Dermatitis

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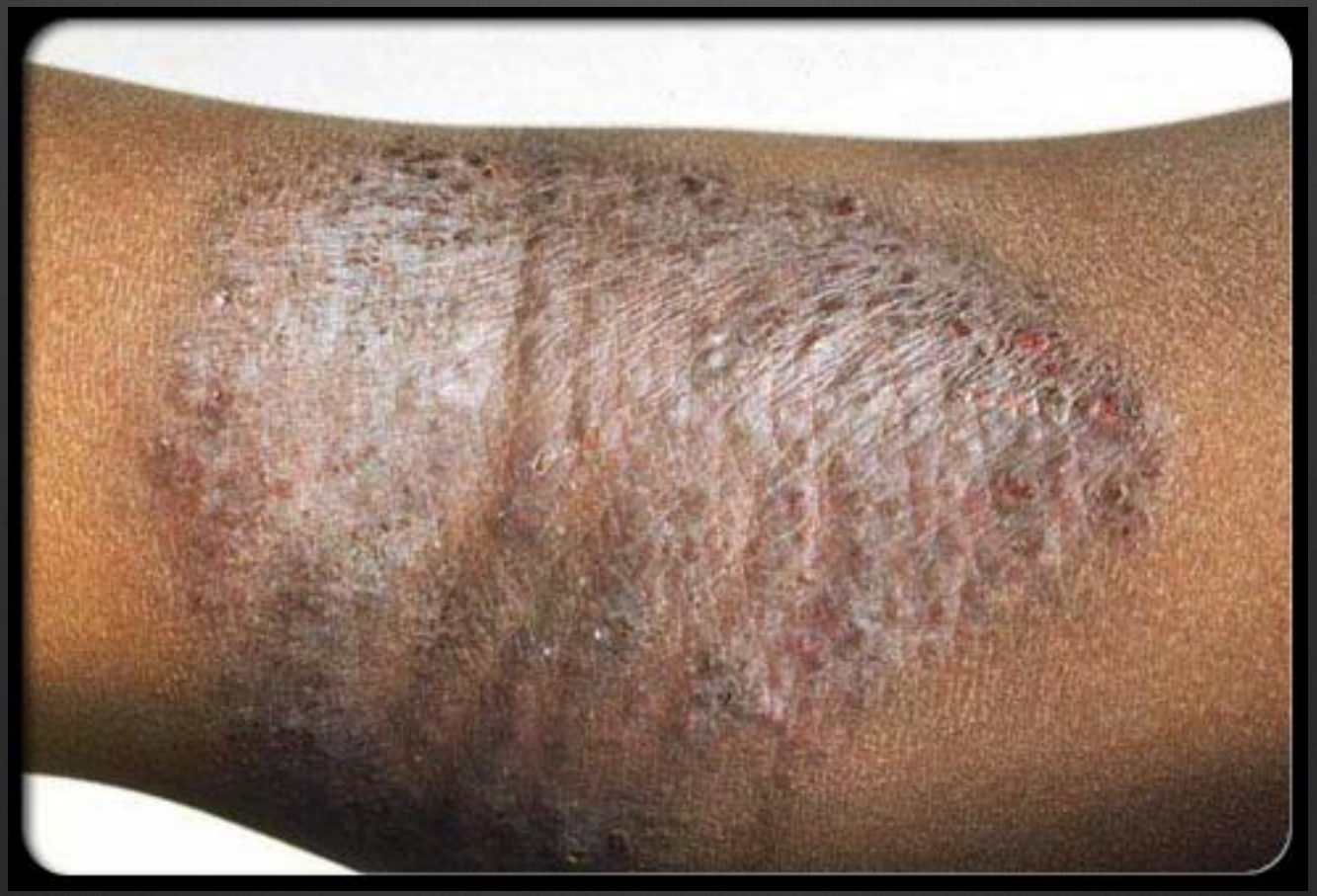
Topics / Lobs

