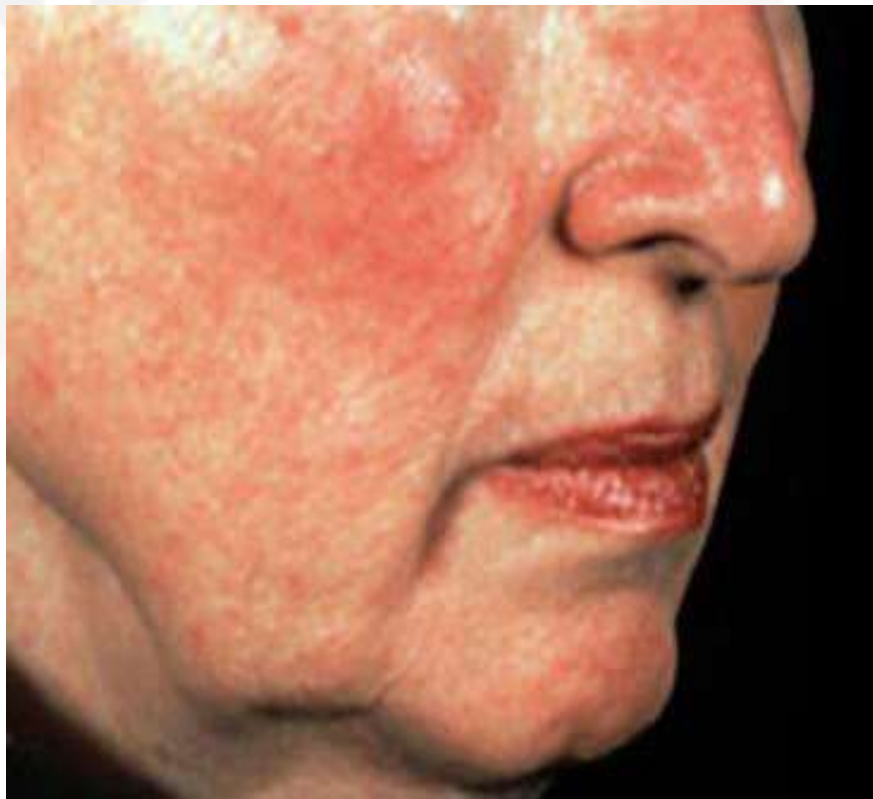
- **If this patient had also a joint pain and pleuritic pain/effusion what is your next step?**
  - Think of SLE: SLE serology and skin biopsy

- **Mention 2 topical Tx:**
  - Sun screen, Topical metronidazole

- **How to treat this condition:**



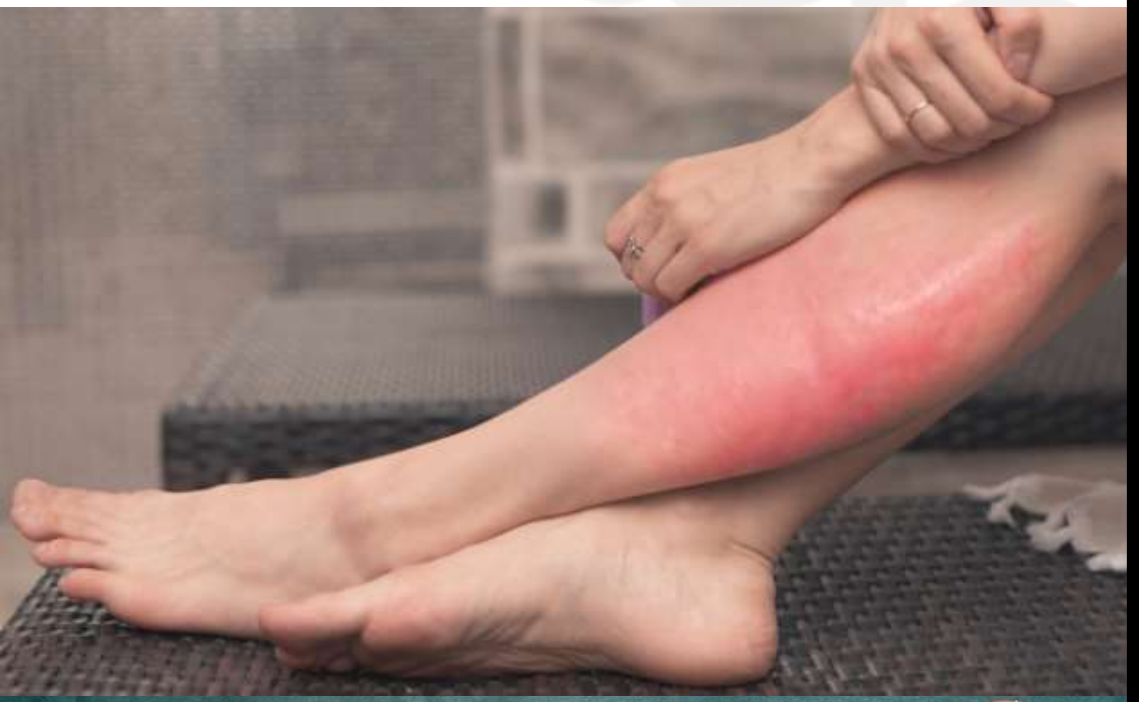


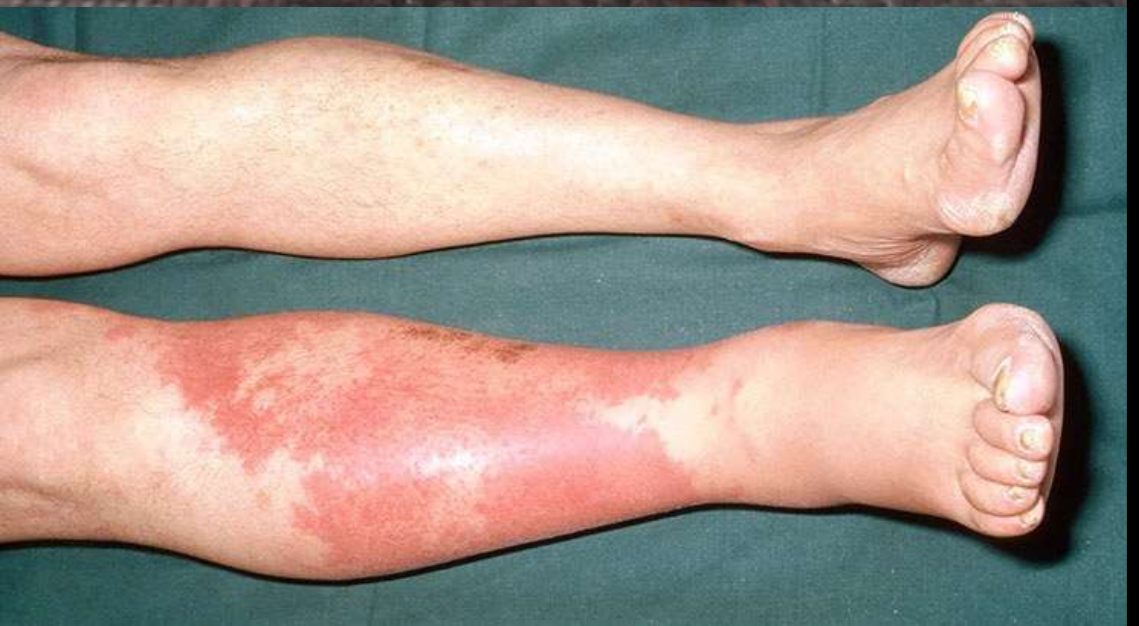


Bacterial Infections

❖ **What is the Dx:**

- Cellulitis



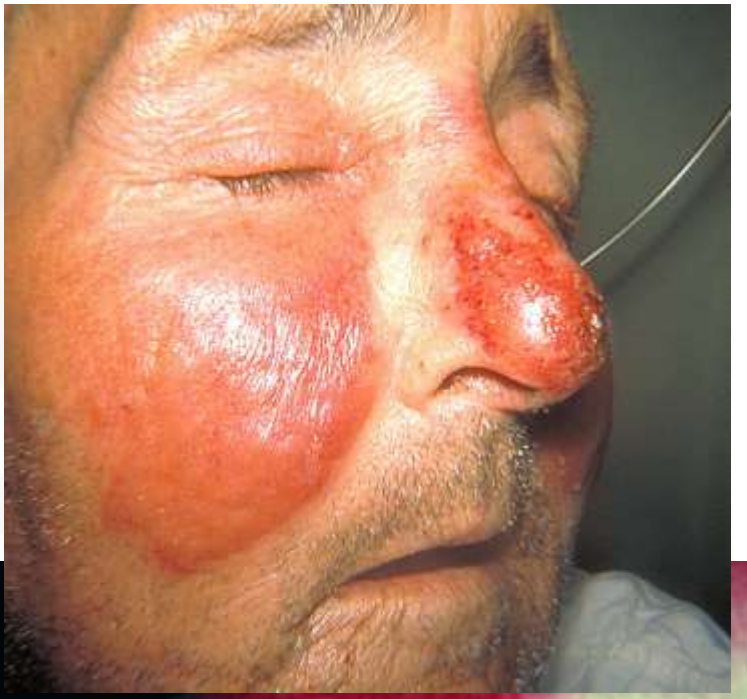


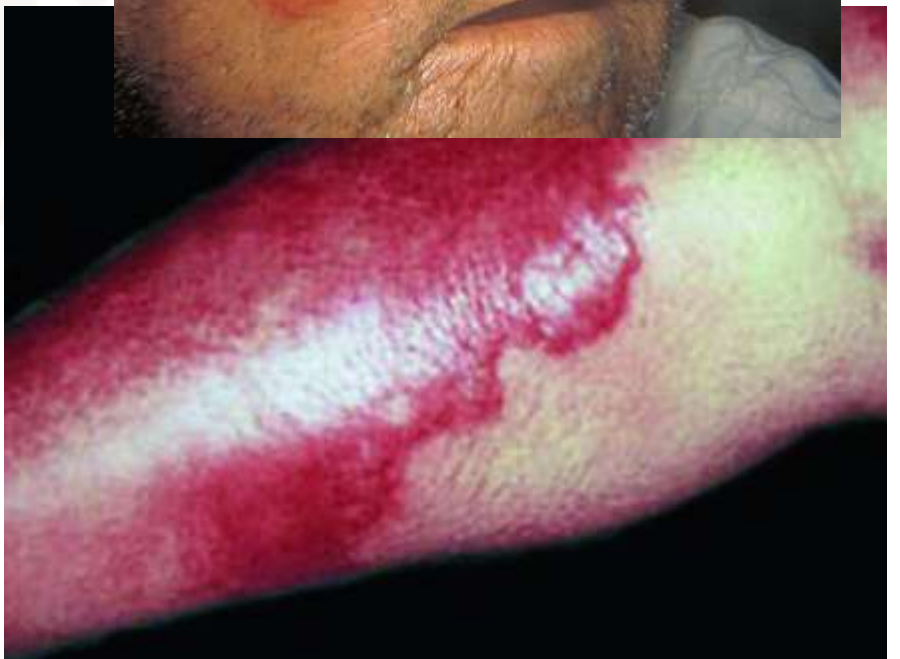
❖ **Name the Dx:**

- Erysipelas

❖ **Name the causative organism in:**

- Group A Strep (GAS), Strep Pyogenes





❖ **What is the Dx:**
- Erythrasma

❖ **Name the color on wood's light and the cause for it:**
- Coral pink due to porphyrins

❖ **What is the causative organism:**
- Diphtheroid

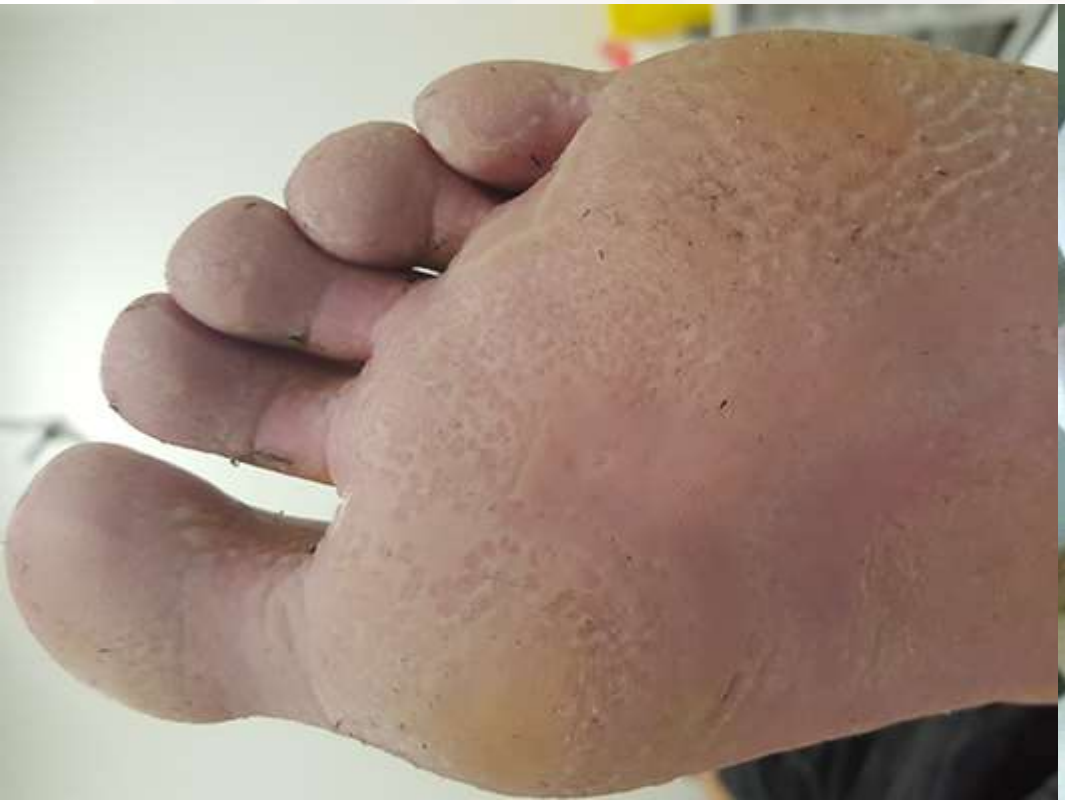
❖ **Mention 2 diseases caused by Diphtheria:**
- Erythrasma
- Pitted keratolysis

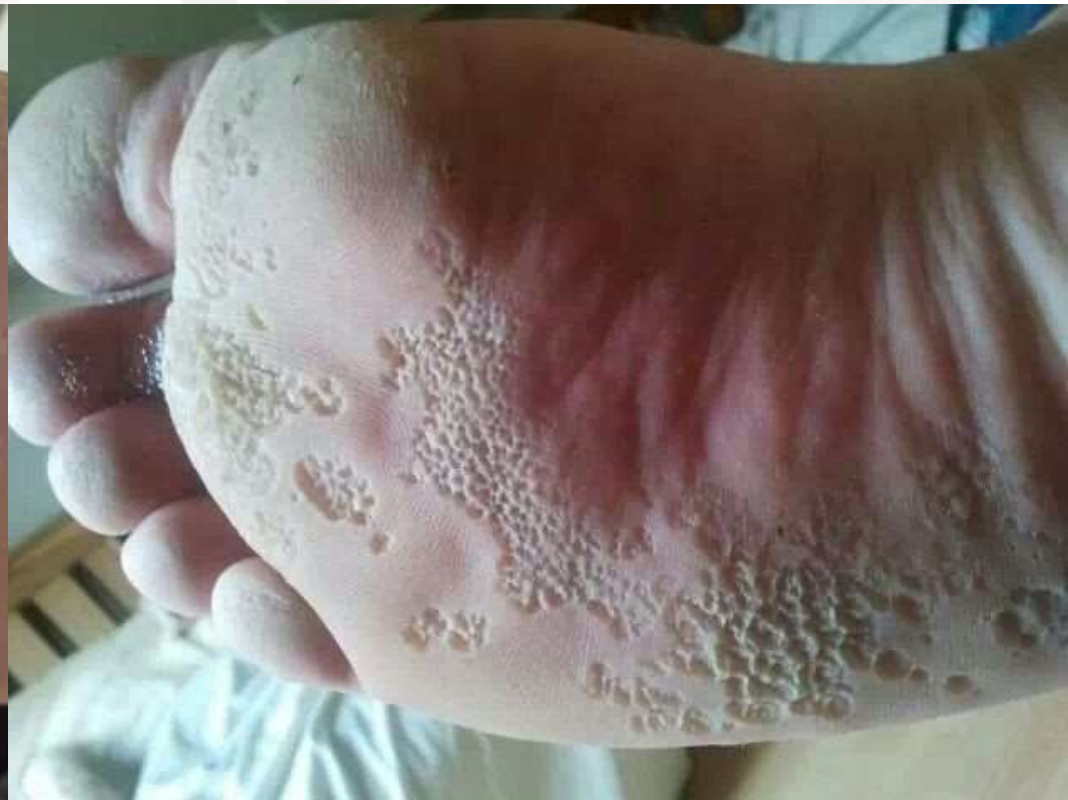
❖ **What is the causative organism for Pitted keratolysis:**

a. Corynebacteria
b. Derpatophilus congolensis
c. Kytococcus sedentarius
d. Actinomyces
e. Streptomyces

❖ **Name 3 lines of Rx for Pitted keratolysis**

a. Fusidic acid or mupirocin ointment
b. Anti-perspirants
c. Avoid occlusive footwear





❖ **Name the Dx?**

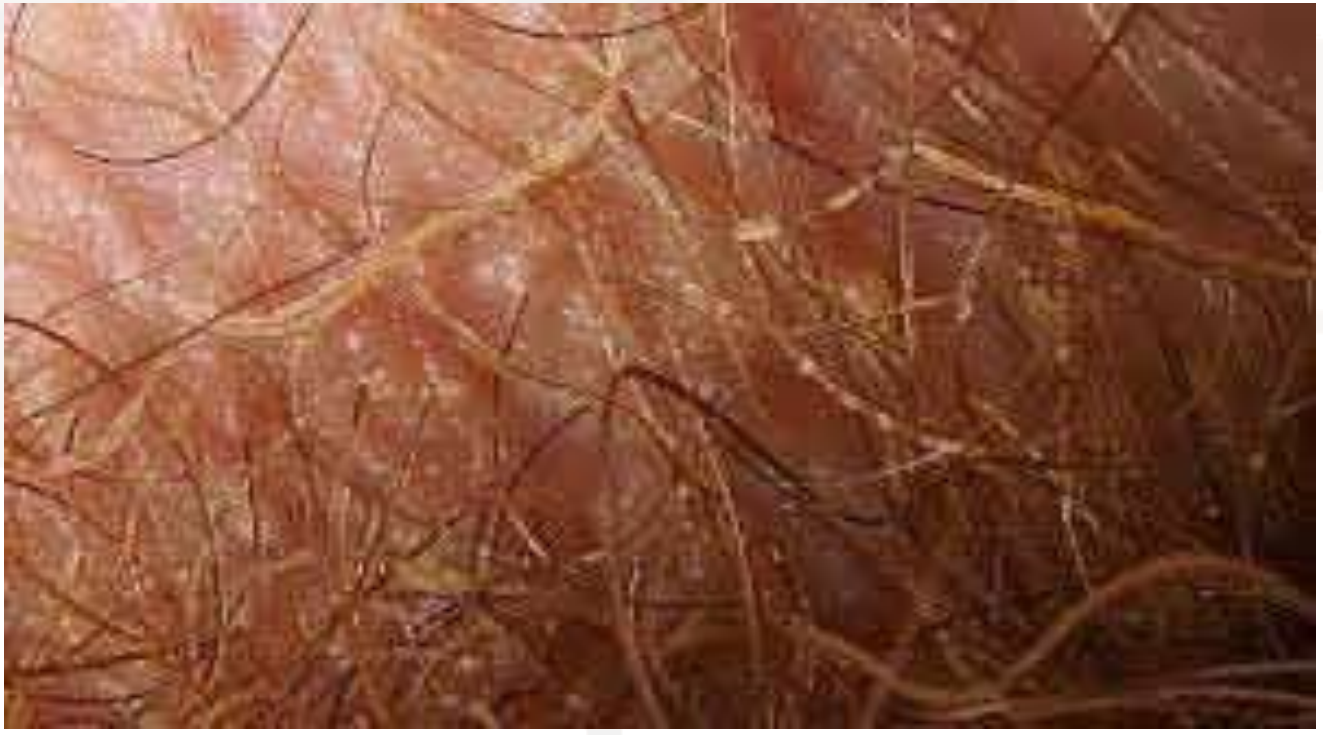
Trichomycosis Axillaris

❖ **Give 2 lines of Rx?**

a. Topical antibiotic ointments

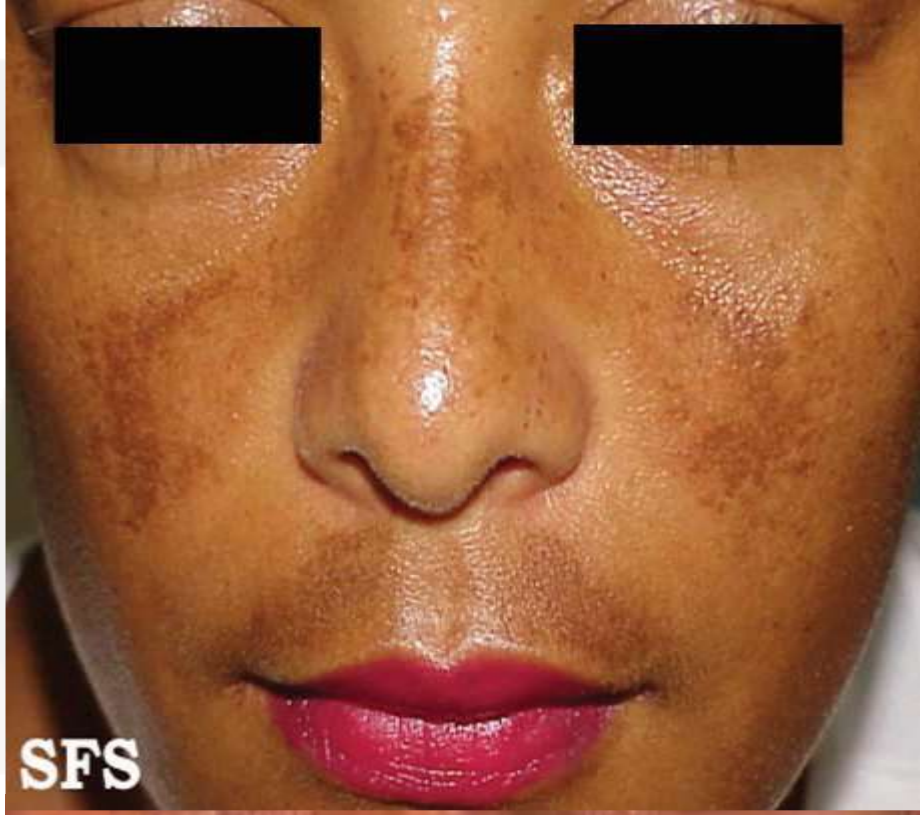
b. Shaving

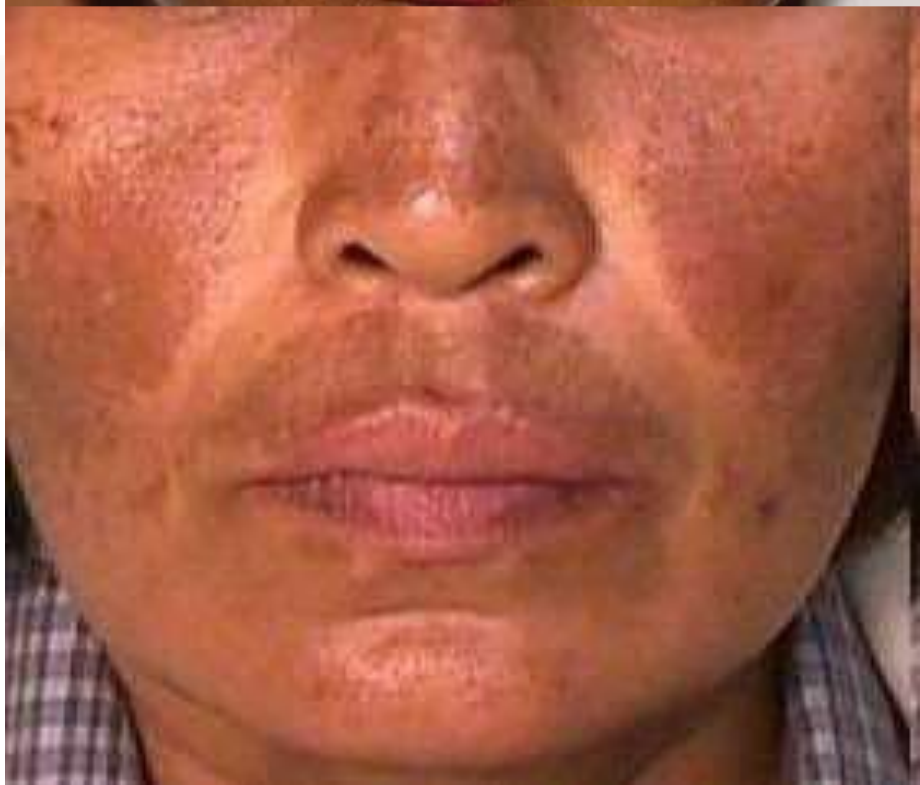
c. Frequent washing with anti-bacterial soups



Female pt after pregnancy she developed these lesions, and she is now on OCP:

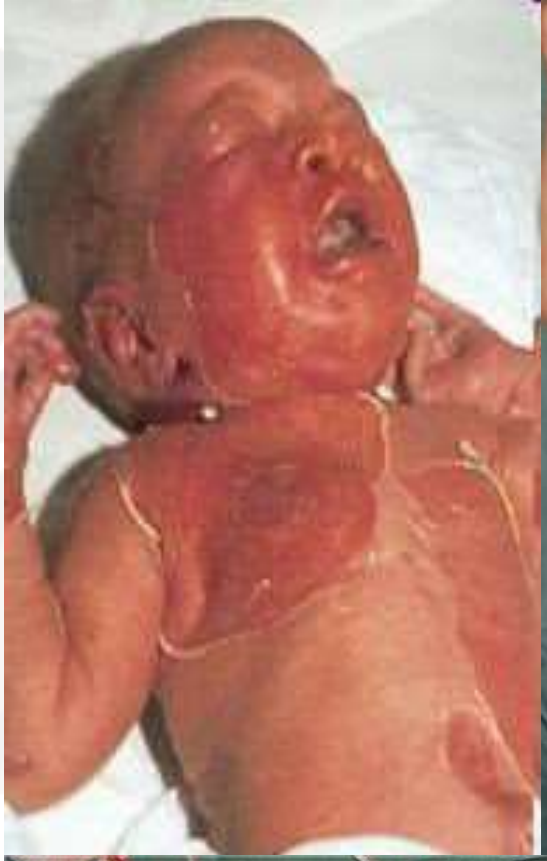
- **What is the Dx?**
  - Melasma
- **What are the risk factors?**
  - Sun exposure
  - Pregnancy
  - Oral contraceptive
  - Ovarian tumor
  - Photosensitizing drugs
- **What tool helps to predict prognosis?**
  - Woods light
- **What is the best treatment?**
  - Sunscreen and avoid sun exposure,
  - Bleaching agents: Hydroquinone
  - Topical steroid and Retinoid

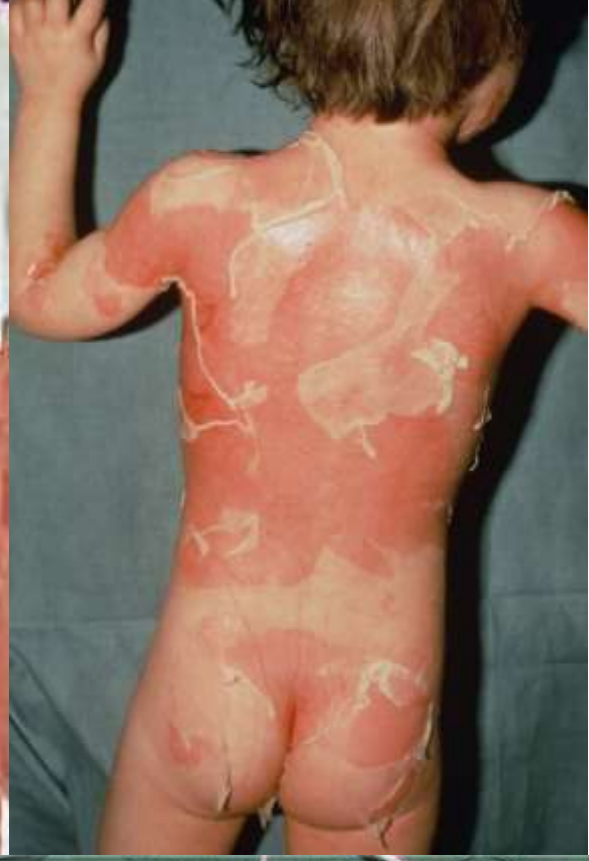


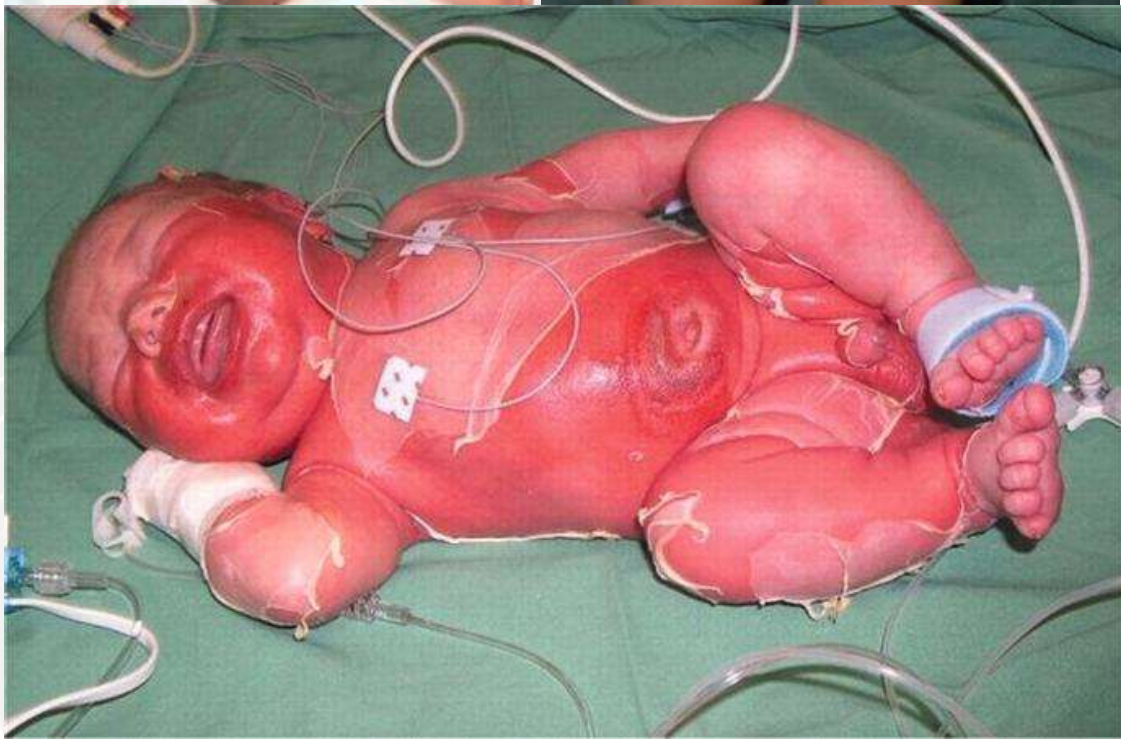


This child had erythema and tenderness before he had this skin loosening:

- **What is this condition?**
  - Staphylococcal scalded skin syndrome (SSSS)
- **What is the causing organism:**
  - Staph A
- **How to treat this:**
  - Hydration
  - Systemic antibiotic

