

# Inflammatory Skin Disorders: Differential Diagnosis and Management

Tracey C. Vlahovic, DPM  
Associate Professor,  
Temple University School of Podiatric Medicine

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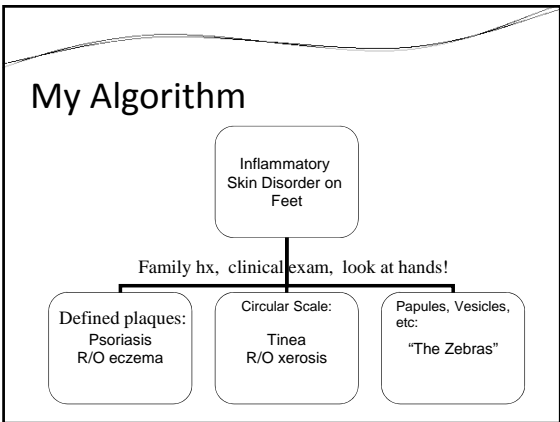
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## Questions to ask...

- Do you or your family have a history of?...
  - Allergic rhinitis, "Sensitive" skin, Asthma
  - Skin Cancer
- Have you ever seen a dermatologist?
- Has your skin ever been biopsied?
  - A skin scrape DOES NOT COUNT!!!!

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### More Questions to ask...

- What colored socks do you wear?
- Occupation/hazards?
- What have you used OTC or homeopathic?
- What is the first lesion to appear, and what is the newest lesion to appear on your skin?

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### Skin Signs of Inflammation

- **Calor** - heat
- **Rubor** - redness
- **Tumor** - swelling
- **Pruritus** - itching



= *Skin Barrier Dysfunction*

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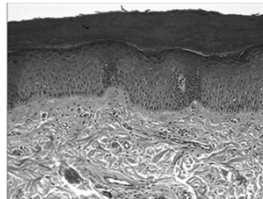
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### Skin Barrier: Definition

- Stratum corneum forms the "skin barrier"
  - Corneocytes filled with keratin
  - Extracellular matrix - lipid enriched
- Protective wall
  - Regulates homeostasis - TEWL
  - Prevents the entry of foreign particles and pathogens into the body



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*Epidermis in Palm/Sole*

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## Palms and Soles

### unique skin characteristics

- Variations in intercellular lipid content & membrane structure provide basis for variation in permeability (soles vs face)
- Palms & soles contain a much smaller proportion of lipids = poorer barrier function
- Number of desmosomes stays constant through all layers of soles & palm. In other skin, increased number in deeper layers which decrease in the superficial layer (20% of deeper layers)

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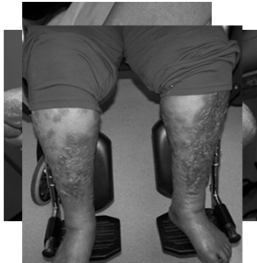
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## Barrier Function Disruptions

- Peri-wound Skin
- Eczema
- Psoriasis
- Venous Stasis Dermatitis
- Diabetic Skin Issues



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## Common Podiatric Skin Conditions associated skin barrier dysfunction

- |                            |                                 |
|----------------------------|---------------------------------|
| • Xerosis                  | • Wet to dry foot syndrome      |
| • Hyperkeratosis           | • Psoriasis                     |
| • Eczema/dermatitis        | • Lichen planus                 |
| • Atopic dermatitis        | • Contact dermatitis            |
| • Lichen simplex chronicus | • Stasis edema/dermatitis/ulcer |
| • Dyshidrotic eczema       | • Dermatophyte infection        |

*= Skin Barrier Dysfunction*

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### Xerosis: Mild to extreme



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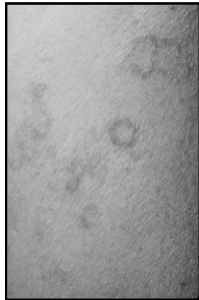
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### Dry Skin

#### asteatotic/xerotic eczema

- “Winter itch” - worse in winter and dry climates
- Decreased humidity
- Frequently misdiagnosed as “ring worm” (tinea corporis)
- Commonly located lateral aspect of the leg
- Pruritic, erythematous scaling annular patches



