

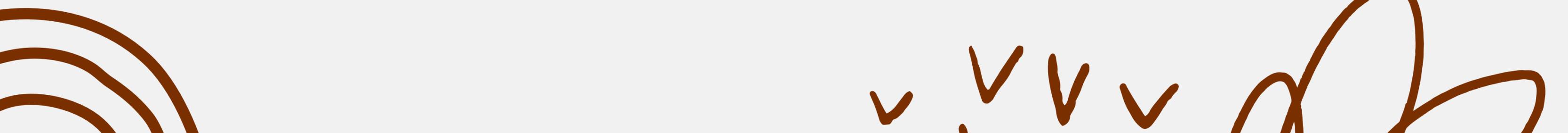
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Eczema and Pruritis

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Definition: Eczema is a term used for a group of conditions that cause the skin to become inflamed, red and itchy, (Itching is the characteristic and the presenting symptom).

Dermatitis can be used as another term for eczema

Eczema is not infectious

Eczema can be classified

according to the onset and

DURATION INTO ; **ACUTE AND CHRONIC**

Acute eczema	Chronic eczema
Recent Acute onset	Longlasting
Marked erythema	Thick scaly skin (lichenification)
Marked edema with vesicle formation and oozing	Less edema
Recent marked itching	Itching during exacerbation

Acute eczema



Ill defined, Wet erythema with oozing



Well defined erythema with blister formation



Erythematous rash with oozing, vesiculation and edema

Chronic eczema



Dryness of the skin with thickening and scaling due to chronic itching.

(Lichenification)

Eczema also can be classified according to the cause into; endogenous and exogenous

endogenous	exogenous
Atopic dermatitis	Contact allergic dermatitis
Seborrheic dermatitis	Contact irritant dermatitis
Discoid(nummular) eczema	Contact allergic photodermatitis
Stasis dermatitis	Contact irritant photodermatitis
Asteatotic eczema	
Dyshidrotic eczema	

Exogenous eczema

1 -Contact allergic dermatitis(eczema)

It is a type four hypersensitivity reaction ,it occurs in predisposed persons only Needs previous sensitization and occurs after second and after each exposure to the offending substance

Allergic substances include: nickel, cement, rubber, dyes and others

It occurs in some persons with some substances,

regardless the concentration of the substances or the duration of the exposure.

Contact allergic dermatitis



Contact allergic dermatitis
due to the necklace
(contains nickel)



Contact allergic dermatitis
due to shoes
(contains dyes and rubber)



Contact allergic dermatitis due to Henna.



2 -Contact irritant dermatitis(eczema)

It can occur in all persons if they expose to the substance for long duration or with high concentration, even after first exposure

No need for sensitization

Examples : Chemicals ,detergents



Contact irritant dermatitis due to detergents exposure

Contact allergic dermatitis

Contact irritant dermatitis

type four hypersensitivity reaction

Non-specific , toxic effect

predisposed persons
some persons with **some substances**

occur in **all persons**

Needs **previous sensitization**

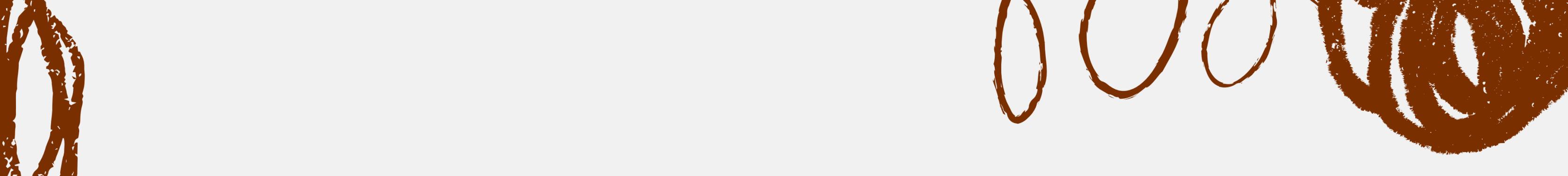
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Examples : Chemicals ,detergents