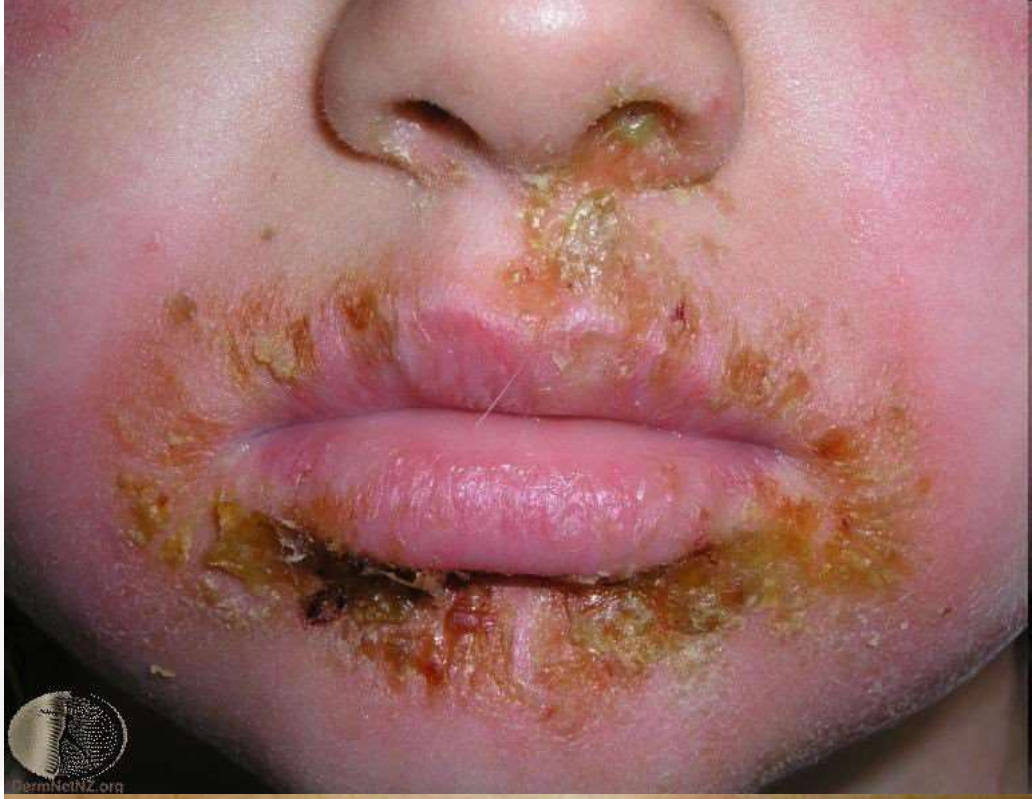


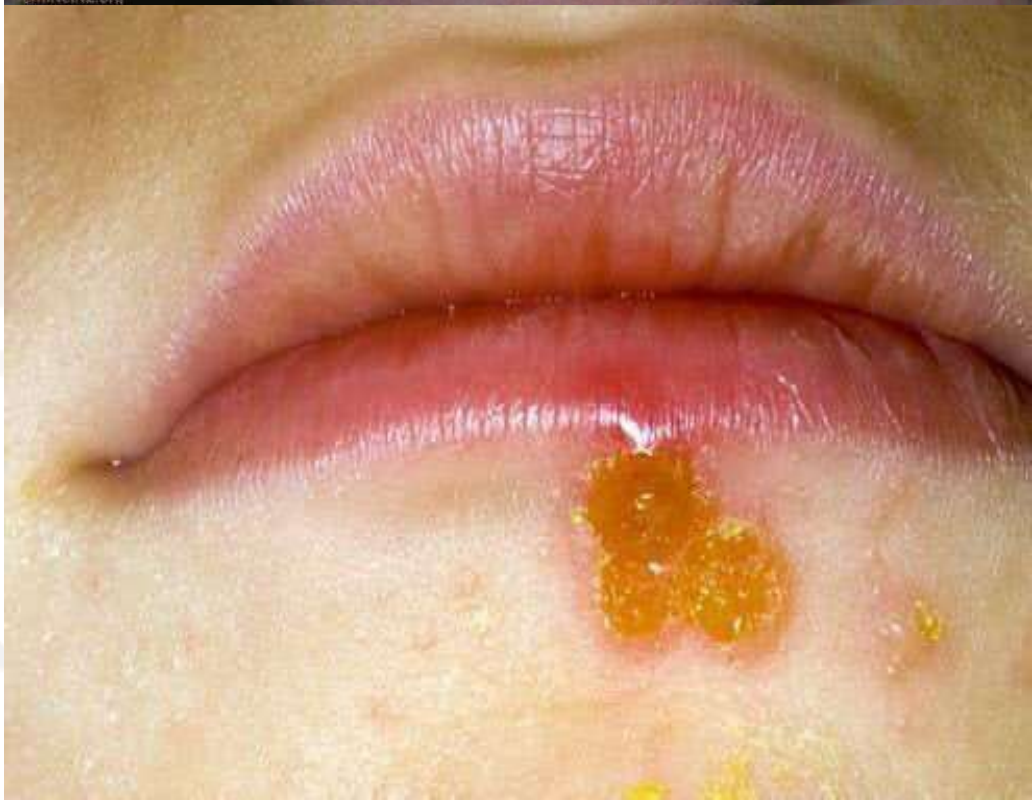




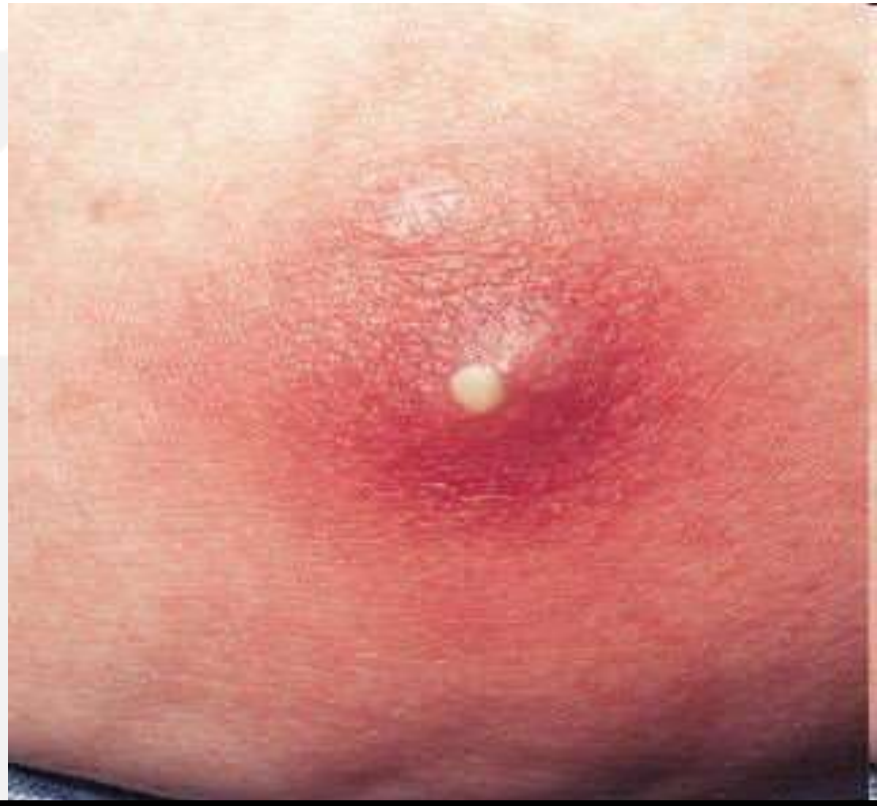
A 5-year-old child developed this lesion:

- **What is the Dx:**
  - Impetigo
- **What is the causing organism:**
  - Staphylococcus Aureus
- **Name another causing organism:**
  - Beta-hemolytic Streptococci
- **How to treat this condition:**
  - Fusidic acid
  - Neomycin
  - Bacitracin

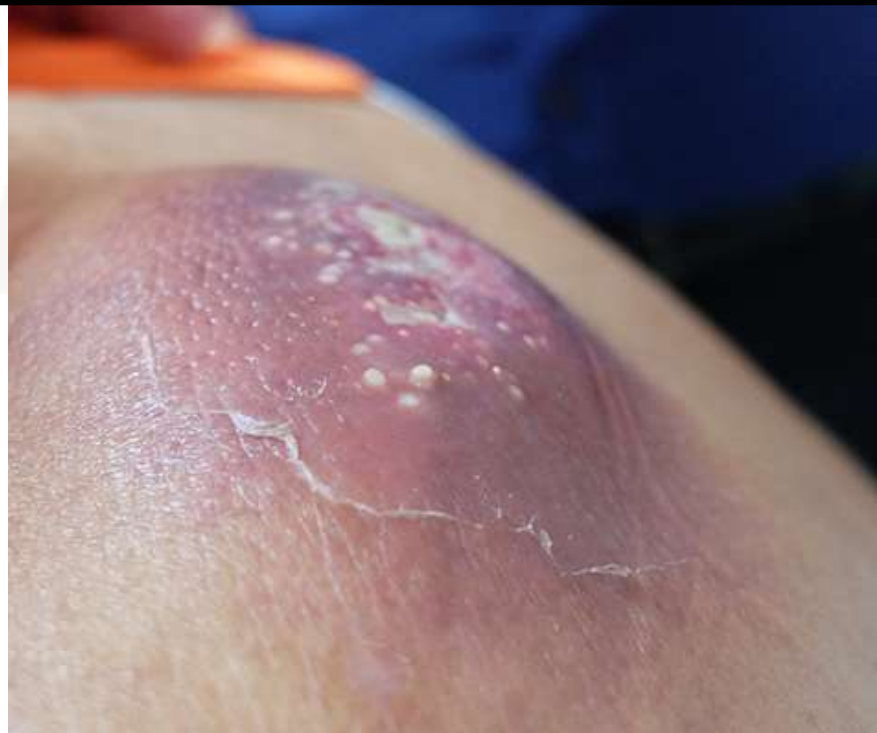




- **Describe the lesion:**
  - Pustule well demarcated elevated erythematous background with central orifice of pus
- **Dx:** Furuncle
- **Causing organism:** Staph



- **Dx:** Carbuncle



Viral Infections

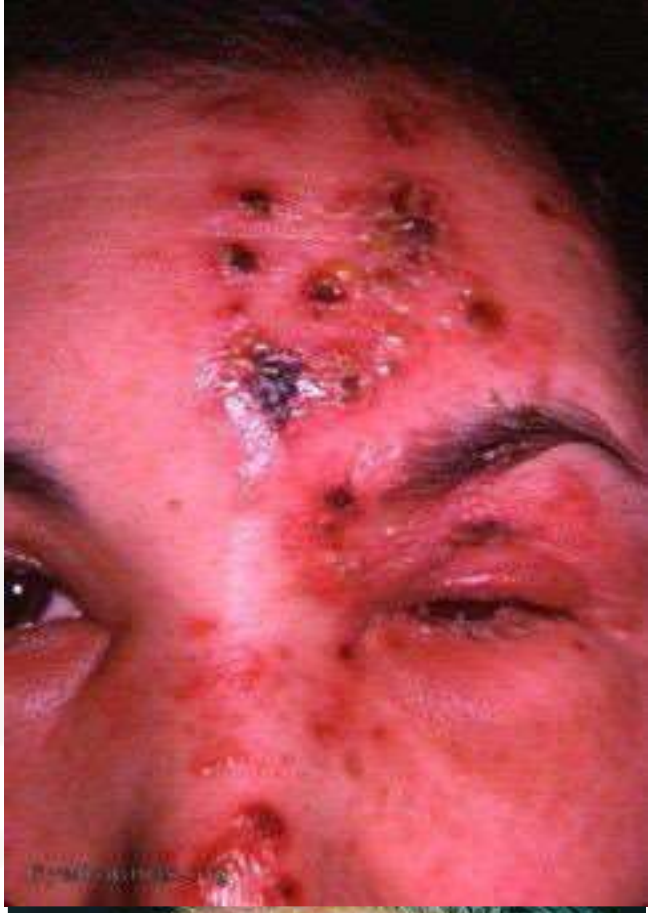
❖ **What is the Condition?**
- Herpes zoster opthalmicus

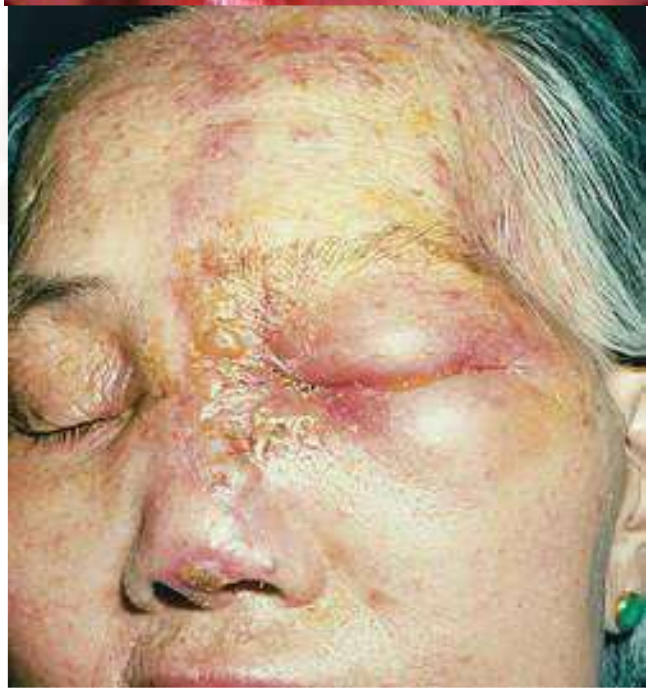
❖ **What is the causative agent?**
- Herpes Zoster

❖ **Describe the rash:**
Multiple vesicles ,with non scaly but crusted surfaces (yellow and blackish), ill defined with erythematous base ,arranged in groups, distributed in the ophthalmic division over a dermatome (forehead, eye lid, tip of the nose ”Hutchinson sign” The clear vesicles quickly become purulent, and over the space of a few days burst and crust. Scabs usually separate in 2–3 weeks, sometimes leaving depressed depigmented scars.

❖ **What is the most serious complication for this condition:**
- 5th nerve palsy, motor weakness (facial muscles), conjunctivitis, keratitis, corneal ulceration, iridocyclitis, glaucoma, and decreased visual acuity or ***blindness***.

❖ **What is your Mx?**
- Systemic Antiviral (*Acyclovir*, Famciclovir, Valaciclovir) as early as possible (golden 5 days)
- if late: supportive treatment mainly



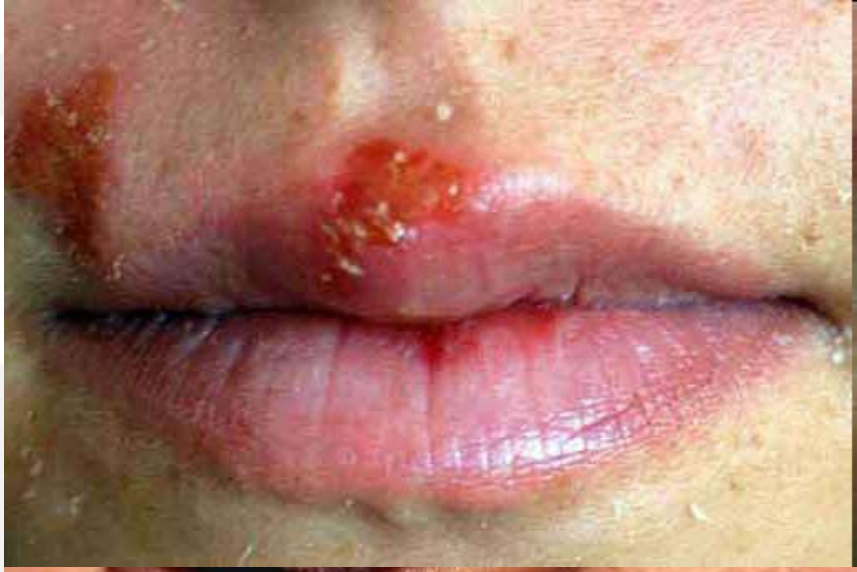


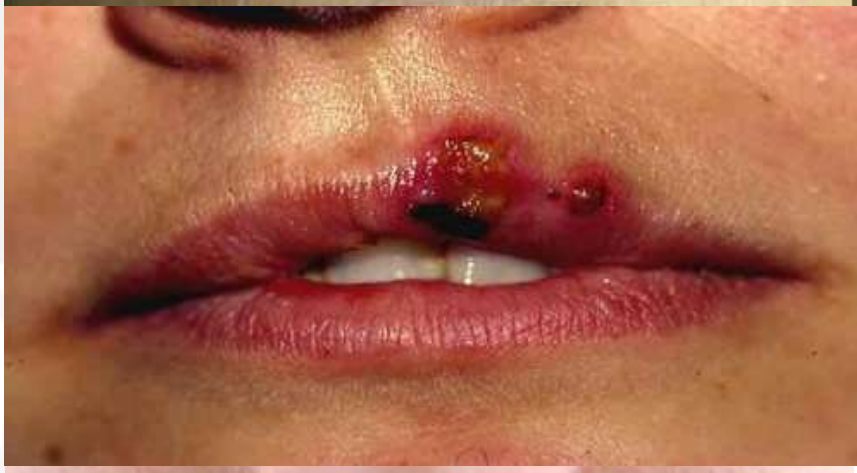
A 12 year old male complains of recurrent attacks of this lesion:

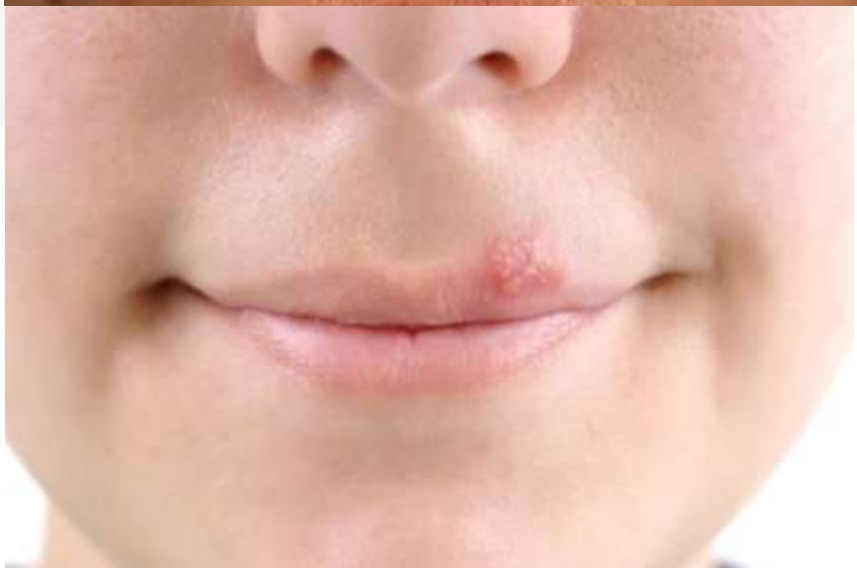
- **What is the Dx:** Herpes simplex virus I

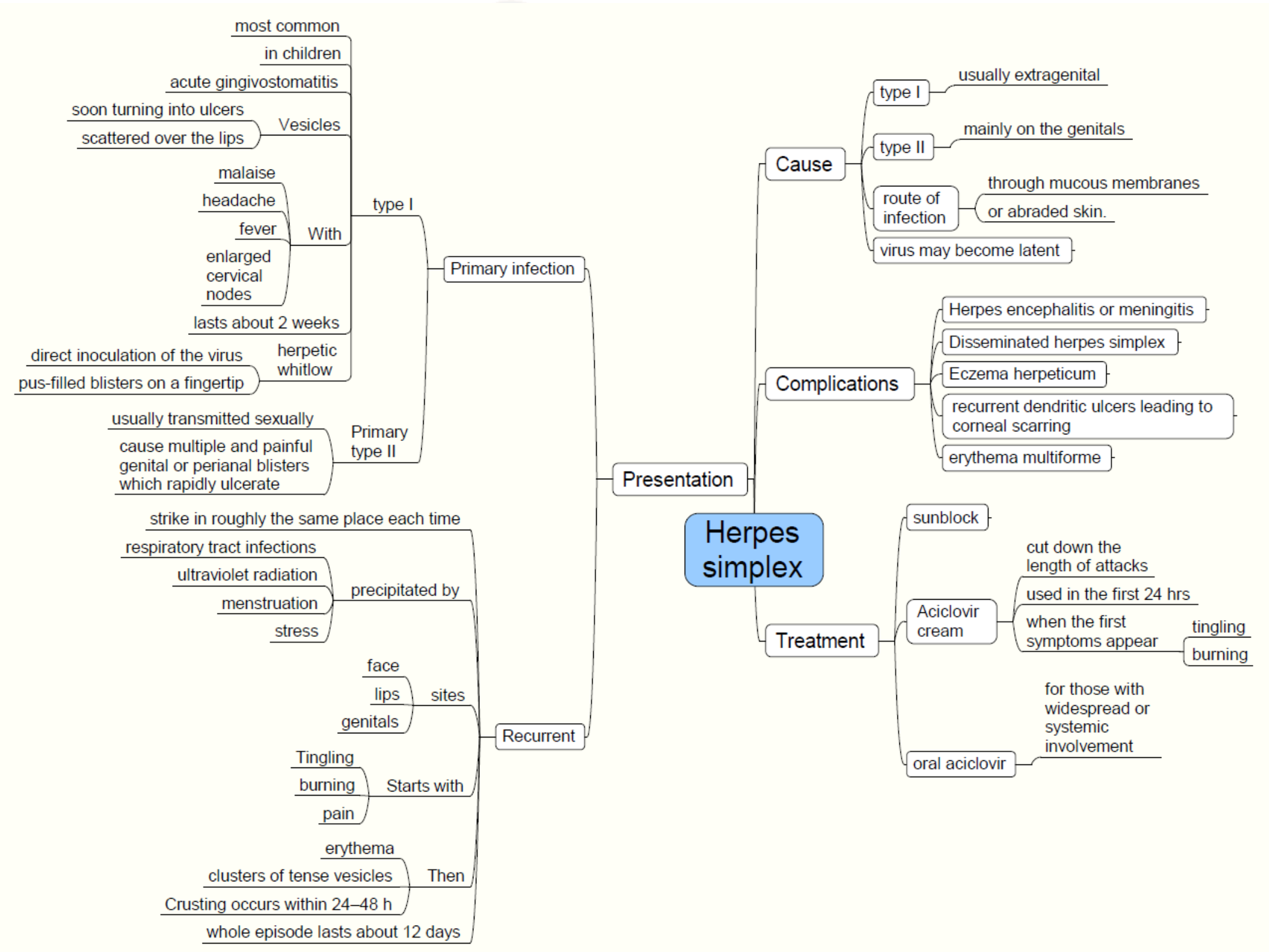
- **Mention 2 factors that might trigger this:**
  a. Sun exposure
  b. Stress
  c. Menstrual cycle
  d. Upper respiratory tract infections (URTI)

- **How to treat it:**
  - Acyclovir



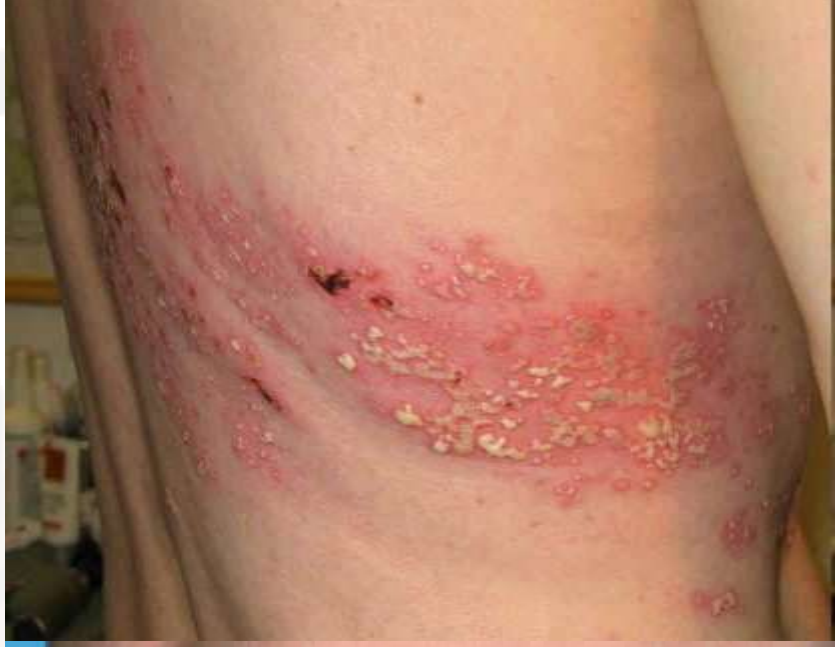


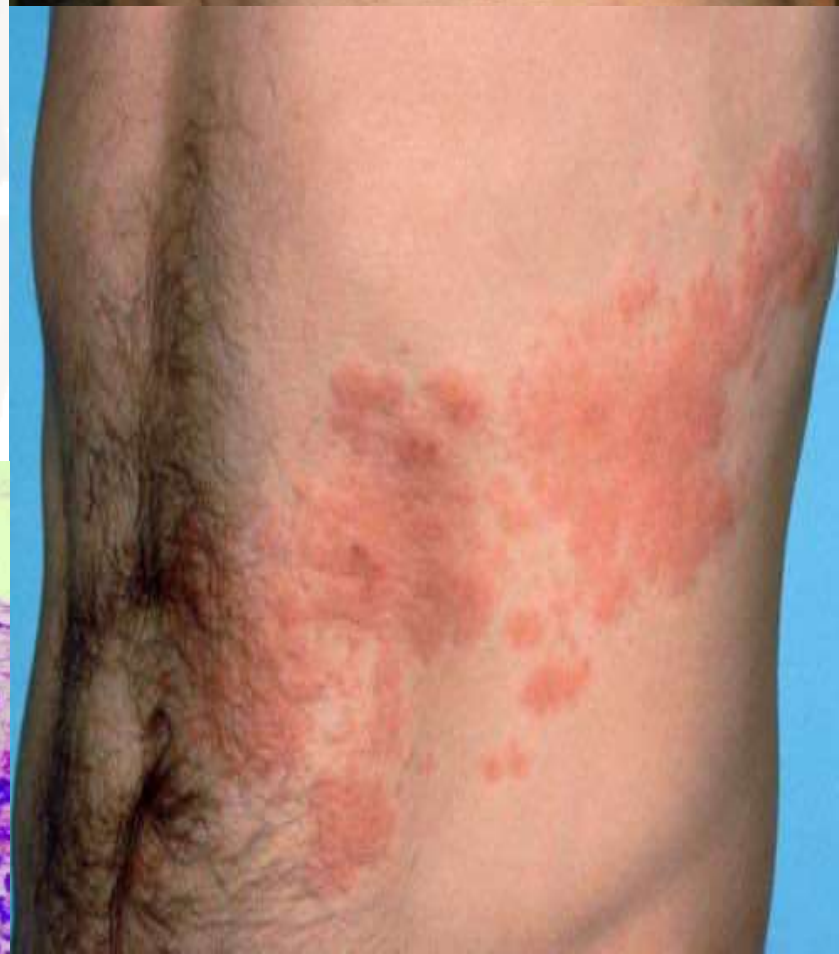


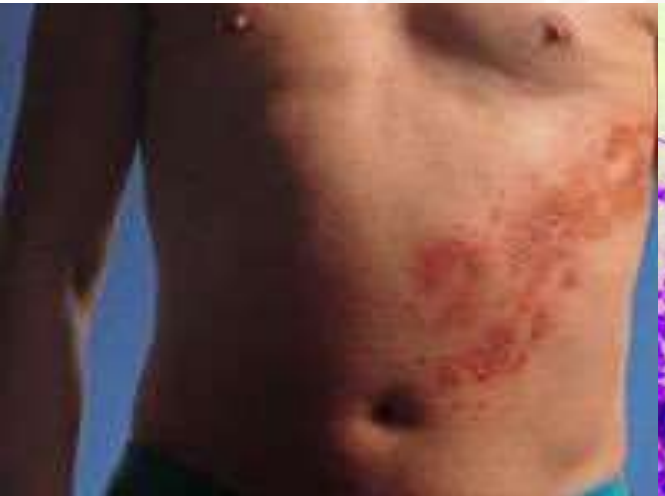

Herpes simplex
Presentation
Primary infection
type I
most common
in children
acute gingivostomatitis
Vesicles
soon turning into ulcers
scattered over the lips
With
malaise
headache
fever
enlarged cervical nodes
lasts about 2 weeks
herpetic whitlow
direct inoculation of the virus
pus-filled blisters on a fingertip
Primary type II
usually transmitted sexually
cause multiple and painful genital or perianal blisters which rapidly ulcerate
Recurrent
strike in roughly the same place each time
precipitated by
respiratory tract infections
ultraviolet radiation
menstruation
stress
sites
face
lips
genitals
Starts with
Tingling
burning
pain
Then
erythema
clusters of tense vesicles
Crusting occurs within 24–48 h
whole episode lasts about 12 days
Cause
type I
usually extragenital
type II
mainly on the genitals
route of infection
through mucous membranes
or abraded skin.
virus may become latent
Complications
Herpes encephalitis or meningitis
Disseminated herpes simplex
Eczema herpeticum
recurrent dendritic ulcers leading to corneal scarring
erythema multiforme
Treatment
sunblock
Aciclovir cream
cut down the length of attacks
used in the first 24 hrs
when the first symptoms appear
tingling
burning
oral aciclovir
for those with widespread or systemic involvement

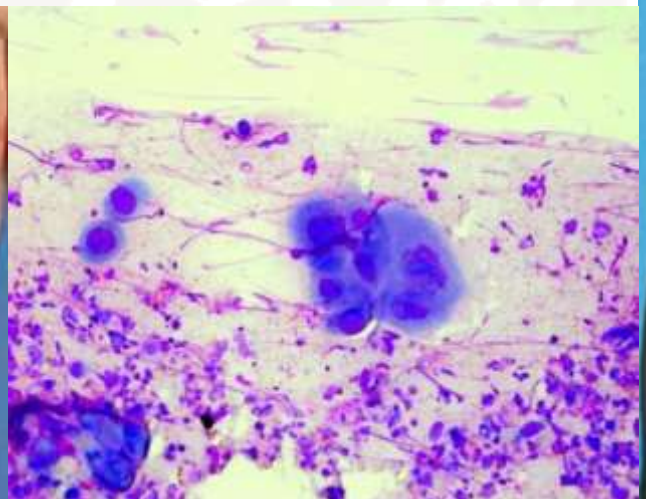
A patient came with unilateral burning pain and the lesion shown, the test shown has been made:

- **What is the Dx:** Shingles
- **What is the causing organism:** Varicella Zoster
- **What is the name of the test:** Tzank test
- **Name other condition we use it for:** Herpes virus
- **What would you see:** Giant multi-nucleated cells
- **What complications might happen:**
  - Motor nerve involvement
  - Neuralgia
  - Secondary bacterial infection
  - Corneal ulcer and scarring









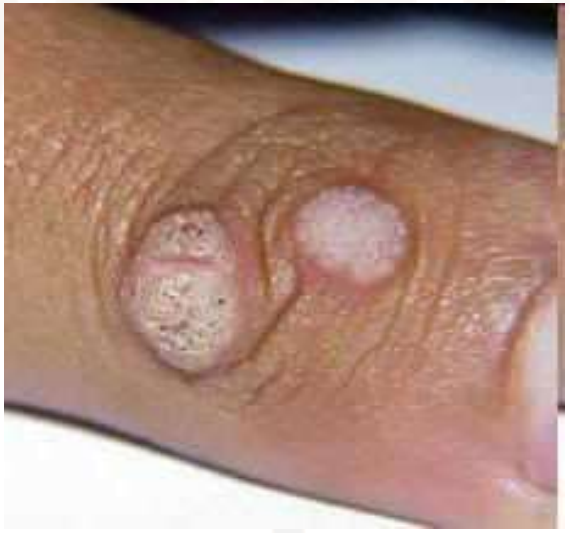
❖ What are the subtypes of viral warts?