- Describe symptoms and signs of eczema and explain the overlap with the term ‘dermatitis’
- Discuss the differences between atopic eczema, contact allergic and irritant dermatitis and seborrhoeic dermatitis
- Discuss the role of topical creams/ steroids and antibiotics in managing eczema
- List exacerbating factors for eczema
- List complications of eczema and outline the management of these
- Explain to a patient how to reduce exposure to allergens/irritants and other exacerbating factors
- Acute management of eczema

Eczema

- Eczema (Dermatitis) is a descriptive term for a chronic inflammatory skin condition, mainly developing in childhood.
- It is characterized by:
  - Itching – results in scratching which leads to skin damage
  - Scaling
  - Redness
  - Fluid-filled blisters
  - Cracking (fissures)

Eczema



+ a strong genetic etiology

Types of Eczema

- Atopic Dermatitis
- Contact Dermatitis
  - Irritant
  - Allergic
- Seborrheic Dermatitis
- Nummular Dermatitis
- Neurodermatitis
- Stasis Dermatitis
- Dyshidrotic Dermatitis

Diagnostic criteria of AD (UK) RCPCH 2011

- When a child has an itchy skin condition + three or more of the following.
  - Visible flexure dermatitis (Or visible cheek/ extensor dermatitis in children aged <18months)
  - Personal history of flexural dermatitis
  - Personal history of dry skin in the last 12 months
  - Personal history of asthma or allergic rhinitis (Or history of atopic disease in a first-degree relative of children aged under 4 years)
  - Onset of signs and symptoms under 2 years of age (This criterion not used in children aged under 4)

1. Atopic Dermatitis (AD)

(*An itch that rashes*)

- Clinical Features *(Harrison's 18ed)*
  - Pruritus
  - Exacerbations and remissions
  - Lichenification
  - Distribution: Antecubital/ popliteal fossae (Also face, neck and extensors in children)
  - Personal or FHx of atopy (FHx of asthma, allergic rhinitis, or eczema)
  - Clinical course lasting >6wks
  - Common histology: Spongiosis (Epidermal intracellular oedema)
  - Cutaneous stigmata:
    - Perioral pallor
    - Dennie-Morgan folds
    - Increased palmar markings
    - Increased incidence of *Staph. Aureus.* Skin infections

Atopic Dermatitis: Management

Mx	• Avoid irritants, bathe more often and moisturize with emollients.
	• Topical anti-inflammatory agents after bathing on areas of AD o Low/mid potency glucocorticoids (SE: skin atrophy and systemic absorption) o NSAIDs are used on face and intertriginous (skin rub areas) ▪ *TACROLIMUS ointment, PIMECROLIMUS cream.* ▪ Macrolide immunosuppressants. No skin atrophy/sys SE
	• Systemic glucocorticoids (For resistant and Severe exacerbations)
	• Prompt treatment of secondary infection: o Lesions should be cultured (>50% of SA isolates are MRSA) o Initial: *DICLOXACILLIN / CEPHALEXIN (250mg/qds/7-10days)* o MRSA: *TRIMETHOPRIM/SULFAMETHOXAZOLE, MINOCYLCINE, DOXYCYCLINE (100MG/bd), CLINDAMYCIN (300-450mg). Treat for 7-10 days.* o Adjunct: anti-bac washes, nasal mupirocin, 0.005% bleach bath
	• Treat Pruritus *(AD often is "An itch that rashes")* o Sedating antihistamines (when sleeping) o *(Non sedating antihistamines and H2RB's used in Urticaria but not useful in pruritus)*

Complication of AD

- Lichen Simplex Chronicus
  - End-stage of all pruritic eczematous diseases
  - Lesion: Circumscribed plaque of lichenified skin due to chronic scratching
  - Distribution: Nuchal areas, dorsum of feet, ankles
  - Treatment: “Break the itch n scratch cycle”
    - High-potency topical glucocorticoids
    - Sedation: Oral antihistamines (*HYDROXYZINE)*, TCA’s (*DOXEPIN)*.
    - Treatment resistant cases: Glucocorticoid injections

