

Atopic Dermatitis and Psoriasis

Separating fact from fiction

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Dermatology/Dermatopathology

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HEARTLAND
DERMATOLOGY
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Atopic Dermatitis

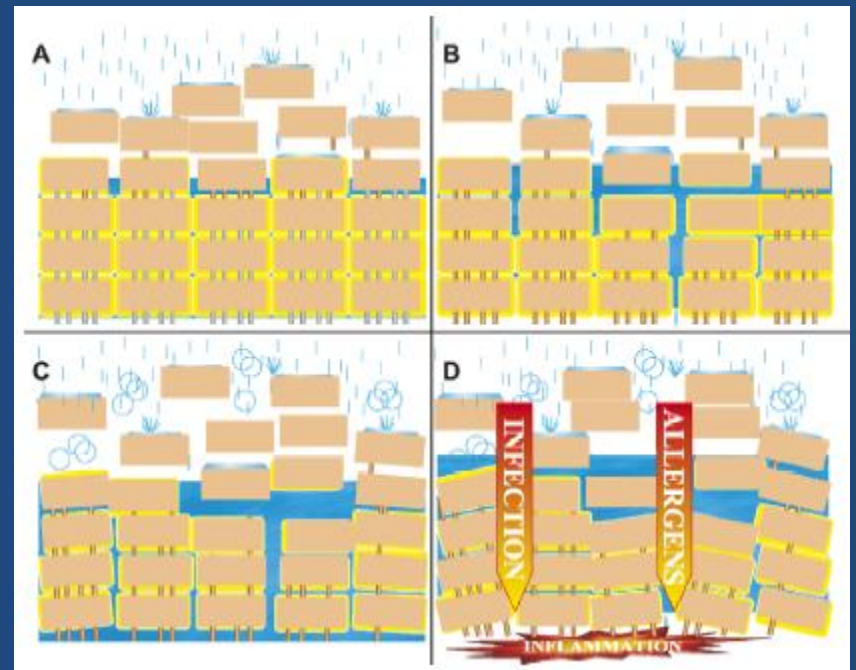
Atopic Dermatitis-Epidemiology

- 90% onset prior to age 5 (rarely before 2)
- 70% of patients have a family history (stronger maternal association)
- Atopic triad: Atopic dermatitis, seasonal allergies, asthma
- Complex genetic disease
 - Loss of function mutations of filaggrin one of the common mutations



Atopic Dermatitis-Pathophysiology

- At its core a **barrier defect** of the skin
- Increased exposure to allergens, irritants, and infectious agents leads to clinical findings



Atopic Dermatitis-Clinical

- Ill-defined erythematous plaques with scale
- Distribution
 - Infants-face, scalp, extremities
 - Childhood-flexural areas
 - Adults: childhood areas plus palms
- Often with secondary lichenification