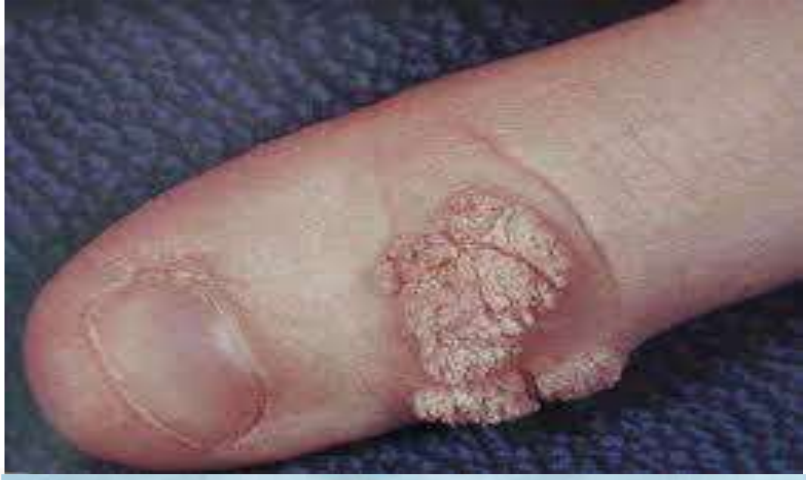
Table 4.1 Human papillomavirus (HPV) types and the common clinical varieties of warts with which they are associated

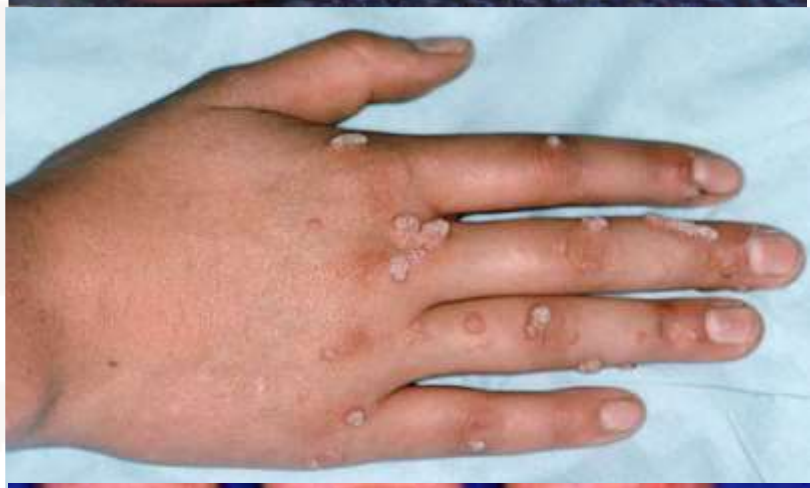
Clinical type	Most common antigenic type of HPV associated
Common warts of hands and fingers (verruca vulgaris)	2, 4
Deep plantar warts (myrmecia warts)	1
Plane warts	3, 10
Mosaic warts	2
Epidermodysplasia verruciformis	5, 8 (but many others isolated on occasion)
Genital warts (condyloma acuminatum)	6, 11 (NB. Types 16 and 18 are also responsible occasionally, and these are known to be associated with carcinoma of the cervix)
Laryngeal papilloma	6, 11

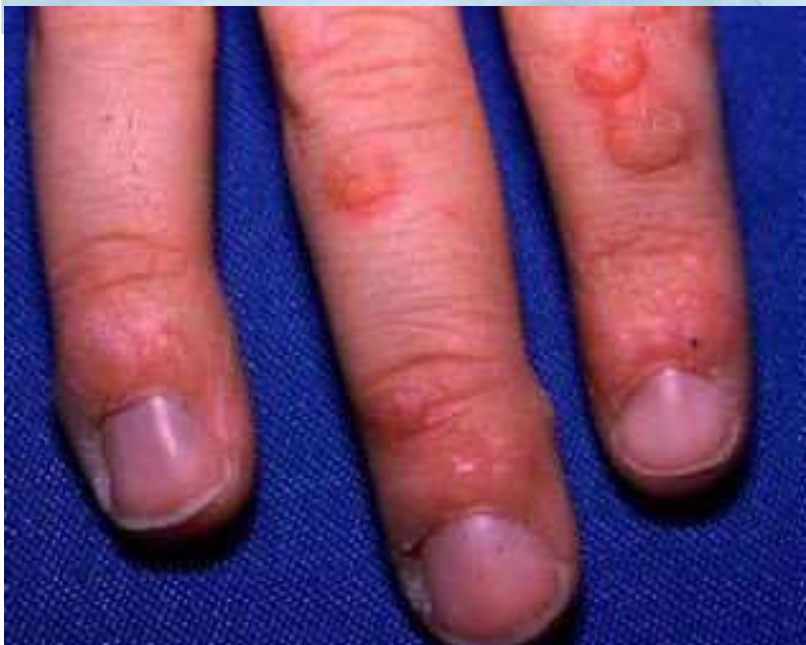
Patient present with this solid elevated asymptomatic lesion:

- **What is the Dx:** Common Warts
- **What is the type:** Cauliform
- **What is the cause:** HPV 1,2,4
- **Mention 3 variants for this condition:**
  - Common, plantar, plane, anogenital, facial, mosaic
- **Name 2 lines of Tx:**
  - Cryotherapy
  - Electrocutary

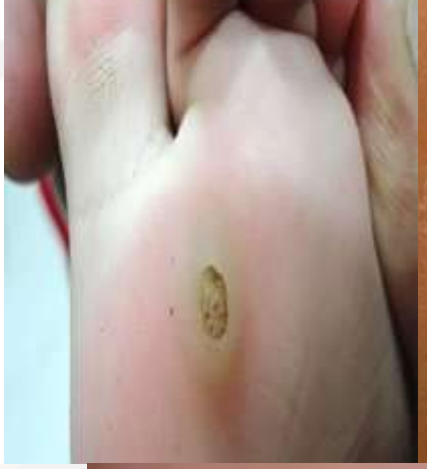


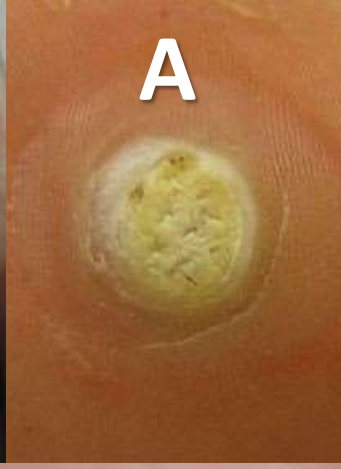


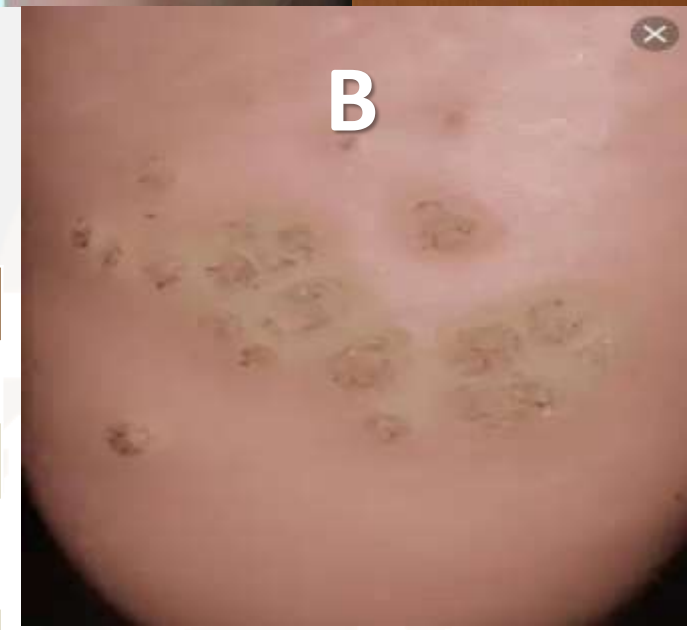




Pt presented with these painful lesions:



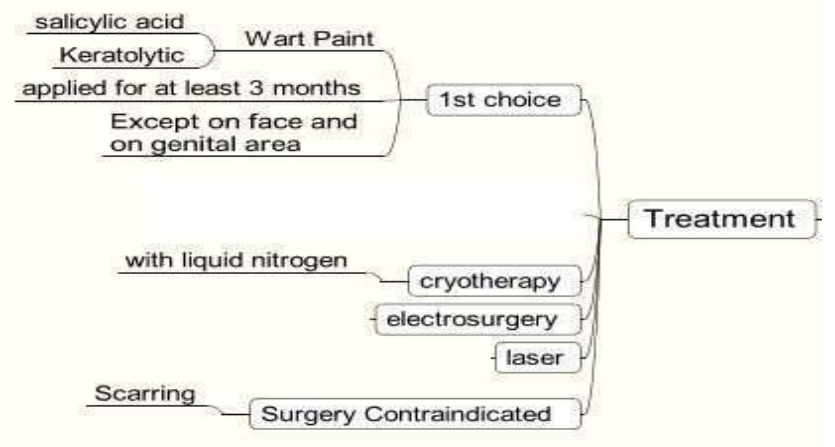


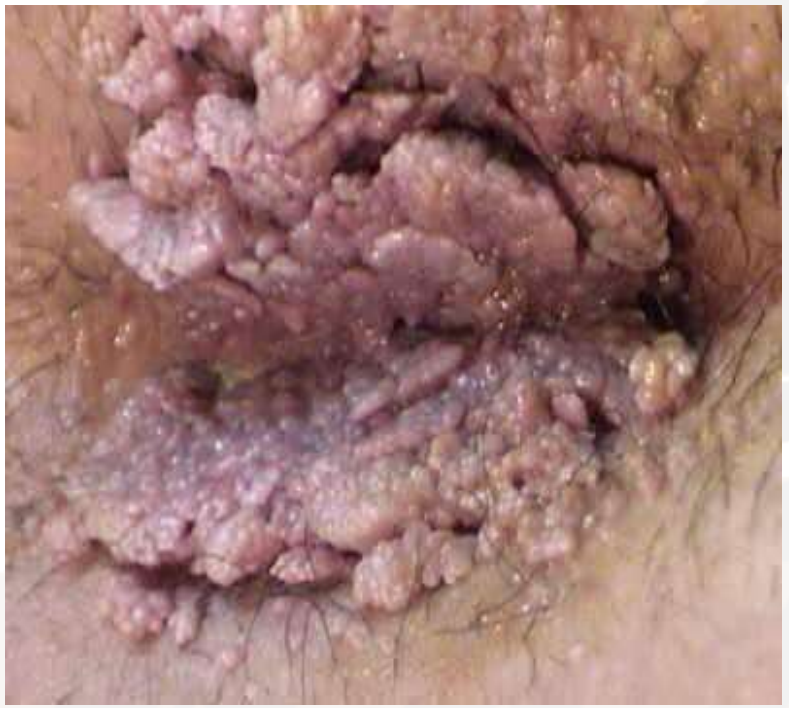


- **What is the Dx:** Plantar Warts
- **Describe this lesion**
  a. Picture A: Single white colored nodule that is scaly, well defined margin, distributed on the sole of the foot
  b. Picture B: Multiple elevated papules, rough surface (verrucous), scaly, brown, well-defined with dark pinpoints
- **Give 1 DDx:** Plantar corns
- **Mention 3 differences between warts & corns.**

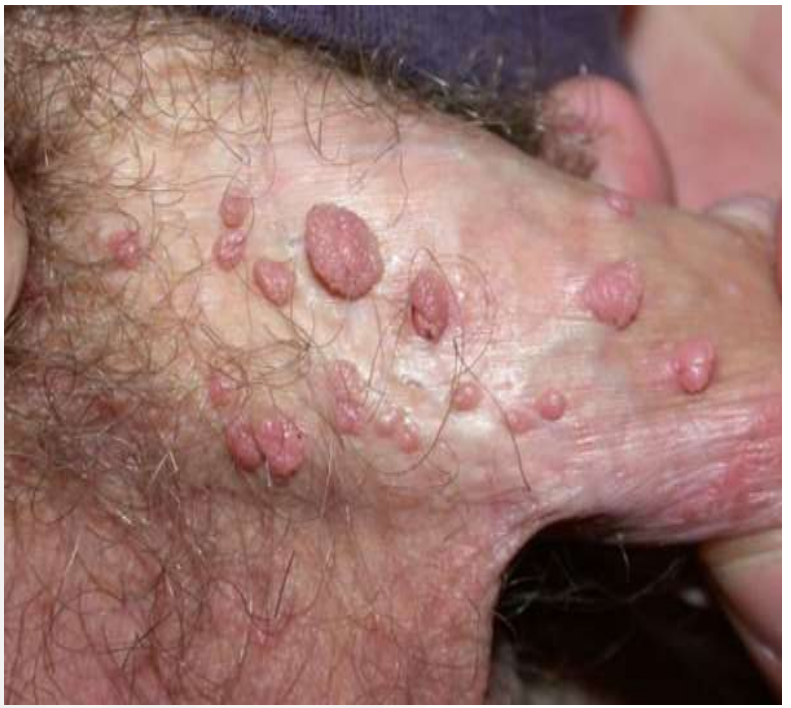
Cons	Warts
Concentrated only on the feet.	Warts can appear all over the body.
A corn is related to friction.	A wart is not related to friction.
Skin lines can appear on the corn	Warts are usually smooth and skin lines don't appear on them
A corn doesn't itch or bleed.	A wart can sometimes itch or bleed.

- **Mention the cause of the black dots:**
  - because the capillary blood vessels are thrombosed
- **Mention 2 lines of treatment for this case.** →
- **Do you recommend surgical excision? And why?**
  - No, it may lead to permanent scarring





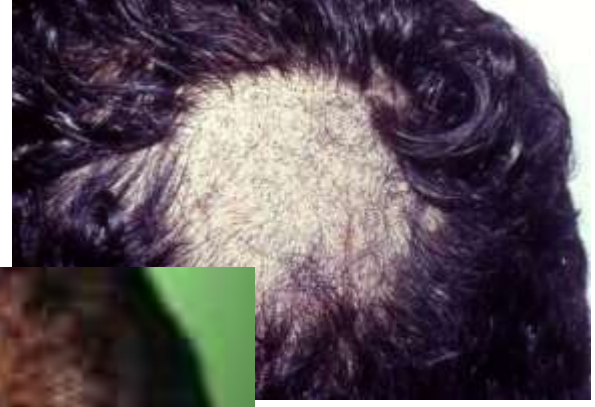
- **What is the Dx:**
  - Condylomata Acuminate
- **What is the causative organism and it's serotypes:**
  - HPV 16, 18
- **Name 1 other DDx:**
  - Other STDs: Candida, Herpes
- **Mention 2 topical treatments with side effect for each one:**
  a. Podophyllotoxin: pain, pruritis
  b. Imiquimod: burning, blisters, pain

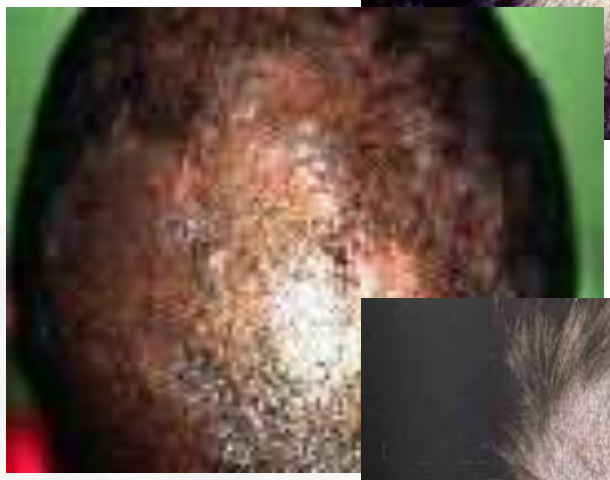


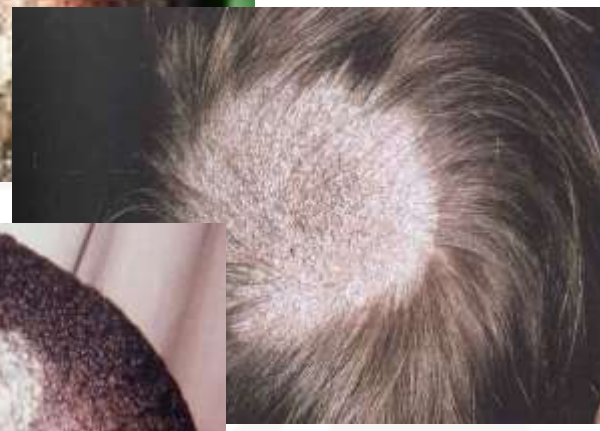
- **What is the Dx:**
  - Anogenital Warts
- **What is the causative organism?**
  - HPV 6,11,16,18

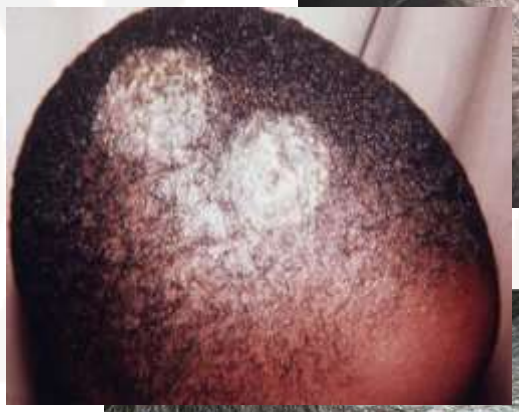

Fungal Infections

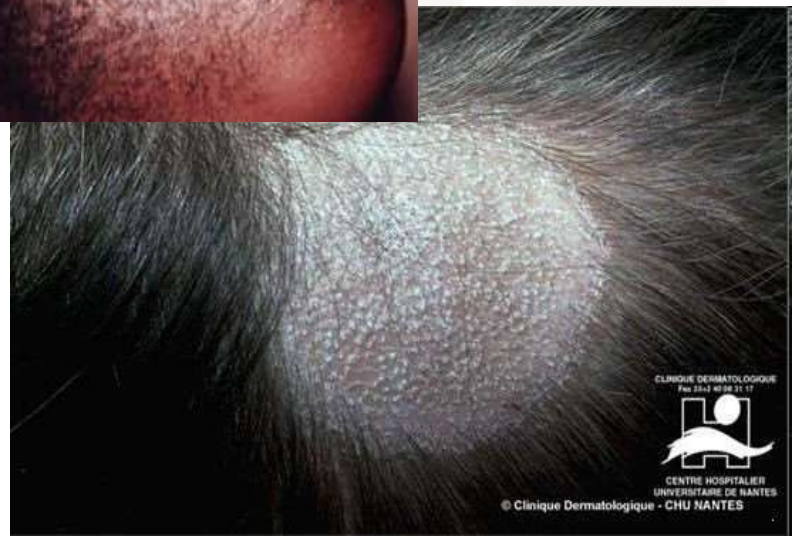
A patient came to you with this presentation, he has a pet dog





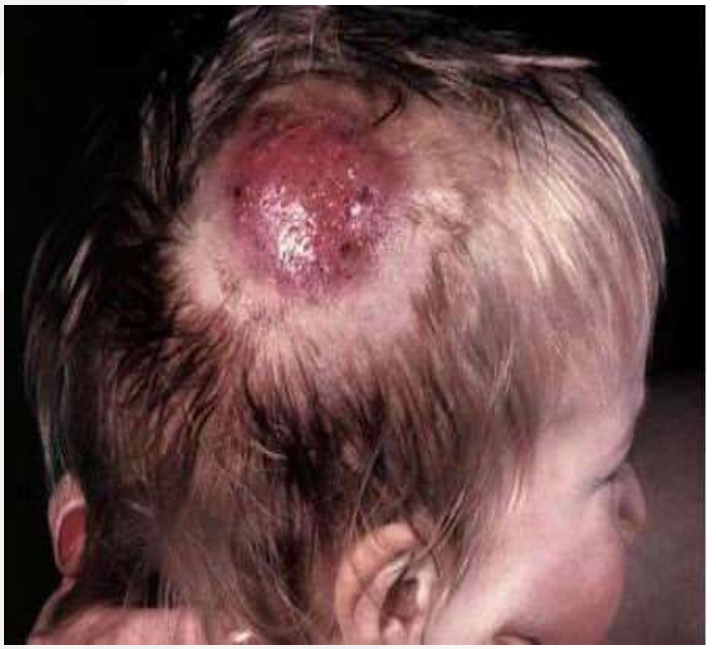




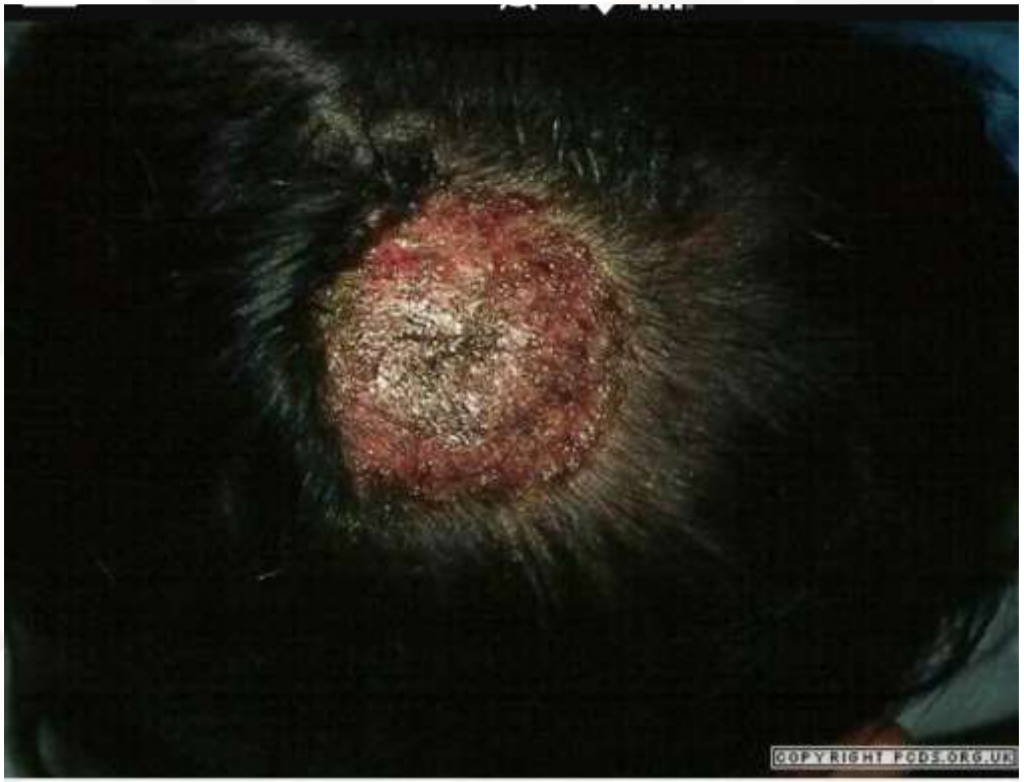


- **What is the most likely diagnosis?**
  Tinea capitis
- **Mention 1 differential diagnosis.**
  a. Scalp psoriasis
  b. Trichotillomania
- **Mention 2 clinical subtypes/presentations for this disease.**
  a. Kerion b. Favus c. Black dots d. Smooth areas of hair loss e. Dry-scaling like dandruff (Antrophilic)
- **How to treat this condition?**
  Systemic Rx: Griseofulvin, Itraconazole, Terbinafine
  Topical Rx: Miconazole
- **What age group is commonly affected?**
  Children
- **Mention 2 bedside tests to perform?**
  a. Wood's light
  b. Hair plucking samples: KOH shows hyphae and spores
- **Appearance on wood examination?**
  Green on the hair shaft

Child presented with this lesion



- **What is the most likely diagnosis?**
  Kerion
- **How to diagnose this condition?**
  Potassium Hydroxide (KOH)
- **Name other investigations to do?**
  Wood light, samples, fungal culture
- **How to treat this condition?**
  Griseofulvin, Itraconazole



A pt complaining of an itchy rash that developed over his abdomen:

- **What is the Dx:**
  - Tinea Corporis

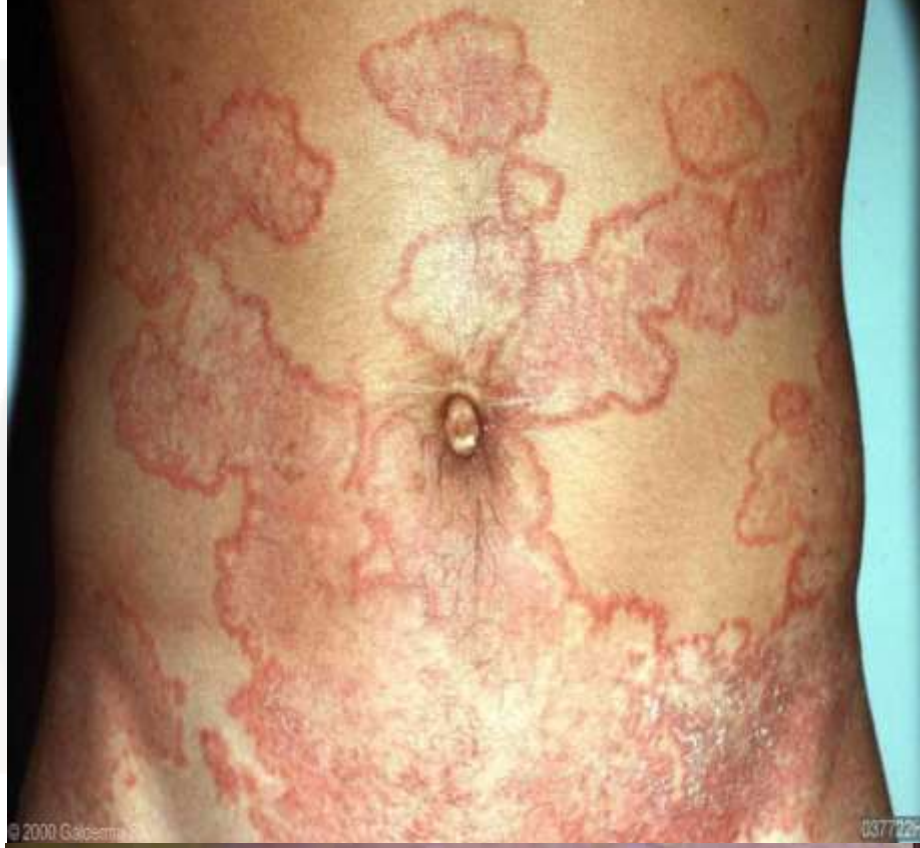
- **What investigations would you like to order?**
  - Skin Scraping + KOH

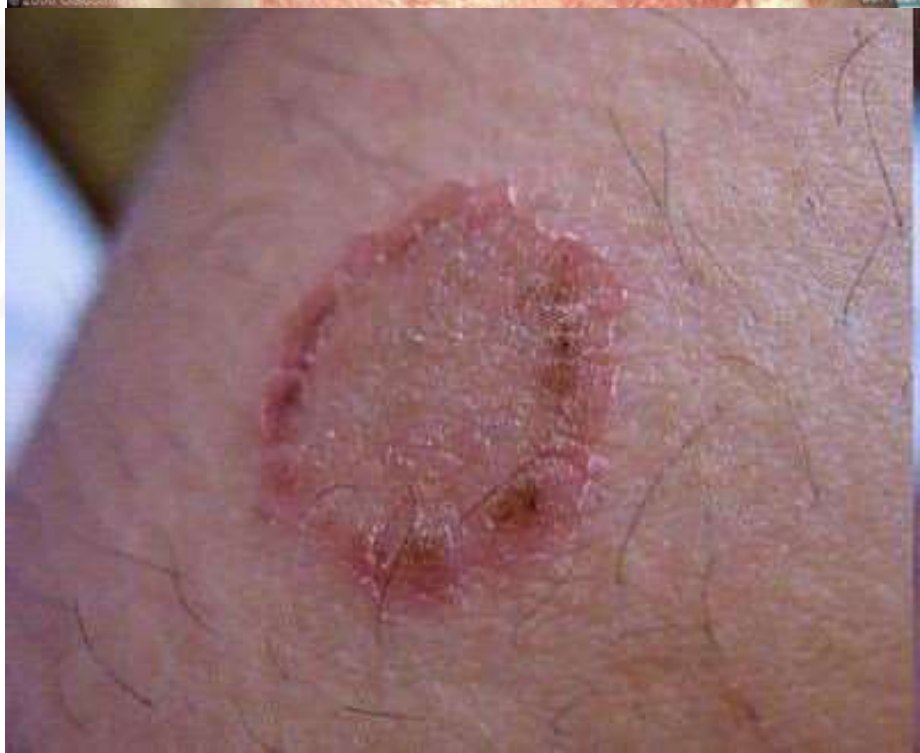
- **What is the best diagnostic tool in the clinic?**
  - KOH

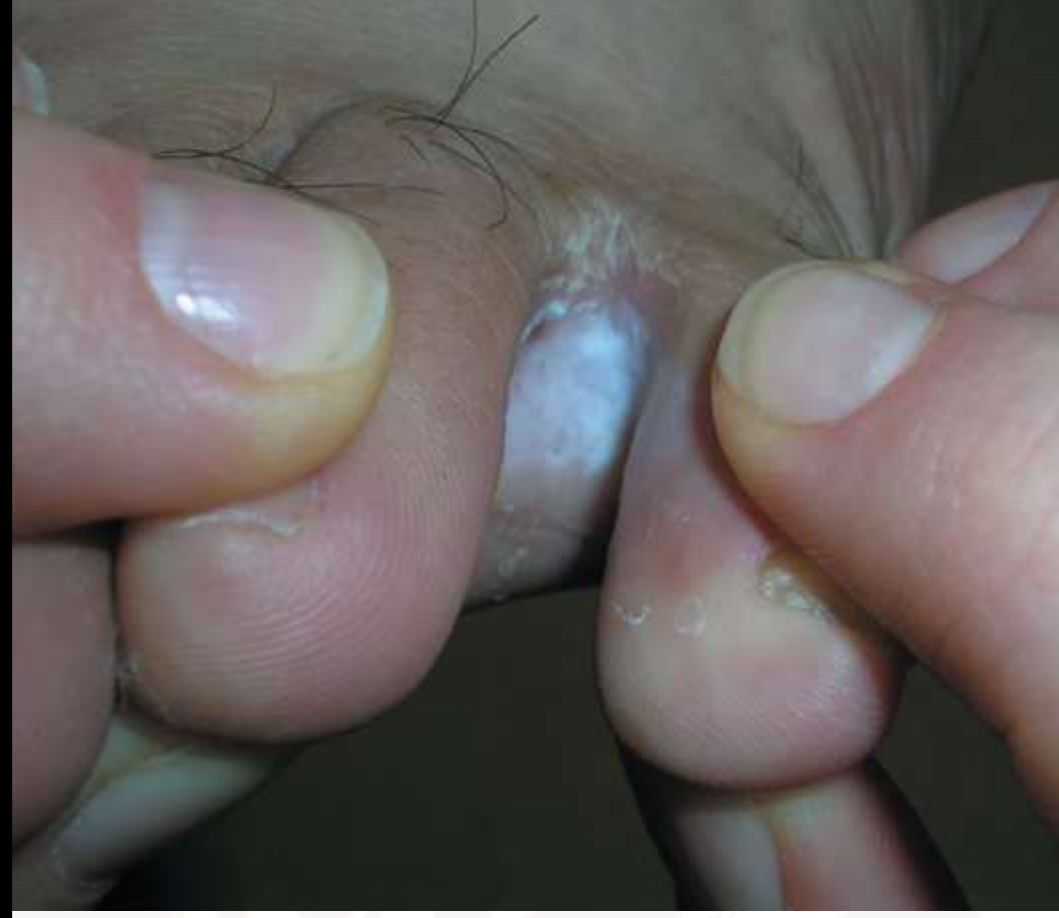
- **What do you expect to find?**
  - Hyphae & Spores