2. Contact Dermatitis (CD)

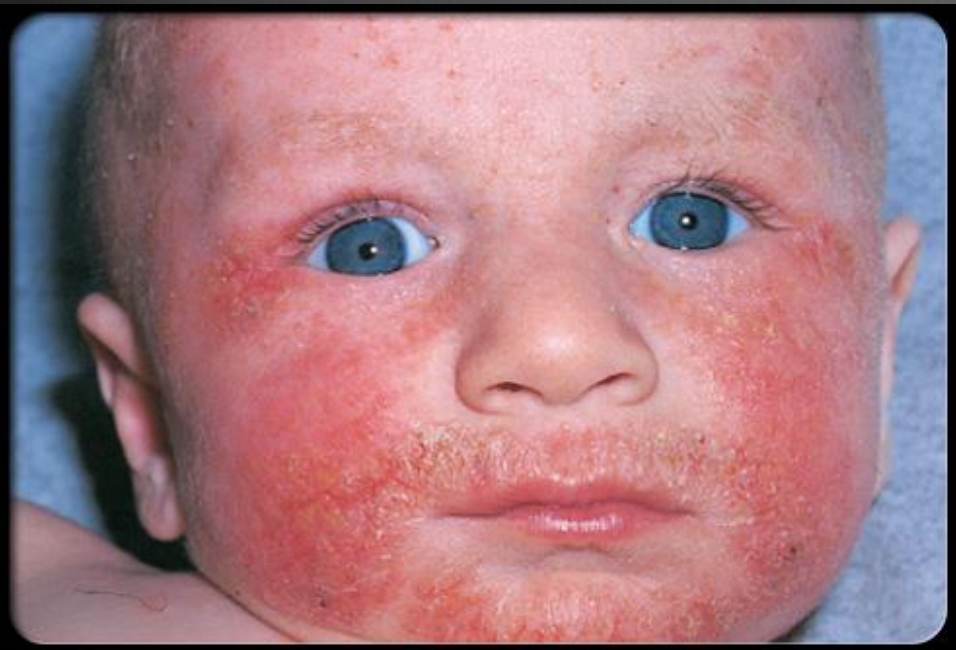
- An inflammatory condition caused by agents that directly/indirectly injure the skin.
- IRRITANT CD: injury caused directly by agents, commonly concentrated acids or bases e.g. soaps, detergents.
  - Lesion: Well demarcated, localized to exposed skin, can be on a spectrum from mild erythema to oedema and ulcers.
- ALLERGIC CD: Delayed-type hypersensitivity reaction mediated by T cells. Sensitizing agent is Urushiol (an oleoresin with the active agent pentadecylcatechol.
  - Lesion: Marked erythema, vesiculation, severe pruritus.
- Management:
  - Suspected agent identified and removed
  - Symptomatic: High-potency glucocorticoids till the dermatitis runs its course.

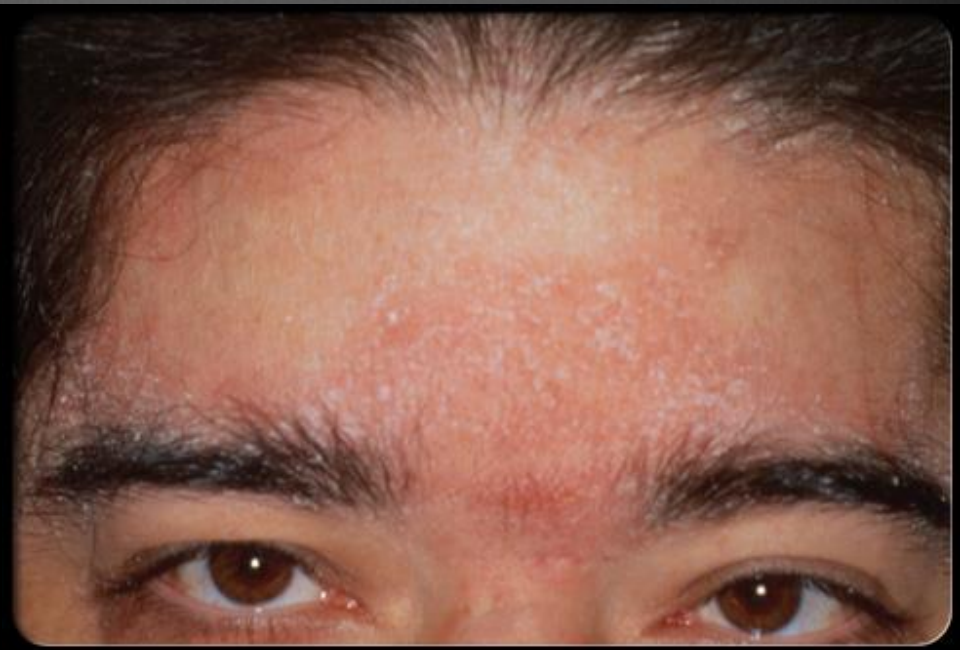
3. Seborrhoeic Dermatitis (SD)