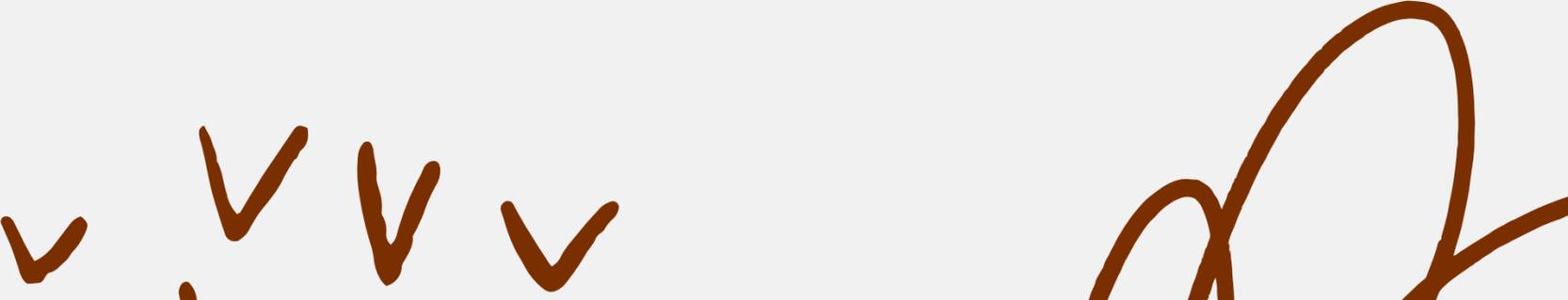


3 -Contact allergic Photodermatitis(eczema)

**It is a contact allergic dermatitis but it needs sun exposure occur
Sun exposure is needed for the eczematuosreaction to develop**

4 - Contact irritant photodermatitis (Eczema)

**It is a contact irritant dermatitis but it needs sun
exposure to develop**



Patch test

- Patch test is a diagnostic test to detect the allergic substance that cause the allergic contact dermatitis .Its avoidance cures the disease and this is important in occupation related skin reactions
- photo patch test is the same but it is used for photo allergic dermatitis and the tested area needs exposure to ultraviolet light(sun light)



Endogenous eczema

1 - Atopic dermatitis

Common inflammatory itchy skin disease Affects 20% of children and 1-3% of adults 85% of patients are less than the age of 5 years 70% of patients will go into remission before adolescence ,No laboratory test to diagnose atopic eczema Diagnosis is clinically (a triad of dry skin, itching and specific eczematous lesions especially in flexures)

It can be a part of atopic state that includes ;Atopic eczema, hay fever, allergic rhinitis, allergic conjunctivitis and bronchial asthma

Cheeks is a common sites of skin lesions in infants and flexures is a common sites in children and adults

Patients with atopic dermatitis are vulnerable for infection and allergic reactions

Atopic dermatitis



Infant with ill-defined, scaly, erythematous patches over the cheeks.



Child with ill-defined, scaly, erythematous patches with Lichenification over the popliteal fossa (Flexural area)



Child with ill-defined, scaly, erythematous patches with Lichenification over the popliteal fossa (Flexural area)



Adult with signs of eczema and Lichenification on the flexural site.

2) Seborrheic dermatitis

Common **itchy** chronic inflammatory skin disease Affects mainly **newborns** and **adults** There is a possible role for pityrosporum ovale (yeast)

In newborns it can appear as cradle cap

In adults appears as erythematous lesions with greasy scales on the Face and/or scalp ,anterior chest upper back and skin folds .

Its differential diagnosis includes **psoriasis**.

Treatment : low potency topical steroid or selenium-based shampoo.

Seborrheic dermatitis



Infant with erythematous scalp with greasy scales and, eyebrows and nasolabial folds involvement

(Cradle cap = adherent yellowish scales on the scalp)



In adults, nasolabial folds are involved, greasy scales on the face.



Greasy scales on the scalp and the lesions respect the hair margin.

(Psoriasis doesn't respect the hair margins)

3) Discoid (nummular) eczema

Chronic itchy inflammatory skin disease that can affect children and adults.

Characterized by disc - shape lesions bilaterally with sometimes mirror image distribution.

Commonly lesions involve the extremities more than the trunk Usually does not affect the face and scalp

Differential diagnosis includes:

psoriasis

fungal infection

Discoid (nummular) eczema



Young patient with discoid lesions, bilaterally distributed in mirror image pattern, itchy.

DDx: Tinea corporis by KOH

4) Asteatotic eczema

Chronic itchy inflammatory skin disease often affects **elderly** Mostly due to water loss from the stratum corneum because of genetic and environmental factors (desert ,winter, excessive bathing) Starts on the shins and then spreads

The skin is dry and cracked appearance of crazy paving

Differential diagnosis
acquired ichthyosis.
skin changes of hypothyroidism.



Crazy paving



Dry, cracked skin like crazy paving.

5) Stasis eczema (Gravitational dermatitis)

Occur mostly in people aged **50 years** or older with lower limb stasis Chronic itchy inflammatory skin disease due to stasis Occur in women more than in men Lower limbs usually affected with scaly erythematous and hyperpigmented (due to hemosiderin deposition) ill defined lesion

Differential diagnosis include :

DVT

erysipelas

cellulitis



Lower limb edema with oozing and ill-defined area of hyperpigmentation.