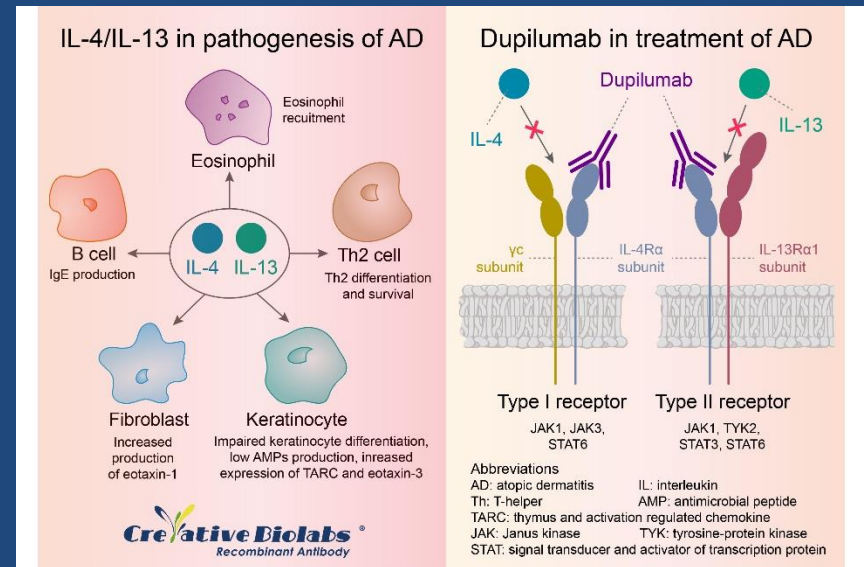
Atopic Dermatitis-Basic Treatment

- Restore the barrier
 - Emollients twice daily
 - Ceramide-containing emollients
- Topical steroids for active areas
 - Be aggressive but only on active areas
 - Don't mix with emollients
- Steroid sensitive areas
 - Tacrolimus (Protopic) ointment
 - Pimecrolimus (Elidel) ointment
 - Crisaborole (Eucrisa) ointment



Atopic Dermatitis-Advanced Treatments

- Immunosuppressive medications
 - Methotrexate
 - Mycophenolate Mofetil
 - Cyclosporine
 - Prednisone
 - Please avoid long-term use
- Targeted medication
 - Dupilumab (Dupixent)



Atopic dermatitis-When to consider referral

- Not responsive to good skin care, regular emollient use, and topical steroids
- Concern for secondary infection-may require urgent referral/phone call



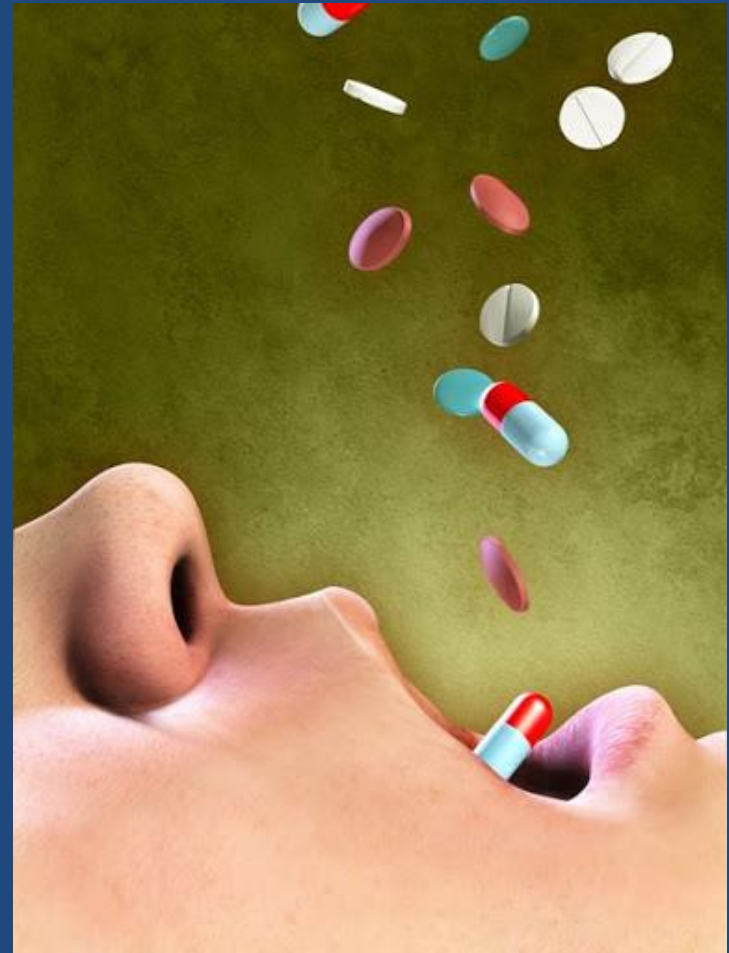
Fact vs Fiction: Bath time

- “Children with atopic dermatitis should bathe every other day or less frequently”
 - Fiction
- Dermatologists typically recommend daily bathing but primary care physicians recommend less frequent bathing
- Randomized controlled trial showing twice daily bathing is superior to twice weekly bathing in reducing validated atopic dermatitis outcome method
- Soak and Smear method
 - Warm water
 - 5-10 min in length
 - Medications and emollients applied immediately upon exiting