- **Describe the lower picture:**
  - Scaly peripherally annular pink well defined lesion

- **What is your treatment:**
  - Systemic Terbinafine
  - Topical Imidazole







❖ **What is this?**

- Hyphae (tinea)

❖ **What preparation do you do to appreciate this?**

- KOH (wet mount)

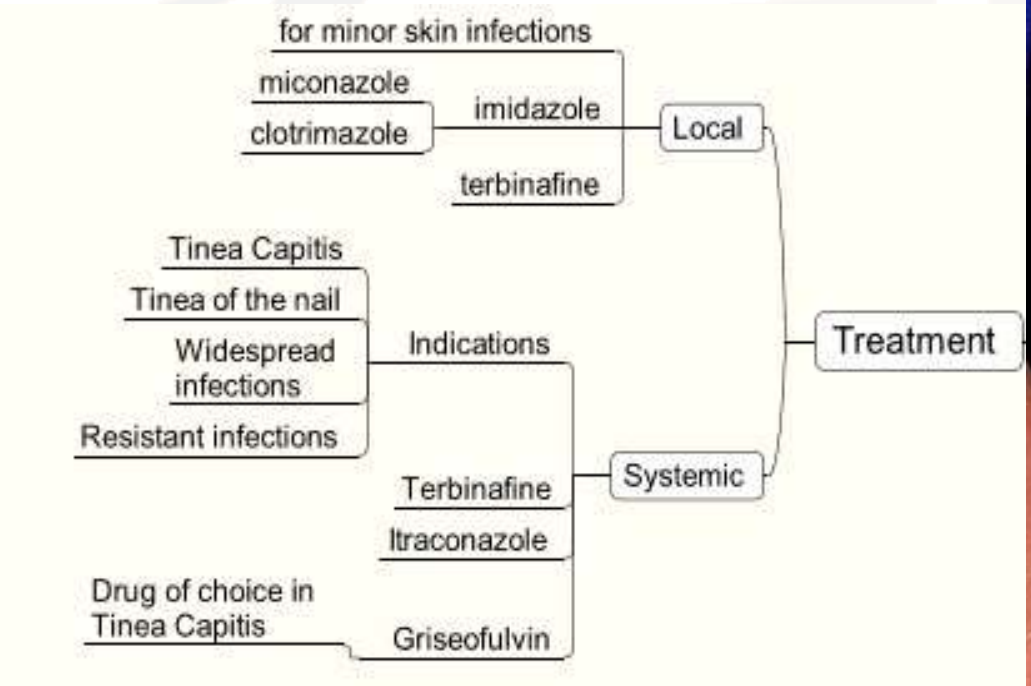
❖ **What is the Dx?**

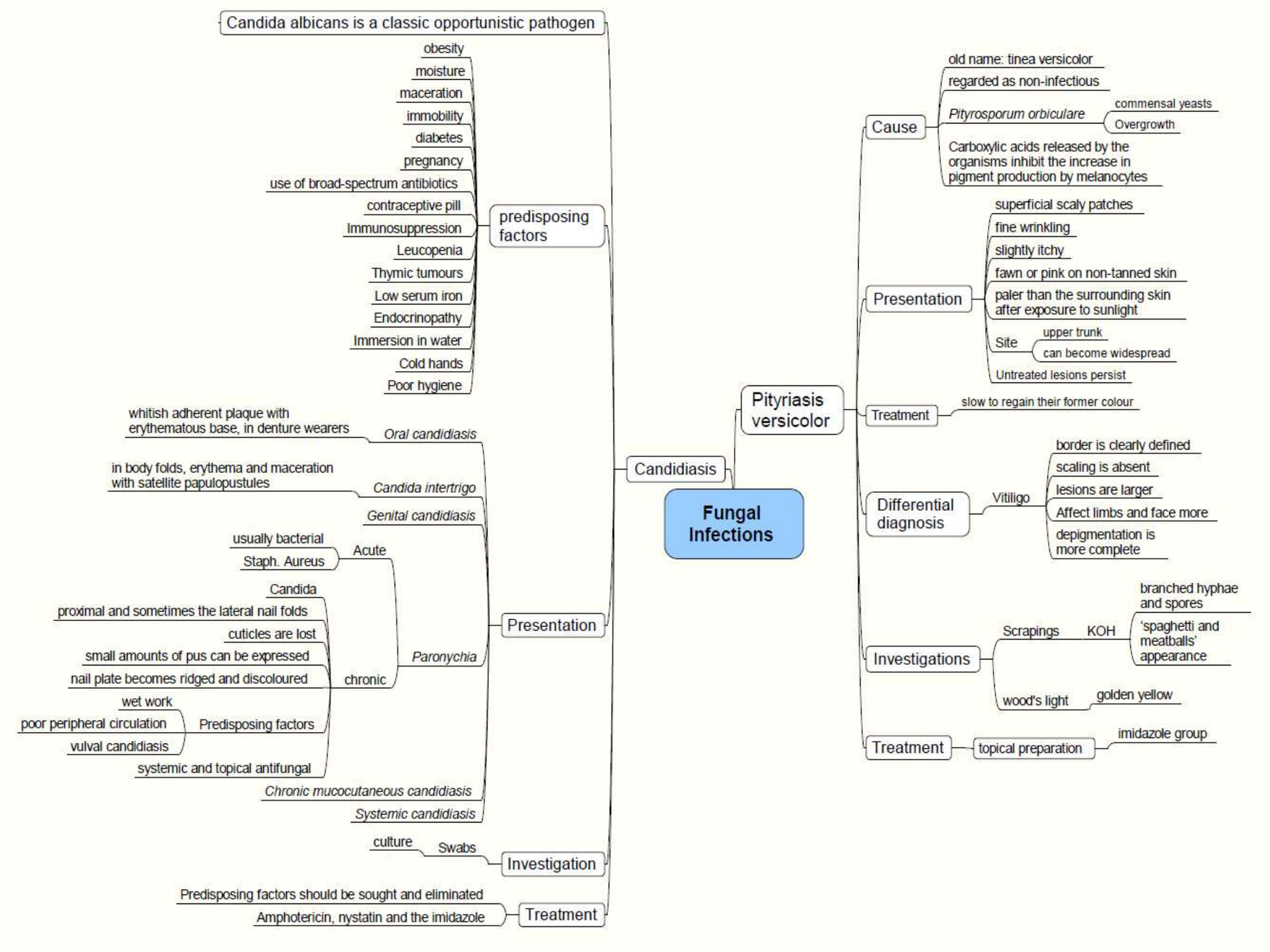
- Tinea Pedis

- **What is the Dx:**
  - Tinea Manuum

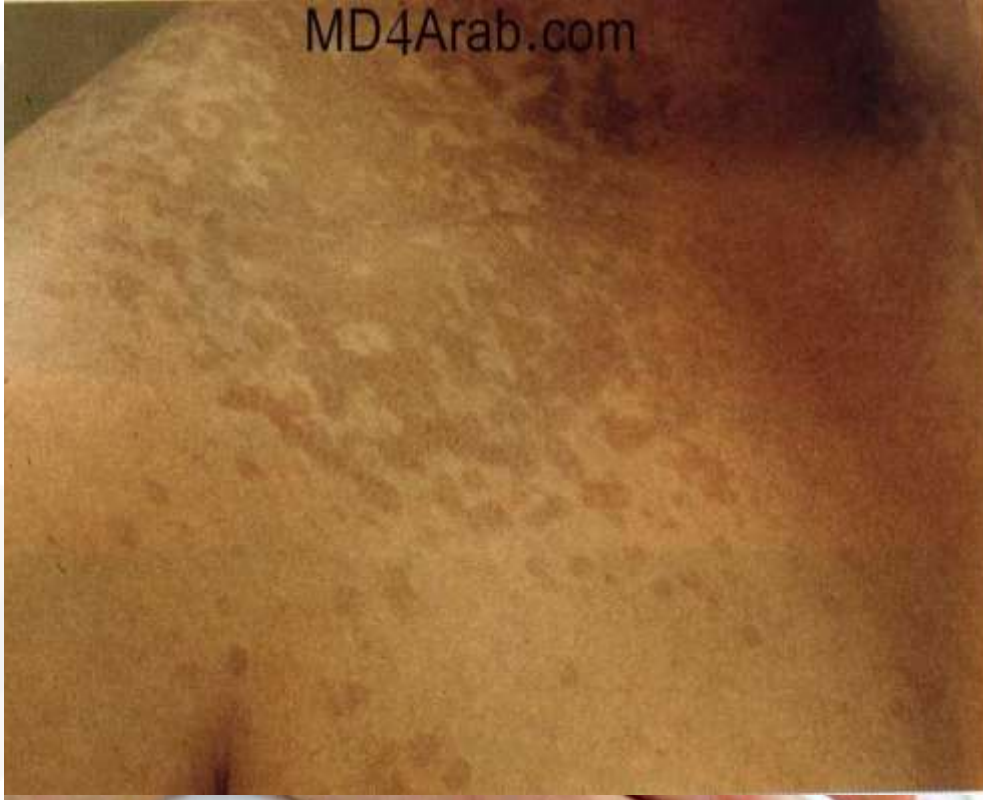
- **Mention some tests to be ordered.**
  - Skin scraping + KOH
  - Cultures

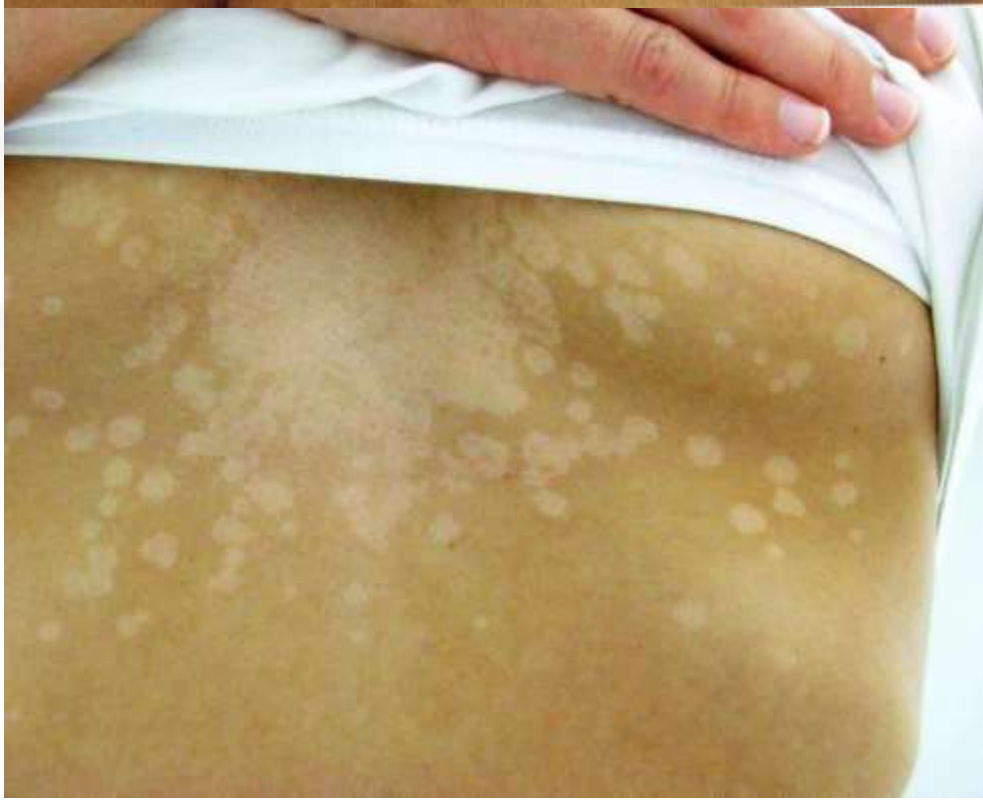
- **What is the treatment?**




Fungal Infections
Candidiasis
Candida albicans is a classic opportunistic pathogen
predisposing factors
obesity
moisture
maceration
immobility
diabetes
pregnancy
use of broad-spectrum antibiotics
contraceptive pill
Immunosuppression
Leucopenia
Thymic tumours
Low serum iron
Endocrinopathy
Immersion in water
Cold hands
Poor hygiene
Presentation
Oral candidiasis
whitish adherent plaque with erythematous base, in denture wearers
Candida intertrigo
in body folds, erythema and maceration with satellite papulopustules
Genital candidiasis
Paronychia
Acute
usually bacterial
Staph. Aureus
chronic
Candida
proximal and sometimes the lateral nail folds
cuticles are lost
small amounts of pus can be expressed
nail plate becomes ridged and discoloured
Predisposing factors
wet work
poor peripheral circulation
vulval candidiasis
systemic and topical antifungal
Chronic mucocutaneous candidiasis
Systemic candidiasis
Investigation
culture
Swabs
Treatment
Predisposing factors should be sought and eliminated
Amphotericin, nystatin and the imidazole
Pityriasis versicolor
Cause
old name: tinea versicolor
regarded as non-infectious
Pityrosporum orbiculare
commensal yeasts
Overgrowth
Carboxylic acids released by the organisms inhibit the increase in pigment production by melanocytes
Presentation
superficial scaly patches
fine wrinkling
slightly itchy
fawn or pink on non-tanned skin
paler than the surrounding skin after exposure to sunlight
Site
upper trunk
can become widespread
Untreated lesions persist
Treatment
slow to regain their former colour
Differential diagnosis
Vitiligo
border is clearly defined
scaling is absent
lesions are larger
Affect limbs and face more
depigmentation is more complete
Investigations
Scrapings
KOH
branched hyphae and spores
'spaghetti and meatballs' appearance
wood's light
golden yellow
Treatment
topical preparation
imidazole group

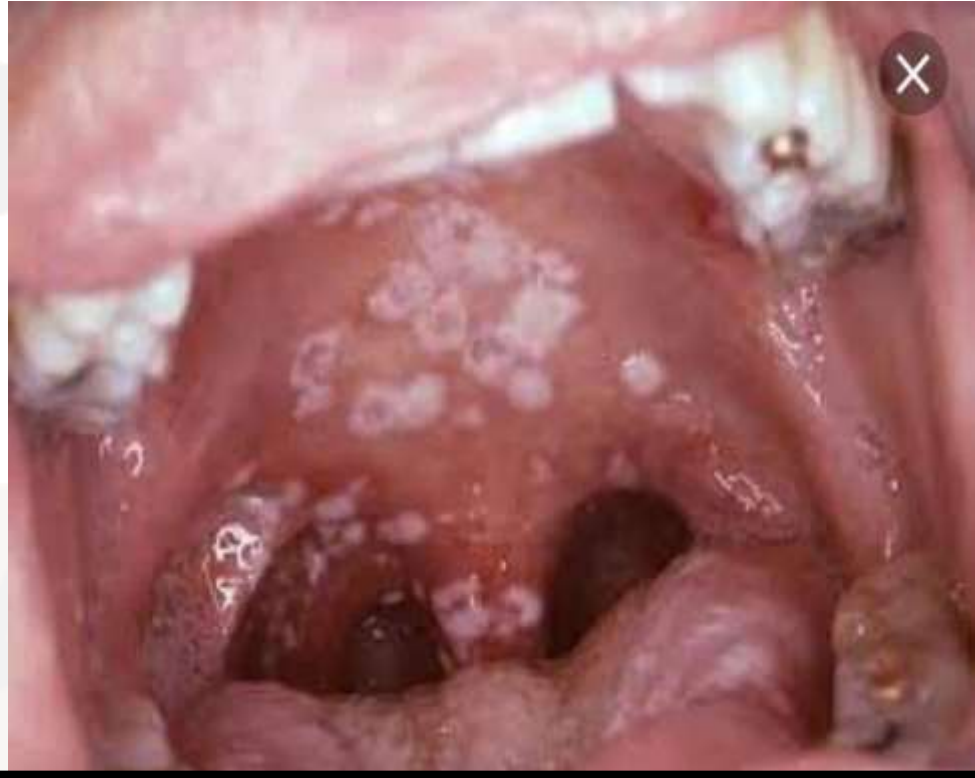
Pt come with this picture, complaining of this after swimming, she had similar asymptomatic hyperpigmented rash last summer:





- **Describe this picture:**
  - Discolored patches of skin, well defined non-scaly and with no specific arrangement
- **What is your Dx?**
  - Pitryasis Versicolor
- **What the cause of these lesions:**
  - Yeast Overgrowth
- **Give 1 DDx:**
  - Vitiligo
- **2 lines of treatment:**
  - Antifungal (Imidazole)
  - Itraconazol
  - Ketakonozal Shampoo

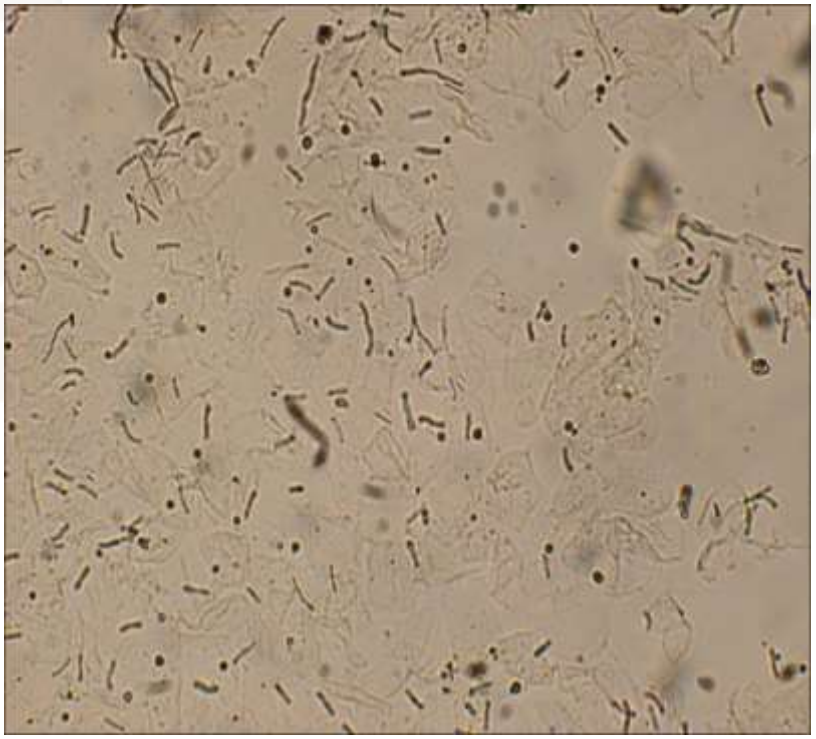
A pt presented with this adherent white plaques:

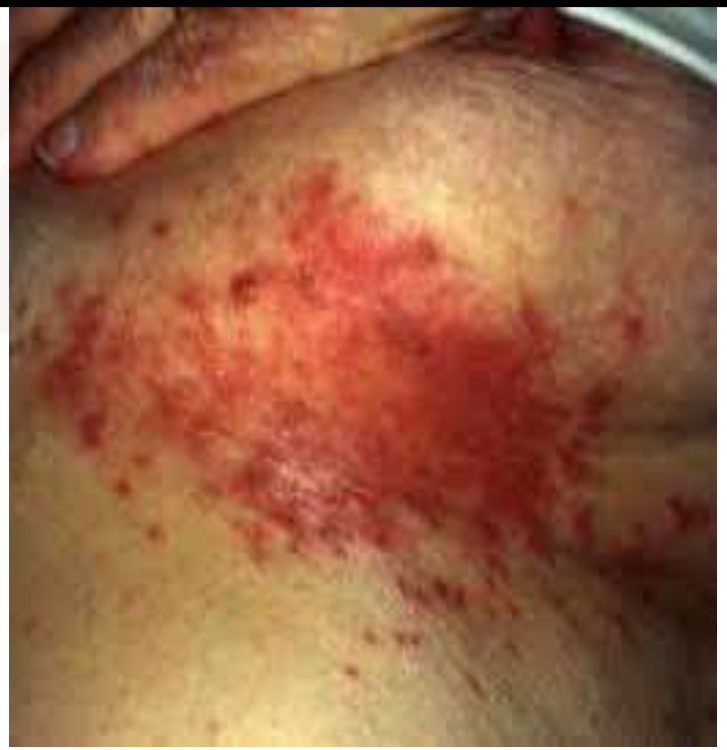


- **What is your Dx:** Oral Candida
- **Give 2 DDx:**
  a. Lichen Planus
  b. Aphthous Ulcer
  c. HSV infection
- **Mention a bed-side test:** KOH

What is your Dx:

Candida in the groin



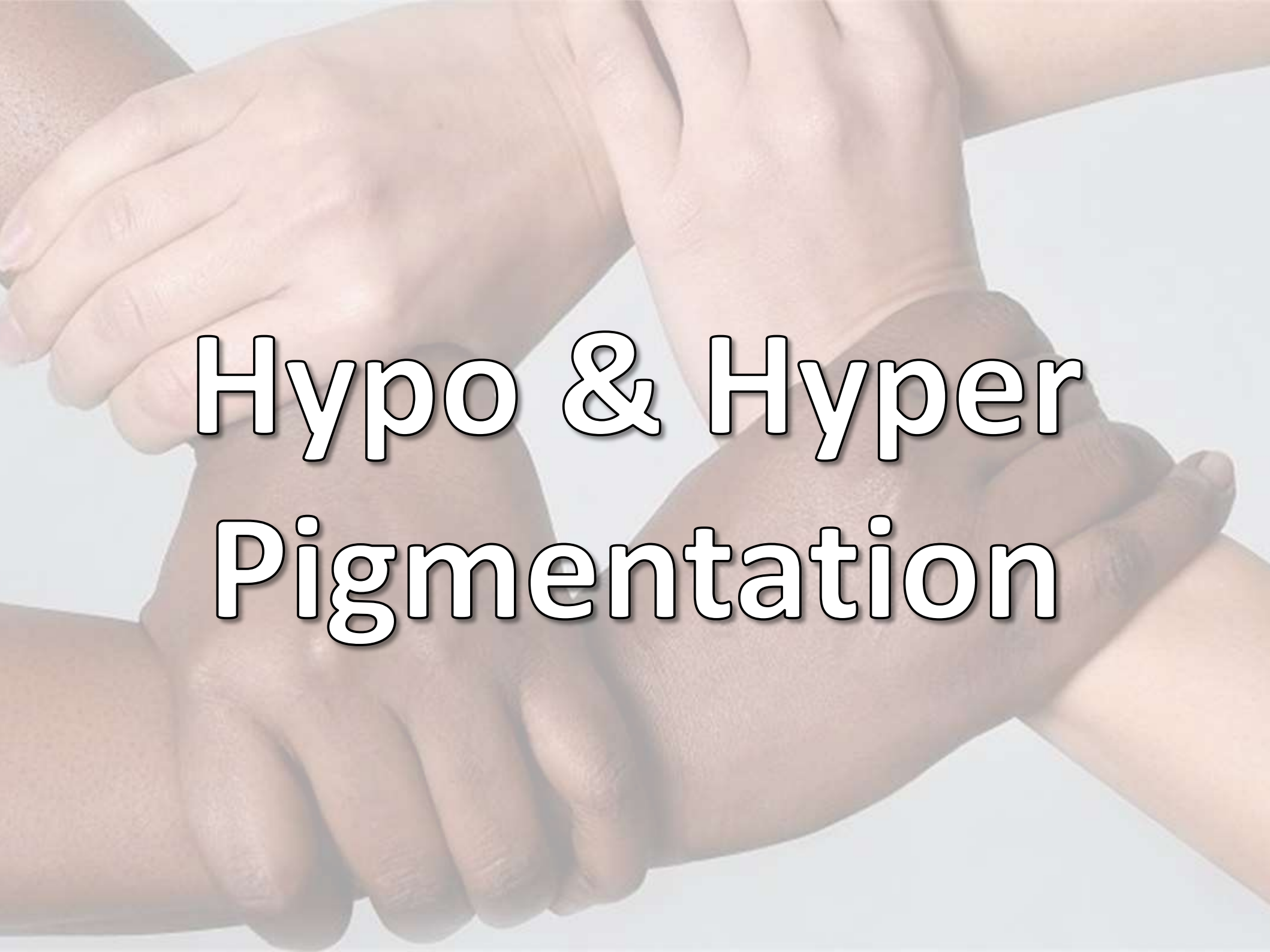


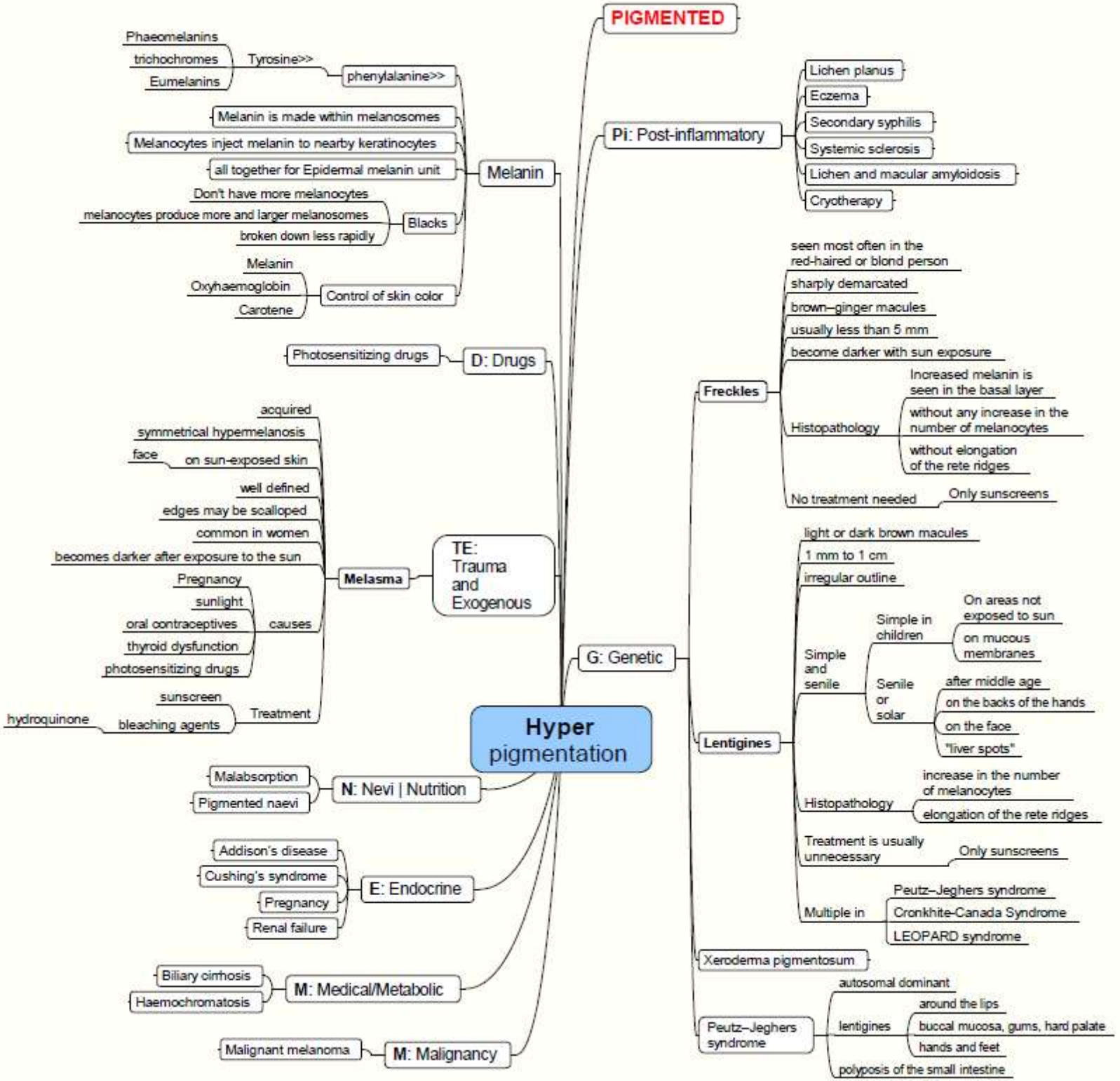
❖ **Define Arthroderma: and name 2 conditions that causes it:**

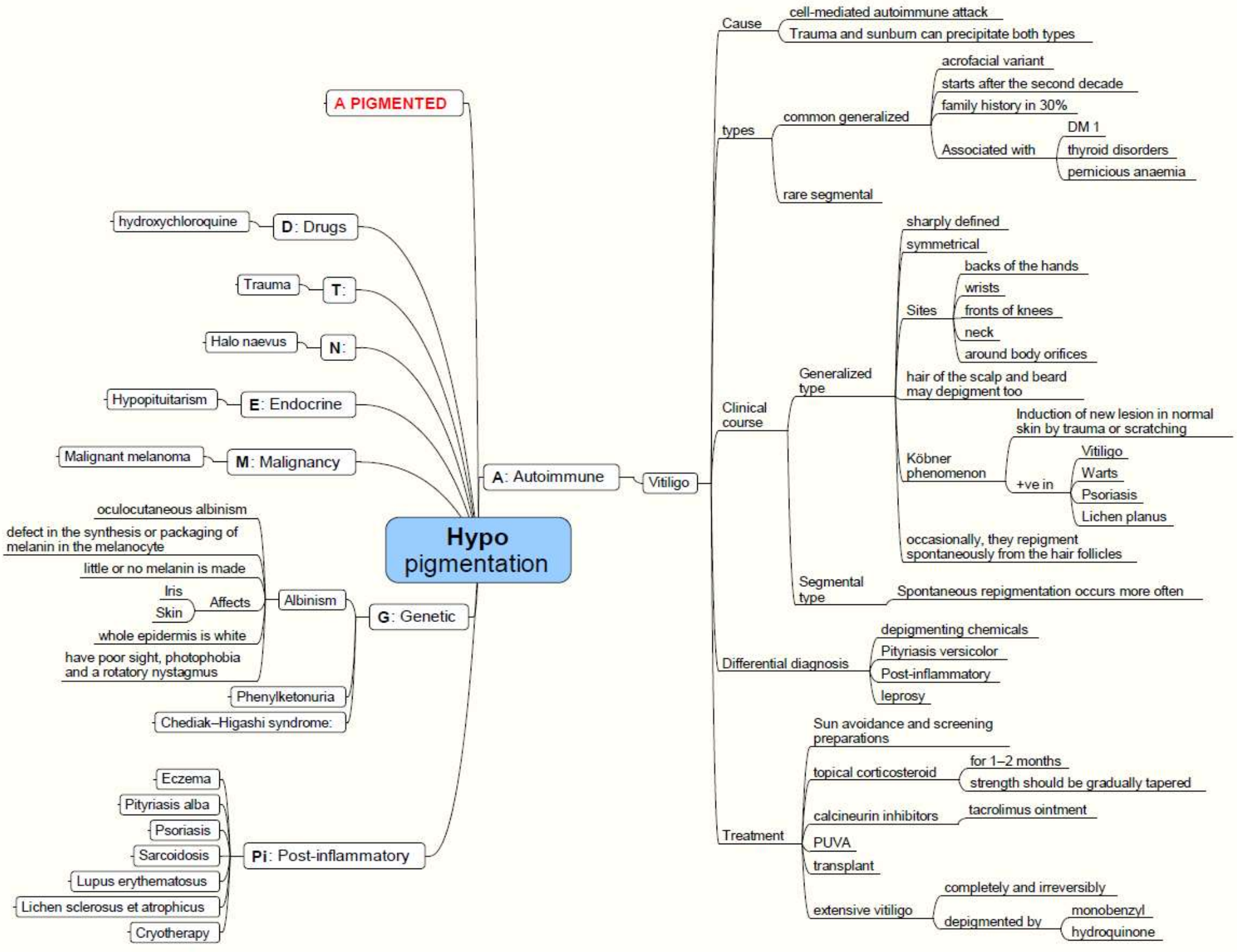
- Are a family of fungi - dermatophytes
- Tinea capitis, tinea corporis, tinea manuum, and tinea faciei

