Dermatology: What you need to know in primary care

Part I

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20 most common dermatology diagnoses

1. acne
2. rosacea
3. psoriasis
4. seborrheic dermatitis
5. atopic dermatitis
6. contact dermatitis
7. stasis dermatitis/ulcers
8. urticaria
9. dermatophyte infections
10. tinea versicolor

11. hemangiomas/port-wine stain
12. verruca/condyloma
13. molluscum contagiosum
14. seborrheic keratosis
15. actinic keratosis
16. melanocytic nevi
17. impetigo, folliculitis, abscess
18. herpesvirus infections
19. scabies
20. pityriasis rosea

HEAD
SHOULDERS
KNEES
TOES
Psoriasis

- Four Main types:
  - Plaque
  - Guttate
  - Pustular
  - Inverse
- Arthritis can be seen with any type

Plaque Psoriasis
**Plaque Psoriasis**
- Most common type
- Scalp, Elbows, Knees, Sacrum
- Usually itches

**Guttate Psoriasis**
- More common in children
- Related to strep infections
- Trunk most involved
- May resolve spontaneously

**Inverse Psoriasis**
- Usually macerated – scale NOT visible

**Pustular Psoriasis**
- Most acute type
- Can be life threatening
- May have fevers, high WBC
- Can be caused by withdrawal of systemic steroids
**Psoriasis**

**Treatment**

**Topical**
- Steroids: mid-strong potency
  - Triamcinolone 0.1%
    (only one that comes in a tub)
- Calcipotriene
- Tacrolimus/Pimecrolimus: usually for inverse pso (off-label)
- Ultraviolet light: 2-3x weekly

**Systemic**
- Acitretin, cyclosporine, biologics (call dermatologist)

**Other:**
- Pustular pso: call derm
- AVOID systemic steroids – can cause severe flare when stopped

**Psoriasis Pearls:**

- Give appropriate amount of topical medication
  (Whole body application approx 30g)
- Pso = lifelong condition –choose therapies accordingly
- Make sure correct vehicle for all pso locations
  - Scalp = oil, solution, foam
  - Body = cream, ointment

**SEBORRHEIC DERMATITIS**

- Most common = Face and scalp
  - “butterfly rash”
- Can affect intertriginous areas esp in children
- Yellow/greasy scale
- Cause: *Pityrosporum ovale*
  - +/- itch
Seborrheic dermatitis

**Treatment**
- Zinc, selenium sulfide, or ketoconazole shampoos
- Leave in for 3-5 min before rinsing
- Use on side of nose and eyebrows too
- Scalp: Clobetasol solution
- Face: Intermittent (minimize use) hydrocortisone 1-2.5%, or tacrolimus/pimecrolimus

Seborrheic dermatitis pearls

- Manage expectations: can’t cure, can control
- Assoc with Parkinson’s and AIDS
- Can overlap with psoriasis “sebopsoriasis”

ACNE
1. Non-inflammatory:
   • Comedones

2. Inflammatory
   • Papules
   • Pustules
   • Nodules
   • Cysts

Pathogenesis of acne.
### Non-inflammatory acne
- Abnormal keratinization
- Increased sebum production

- Open comedones = blackheads
- Closed comedones = whiteheads

### Non-inflammatory acne
- **Treatment:**
  - **Retinoid**
  - Adapalene
  - Tretinoin
  - Tazarotene
  - Benzoyl peroxide wash or gel
  - Salicylic acid

### Inflammatory acne

#### Pathogenesis:
- Abnormal keratinization
- Increased sebum production
- Inflammation
- *P. acnes*

#### Lesions:
- Papules
- Pustules
- Nodules
- Cysts

### Inflammatory acne
- **Treatment** – target all causes!
- “Triple therapy”
  1. **Antibiotics**
     - Doxycycline 100mg PO BID
     - Minocycline 100mg PO BID
     - Minimize course to 3-6 months
  2. **Retinoid**
  3. **BPO**
SPECIAL CASES

Inflammatory acne - severe
- Nodules > 0.5cm in diameter and depth
- Cysts
- Scars