Fact vs Fiction: Antibiotic Use

- “Regular antibiotic use is effective for children with atopic dermatitis”
 - Fiction
- Antibiotic use in the absence of clinical signs of infection has not been shown to be effective and may lead to antibiotic resistance



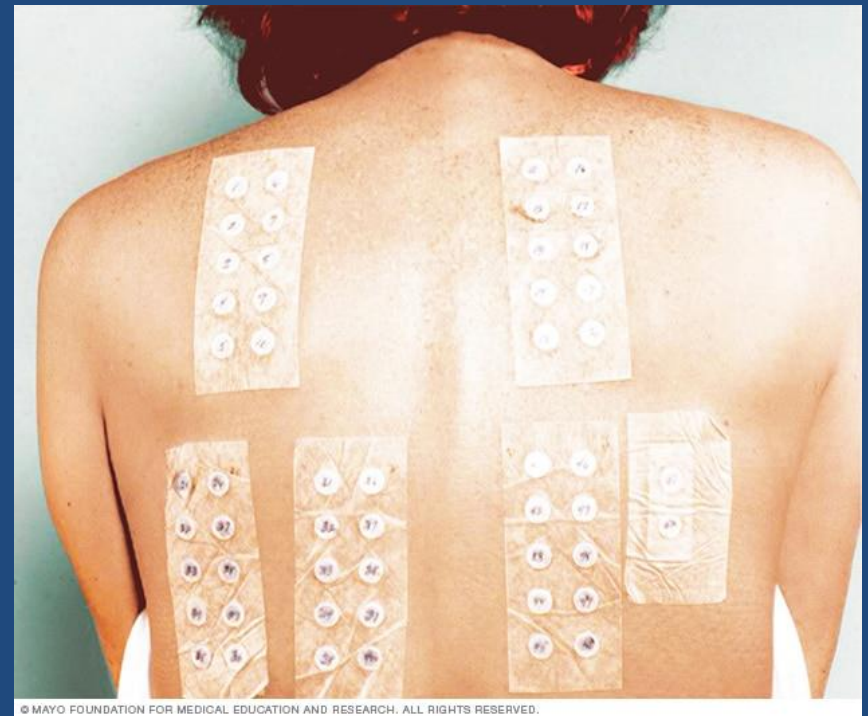
Fact vs Fiction: Allergy and Atopic Dermatitis

- “Regular use of skin prick or blood (RAST) allergy testing is useful in atopic dermatitis”
 - Fiction
- Children with atopic dermatitis have higher rates of allergies, although these rarely drive their skin disease
- Allergy testing should only be considered in children who have evidence of an immediate reaction (hives, swelling, pruritus) AND their atopic dermatitis has persisted despite optimal therapy