6) Dyshidrotic eczema

Chronic itchy inflammatory skin disease affecting the hands (cheirpompulox) and/or feet (podopompulox) Most often affects **young adults** Characterized by deep seated vesicles and blisters on the palms, fingers, soles and toes. Many patients report **palmoplantar hyperhidrosis**.

Differential diagnosis includes :

psoriasis,
contact dermatitis
id reaction
(an allergic reaction
to an inflammatory
dermatophyte fungal
infection elsewhere)



Erythema, scaling and deep-seated vesicles.

Deep-seated vesicles.

Management

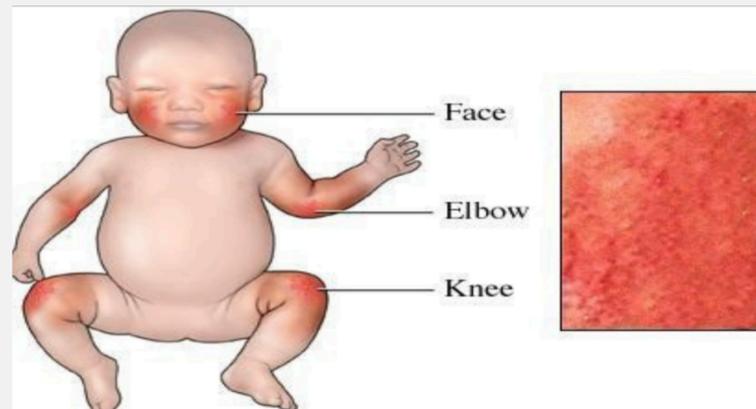
- **Prophylactic measures to avoid exacerbating factors like harsh clothes, irritants, infections and stress especially in atopic and seborrheic eczema.**
- **Treatment of stasis in stasis dermatitis.**
- **Emollient especially important for atopic and asteatotic eczema.**
- **Topical steroids.**
- **Topical calcineurin inhibitors (tacrolimus).**
- **Antihistamines.**
- **Some times short course of systemic steroids in severe cases especially in acute forms or sever exacerbation.**

Pruritus

- Pruritus is the most common dermatologic symptom.
- Ddx. :



Xerosis



Atopic dermatitis



Scabies



Pediculosis



Urticaria



Lichen planus



Mycosis fungoides



Dermatitis herpetiformis



Psoriasis



Infection

Herpes

Folliculitis

chickenpox

- Pruritus is a complex neurophysiological process through different mediation as a protective response to remove pruritogens.
- Pruritus should challenge the dermatologist to search for underlying cause.
- Pruritus can occur with or without skin lesions and may represent a dermatological or systemic disorders.

Few clinical clues

- Acute pruritus with no primary skin lesions and of short duration is less suggestive of systemic cause.
- In pruritus not related to a primary skin disease there is only excoriation and secondary changes
- When multiple family members are affected think of infestation
- Pruritus after bathing think of polycythemia rubra vera
- Night pruritus with chills, sweating and fever think of Hodgkin's disease

Pruritus



Scratch marks and excoriation due to Hodgkin's lymphoma

(Night pruritus with chills, sweating and fever)



Scratch marks and excoriation without primary skin lesions



Neurotic excoriation, may be due to psychological stress, abnormality or triggering factor.

Xerosis

Causes generalized pruritus.

Demographic: Occurs on elderly due to skin dryness.

Treatment: Improved by emollients.



Mycosis fungoides (Cutaneous t cell lymphoma)



Areas of mycosis fungoides (cutaneous T-cell lymphoma). Multiple, superficial, scaly erythematous plaques of the buttocks and trunk.