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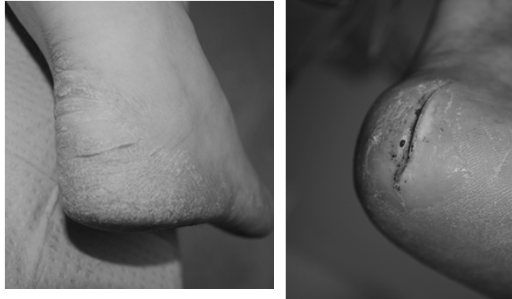
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### Cracked Heels (keratoderma climacterum)



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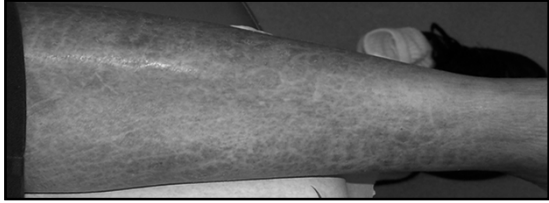
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### Erythema Craquele aka Asteatotic Eczema



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### Ichthyosis Vulgaris

- Most common form of inherited dry skin
- Also can be acquired
- Autosomal dominant 1:100
- Fish scale-like dryness
- Hyperlinearity and thickening of palms and soles
- Can Improve with age

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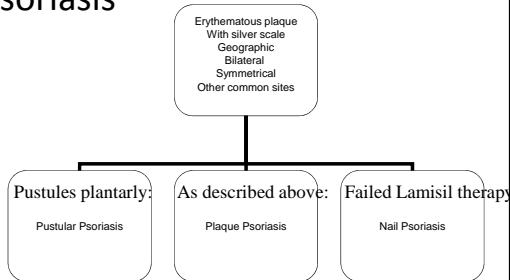
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### Psoriasis



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## Psoriasis

- Develop as a child or as an adult
- Most classic form is plaque, followed by pustular
- Most commonly symmetrical, bilateral
- May be pruritic
- Affects joints, nails
- First line of treatment: topical steroids

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## Plaque Psoriasis



*Misdiagnosed as tinea in the ED:  
Placed on Oral Ketoconazole  
Given topical Ketoconazole  
Had used this for 2 weeks before I saw him*

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## Pustular Psoriasis



*Misdiagnosed as interdigital tinea*

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## Diagnosed as "dry skin"



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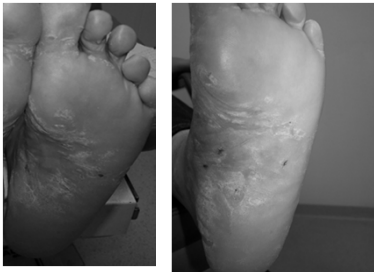
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## Misdiagnosed as "dry skin"



2/18/09

4/13/09

Why  
Is there  
Not much  
Improvement  
After  
2 months???

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## Nail Psoriasis



Failed Lamisil therapy twice



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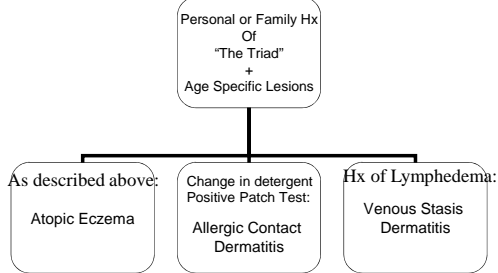
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## Eczema, or Atopic Dermatitis



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## Atopic Eczema/Dermatitis



- "Atopy" – no place
- Inherited - asthma, hay fever, eczema, hives
  - The "triad"
- "Itch that gets a rash"
- Foot eczema
  - Acute, subacute, chronic
- 2° bacterial infection
- DDX
  - Tinea pedis
  - Contact dermatitis
  - Dyshidrosiform eczema

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**Acute**  
**Eczema/Dermatitis**

- Moderate to intense itching
- Red, scaling, weeping, oozing skin rash
- Clinical presentations:
  - Atopic dermatitis
  - Dry skin eczema
  - Contact dermatitis
  - Stasis dermatitis
  - Dermatophyte infection



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**Superinfected tinea**

Week 1



Week 3



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**Sub-Acute**  
**Eczema/Dermatitis**