Severe inflammatory acne

Treatment
- Isotretinoin
  - Synthetic Vitamin A Derivative
  - Highly teratogenic – controlled by gov’t
  - Numerous A/E:
    - Xerosis
    - Hyperlipidemia
    - ? depression/suicide
    - ? IBD
  - Send to derm if not part of Ipledge program

Inflammatory acne – adult female “O” distribution

Treatment:
- Hormonal therapy
  - OCPs
    - 3 “approved”
    - Reality: all likely work,
      - Ideally pick one w/ low androgenic progestin
        - (norgestimate, desogestrel, drospirenone, 3rd gen progestins)
  - Spironolactone (off-label)
    - Blocks androgens
    - Dose: 50mg BID, can increase to 100mg PO BID
    - S.E.: Breast tenderness, irreg periods, headache, feminization of male fetus
Acne pearls

- Biggest cause of treatment failure: Poor compliance
- * Counsel – takes 2-3 months for therapy to work!
- Diet and acne.....the jury is still out

ROSACEA

Rosacea

4 Types:
1. Erythrotelangiectatic
2. Papulopustular
3. Phymatous
4. Ocular

Rosacea

ROSACEA
Rosacea

**Treatment:**
1. Erythrotelangiectatic
   - Aug 2013: Brimonidine topical gel, 0.33%
   - Alpha-2 adrenergic agonist
2. Papulopustular
   - Metrogel or metrocream
   - Oral doxycycline (off-label)
   - Anti-inflammatory dosing
3. Ocular
   - Oral doxycycline (off-label)
4. Phymatous
   - Surgery/ Shaw scalpel

Rosacea pearls

- Anti-inflammatory dosing of doxycycline
- Doxycycline 20mg PO BID, 40mg PO daily, 50mg PO BID
- Effective
- Lower incidence of GI side effects

- Ask about eye symptoms
- Dry, gritty eyes
- Need oral doxycycline

Rhinophyma

ACTINIC KERATOSES
Actinic Keratoses

Treatment:
• Cryotherapy
• “Field therapy”: 5-fluorouracil, imiquimod, diclofenac
• New therapy: ingenol mebutate
  • Intracellular protein kinase C agonist \(\rightarrow\) cellular necrosis
  • Also immunostimulatory \(\rightarrow\) get cytotoxic Ts against dysplastic cells
• Face 0.015% x 3 days, Trunk/extremities 0.05% x 2 days
• Face/scalp: 83% median reduction, Trunk: 75% median reduction

Actinic keratoses pearls

• Don’t need to treat them all – treat bothersome areas
• Field therapy – can be difficult esp for elderly pts

IMPETIGO
**Impetigo**

- Most common: S. aureus
- “Honey-colored” crusts more than pustules
- More superficial than ecthyma
- More likely in kids w/ atopic derm

**Treatment:**

- Topical antibiotic, antibacterial wash
- More severe: oral antibiotic (cephalexin)

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**When to consult your local dermatologist?**

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**Managing the “STAT acne consult”**

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**Common rashes in primary care Part 2:**

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Objectives (I can identify common patterns of)
1. Dermatitis/Eczemas
   A. Atopic Dermatitis
   B. Asteatotic eczema (Eczema craquele)
   C. Allergic/Irritant Contact Dermatitis
   D. Stasis Dermatitis
   E. Dermatophyte infections
   F. Tinea Versicolor
   G. Scabies
2. Urticaria
3. Hidradenitis Suppurativa
4. Severe cutaneous adverse reactions from drugs

Topical Steroids You need to know
Low: Hydrocortisone 2.5% crm/ointment
Medium: Body – Triamcinolone 0.1% crm/ointment
High Potency: Body, thick plaques – Betamethasone dipropionate augmented 0.05% crm/ointment/lot

Psoriasis ↔ Atopic Dermatitis

Atopic Dermatitis
### Childhood Atopic Dermatitis

- Moisturization (most important)
- Avoid triggers (food allergens, infections, airborne allergens)
- Antihistamines
- Topical steroids
- For severe disease: Send to dermatologist!

### Asteatotic Eczema – Eczema craquele

- Always elderly patients
- Always on the legs
- Worst in the wintertime
- Best treatment moisturization (ammonium lactate although triamcinolone can be beneficial initially)

### Treatment of Atopic Dermatitis (AD)
Contact Dermatitis

Toxicodendron radicans.