Localized Pruritus

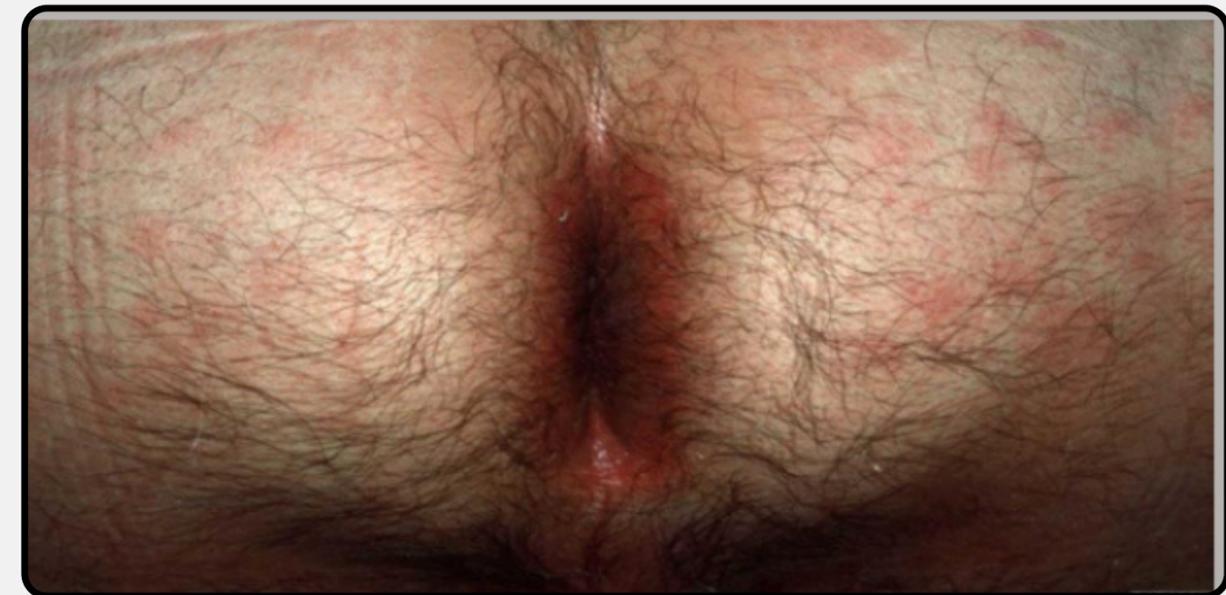
Lichen simplex chronicus (neurodermatitis) , Prurigo nodularis , Pruritus ani , Pruritus vulvae and scroti Scalp pruritus , Pruritus in scar



Lichen simplex chronicus(neurodermatitis)



Prurigo nodularis



Pruritus Ani
Localized
- 25-95% primary – (Idiopathic)



Pruritus vulvae and scroti

- Infection - Skin disease
- LP , psoriasis
- Neoplasm , Pagets disease
- 7% psychogenic



Pruritus in scar

- Associated with normal wound healing ,
nerve regeneratio

Pruritus Of Systemic Disease

1) Renal prurities

- Mechanism still unknown - Can be localized or generalized - Treatment Gabapentin 200-300mg after hemodialysis session - Renal transplantation is the most effective treatment

2) Cholestatic pruritus

- Any liver disease can cause pruritus
- Worse at night - Worse on hands and feet and body regions constricted by clothing - Treatment is treating and removing the primary cause . Examp. remove galblader stones

3) Heamatologic pruritus

- Iron deficiency
- Polycythemia rubra vera
- treatment Aspirin 300 mg t.i.d , phototherapy

4) Pruritus and malignancy

- Any malignancy can induce pruritus as a paraneoplastic phenomenon - Hodgkin disease (strong association)
- Non - Hodgkin's lymphoma - less common (2%)

Leukemia - CLL chronic lymphocytic leukemia.

- Thyroid disease
- Diabetes melitus

Endocrine pruritus

5) Pruritus in pregnancy

-Dermatosis of pregnancy :



Prurigo of pregnancy



pemphigoid gestationes



pruritic urticarial plaques and papules of pregnancy

6) Cholestasis of pregnancy

- **Generalized pruritus with or without jaundice**
- **Absence of primary skin lesions**
- **Biochemical abnormalities consistent with cholestasis**
- **Disappearance of signs and symptoms after delivery**
- **Recurrence during subsequent pregnancies**
- **Increased serum bile acids**
(cholic acid , deoxycholic acid ,chenodeoxycholic acid)
- **Prothrombin time should be monitored because Vit . K deficiency can occur due to impaired reabsorption of lipid soluble vitamins**



7) Pruritus HIV infection and AIDS

- Severe pruritus is common
- AIDS patients may develop several pruritic conditions like , severe seborrheic dermatitis , eosinophilic folliculitis

8) Psychogenic pruritus

Consultation with psychiatrist is recommended

Investigation :

- CBC , KFT , LFT , urine analysis , ESR , CXRay , Hepatitis profile , F.B.s



اللهم قد ضاقت القلوب حُزناً على اهلنا
في غزة وقد سيطر العجز على قلوبنا
فكن لهم، اللهم لا حول لهم إلاك على
من ظلمهم، اللهم انصرهم وثبت
اقدامهم يارب العالمين اللهم بردًا
وسلامًا على اخواننا في غزة.



Thank you