- Mild to moderate itching
- Red, scaling, dry, fissured, skin rash
- Clinical presentations
  - Atopic dermatitis
  - Contact dermatitis
  - Stasis dermatitis
  - Dry skin eczema
  - Dermatophyte infection



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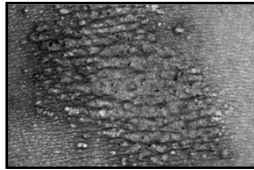
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**Chronic  
Eczema/Dermatitis**

- Moderate to intense itching
- Hyper/hypopigmented, dry, scaling, lichenified, excoriated, fissured skin rash
- Clinical presentations
  - Atopic dermatitis
  - Lichen simplex chronicus
  - Habitual scratching/rubbing



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**Contact Dermatitis  
irritant vs allergic**

- Irritant contact dermatitis
  - Everyone
  - Skin barrier dysfunction
- Allergic contact dermatitis
  - Antigen-antibody reaction
  - 8 to 28 days



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**Allergic Contact Dermatitis**



2/17



4/14

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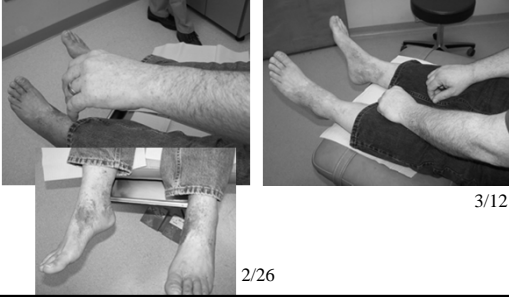
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## Allergic Contact Dermatitis



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## Allergic Contact Dermatitis



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## Allergic Contact Dermatitis



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## ICD vs ACD= Patch Test



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## A Note on Dyshidrotic Eczema

- This is not an overall term to be applied to every skin dermatitis
- Tapioca Pudding
- No erythema
- Self Limiting
- Mostly on hands



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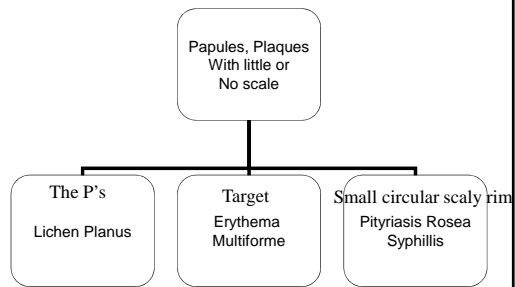
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## Seeing Circles?



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## Lichen Planus



Plentiful, Pruritic, Planar, Purple, Polygonal, Planar  
Polished, Papular + Wickham's Striae

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## Lichen Planus



You must treat this as soon as possible!!!

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## Erythema Multiforme



*Stevens Johnson is no longer 'erythema  
multiforme major'*

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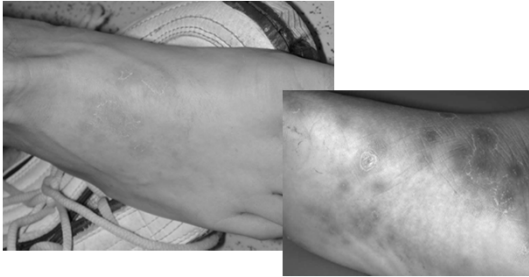
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## Pityriasis Rosea vs Syphilis



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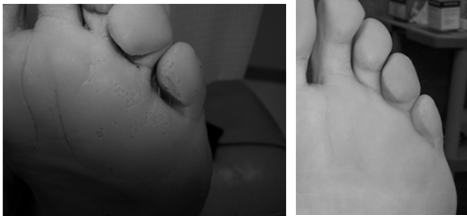
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## Pitted Keratolysis



1<sup>st</sup> visit

2<sup>nd</sup> visit

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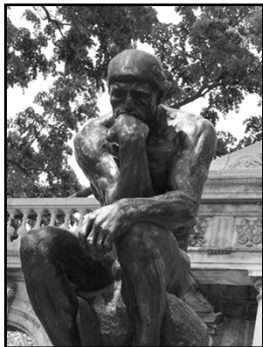
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THANK YOU



Rodin Museum,  
Philadelphia

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