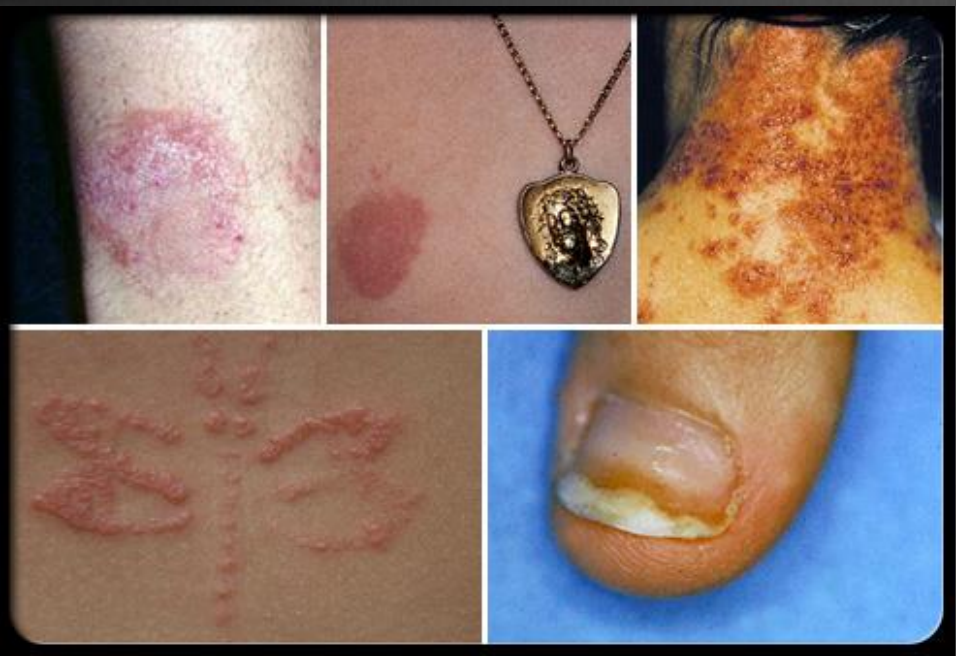
- Most common rash in adults
- Characteristics: greasy scales overlying erythematous patches or plaques
- Lesion:
  - Scalp (recognized as dandruff)
  - Face: Eyebrows, eyelids, glabella, nasolabial folds, external auditory canal, and post-auricular areas.
  - Central chest, axillae, groin, submammary folds, gluteal cleft.
  - Pruritus is variable.
- Management:
  - Low-potency glucocorticoids + antifungal agents (*KETOCONAZOLE, CICLOPIROX)*
  - *Anti-dandruff shampoo*
  - *DO NOT USE high-potency glucocorticoids on face (Causes: Steroid-indused Rosacea and atrophy)*