❖ **Mention 2 diseases caused by Malassezia (Pityrosporum Orbiculare - fungal):**

a. Tinea versicolor
b. Hair dandruff
c. Seborrheic dermatitis


Hypo & Hyper
Pigmentation


Hyper pigmentation
PIGMENTED
Pi: Post-inflammatory
Lichen planus
Eczema
Secondary syphilis
Systemic sclerosis
Lichen and macular amyloidosis
Cryotherapy
G: Genetic
Freckles
seen most often in the red-haired or blond person
sharply demarcated
brown–ginger macules
usually less than 5 mm
become darker with sun exposure
Histopathology
Increased melanin is seen in the basal layer
without any increase in the number of melanocytes
without elongation of the rete ridges
No treatment needed
Only sunscreens
Lentigines
light or dark brown macules
1 mm to 1 cm
irregular outline
Simple and senile
Simple in children
On areas not exposed to sun
on mucous membranes
Senile or solar
after middle age
on the backs of the hands
on the face
"liver spots"
Histopathology
increase in the number of melanocytes
elongation of the rete ridges
Treatment is usually unnecessary
Only sunscreens
Multiple in
Peutz–Jeghers syndrome
Cronkhite-Canada Syndrome
LEOPARD syndrome
Xeroderma pigmentosum
Peutz–Jeghers syndrome
autosomal dominant
lentigines
around the lips
buccal mucosa, gums, hard palate
hands and feet
polyposis of the small intestine
TE: Trauma and Exogenous
Melasma
acquired
symmetrical hypermelanosis
face
on sun-exposed skin
well defined
edges may be scalloped
common in women
becomes darker after exposure to the sun
causes
Pregnancy
sunlight
oral contraceptives
thyroid dysfunction
photosensitizing drugs
Treatment
sunscreen
bleaching agents
hydroquinone
Melanin
phenylalanine>>
Tyrosine>>
Phaeomelanins
trichochromes
Eumelanins
Melanin is made within melanosomes
Melanocytes inject melanin to nearby keratinocytes
all together for Epidermal melanin unit
Blacks
Don't have more melanocytes
melanocytes produce more and larger melanosomes
broken down less rapidly
Control of skin color
Melanin
Oxyhaemoglobin
Carotene
D: Drugs
Photosensitizing drugs
N: Nevi | Nutrition
Malabsorption
Pigmented naevi
E: Endocrine
Addison's disease
Cushing's syndrome
Pregnancy
Renal failure
M: Medical/Metabolic
Biliary cirrhosis
Haemochromatosis
M: Malignancy
Malignant melanoma


Hypo pigmentation
A PIGMENTED
D: Drugs
hydroxychloroquine
T:
Trauma
N:
Halo naevus
E: Endocrine
Hypopituitarism
M: Malignancy
Malignant melanoma
A: Autoimmune
Vitiligo
Cause
cell-mediated autoimmune attack
Trauma and sunburn can precipitate both types
types
common generalized
acrofacial variant
starts after the second decade
family history in 30%
Associated with
DM 1
thyroid disorders
pernicious anaemia
rare segmental
Clinical course
Generalized type
sharply defined
symmetrical
Sites
backs of the hands
wrists
fronts of knees
neck
around body orifices
hair of the scalp and beard may depigment too
Köbner phenomenon
Induction of new lesion in normal skin by trauma or scratching
+ve in
Vitiligo
Warts
Psoriasis
Lichen planus
occasionally, they repigment spontaneously from the hair follicles
Segmental type
Spontaneous repigmentation occurs more often
Differential diagnosis
depigmenting chemicals
Pityriasis versicolor
Post-inflammatory
leprosy
Treatment
Sun avoidance and screening preparations
topical corticosteroid
for 1–2 months
strength should be gradually tapered
calcineurin inhibitors
tacrolimus ointment
PUVA
transplant
extensive vitiligo
completely and irreversibly depigmented by
monobenzyl hydroquinone
G: Genetic
Albinism
oculocutaneous albinism
defect in the synthesis or packaging of melanin in the melanocyte
little or no melanin is made
Affects
Iris
Skin
whole epidermis is white
have poor sight, photophobia and a rotatory nystagmus
Phenylketonuria
Chediak–Higashi syndrome:
Pi: Post-inflammatory
Eczema
Pityriasis alba
Psoriasis
Sarcoidosis
Lupus erythematosus
Lichen sclerosus et atrophicus
Cryotherapy

❖ Name 2 diseases that cause Hypopigmentation:

Mnemonic: A-PIGMENTED

Mnemonic		Examples
A	**Autoimmune**	- Vitiligo
Pi	**Post-Inflammatory**	- Eczema - Pitriasis Alba - Psoriasis - Sarcoidosis - Lupus Erythematous - Lichen Sclerosus aet atrophics - Cryotherapy
G	**Genetic**	- Albinism - Phenylketouria - Chediak-Higashi Syndrome
M	**Malignancy**	- Malignant Melanoma
E	**Endocrine**	- Hypopituitarism
N	**Naevus Halo**	
T	**Trauma**	
D	**Drugs**	- Hydroxychloroquine

❖ Name 2 diseases that cause Hyperpigmentation:

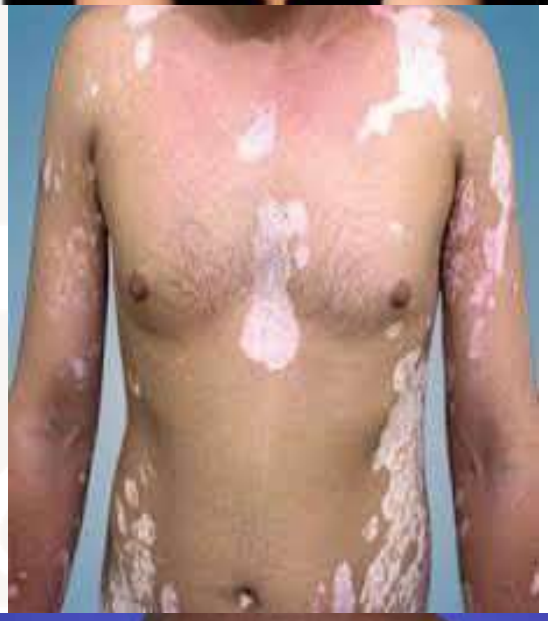
Mnemonic: PIGMENTED

Mnemonic		Examples	
Pi	**Post-inflammatory**	- Lichen planus - Systemic Sclerosis - Cryotherapy	- Eczema - Lichen and Macular Amyloidosis - Secondary Syphilis
G	**Genetic**	- Freckle - Xeroderma Pigmentosum	- Lentigines - Peutz-Jeghers Syndrome
M	**Malignancy**	- Malignant Melanoma	
M	**Medical/Metabolic**	- Biliary Cirrhosis	- Haemochromatosis
E	**Endocrine**	- Addison's disease - Pregnancy	- Cushing syndrome - Renal failure
N	**Nevi/Nutrition**	- Malabsorption	- Pigmented Naevi
TE	**Trauma and Exogenous**	- Melasma	
D	**Drugs**	- Photosensitizing drugs	

❖ **Write 4 endocrine disorders that leads to hyperpigmentation:**

a. Addison's
b. Cushing
c. Pregnancy
d. Renal failure

A female patient came complaining of hypopigmented areas on her skin, Her mother has Hashimoto thyroiditis:



- **What is the diagnosis?**
  - Vitiligo

- **Describe:**
  - Type: Patch
  - Shape: Sharply defined, hypopigmented, not scaly
  - Arrangement: not specific
  - Distribution: *Name the site, symmetry*

- **Mention 1 bedside test tests:**
  - Wood light: Milky white

- **Mention 2 other autoimmune diseases you expect to find in this patient:**
  a. Hashimoto thyroiditis
  b. DM Type I

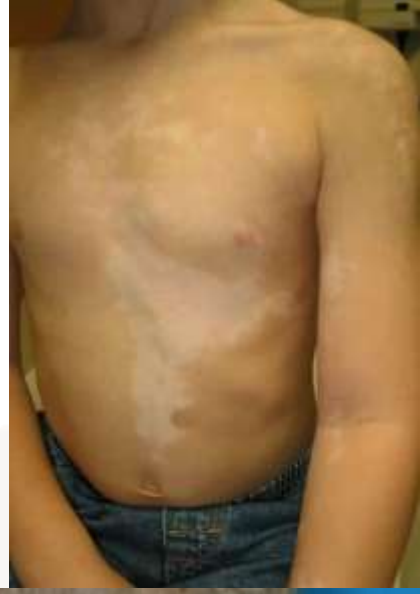
- **Mention 2 blood tests you would order:** (R/O other autoimmune diseases)
  - TFTs,
  - Fasting blood glucose,
  - B12

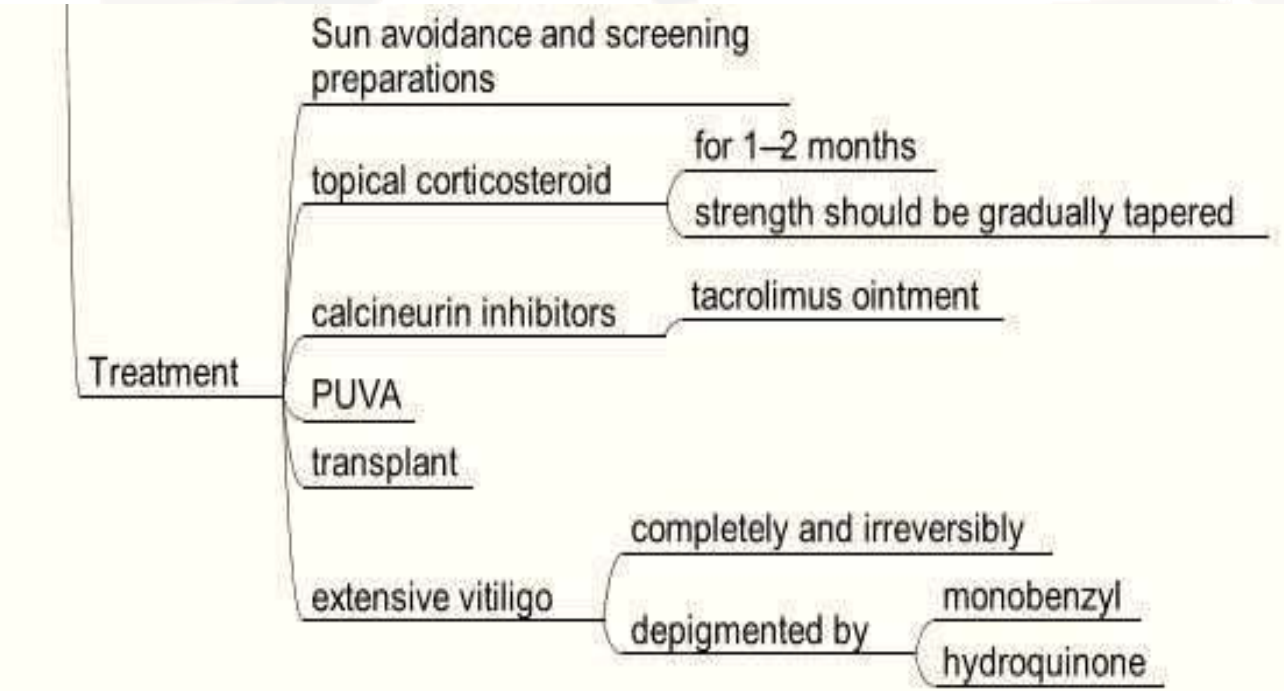
❖ **If both parents were affected with vitiligo, what is the % for their kids to be involved:**
- 41% (based on hunter 5th edition)

❖ **Which type of vitiligo only presents on the lateral trunk and upper thigh?**
- Segmental

❖ **Name 2 topical treatments:**
- Topical corticosteroid
- Sun-screen

❖ **Name 3 lines of treatment:**





A patient came with this lesion on his face, and he has itching on the flexor surface of his knees

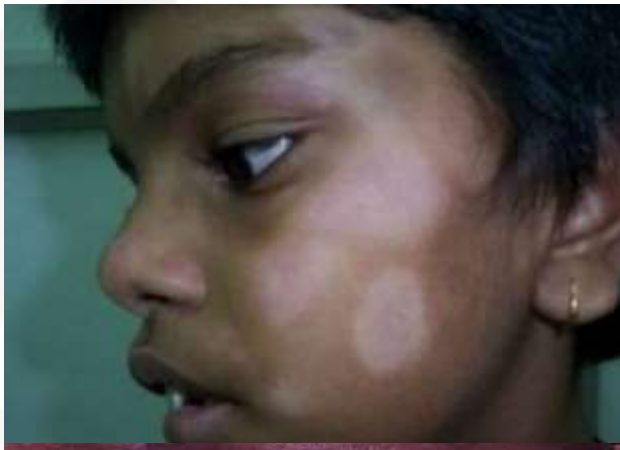
- **What is the diagnosis?**
  - Pityriasis alba.

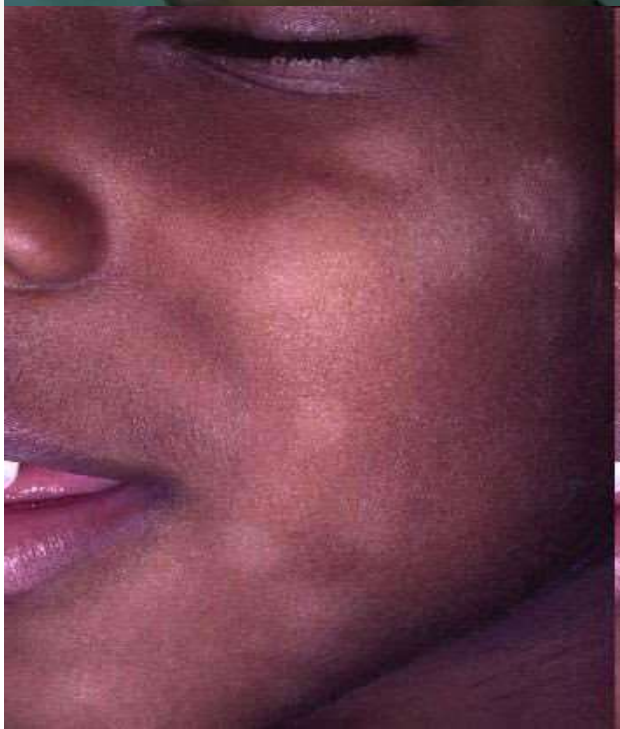
- **Describe this lesion.**

  - Multiple patches of hypopigmentation, well defined margin, no clear pattern of arrangement, distributed on the face and cheek.

- **Mention one differential diagnosis.**
  - Vitiligo

- **What is the treatment?**
  - Sunscreen
  - Moistening





Alopecia & Hirsutism

Causes for Scarring/Non-scarring Alopecia:

Non-scarring diffuse alopecia	Scaring alopecia
Androgenic alopecia	Burns
Alopecia areata	Kerion
Traction alopecia	SLE
Ringworm infections	Lichen planus
Drug induced	Carbuncle
Telogen Effluvium	Sarcoidosis
Iron Deficiency	Cicatricial basal cell carcinoma (BCC)
Non-inflammatory tinea capitis	Radio-dermatitis
	Aplasia cutis

This patient developed a this type of hair loss:

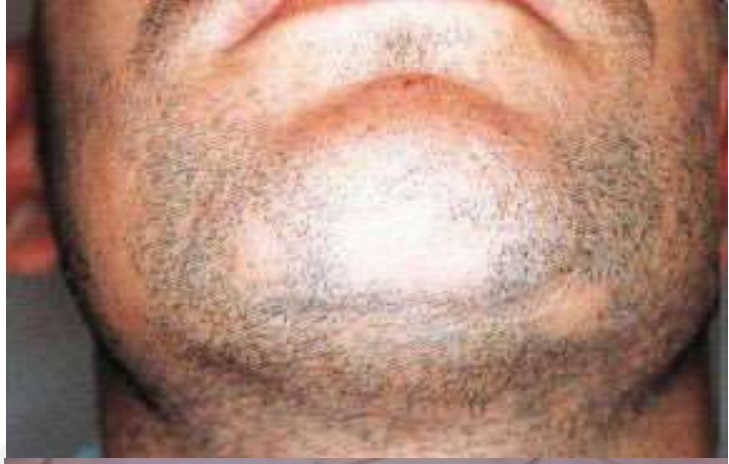
- **What is the diagnosis:**
  - Alopecia areata

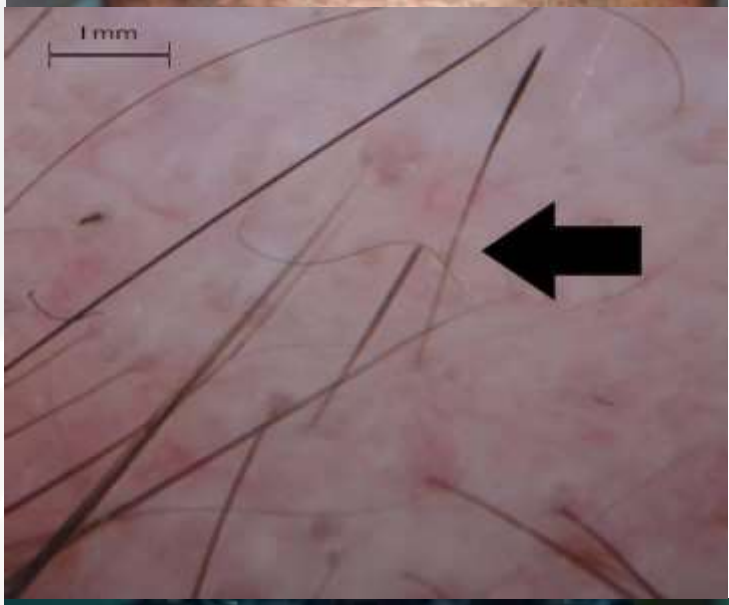
- **Describe the lesion:**
  - Patch of hair loss, with no scaring or scaling or skin discoloration with well defined margins

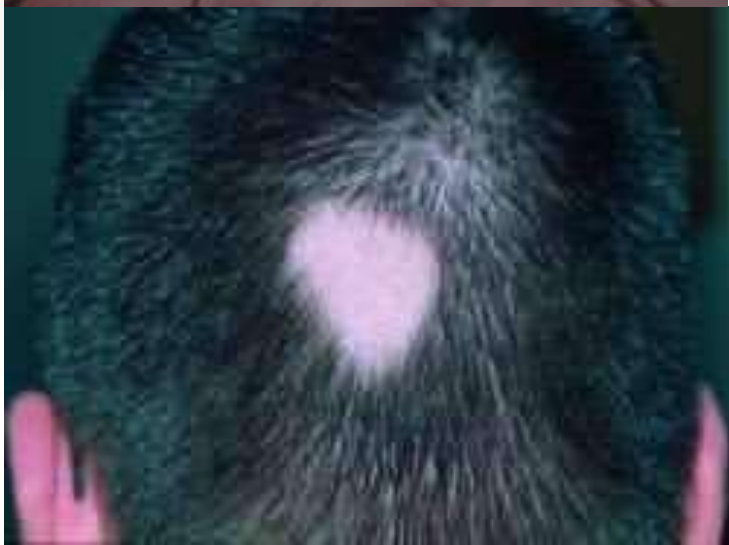
- **What is the mark with the black arrow and define it:**
  - Exclamation mark: Brocken hair that is 4 mm long, less pigmented and thinner proximally

- **Mention 2 signs you will look for to support your Dx:**
  - Well defined, not scaly, no skin color change, smooth area
  - Exclamation mark

- **Name a DDx:**
  - Traction alopecia,
  - Telogen Effluvium,
  - Drug induced,
  - Ring worms,
  - SLE,
  - Lichen Planus





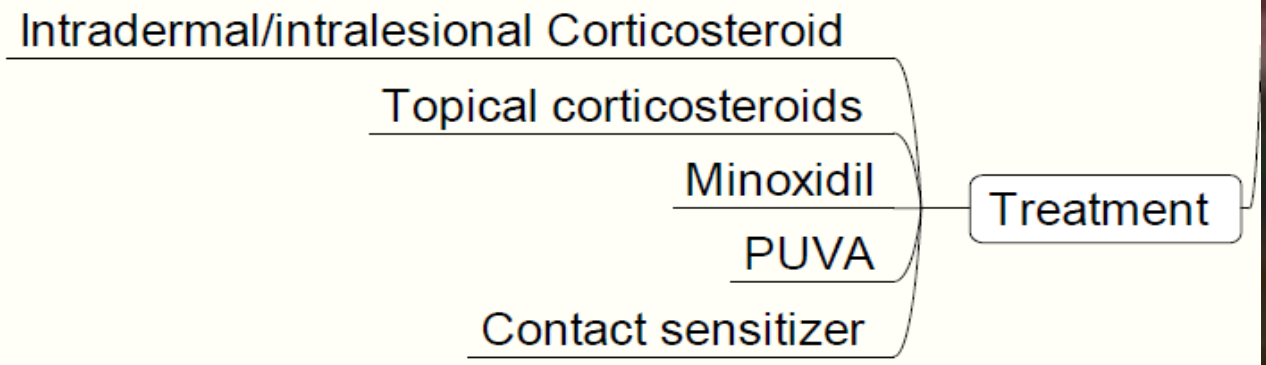


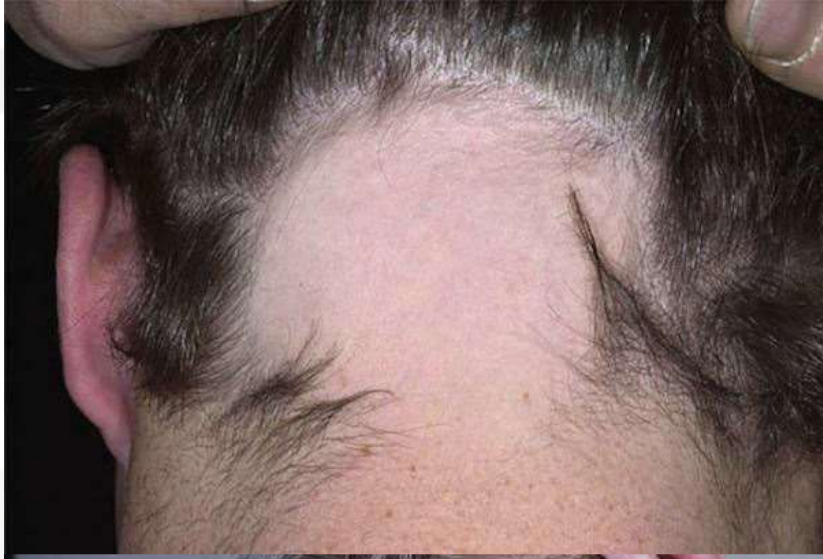
❖ **What is the treatment:**
- Intradermal/cortical corticosteroid
- Minoxidil
- PUVA
- Contact sensitizer

❖ **What are the poor prognostic factors for this condition:**
- Down syndrome,
- Atopy,
- Onset before puberty,
- Wide-spread involvement of the scalp,
- Recurrence,
- Chronicity (more than 3-month duration),
- Nail involvement

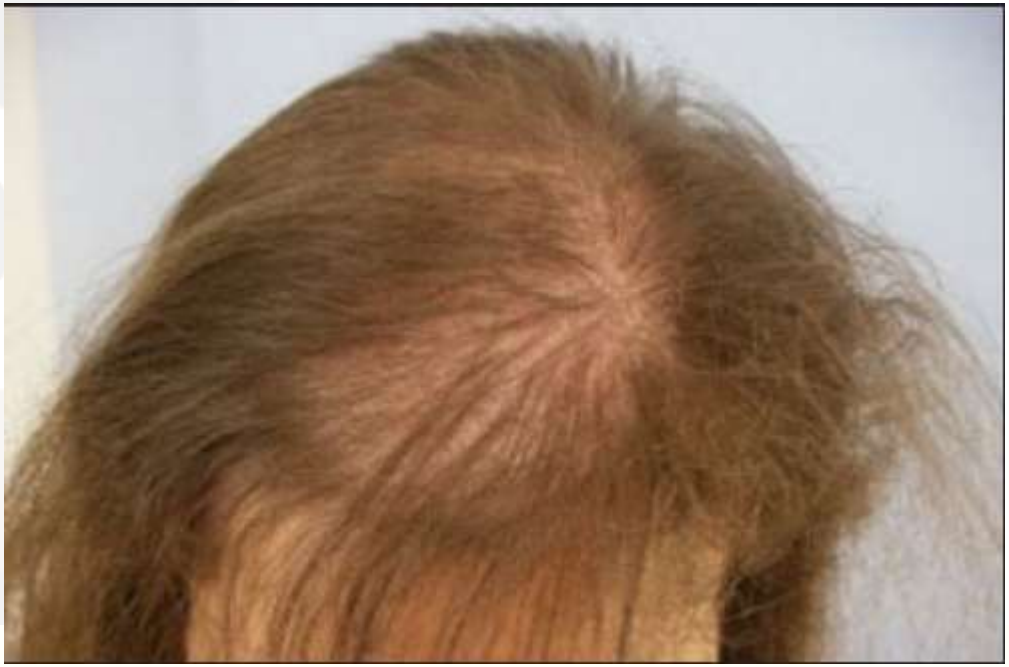
❖ **Does it have bad or good prognosis and why?**
- I think bad because it has a recurrence rate and its has a very unpredictable course

❖ **What is the Mx:**



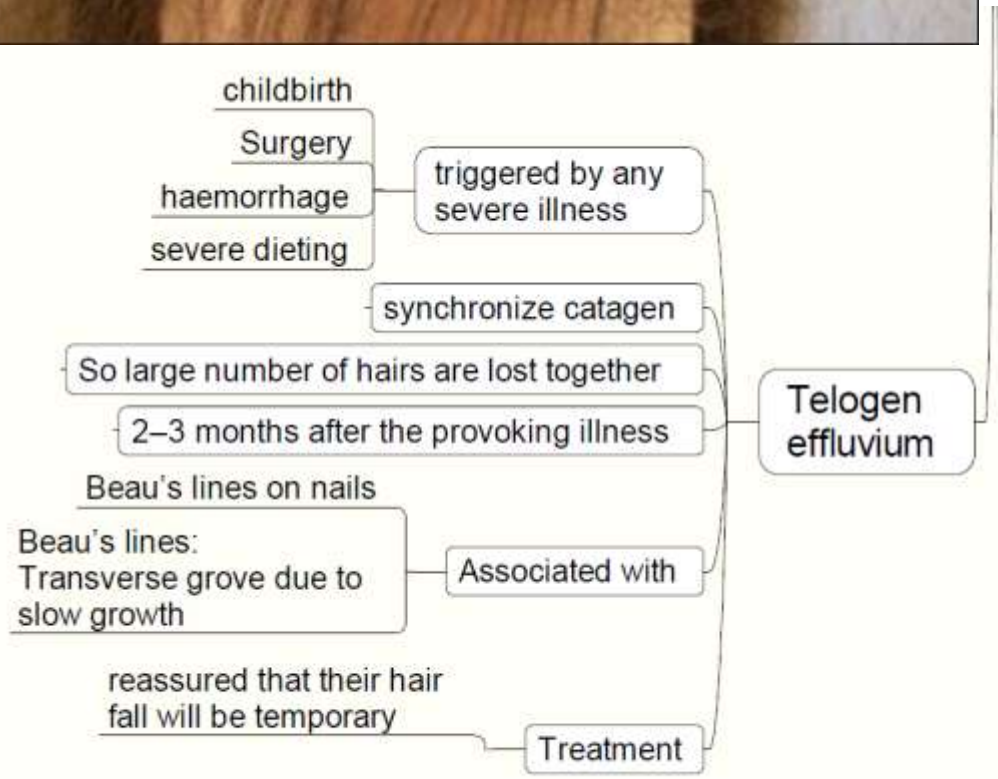


This patient came complaining of hair loss that started since she gave birth:



- **What is the Dx:**
  Telogen Effluvium
  "it is a form of temporary hair loss that usually happens several months after a person experiences a traumatic event or stress that pushes more hairs into the telogen phase (resting phase)"

- **What is the Mx for Telogen Effluvium?**
  a. Nutritional deficiencies through diet
  b. Non-surgical hair replacement
  c. Hormone replacement therapy (HRT) for menopausal women
  d. Psychiatric counseling for stress and anxiety



This patient with hair loss from all over the body

- **What is the Dx?**
  - Alopecia Universalis

- **Finding on histology:**
  - Lymphocytes around and in the hair matrix

- **List 2 treatment:**
  a. Topical corticosteroid
  b. Topical immunotherapy (squaric acid dibutylester (SADBE) and duphencyprone (DPCP)

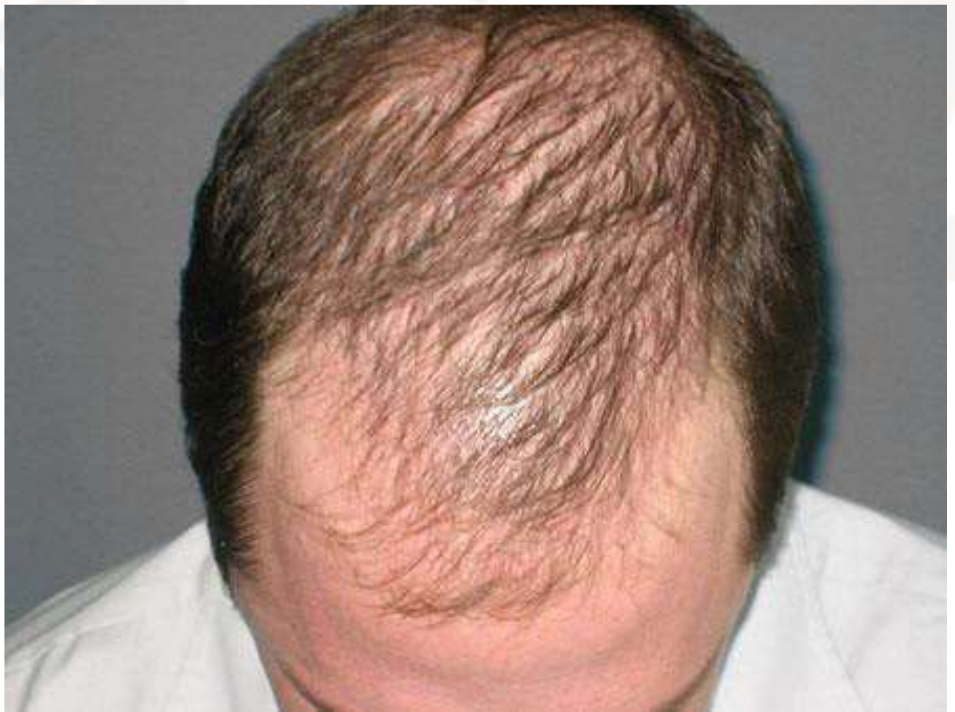
This patient came complaining for a localized non-scaly hair loss on the scalp, his brother complain of the same problem:

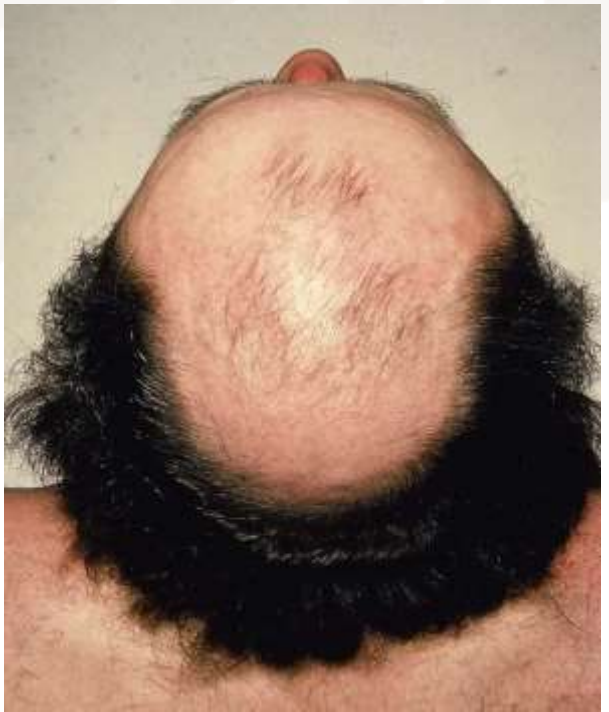
❖ **What is the Dx, define it:**

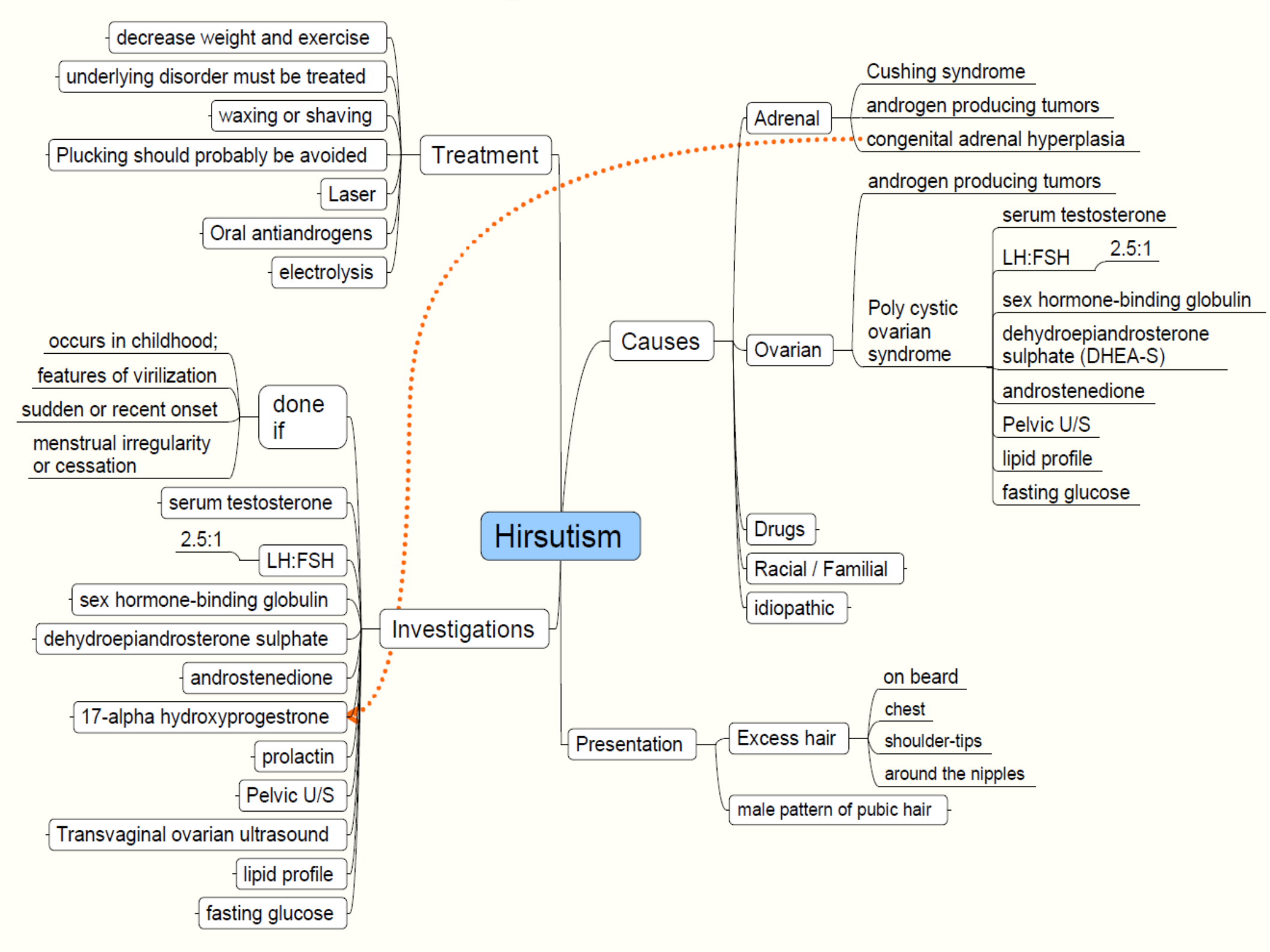
- Androgenic Alopecia: Male pattern baldness

❖ **How to treat this condition:**

- Scalp surgery, hair transplant, wigs, minoxidil, anti-androgens, & finasteride






Hirsutism
Causes
Adrenal
Cushing syndrome
androgen producing tumors
congenital adrenal hyperplasia
Ovarian
Poly cystic ovarian syndrome
androgen producing tumors
serum testosterone
LH:FSH
2.5:1
sex hormone-binding globulin
dehydroepiandrosterone sulphate (DHEA-S)
androstenedione
Pelvic U/S
lipid profile
fasting glucose
Drugs
Racial / Familial
idiopathic
Presentation
Excess hair
on beard
chest
shoulder-tips
around the nipples
male pattern of pubic hair
Investigations
done if
occurs in childhood;
features of virilization
sudden or recent onset
menstrual irregularity or cessation
serum testosterone
LH:FSH
2.5:1
sex hormone-binding globulin
dehydroepiandrosterone sulphate
androstenedione
17-alpha hydroxyprogestrone
prolactin
Pelvic U/S
Transvaginal ovarian ultrasound
lipid profile
fasting glucose
Treatment
decrease weight and exercise
underlying disorder must be treated
waxing or shaving
Plucking should probably be avoided
Laser
Oral antiandrogens
electrolysis

A 19 year old woman came with hirsutism:

- **Define Hirsutism:**
  - the growth of terminal hair in a woman , which is distributed in a man pattern

- **Mention 4 questions you want to ask in history:**
  a. Onset and duration
  b. Menstrual cycle
  c. Signs of virilization: acne, alopecia, voice changes (irreversible if occurred)
  d. Family Hx

- **What is the most important questions to ask in hx:**
  - Infertility, signs of virilization, weight gain

- **Mention 2 underlying causes of localized hypertrichosis:**
  a. Becker's naevi
  b. Stayr's tuft
  c. Spina bifida
  d. Occupational pressure

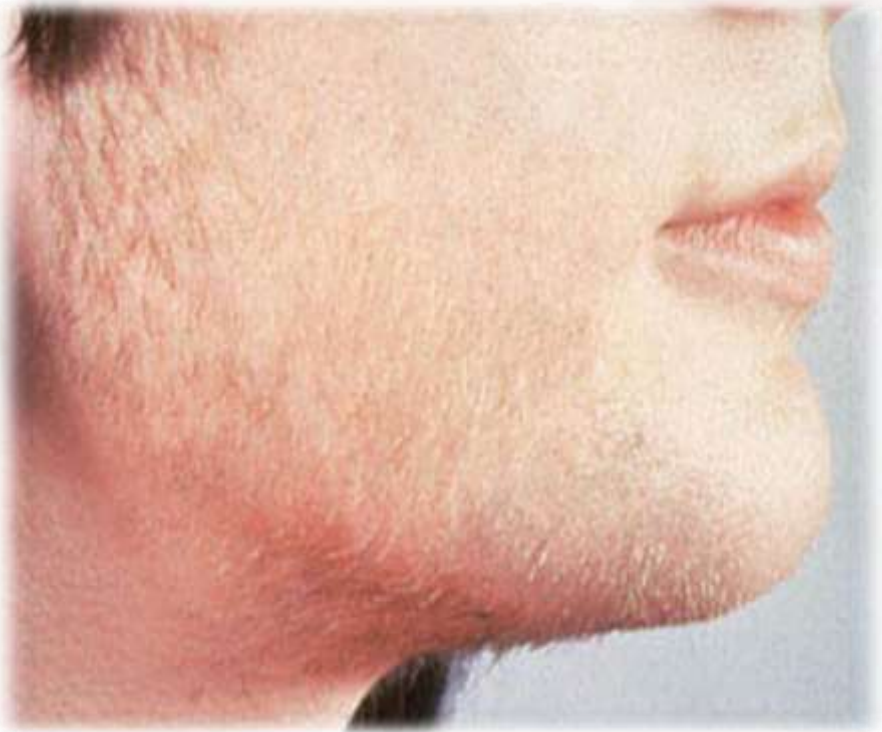
- **Beside PCOS name 3 conditions that cause hirsutism:**
  a. Cushing syndrome
  b. Androgen producing tumors
  c. CAH

- **If the patient had deepening of voice and clitoromegaly what to suspect?**
  - Virilization signs

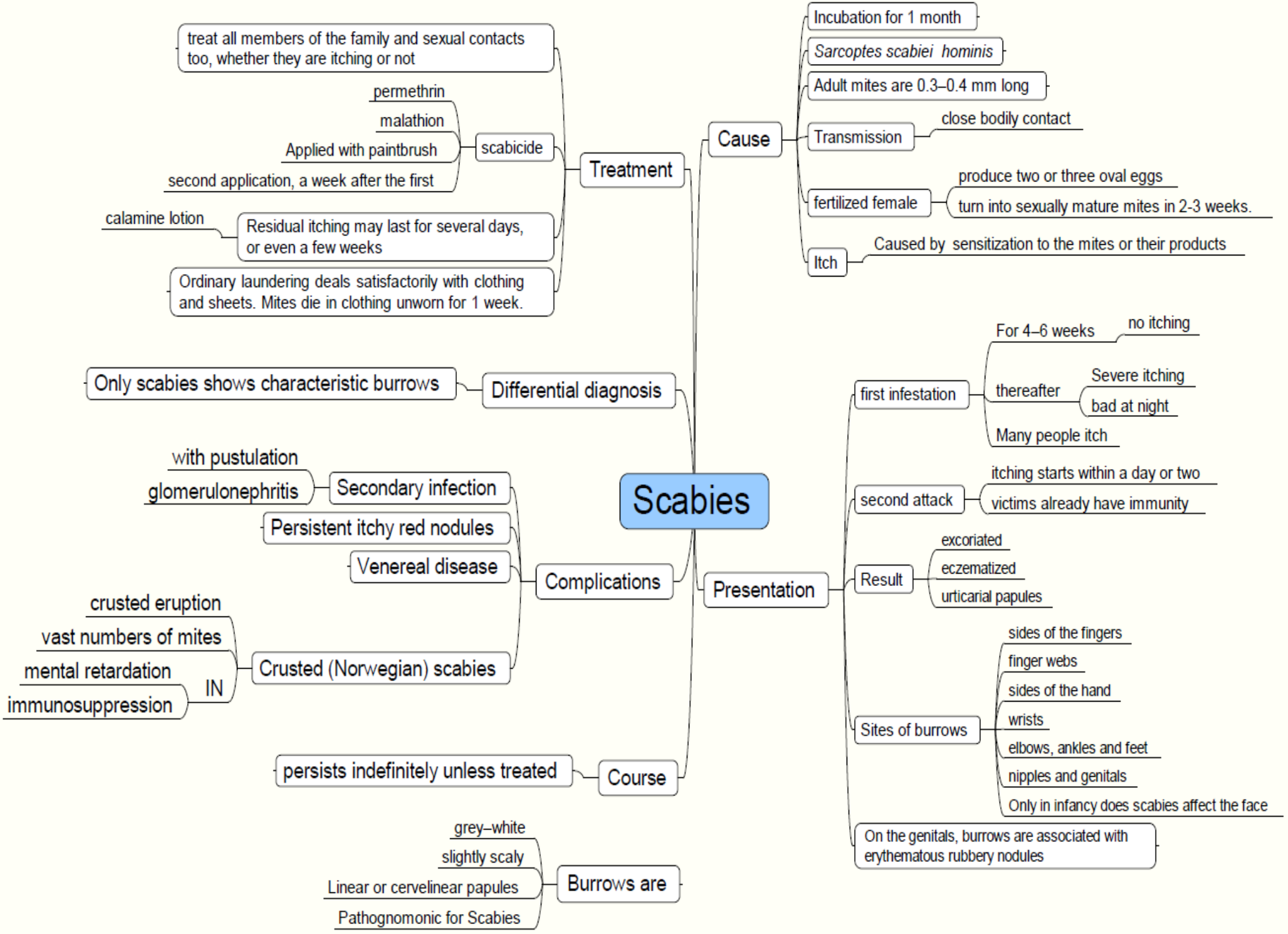
- **What are the blood tests or investigations you would order?**
  - Serum Testosterone
  - Sex hormone-binding globulin (SHBG)
  - Dehydroepiandrosterone sulphate
  - Androstenedione
  - Prolactin.
  - FSH/LH
  - Pelvic US

❖ **What is the treatment:**

- Decrease weight and exercise.
- Treatment of underlying cause if present.
- Hair removal physically + plucking should be avoided.
- Drugs as Ethinylestradiol & Cyproterone acetate or Spironolactone (antiandrogen).
- Topical therapy with eflornithine
- Laser.
- Electrolysis.



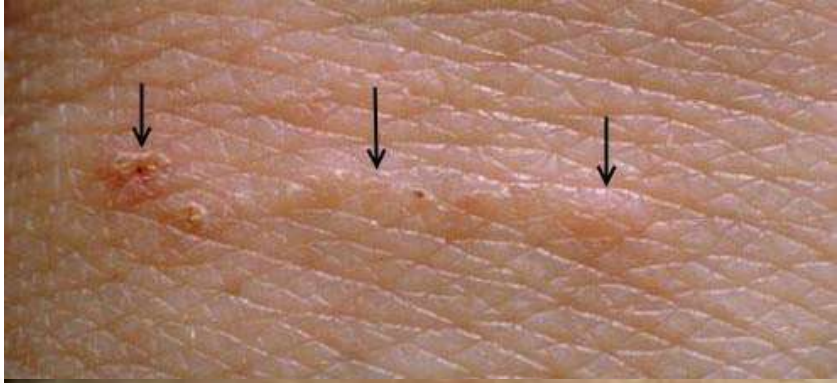
Infestations & Scabies

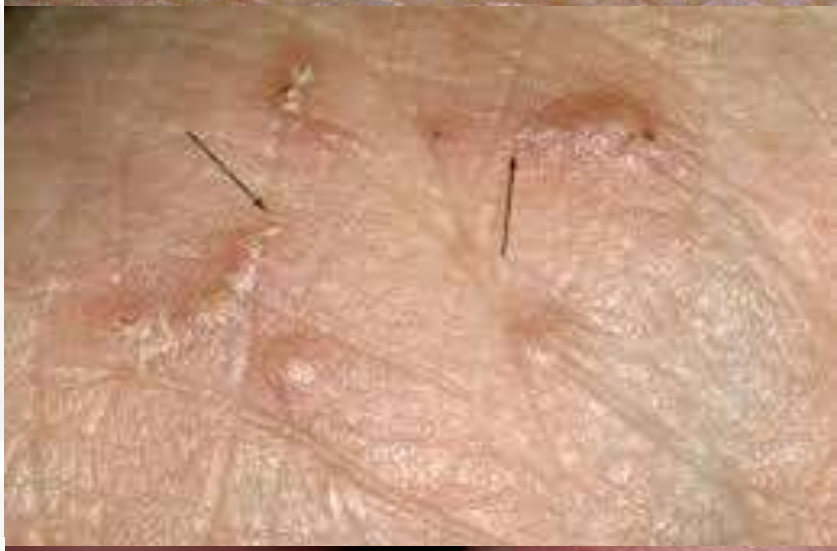

Scabies
Cause
Incubation for 1 month
Sarcoptes scabiei hominis
Adult mites are 0.3–0.4 mm long
Transmission
close bodily contact
fertilized female
produce two or three oval eggs
turn into sexually mature mites in 2-3 weeks.
Itch
Caused by sensitization to the mites or their products
Treatment
treat all members of the family and sexual contacts too, whether they are itching or not
scabicide
permethrin
malathion
Applied with paintbrush
second application, a week after the first
calamine lotion
Residual itching may last for several days, or even a few weeks
Ordinary laundering deals satisfactorily with clothing and sheets. Mites die in clothing unworn for 1 week.
Presentation
first infestation
For 4–6 weeks
no itching
thereafter
Severe itching
bad at night
Many people itch
second attack
itching starts within a day or two
victims already have immunity
Result
excoriated
eczematized
urticarial papules
Sites of burrows
sides of the fingers
finger webs
sides of the hand
wrists
elbows, ankles and feet
nipples and genitals
Only in infancy does scabies affect the face
On the genitals, burrows are associated with erythematous rubbery nodules
Differential diagnosis
Only scabies shows characteristic burrows
Complications
Secondary infection
with pustulation
glomerulonephritis
Persistent itchy red nodules
Venereal disease
Crusted (Norwegian) scabies
IN
crusted eruption
vast numbers of mites
mental retardation
immunosuppression
Course
persists indefinitely unless treated
Burrows are
grey–white
slightly scaly
Linear or cervelinear papules
Pathognomonic for Scabies

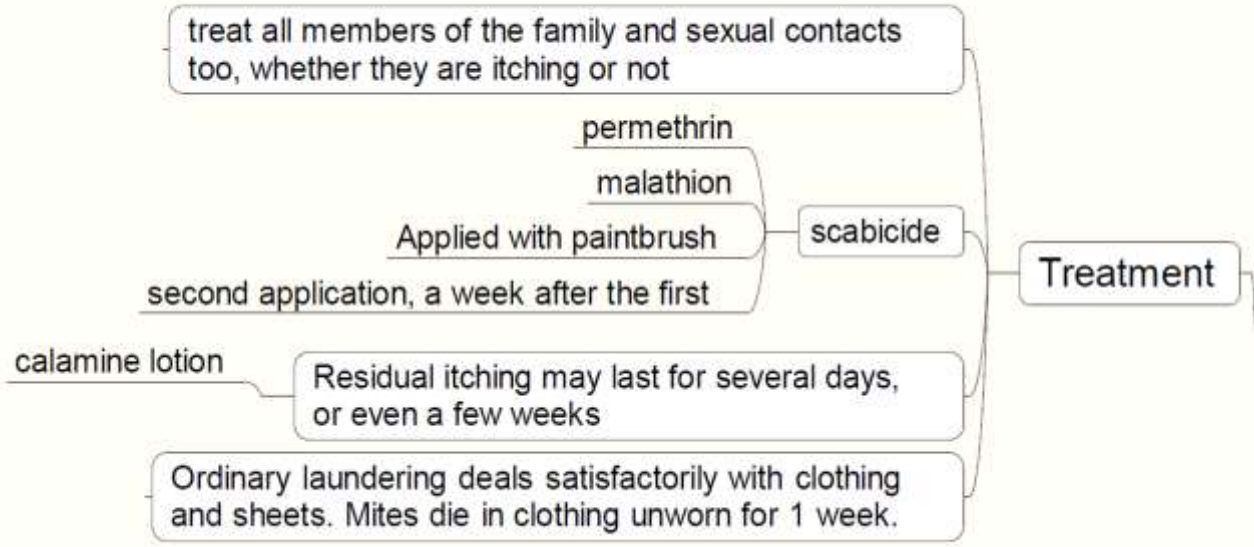
❖ **Define Burrows, what is the causative organism:**
- Linear or curvilinear papule, caused by scabies mite

❖ **Mention 2 sites where you can find them:**
a. Interdigital spaces
b. Sides of the hand
c. Flexural aspect of the wrist
d. Others: Nipples and genitalia

❖ **Name 2 lines of Rx for Scabies:**
a. Scabicide
b. Anti-histamine

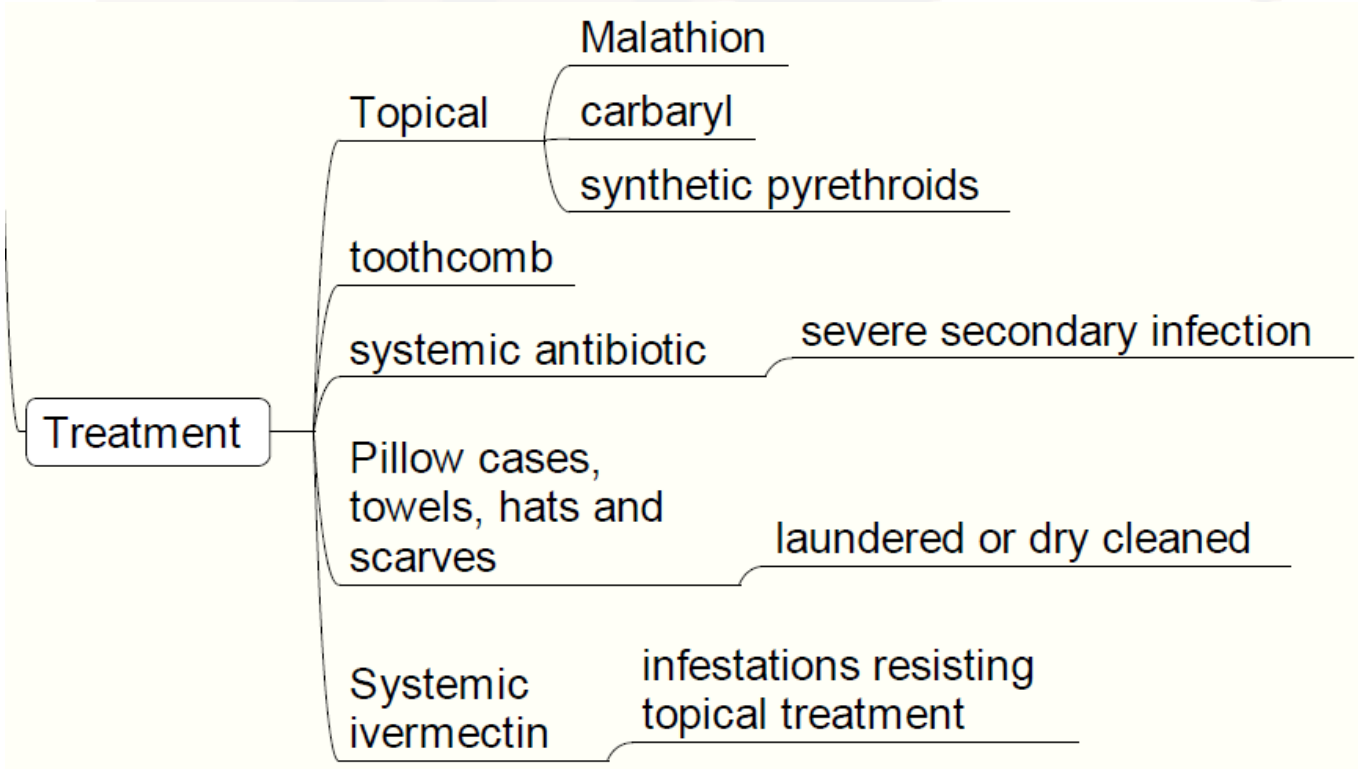


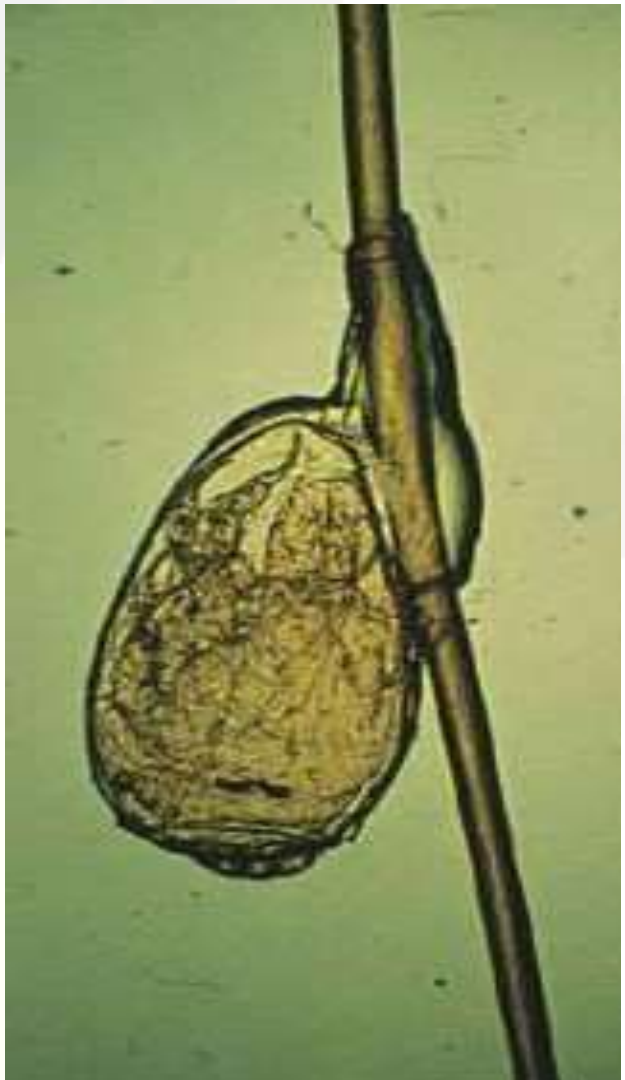




8 yrs old complaining of itchy scalp for 2 months that become worse at night

- **Your Dx?** Head lice
- **Mention one bedside test:**
  - It requires no further investigation but maybe we look for nests
- **Mention 2 lines of treatment:**






Nails

❖ **What is your Dx?**

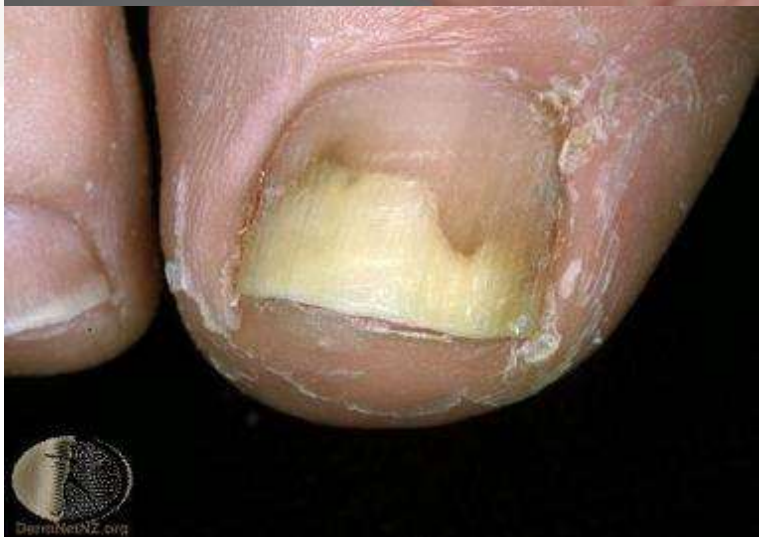
- Onycholysis

❖ **Define it:**

- common medical condition characterized by the painless detachment of the nail from the nail bed, usually starting at the tip and/or sides. On the hands, it occurs particularly on the ring finger but can occur on any of the fingernails. It may also happen to toenails

❖ **Give 3 causes of onycholysis:**

a. Minor trauma
b. Nails psoriasis
c. Phototoxic reactions
d. Repeated immersion in water
e. After the use of nail hardeners
f. Thyroid disease



❖ **What is your Dx?**

- Paronychia

❖ **Name 2 Rx lines for chronic Paronychia:**

a. Manicuring of the cuticle should cease

b. the hands should be kept as warm and as dry as possible, and the damaged nail folds packed several times a day with imidazole cream

c. highly potent topical corticosteroid creams applied 3 weeks also help

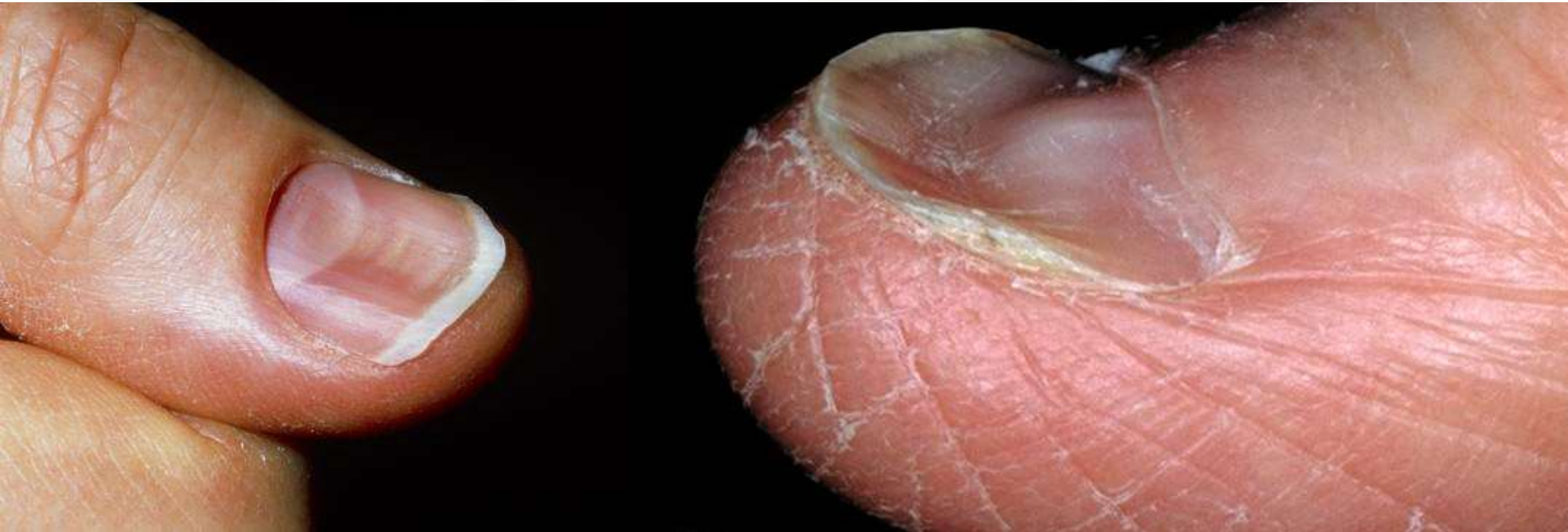
d. if there is no response and swaps confirm a candida infection, a 2 week course of itraconazole should be considered

❖ **What is the Sign:**

Koilonychia (Spoon-Shaped Nail)

❖ **What does it indicate:**

Hypochromic anemia mostly likely Iron deficiency anemia (IDA)



