1. Acute inflammatory dermatoses

 mononuclear cells rather than neutrophils, (unlike acute inflammatory disorders at most other sites)

Urticaria:

- HIVES / Raised Wheals / transient smooth papule or plaque
- localized mast cell degranulation, which leads to Dermal microvascular hyperpermeability.
- Individual lesions usually develop and fade within hours, but episodes can persist for days or even months

Pathogenesis

- Ige dependent: antigens
- Ige independent: exposure to substances directly incite mast cell degranulation: opiates / antibiotics

Treatment

- Antihistamines
- Leukotriene antagonists.
- Monoclonal antibodies that block the action of IGE
- Immunosuppressive drugs

Eczema:

- Erythematous papules > vesicles > ooze > crusted > Pruritus > scaling plaques
- Spongiosis or epidermal edema, splays apart keratinocytes
- mast cell degranulation
- persistent antigen lesions become scaly hyperkeratotic as the epidermis thickens (acanthosis)
- Children with atopic dermatitis often have Atopic triad: asthma / allergic rhinitis / atopic dermatitis

The clinical subtypes include:

- Allergic contact dermatitis: allergen and irritation is caused by delayed hypersensitivy reactions.
- Atopic dermatitis: defects in keratinocyte barrier function
- Drug-related eczematous dermatitis: Hypersensitivity reaction to a drug
- Photoeczematous dermatitis: abnormal reaction to UV or visible light
- Primary irritant dermatitis: substances chemically, physically, or mechanically damage the skin

Erythema Multiforme:

- Autoimmune disease caused by CD8+ cytotoxic T lymphocytes
- cytotoxic T cell attack on the basal cells of cutaneous and mucosal epithelia
- macules, papules, vesicles, and bullae (hence the term multiforme)
- Well-developed lesions have a characteristic "targetoid" appearance
- dermal edema and with time basal epidermal necrosis with blister formation

the cause of erythema multiforme

- herpes simplex
- mycoplasma
- Drugs (PHASS): Sulfonamides / Penicillin / Salicylates / Hydantoins / anti-malarials

Erythema multiforme caused by medications may progress to more serious eruptions such as

- Stevens-Johnson syndrome
- toxic epidermal necrolysis