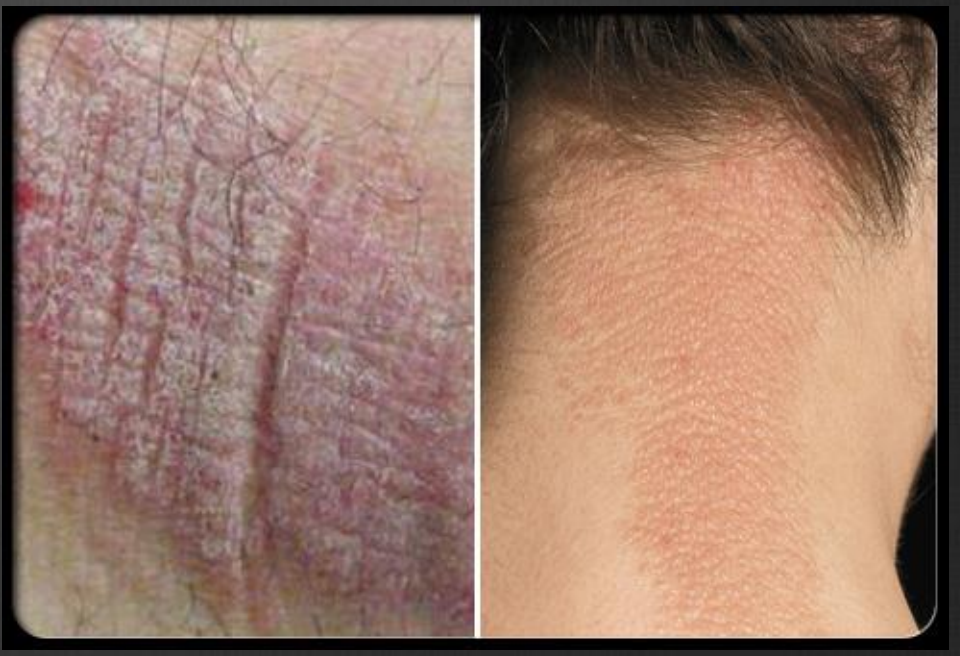
Comparison

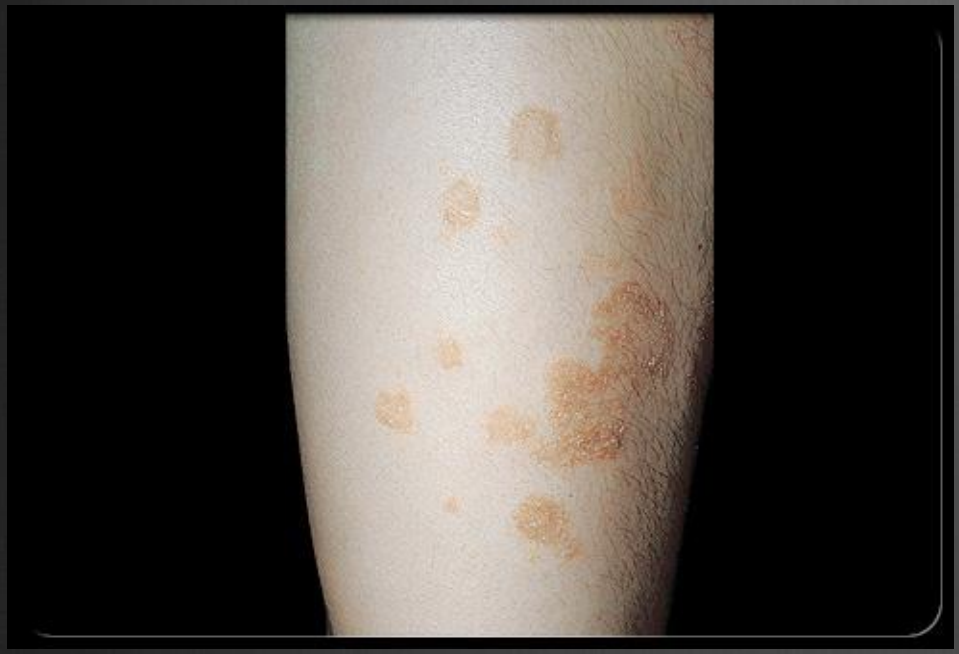
Atopic Dermatitis	Contact Dermatitis	Seborrhoeic Dermatitis
- Inherited - Hx of Atopy - Weeping, oozing, itchy lesions - Often begins in infancy and improves in adulthood	- Occurs in response to exposure to an irritant or allergic substance - Irritants cause direct toxic damage - Allergens induce an immune response	- Chronic, recurrent - Most common rash in adults - Scalp, forehead, brows, ears, nasolabial folds, central chest, mid-back. - “Craddle cap” in infants - Course of improvements followed by flares

