Introduction to Clinical Dermatology

CHAP Downtown Emergency Service Center
Derm Clinic

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Objectives:
After this session, you will...

I. Begin to use the morphologic terms for describing skin lesions.
II. Understand a clinical approach to dermatologic diagnosis.
III. Recognize some of the common skin conditions that affect clients at the DESC.
IV. Name the most commonly prescribed topical therapies used in dermatology.
Burden of Skin Disease in the US

• Skin problems outnumber those from obesity, hypertension and cancer—combined
• Substantial financial burden
  – $96 billion in 2004!*
    • ($90 billion requested for education in 2007 federal budget)
• Major social morbidity
• Visibility of skin disease is a curse and a blessing.
  – Often a “hook” into health care.

Skin Disease in Homeless People

- Exposure
- Gravity
- Comorbidities
- Access
4 Dermatology Principles
1. Skin disease is visual.
2. 
Skin disease is more than skin deep.
The skin doesn’t read text books.
The skin is an immune organ.
30” Approach to Any Skin Problem—Almost

• Sick or well?
• Bump or rash?
• What color skin?
• What age patient?
• Acute, chronic, or in between?
• How distributed?
• What is the primary lesion?
The Language of Dermatology
Primary skin lesions
Macule (<1cm)
Patch (>1cm)
Papule
Plaque
Nodule
Vesicle/Bulla
Pustule
Wheal
Secondary Skin Lesion Changes
Scale/Hyperkeratosis
Crust
Erosion
Ulcer
Fissure
Lichenification
Atrophy
Scar
Practice!
Impact of skin color on assessment of skin conditions
How Dermatologists Think
Look first, ask questions later.
Physical examination

Attempt to identify primary lesion

Identify any secondary change, lesion pattern & distribution

Differential diagnosis

Consider biopsy if, e.g.: Entities in ddx have distinguishable histologies, or, systemic infection is suspected, or, neoplasia is suspected

Biopsy sent for H & E (request special stains if infection is suspected)

Histologic diagnosis or description

Clinicopathologic correlation

Second specimen for culture if infection suspected

Microbiologic diagnosis

History

Clinical diagnosis
• 56 y.o. homeless male, otherwise healthy.
• Growth over 3-4 months.
• Bleeds easily.
• What are you thinking?
Dermatology*

Rash vs. Bump

- Multiple, widespread
- Onset often rapid
- Patient concerns:
  - Misery from symptoms
  - Will it end?
  - Contagious?
  - Systemic disease?
- Management often medical

- One or few
- Often slow growing
- Main patient concern: Cancer
- Management often surgical

*made ridiculously simple
Reasons to refer urgently

• Suspected melanoma
• Advanced nonmelanoma skin cancer
• Widespread inflammatory dermatosis
  – Systemic symptoms (fever, etc.)
  – Impaired skin barrier
• Limb (or life) threatening wound
Simple tricks to aid with dermatological diagnosis

• Skin exposure
• Good lighting
  – Ambient
  – Small flashlight
• Magnification
  – Hand lens—4X (¢)
• (Digital camera)
You purchased this item on December 14, 2010.

Bausch & Lomb 4X Folded Pocket Magnifier, 36mm Diameter Lens (812354)

from Bausch & Lomb

* * * * 11 • 40 customer reviews

List Price:
  Price: $13.31 & FREE Shipping
  You Save: $6.59 (33%)

Note: Not eligible for Amazon Prime.

In stock
Ships from and sold by MAGNIFYING AIDS

Estimated Delivery Date: Tuesday, Oct. 27 when you choose Two-Day Shipping at checkout.

Style Name: A

Size: 1-Pack

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- Single lens.
- Includes carrying case.
- Jewelers quality.

34 new from $10.10
Dermatologic Therapy

Some basics
Most Common Topical Agents Prescribed by Dermatologists

1. Corticosteroids
2. Antimicrobials
   - Antifungals
   - Antibacterials
3. Agents for acne
   - Retinoids
   - Comedolytics
Topical Therapies—Vehicles

- Ointment
- Cream
- Lotion
- Solution/spray
- Gel
- Occlusive tape

*In general, the more occlusive the vehicle, the better the drug penetration.*
Topical Steroid Strength Classes

Group 1: superpotent
Group 2: potent
Group 3: upper mid-strength
Group 4: mid-strength
Group 5: lower mid-strength
Group 6: mild
Group 7: least potent

Question: How are these strength classes determined?
# Topical Steroids Simplified

<table>
<thead>
<tr>
<th>Strength class</th>
<th>Example</th>
<th>Do’s</th>
<th>Don’ts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (very strong)</td>
<td>Clobetasol 0.05%</td>
<td>Hand dermatitis</td>
<td>Face, groin, axilla; fungus</td>
</tr>
<tr>
<td>2</td>
<td>Fluocinonide 0.05%</td>
<td>Hand, body dermatitis</td>
<td>Face, groin, axilla; fungus</td>
</tr>
<tr>
<td>4</td>
<td>Triamcinolone 0.1%</td>
<td>Large area body</td>
<td>Face, groin; fungus</td>
</tr>
<tr>
<td>6</td>
<td>Desonide 0.05%</td>
<td>Face, groin</td>
<td>Hands, feet; fungus</td>
</tr>
<tr>
<td>7 (weak)</td>
<td>Hydrocortisone 1%</td>
<td>Face, groin</td>
<td>Hands, feet; fungus</td>
</tr>
</tbody>
</table>
Infant with atopic dermatitis.

Your attending prescribes a mid-strength topical steroid then asks you: “What vehicle would you like to use?

You say:

a) Gulp!
b) Gel
c) Solution
d) Cream
e) Ointment
Patient 6: 35 year old cement worker with contact dermatitis
What steroid strength/vehicle should you prescribe?

a) Class 1 (superpotent)/solution
b) Class 1/ointment
c) Class 4/cream
d) Class 7/ointment
72 year old with itching all over…

Diagnosis?

Scabies
Diagnosis?  Tinea
28 y.o. male with scattered skin lesions

Diagnosis?

Staph folliculitis
Cellulitis

- Deeper lymphatics involved
- Less distinct edges

- Limbs most common
- Staph frequent cause
- Tinea pedis can be portal of entry
- Treatment may help prevent recurrences
Gram + Skin and Soft Tissue Infections

- Staph common cause
  - Sometimes group A strep
- If recurrent, think nasal staph colonization
- Systemic anti-staph antibiotics
Questions?
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