An Aside: Skin prick testing vs patch testing

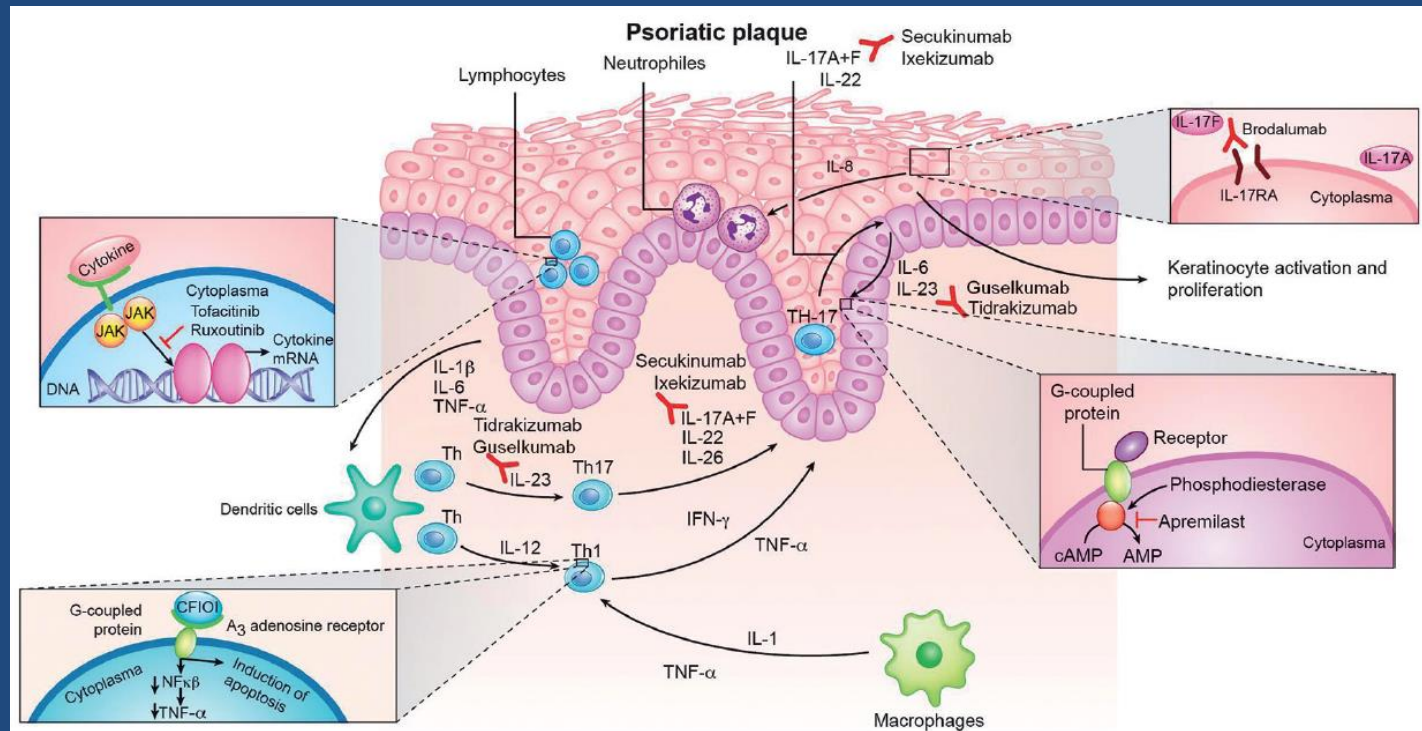
- Skin prick testing
 - Test immediate (type I hypersensitivity)
 - Potentially useful for urticaria and seasonal allergies
 - Useless for allergic contact dermatitis on the skin
- Patch testing
 - Tests delayed type hypersensitivity (type IV)
 - Useful for allergic contact dermatitis
 - Useless for urticaria and seasonal allergies



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Psoriasis

Psoriasis-Pathophysiology



Kofoed K, Skov L, and Zachariae C. New Drugs and Treatment Targets in Psoriasis. *Acta Derm Venereol* 2015;95:133-139.