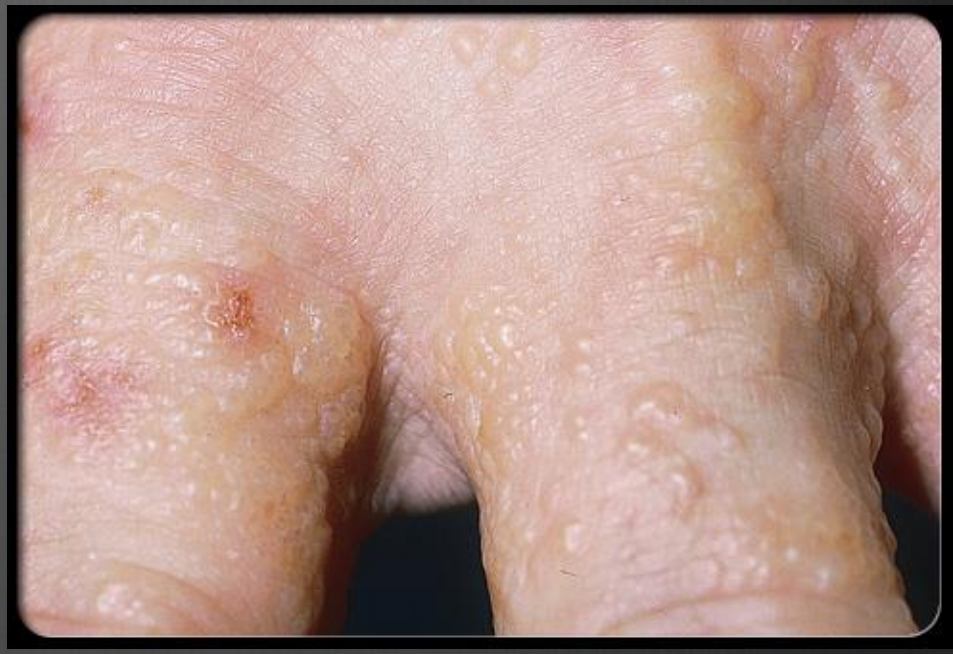


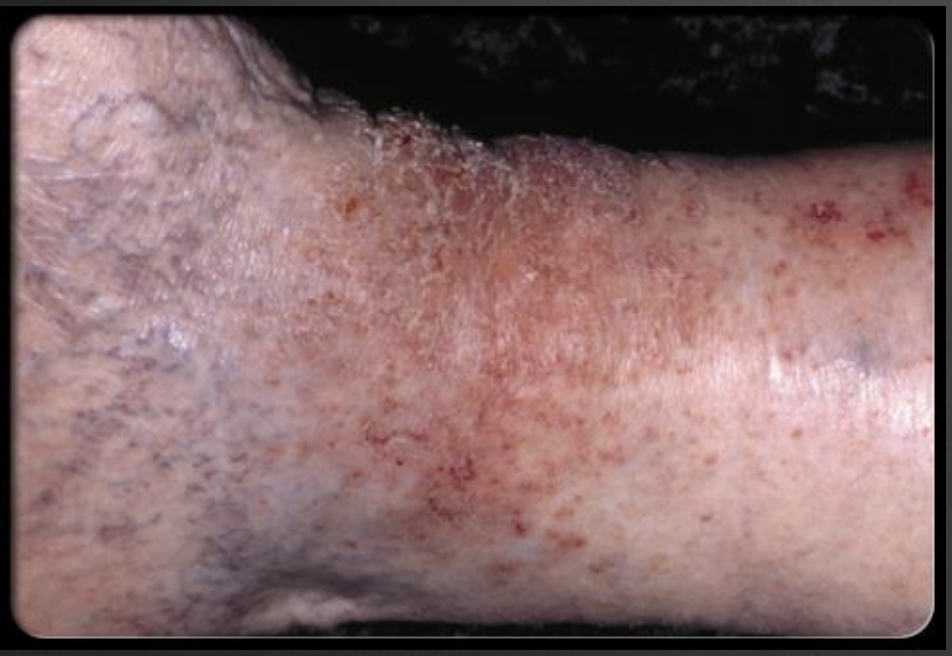












Images taken from MedicineNet.com

Thank you