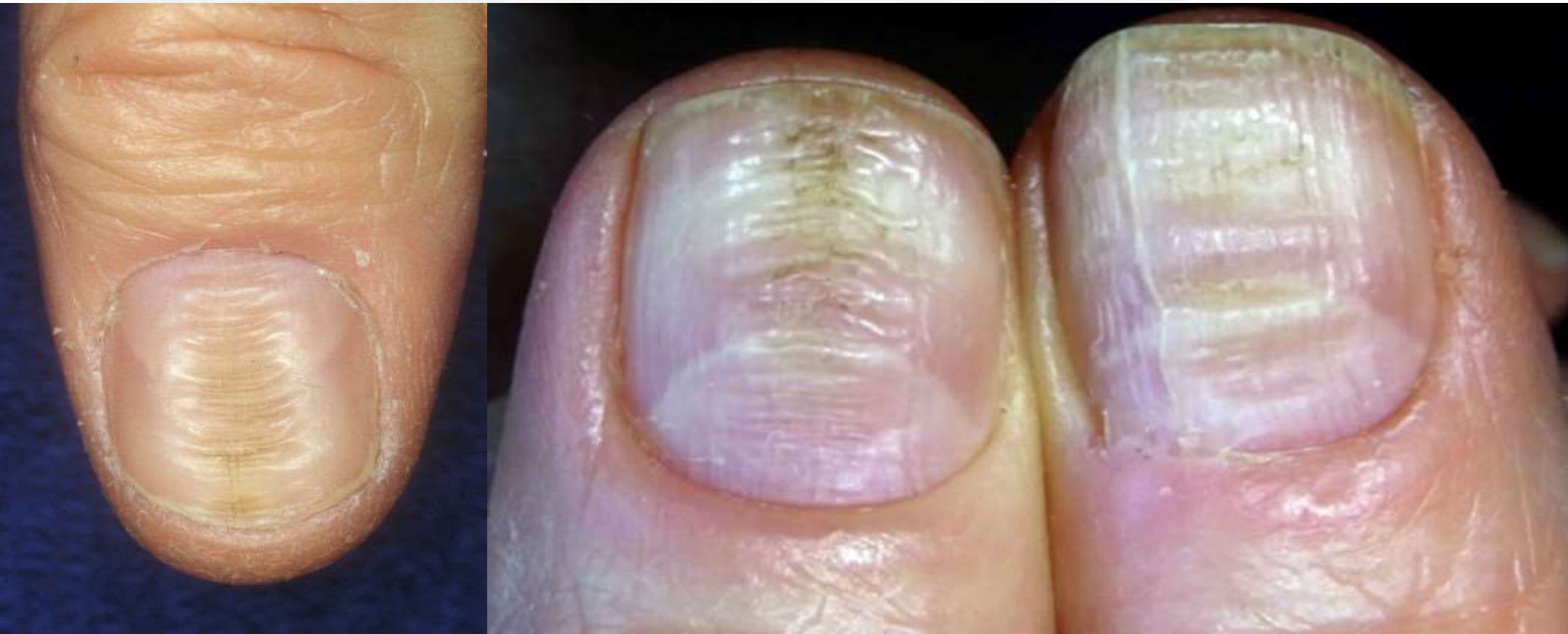
❖ **What is the Sign:**

Tic nail dystrophy

❖ **Mention 2 diseases that cause nail pitting:**

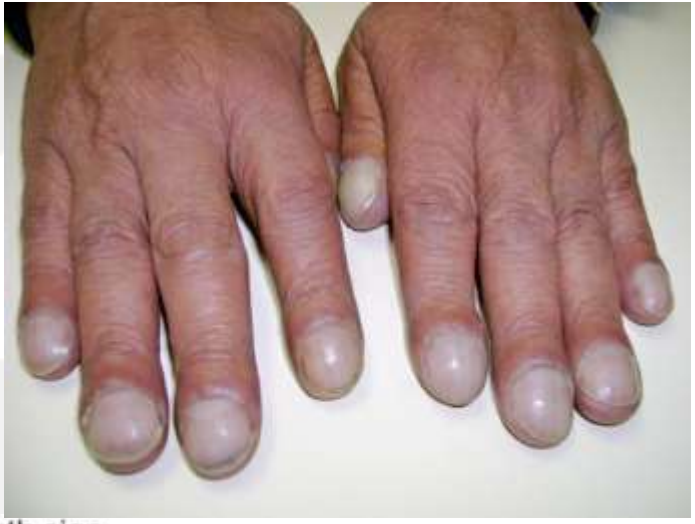
a. Psoriasis

b. Tinea of the nail

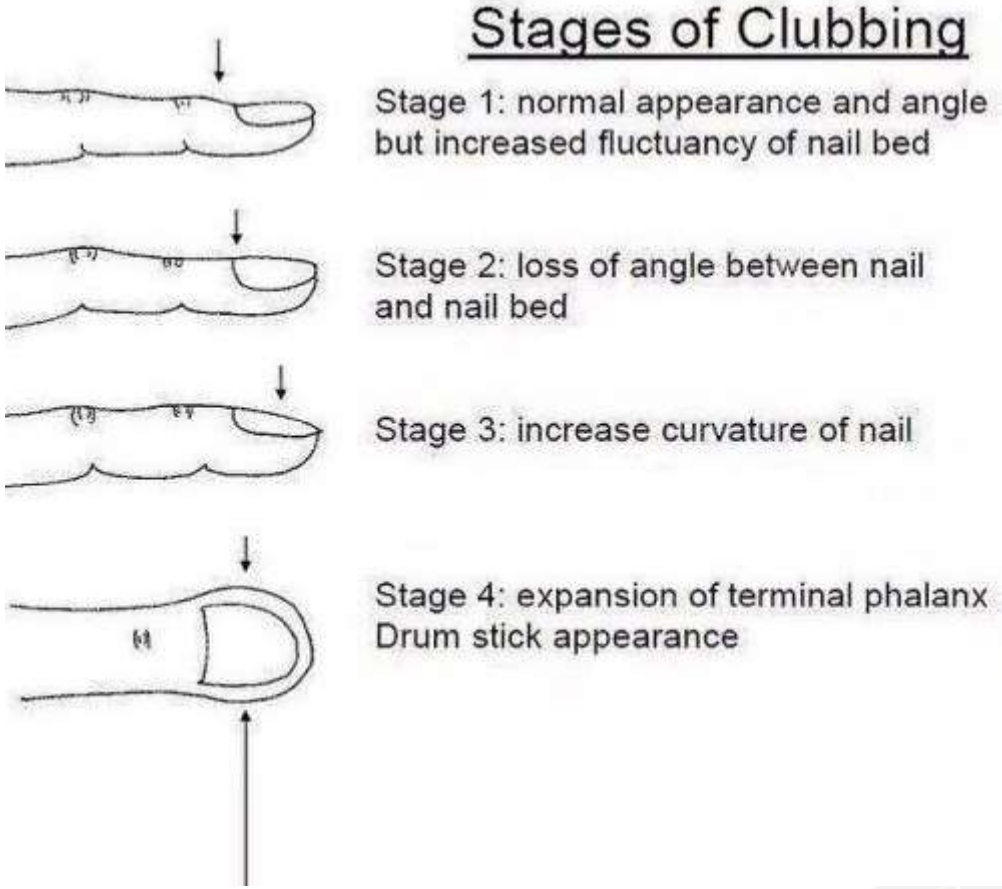


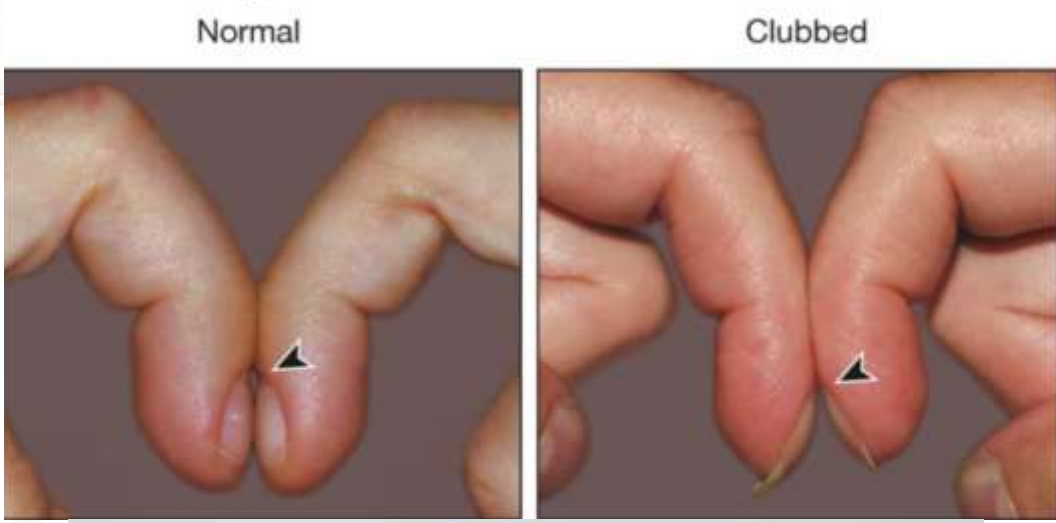
❖ **What is the Sign:**
Nail clubbing

❖ **Name the degrees of this problem:**

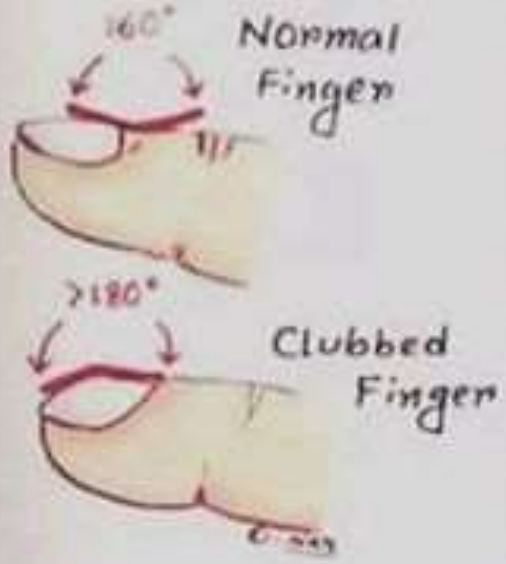


Schamroth sign





Causes of Clubbing



C → **C**yanotic Heart dis.
Cystic Fibrosis

L → **L**ung Cancer **L**ung abscess

U → **U**lcerative Colitis

B → **B**ronchiectasis

B → **B**enign mesothelioma

I → **I**nfective Endocarditis
Idiopathic Pulmonary fibrosis

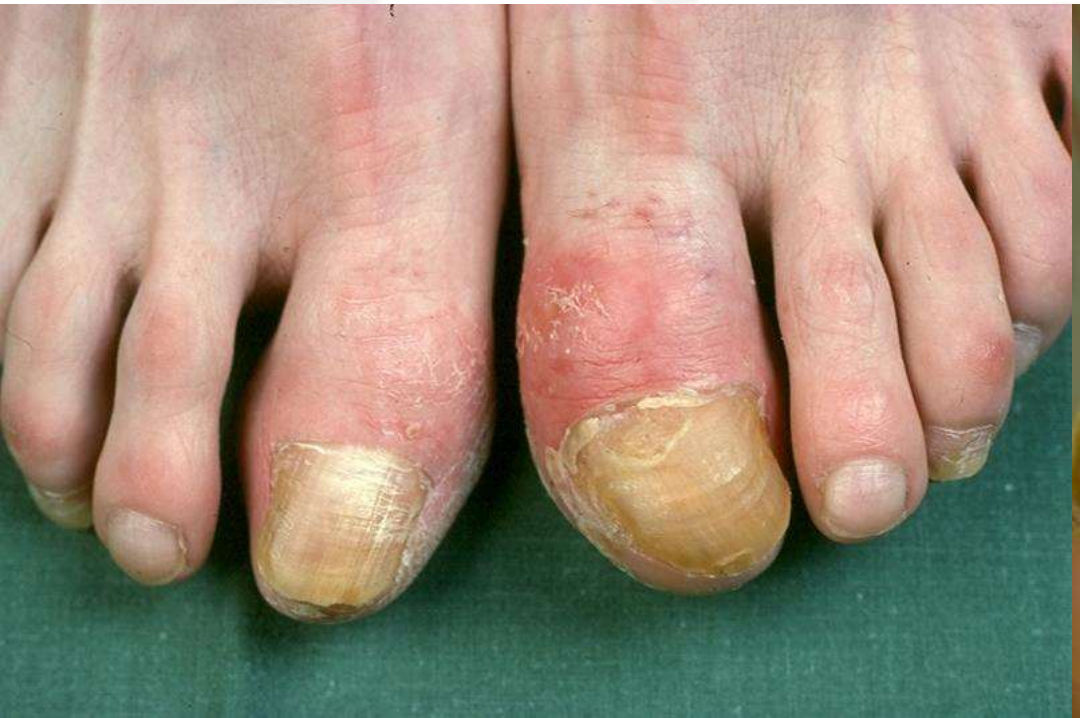
N → **N**eurogenic tumors

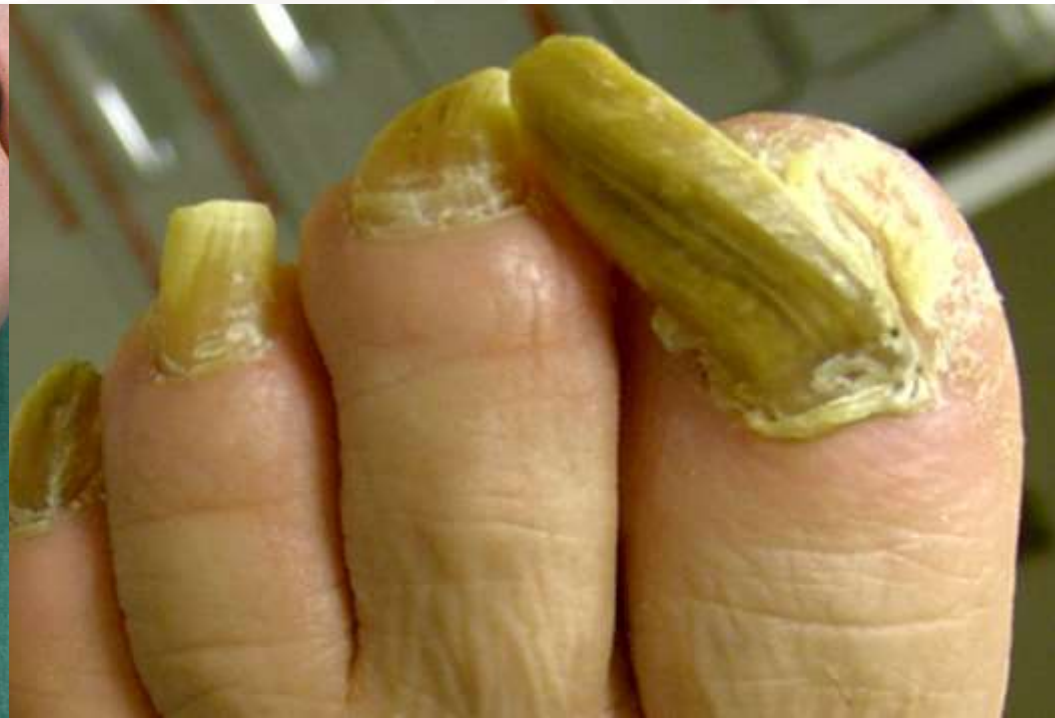
G → **G**astrointestinal dis.

❖ What is the Sign:

Onychogryphosis (Ram’s Horn Nails)

“it is a nail disease that causes one side of the nail to grow faster than the other. The nickname for this disease is ram's horn nails because the nails are thick and curvy, like horns or claws. it mostly affects the toes — specifically the big toes”

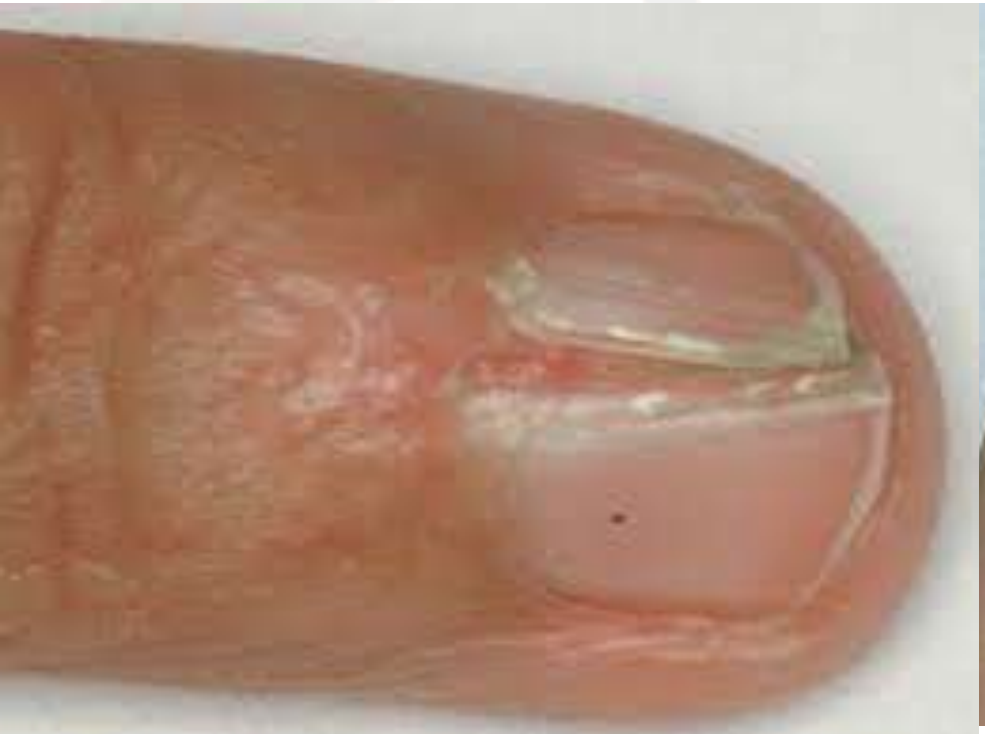




❖ What is the Sign:

Lamellar Splitting

"Onychoschizia, commonly known as nail splitting but also known as onychoschisis or lamellar dystrophy, is a condition that causes horizontal splits within the nail plate. ... Injury (trauma) may also play a role in the development of brittle nails."



❖ **What is the Sign:**

Nail fold telangiectasia

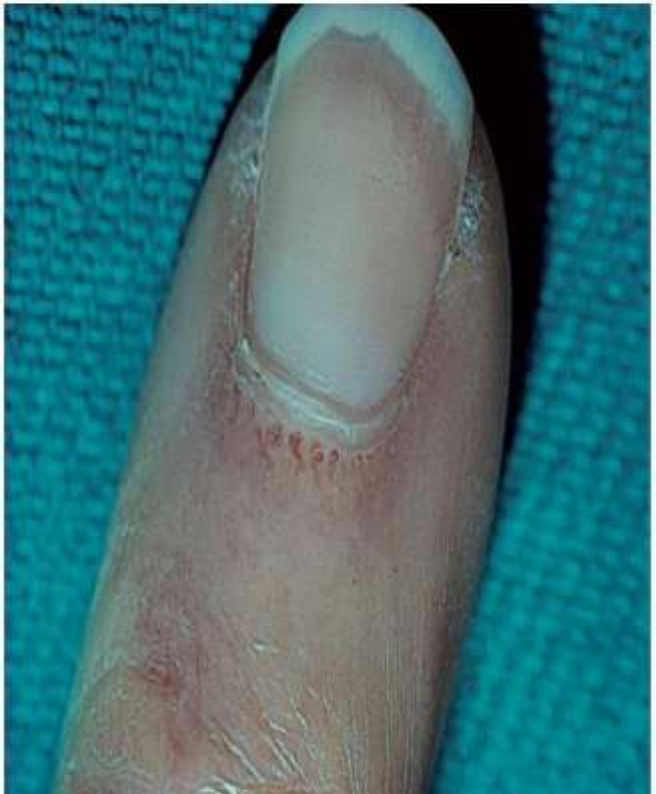
❖ **Mention 3 diseases that causes it:**

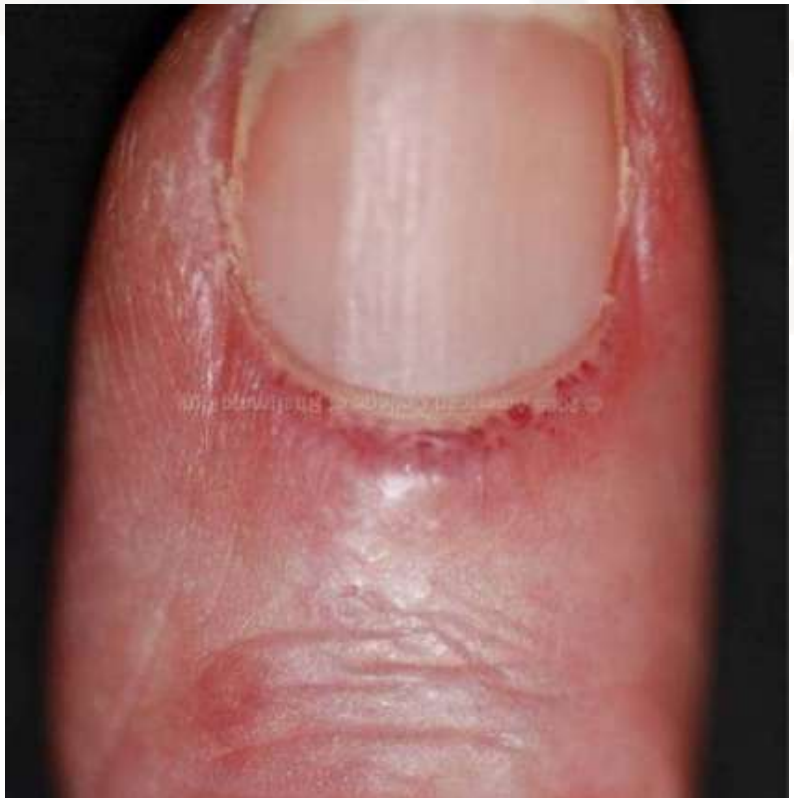
a. SLE

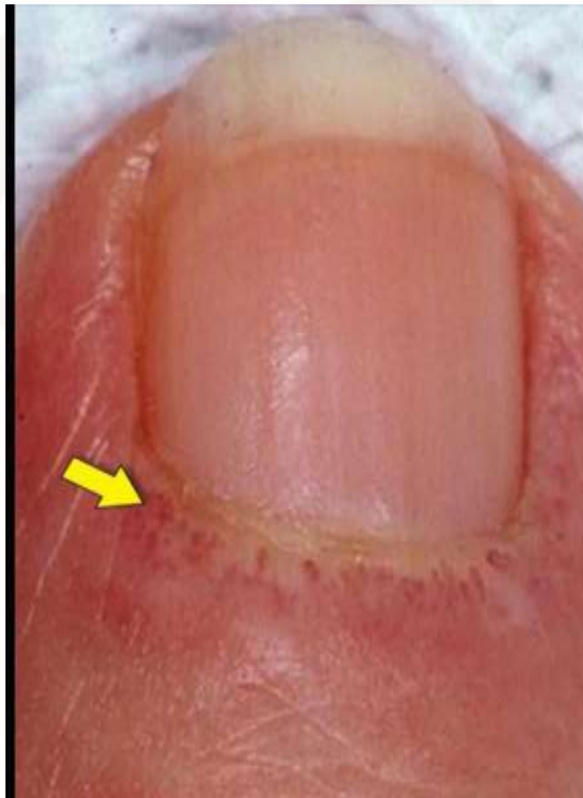
b. Sarcoidosis

c. Dermatomyositis

d. Scleroderma







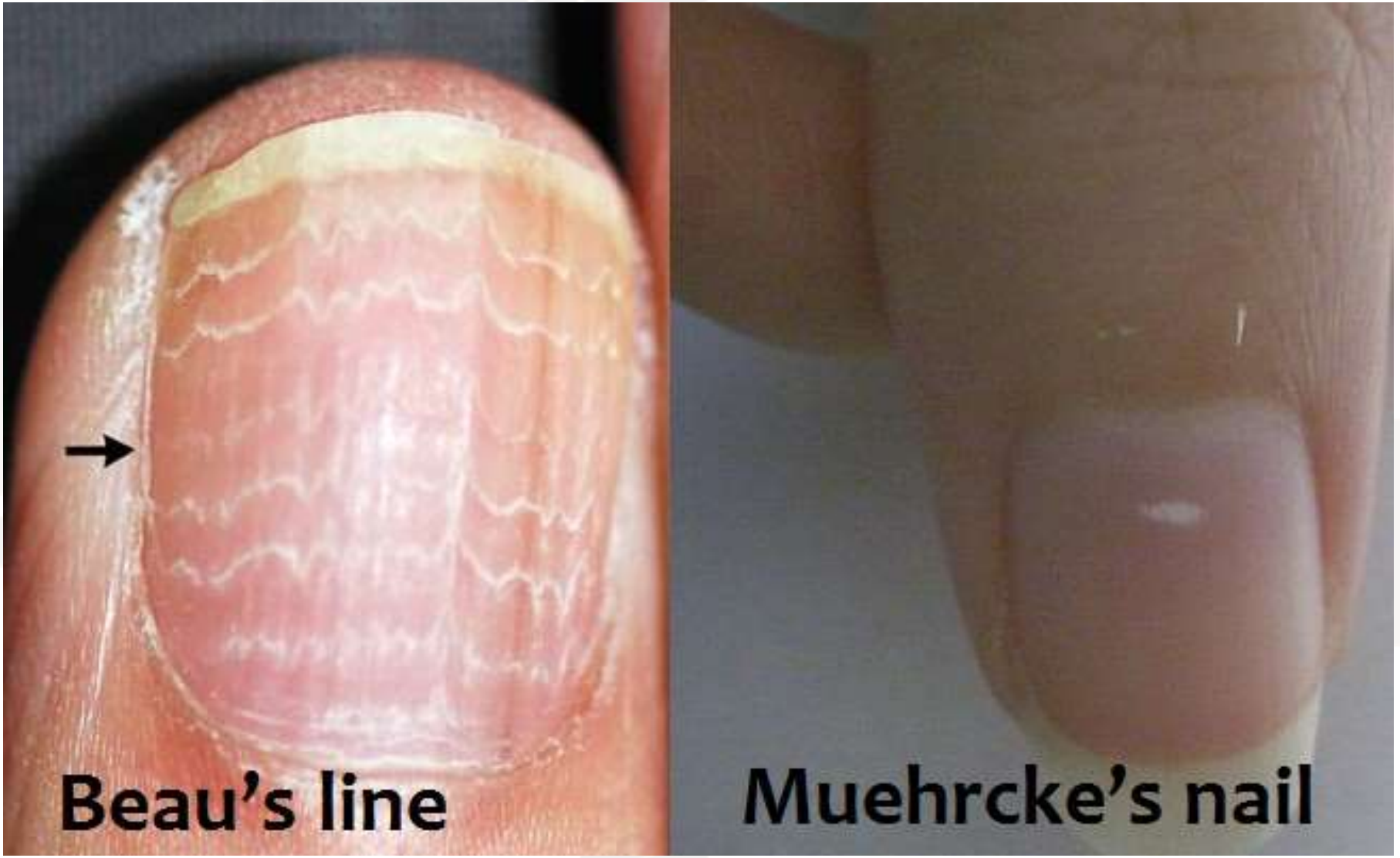
❖ **Name the signs:**

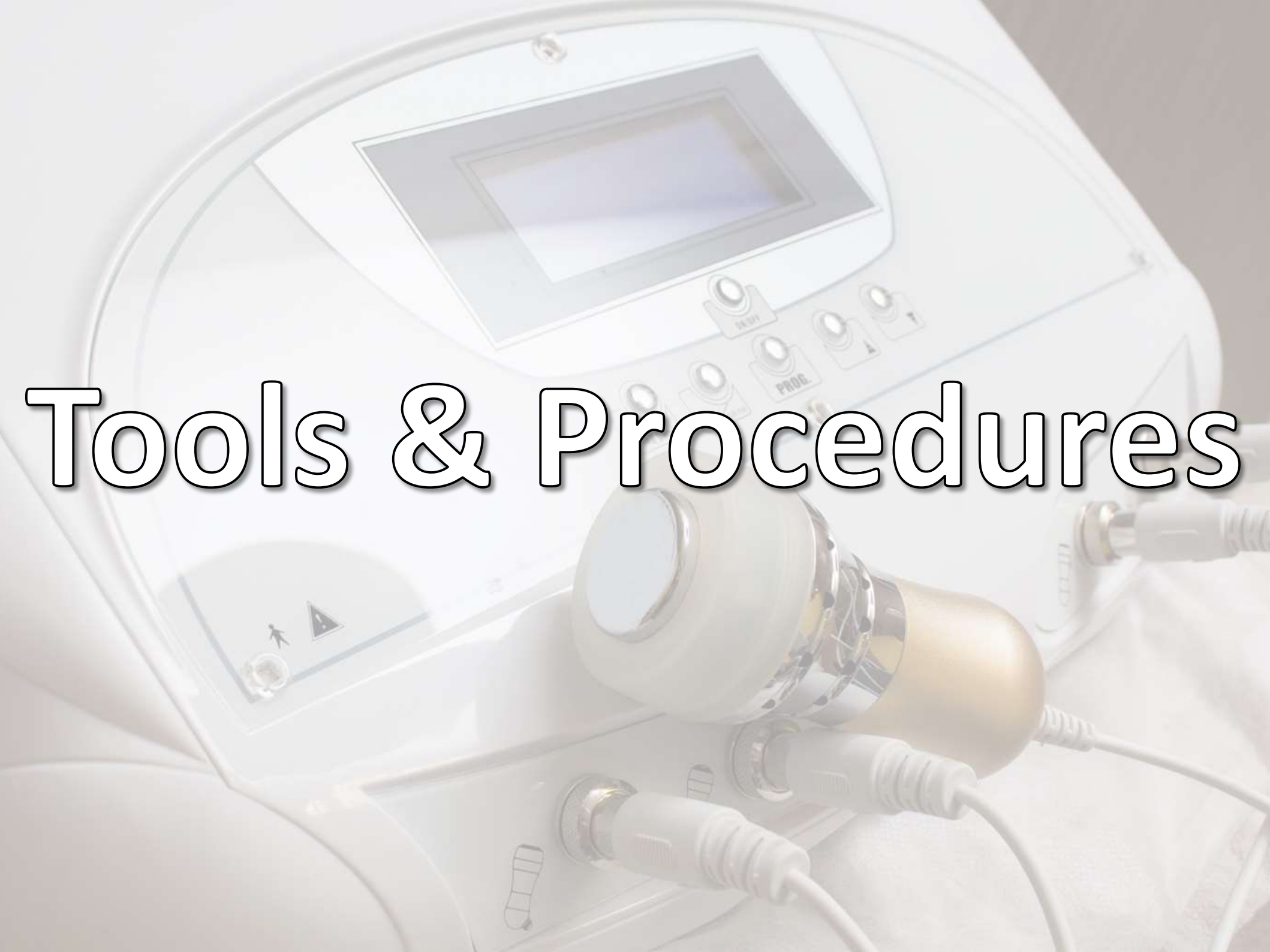
A. Terry's nails: is a physical condition in which a person's **fingernails** or toenails appear white with a characteristic "ground glass" appearance without any lunula.

B. Muehrcke's nails/lines: (apparent leukonychia striata) it refers to a set of one or more pale transverse bands extending all the way across the nail, parallel to the lunula. In contrast to Beau's lines, they are not grooved (no 3-dimensional deformity), and in contrast to Mees' lines, the thumb is usually not involved.