- Very common, probably 75% of the population is sensitized
- “Streaky Dermatitis”
- New spots can appear for days after rash starts
- Blister fluid does not spread the rash
- Treat with 3 weeks of prednisone if severe otherwise high-potency topical steroids
Contact Dermatitis – Nickel

• Most common cause of chronic allergic contact
• Common sources of exposure:
  Jewelry (earrings, watches, etc)
  Clothing (belts, snaps, rivets, etc)
  Coins, Keys, Eyeglasses

Internet for sources of nickel free jewelry

Contact Dermatitis – Triple Antibiotic ointment (neomycin or bacitracin)

Contact Dermatitis – Neomycin

• Very common, up to 10% of the population is allergic
• Both Neomycin (most common cause of allergic contact dermatitis from topical medications) and Bacitracin
• - If a patient has used neomycin/bacitracin, have patient perform a “repeat open application test”

Contact Dermatitis – Fragrance and Preservatives
Contact Dermatitis – Fragrance and Preservatives

- Face, Neck, Hands
- Common exposures:
  - Shampoo, soap, conditioner, hair products, moisturizer, perfume, deodorant
- Very difficult to avoid these substances as even products that say “hypoallergenic” or “dermatologist tested” often have fragrances
- Allergic patients only react to some fragrances and preservatives

Contact Dermatitis – Perianal

- Ask about diarrhea and use of diaper wipes
- If using diaper wipes – stop and give high potency steroid

Irritant Hand Dermatitis

- Most commonly due to repetitive exposure to soap and water
- Interdigital and dorsal hands
- Ask about frequency of handwashing
- Hand sanitizer is less damaging than soap
- Need thick ointment to protect
Stasis Dermatitis

- For mild cases, compression is key
- Predisposed by lower limb injury, surgery, obesity, lymphedema, and increased age
- May apply Triamcinolone underneath stockings
- Contact dermatitis is common

Lymphedema -> Stasis Dermatitis -> Elephantiasis

Tinea
### Tinea

- Look for annular/arcuate appearance
- Also look for interdigital scale, mild tinea pedis
- KOH examination or skin biopsy will confirm

- Treat with Ketoconazole 2% cream bid UNLESS features suggestive for hair-follicle involvement

### Tinea Versicolor

- Upper body, summer time, young-adults, typically in humid environments
- Scrape with slide or fingernail, scaling can confirm it

- Treat: Fluconazole 300 mg x 2, 1 wk apart
- For maintenance, have patient use OTC dandruff shampoo (zinc pyrithione, selenium, or ketoconazole) as body wash tiw
**Scabies**

- Finger webs
- Antecubital fossa
- Axilla
- Breasts/Groin

**Permethrin (5%)!** Neck down full body – Everyone in house

Everything washed in a hot cycle the following AM

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**Urticaria**

Ask about known Triggers.

If none pinpointed, Titrate cetirizine to 20 mg daily.

Can start H2 blocker as well.

If no improvement

Refer to derm, can consider further immunosuppression
### Urticaria
- Itchy, evanescent, and transient wheels
- *If greater than 24 hrs in one place, it is not urticaria!!*
- Common causes include strep infections, drugs, hymenoptera envenomations
- Never scaly
- Titrate cetirizine (start 10 mg bid) for treatment

### Hidradenitis suppurativa
- Treatments:
  - Topical acne treatments
  - Weight loss
  - Chronic antibiotics (Doxycycline 100 mg bid)
  - ??Adalimumab, infliximab?? Needs referral to dermatology.
  - If severe and can’t get into dermatology – consider referral to plastics/gen surg for excision and skin grafting

### Severe Cutaneous Adverse Reactions
- Stevens-Johnson Syndrome
Stevens-Johnson Syndrome

- Acute death of epidermis due to exposure to a medication
- Key early finding is pain/involvement of multiple mucous membranes, followed by sloughing of the skin
- Usually within 1-3 weeks of starting med
- Aromatic Anticonvulsants, allopurinol, Sulfa, NSAIDS,
- High Mortality - Stop med, call dermatology/hospital with dermatology capabilities

Lastly – Bed Bugs or Cimex lectularius

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Thanks Everyone