Psoriasis-Clinical

- Well demarcated usually thick erythematous plaques
- Silvery/Micaceous scale
- Auspitz sign
- Koebnerization
- Common areas of involvement
 - Knees/Elbows
 - Umbilicus
 - Gluteal cleft



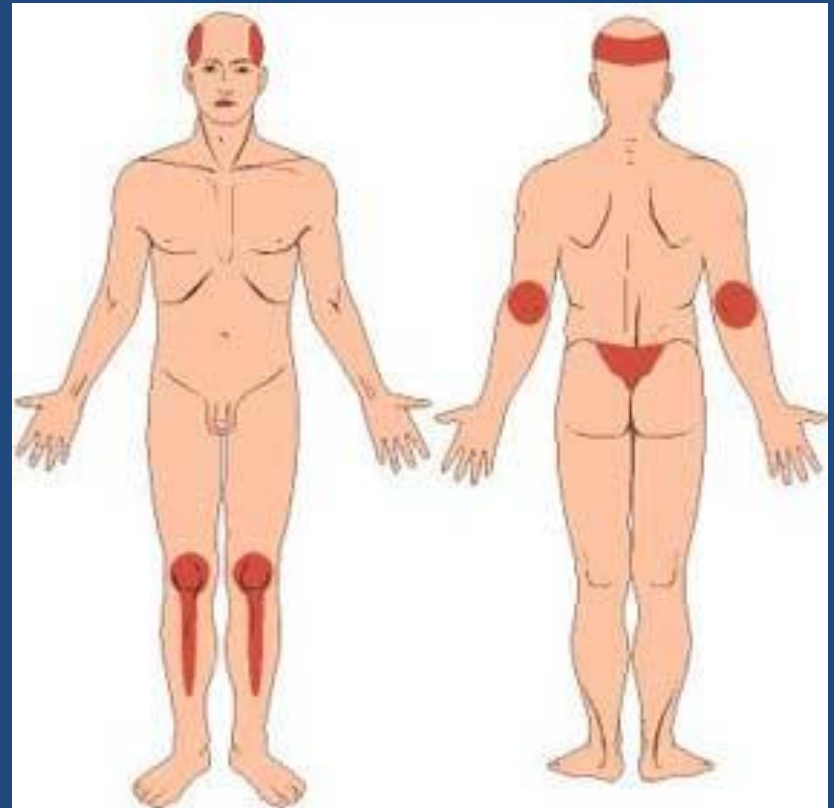
Psoriasis-Clinical variants

- Inverse psoriasis
- Guttate psoriasis
- Pustular psoriasis
- Palmoplantar pustular psoriasis
- Erythrodermic psoriasis



Psoriasis-Basic Treatment

- Topical steroids-Be aggressive
- Calcipotriene (dovonex)
- Combination products
 - Betamethasone and calcipotriene (Enstilar)
 - Halobetasol and tazarotene (Duobrii)
- Natural light therapy
 - 10-15 min 3x weekly



Psoriasis Advanced Treatment

- Narrow-band UVB phototherapy
- Immunosuppressive medications
 - Methotrexate
 - Cyclosporine
 - Prednisone
- Phosphodiesterase type IV inhibitor
 - Otezla (apremilast)
- Biologic Medications
 - Tumor necrosis factor-alpha
 - Adalimumab (Humira)
 - Etanercept (Enbrel)
 - Infliximab (Remicade)
 - Interleukin 12/23
 - Ustekinumab (Stelara)
 - Interleukin 17
 - Brodalumab (Siliq)
 - Ixekizumab (Taltz)
 - Secukinumab (Cosentyx)
 - Interleukin 23
 - Guselkumab (Tremfya)
 - Risankizumab (Skyrizi)
 - Tildrakizumab (Ilumya)

Psoriasis- When/where to consider referral

- Dermatology
 - Recalcitrant to topical treatments
 - Severe disease
 - Greater than 10% BSA
 - Involvement of genitals, hands, scalp
- Rheumatology
 - Psoriasis plus joint pain
 - Usually small joints of hands feet associated with morning stiffness >30 min
 - Enthesitis, especially of the feet, is a common presentation

Fact vs Fiction: Steroid-induced atrophy

- “Steroid-induced skin atrophy is a common problem in patients treated with topical corticosteroids”
 - Fiction
- Available studies suggest a risk ranging from 0-5% with long-term use
- Patient counseling regarding appropriate use is critical



Questions???