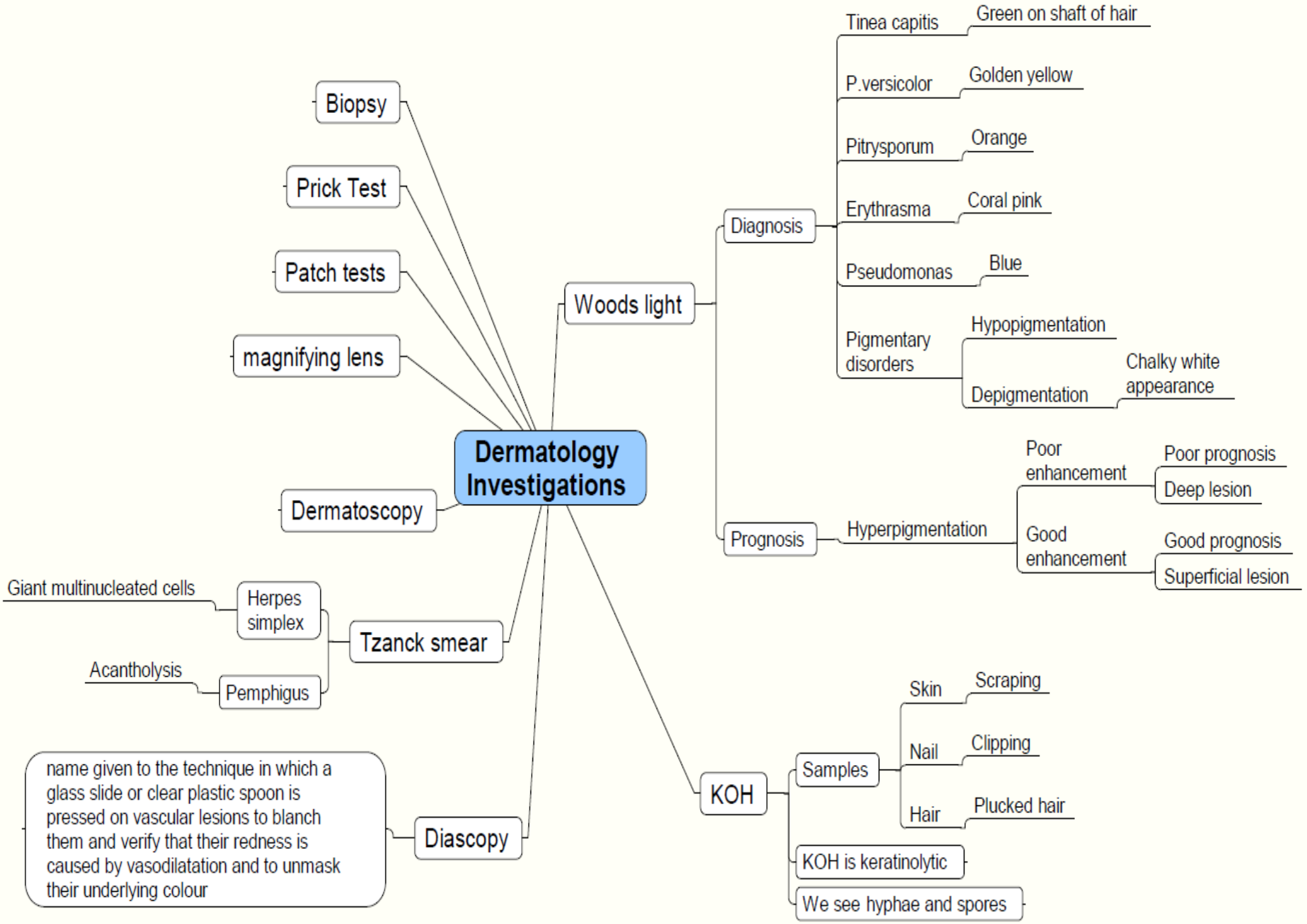
❖ **What does they indicate:**

- Mainly for hypoalbuminemia as in liver cirrhosis

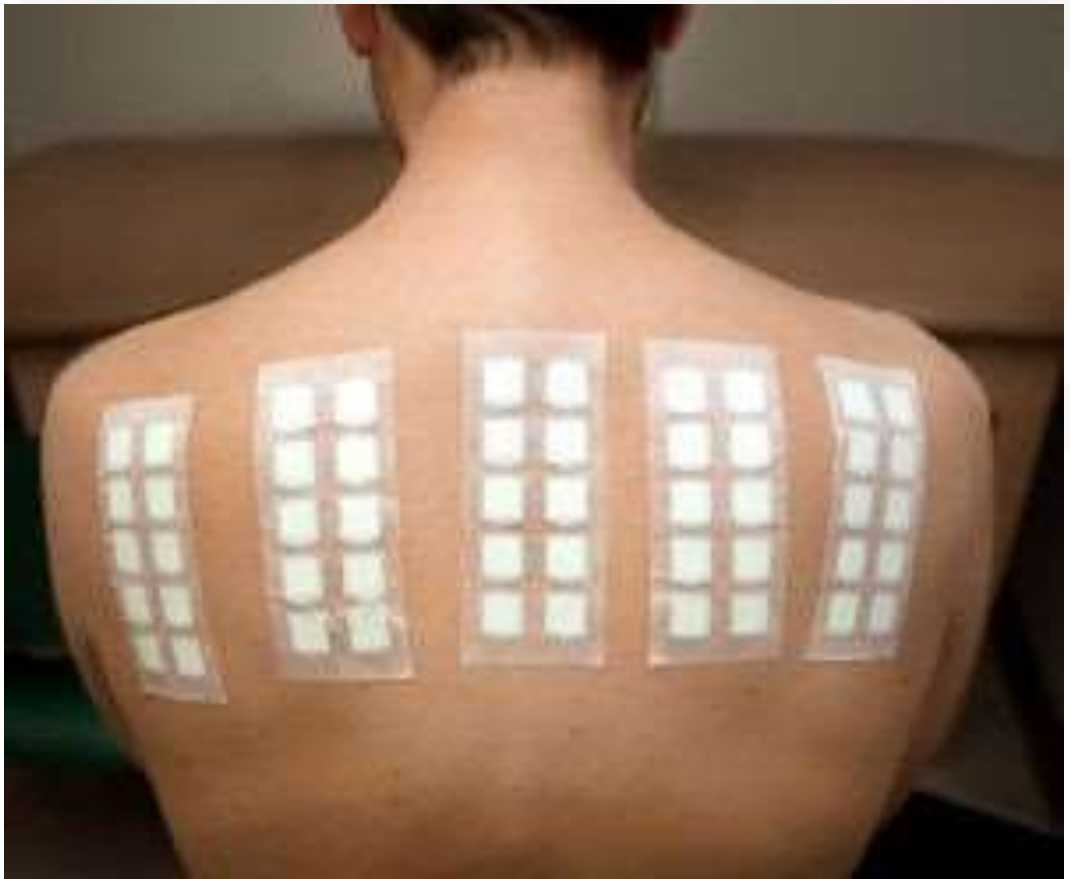

Beau’s line
Muehrcke’s nail

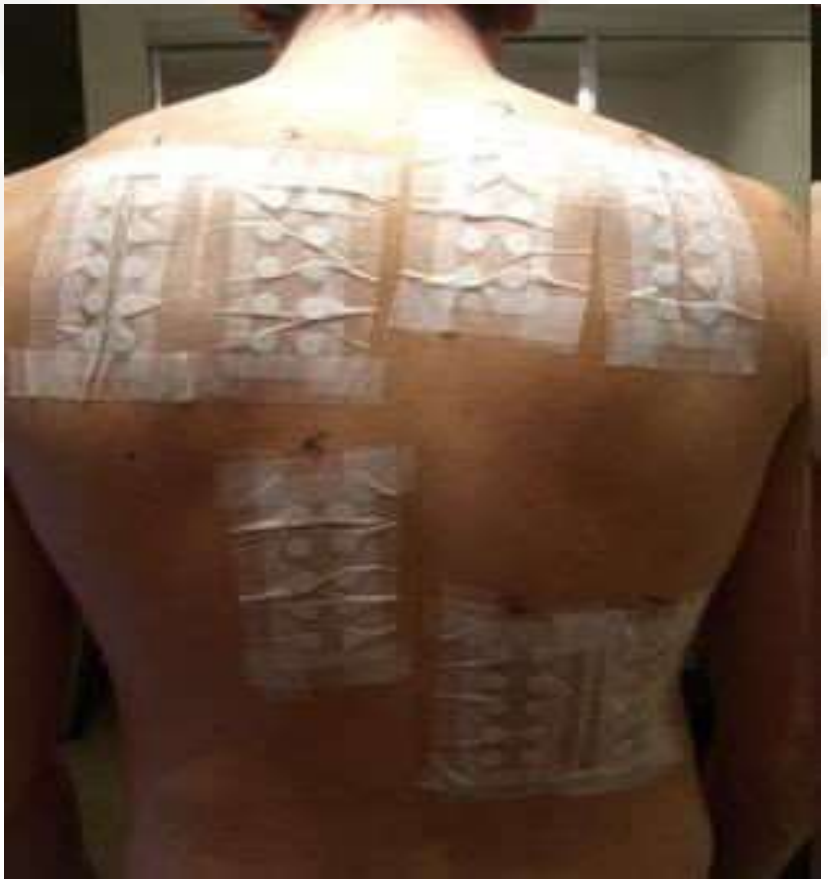


Tools & Procedures


Dermatology Investigations
Biopsy
Prick Test
Patch tests
magnifying lens
Dermatoscopy
Tzanck smear
Giant multinucleated cells
Herpes simplex
Acantholysis
Pemphigus
Diascopy
name given to the technique in which a glass slide or clear plastic spoon is pressed on vascular lesions to blanch them and verify that their redness is caused by vasodilatation and to unmask their underlying colour
Woods light
Diagnosis
Tinea capitis
Green on shaft of hair
P.versicolor
Golden yellow
Pitrysporum
Orange
Erythrasma
Coral pink
Pseudomonas
Blue
Pigmentary disorders
Hypopigmentation
Depigmentation
Chalky white appearance
Prognosis
Hyperpigmentation
Poor enhancement
Poor prognosis
Deep lesion
Good enhancement
Good prognosis
Superficial lesion
KOH
Samples
Skin
Scraping
Nail
Clipping
Hair
Plucked hair
KOH is keratinolytic
We see hyphae and spores

- **What is this test?** Patch test.
- **What type of hypersensitivity does it test?** Type 4 hypersensitivity reaction.
- **When do you read the test?** Between 48-92 hours, on average the first reading is read after 3 days. (2-4 days)
- **What disease is diagnosed with it?** Allergic dermatitis, Eczema





- **Name the device:**
  Liquid Nitrogen Sprayer – Cryotherapy – Cryosurgery
- **What is the temperature used in this device?**
  - 196
- **Write 2 side effects:**
  a. Burn
  b. Blister formation
  c. Headache
  d. Hair loss
  e. Hypopigmentation
  f. Bleeding
  g. Scarring (Rare)
- **Name conditions we use this device for?**
  Warts, Callus

❖ **Name the device:**

Dermatoscope

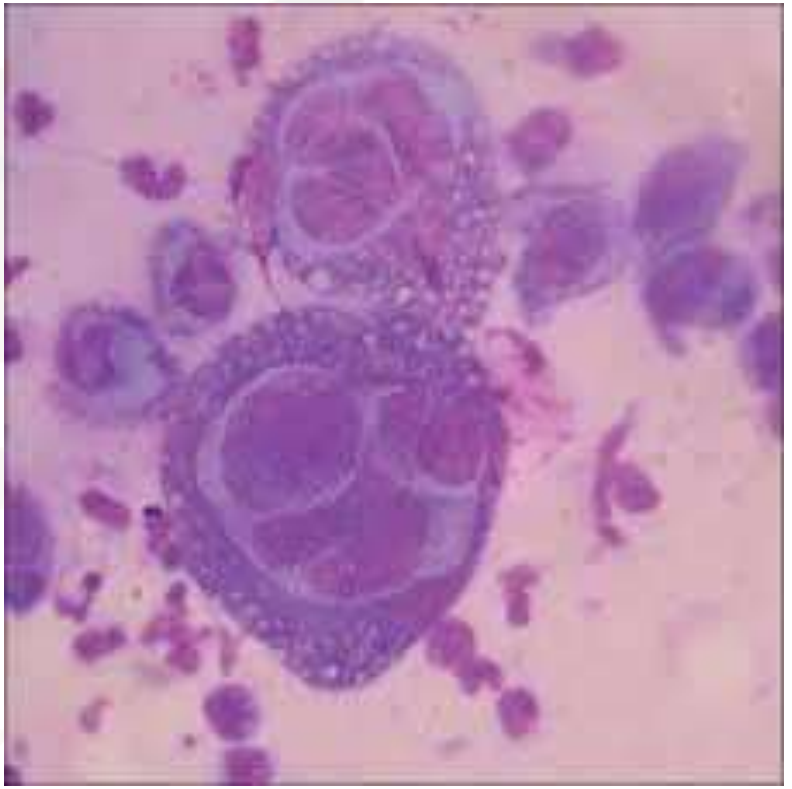
❖ **Name conditions we use this device for?**

Melanocytic navi, Scabies

❖ **Name the test:** Tzank Smear

❖ **Define the test:**

- Tzanck test, also Tzanck smear, is scraping of an ulcer base to look for Tzanck cells. It is sometimes also called the chickenpox skin test and the herpes skin test. It is a simple, low-cost, and rapid office based test.



❖ **Uses:**

a. All types of infection:
- bacterial (impetigo, SSSS,..),
- Fungal (dermatophytes, candida,..),
- Viral (Herpes, chickenpox,..),
- Parasitic (Leishmaniasis,..)

b. Genodermatoses: hailey-hailey disease, Darier's disease

c. Granulomatous diseases: necrobiosis lipoicida,..

d. Immunobullous disorders: Pemphigus, erythema multiforme (EM)

e. Spongiotic dermatitis: contact

f. Tumoral lesions

❖ **What is this called?**

Puva chamber

❖ **Mention 4 indications?**

a. Psoriasis

b. Eczema

c. Vitiligo

d. Lichen planus

e. Alopecia Areata

❖ **What side effects do you expect?**

a. Skin cancer

b. cataract

c. photosensitivity

d. aging

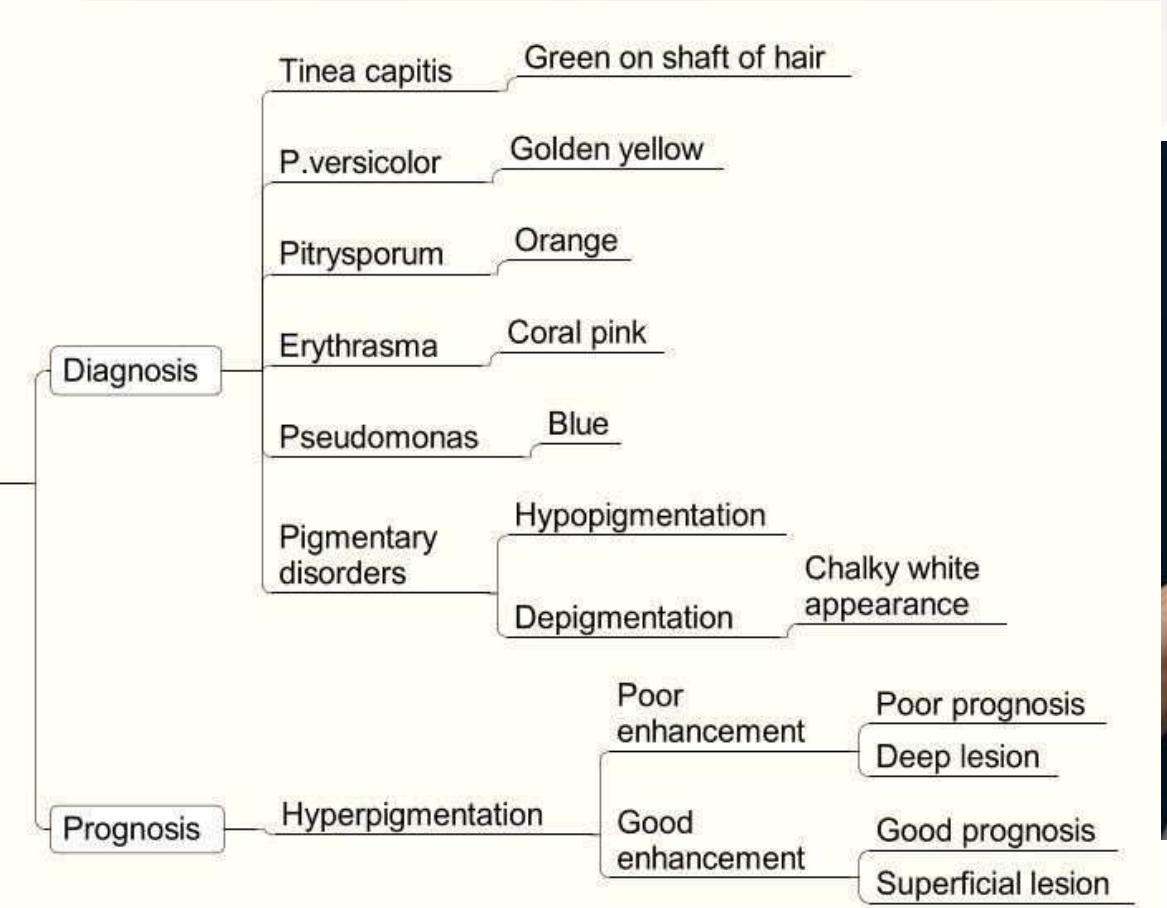
❖ **Name the test?**

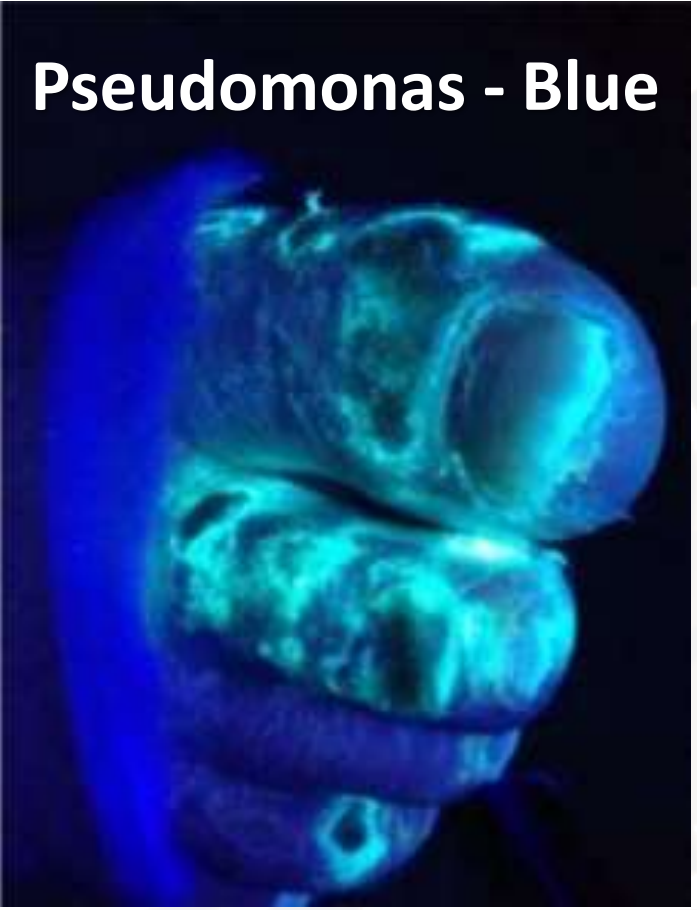
Wood's light

❖ **Mention the length of light used?**

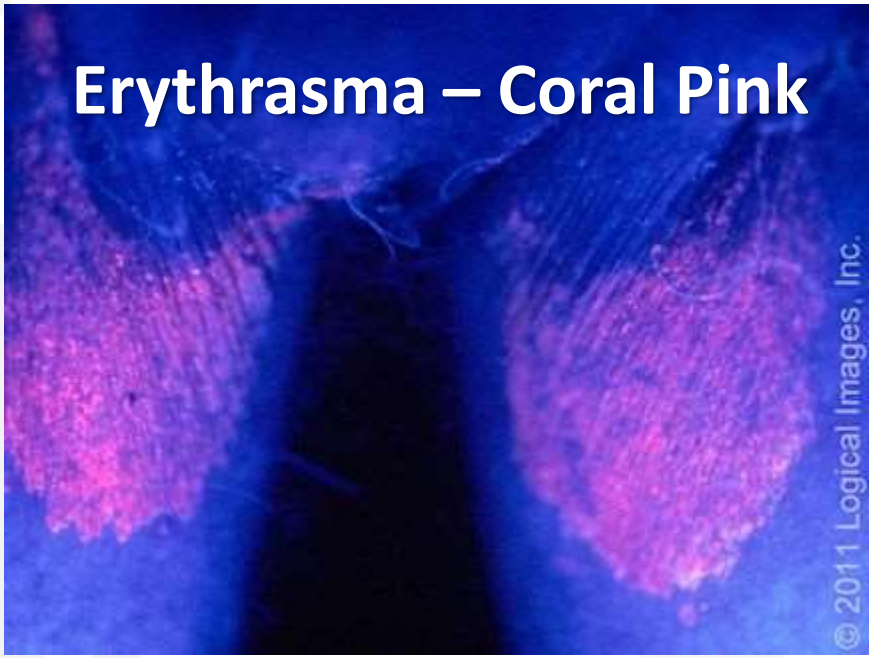
365 nm

❖ **Name the indications & What are the possible colors to be seen:**

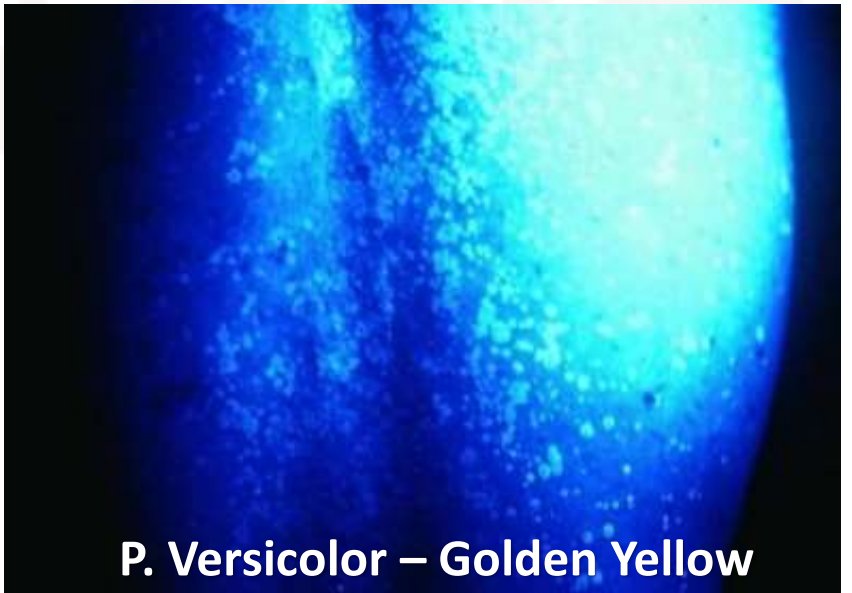



Pseudomonas - Blue


Vitiligo –
Bright Bluish White


Erythrasma – Coral Pink
© 2011 Logical Images, Inc.


Tinea Capitis - Green
(c) Reproduction interdite

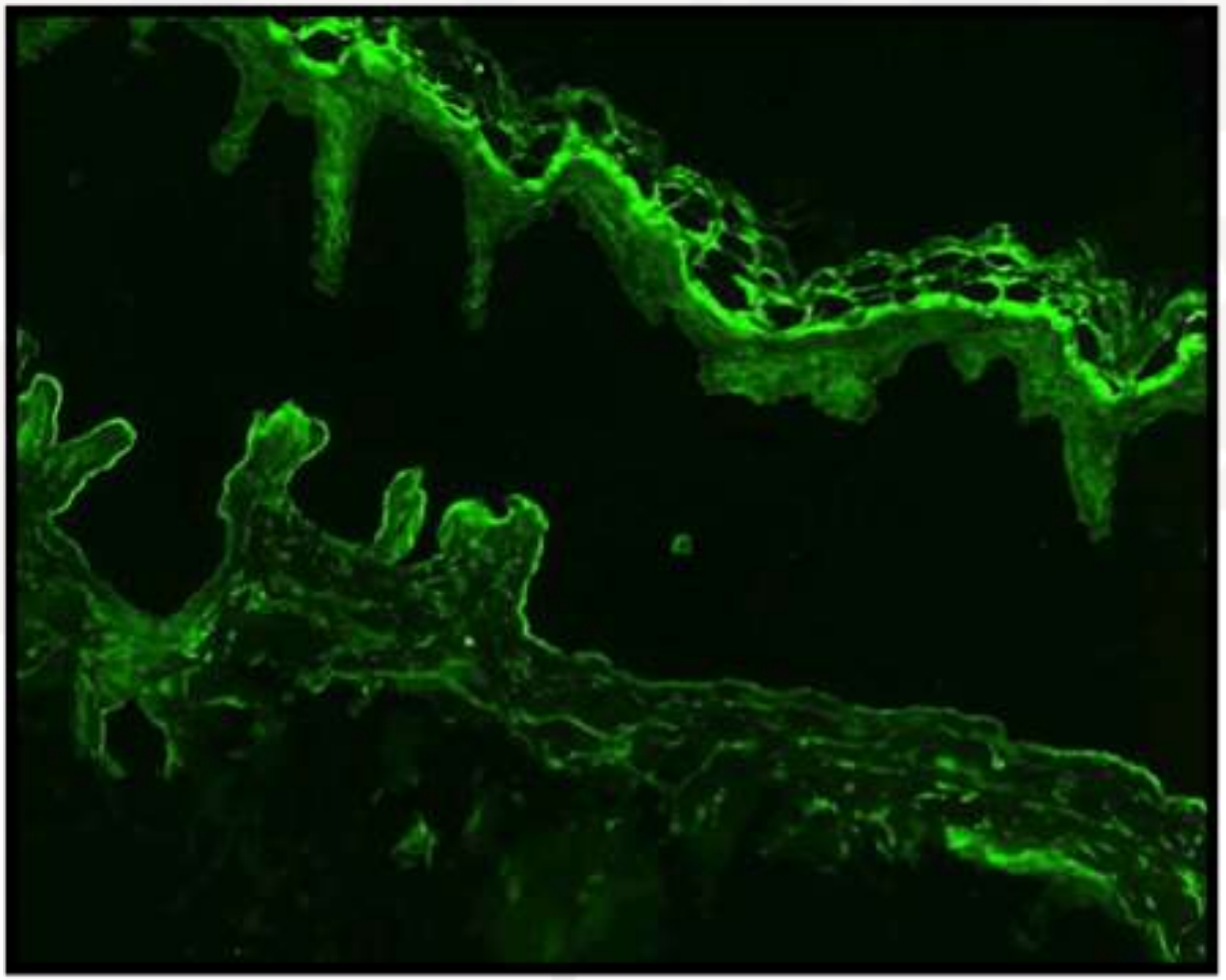

P. Versicolor – Golden Yellow

❖ **Name the test:**

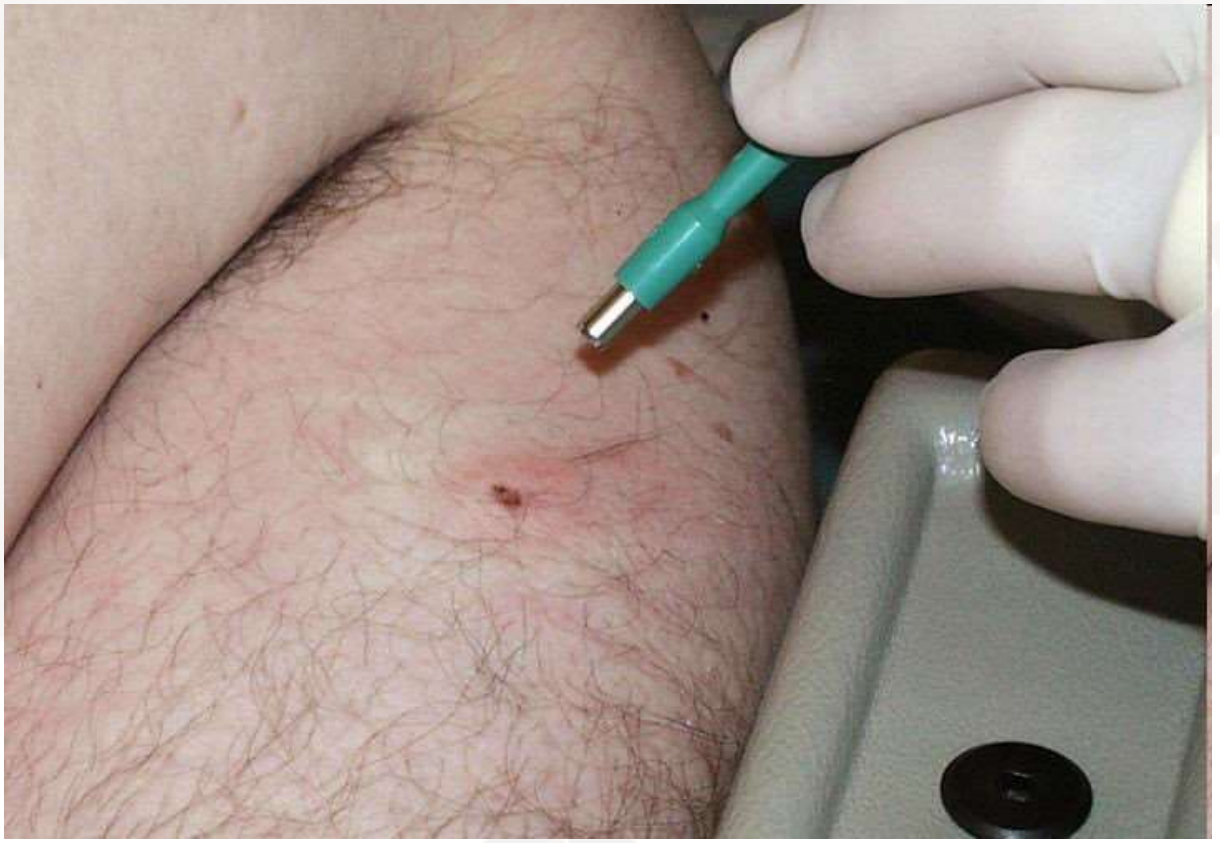
- Direct Immunofluorescent test

❖ **What is the mechanism of action (MOA):**

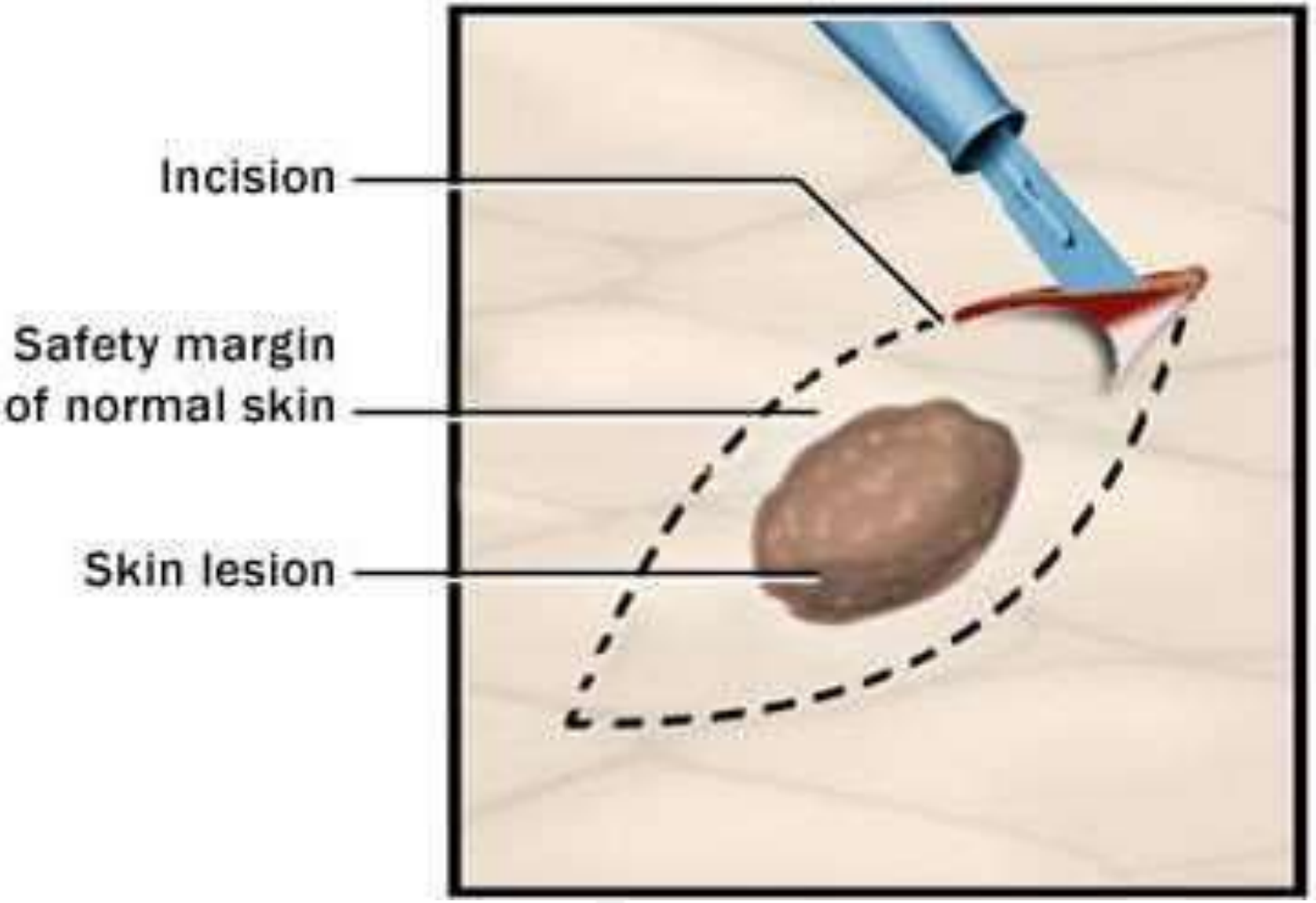
- Ultraviolet source detects antibodies in a patient's skin. Here immunoglobulin G (IgG) antibodies are detected by staining with a fluorescent dye attached to antihuman IgG."



Punch biopsy



Elips



Best Wishes

Done by: Yazan Omar Alawneh