**Dermatitis & Eczema**

Eczema : means inflammation of skin whether immunologically mediated or not, characterized by itching. It is not a clinical diagnosis, It is a group of diseases.

Dermatitis : is the medical (latin) name for eczema.

Atopy: a genetically predisposition to develop a itchy skin inflamation.

Classification :

1. according to the onset :
2. Acute
* Characterized by erythema (fiery red), oozing, blisters, erosions and itching.
1. Sub acute
* Characterized by erythema, OPEN blisters, visible scales and crustation, erosions and itching.
1. Chronic
* None of the signs of acute presentation, Except itching.
* thickening of the **skin** with exaggeration of the normal **skin** markings (lichenification)

N:B: Itching is present in all three sub-types.

2- according to the cause:

1. Contact dermatitis
2. Atopic dermatitis
3. Seborrhoeic dermatitis
4. Contact dermatitis
* It has two types, irritant and allergic.
1. Allergic:
* It is a type 4 hypersensitivity reaction (T-cell mediated immunity)
* Allergens like: hair dye, leathers, metals like nickel
* Allergic manifestation takes 2-3 weeks for the first exposure, and only 1-2 days for the second exposure.
* It is diagnosed by patch test. (MCQ)
1. Irritant:
* Irritants like strong chemical (e.g. acid) most detergents
* Irritant cause dermatitis in every body, But allergens cause it in sensitized people only.
* It is diagnosed by the clinical picture.

Clinical features

* Predilection sites. 🡪 at sites of contact with allergens and irritants

Management

* Diagnosis can be clinical and may be proved with Patch test.
* Avoidance of allergens and irritants.
* Topical corticosteroid 🡪 the most commonly used for all types of eczema.
1. Atopic dermatitis
* “ Itchy, chronic, relapsing, inflammation of the skin”
* Genetically predisposed dermatitis especially from the maternal side.
* The most common type of eczema.
* More in developed countries.
* Incidence 15% - 20%.
* Grow out tendency 🡪 as the child grows up the allergy may fade away.

Pathogenesis

* Immune mediated. (Type 4 hypersensitivity)
* IgE is one of the marker of Atopic dermatitis but is not mandatory to be high for diagnosis.
* Activation of T-helper 2 cells (higher in Atopic patients). (That’s why immunosuppressant’s and steroids are effective).
* Dryness of the skin is crucial factor for pathogenesis.
* There’s increased colonization of staph. aureus on the skin, even on normal parts of the skin, which is considered as a Co-factor.

Variants

1. Infantile 🡪 in face & extensor surfaces, often acute and if untreated become chronic (can continue into childhood).
2. childhood 🡪 in flexor surfaces, may be acute or chronic.
3. Adulthood 🡪 arises in anticubital, antipobliteal fossa &hands, but may affect any part, Usually chronic with slow recovery.
* 50% of atopic dermatitis starts in infantile period.
* 30% of atopic dermatitis starts in childhood period.

Complication:

1. secondary infection (cellulitis).
2. Eczema herpaticum (viral infection)🡪 is a medical emergency that may lead to deep, ugly scars. The Pt must be admitted and given I.V. acyclovir.
3. Growth retardation (due to decreased sleep and bad diet), it is a rare condition.
4. Psychological.

Investigations

 Usually clinical, and we can measure IgE level.

Management

* Education about:
* Nature of the disease: chronicity
* Use of Emollients (Vaseline)
* Avoidance of allergens and irritants
* Prognosis
* Topical 🡪steroid

 🡪non-steroidal immune modulating drugs (Tacrolimus and Pemicrolimus (MCQ)

* Safe to be used for long time and as prophylactic.
* Anti-histamine for itching
* Ultra-violate light
* Systemic 🡪steroid

 🡪immunosuppressants

1. methotrexate
2. cyclosporine
3. azathioprine (immuran)
4. Seborrhiec dermatitis :
* Dermatitis related to ↑ secretion of sebum in scalp, face, anterior chest, axillae, groin.

 Pathogenesis:

The main factor is increased sebum production, (rarely, Patients may have normal sebum)

Also it may be associated with fungal infection.

Presentation:

* Scalp 🡪excessive dandruff and a yellow scales and crusts: are signs of seborrhoiec dermatitis.
* Face 🡪 Oily, specially in T-zone (eye-brows and nasolabial folds. It may be confused with SLE, we can best differentiate the two by the presence of scales in dermatitis.
* Anterior chest

Management

* Shampoo 🡪 ketoconazole (nizoral)
* Antifungal 🡪 shampoo or cream
* Topical 🡪 steroid
* Combined 🡪 steroids + anti-fungal (used in severe cases)
* Systemic: isotretinoin used for acne also
* Treatment usually take 3-4 months in children (good prognosis)
* Usually chronic in adulthood.
* HIV and Parkinson’s patients are predisposed to seborrhiec dermatitis.
* If seborrhoeic dermatitis don’t improve with treatments in infants, we must exclude histocytosis (malignancy).(MCQ)
* A newborn with scales in his scalp? its more likely to be seborrhiec if it appear shortly after birth and it more likely to be atopic if it appear in 2-3 months later, and

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| --- | --- | --- |
|  | Atopic | seborrhiec |
| Skin | dry | Oily |
| Distribution | See above | See above |
| Itchiness | Always itchy | Around 50% are itchy |