Dermatology for the Primary Care Nurse Practitioner

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- Bachelor’s of Nursing from Wichita State
- Master’s of Nursing: Family Nurse Practitioner from University of Missouri—Kansas City
- Emergency Department Nurse Practitioner
- Been in Dermatology for 15 years: 5 years at Moeller Dermatology in Wichita Kansas, 10 years at Dermatology and Skin Cancer Center (part of US Derm Partners) in the Kansas City area
- Board Certified in Dermatology

Disclosures

No Disclosures at this time
What you will take home

- Common primary care dermatologic conditions and how to treat them
- What, when, and why to refer to dermatology

Tineas

- Tinea Corporis
- Tinea Manum
- Tinea Cruris
- Onychomycosis
- Tinea Versicolor

EVERYTHINGS GONNA BE FINE ITS JUST A RASH.
Tinea Corporis

- "Ringworm"
- Well-demarcated border, scaly, itchy
- Multiple fungi can cause
- Topical treatment is effective if not widespread—
  ketoconazole bid x 1 month.
- Terbinafine qd x 2 weeks and topical therapy if widespread
- If involving scalp or beard area, needs oral therapy
  for 4-6 weeks.

Tinea Mannum

- One hand affected
- "Two feet-one hand"—check for tinea pedis or onychomycosis.
- Treatment: treat with topicals if feet and toenails are not affected.
- If toenails are affected treat the onychomycosis.

Tinea Cruris

- "Jock itch"
- Well-demarcated border, itchy
- Check feet/toenails—treat nail involvement too for onychomycosis.
- Topical therapy-ketoconazole cream, shampoo, foam bid x 1 month.
- Recalcitrant cases terbinafine bid x 2 weeks.
Onychomycosis

- Superficial white onychomycosis—treat with topical antifungals (ketoconazole/loprox) bid x 1 month or clear or Jublia qd until clear
- Onychomycosis—nail biopsy for PAS
- Terbinafine qd x 6 weeks (fingernails)
- Terbinafine qd x 12 weeks (toenails)
- Lab monitoring: LFT’s baseline, 6 weeks and 12 weeks

Steroid/Antifungal

- Steroids will make a fungal infection worse
- Majocchi’s granuloma
- Tinea Incognita

Tinea Versicolor

- Overgrowth of pityrosporum ovale
- Flares in the warmer months of the year, but for some can be chronic (tanners, frequent exercise)
- KOH useful in diagnosing
- Treatment: Diflucan 100mg po x 7 days
- Ketoconazole/loprox shampoo qd in shower
- Can use ketoconazole/loprox shampoo 2-3x week for prevention
Dermatitis

Contact
- Atopic
- Seborrheic
- Perioral
- Hand

Contact Dermatitis

- Most common allergens are soap, detergents, hair dyes and jewelry
- Can present due to an ingested allergen, especially eyelid dermatitis—nickel, artificial sweeteners

Patch testing options: Skim Test, NAC 80

Perioral Dermatitis

- More common in females
- Seasonal changes, stress related
- Often mistaken for acne or delayed treatment
- Considered a variant of rosacea

Treatment
- Doxycycline/Minocycline
- Finacea, Metrogel
- Clindamycin
Atopic Dermatitis

• "The itch that rashes"
• Often starts in infancy and usually improves with age
• Flexural areas, Morgan-Dennie lines
• Atopic Triad/March (Dermatitis, Allergies, Asthma)
• Psychosocial impact, family dynamics, growth

Figure 15
Atopic Dermatitis - Treatment

• Mild – moderate cases and flares:
  - Topical steroids paired with steroid-sparing agents (Protopic, Elidel, Eucrisa)
• Severe cases ages 12 and above:
  - Dupixent
• Bleach sprays
• Zyrtec/Singulair
• Moisturizers - Cerave, Cetaphil Pro

Figure 16

Seborrheic Dermatitis

• Overproduction of sebum—scalp, ears, eyebrows, ala, nasolabial fold
• If very itchy use keratolytic to help remove scale—Tsal shampoo, Am-Lactin lotion
• Ketoconazole shampoo/cream
• Fenestra, Ciclopiroxolamine (Elidel, Protopic)
• Vanicream Z-bar (zinc pyrithione)
• Moisturizers - Curotec, Cuphild Plus

Figure 17
Figure 18
Figure 19
Hand Dermatitis

• Accounts for almost 30% of all dermatitis
• Occupational, contact allergen, genetics are all causes
• Often chronic in nature, worse during winter months

Treatment
• Initially high potency steroid 2 weeks on/off
• Maintenance therapy—Eucrisa, Elidel, Protopic
• Moisturizers/Skin Barrier—Cerave Hand Cream, Skin Fix

Steroids

• Important for controlling acute skin disease and chronic
• Tachyphylaxis
• Skin Atrophy
• Limit amount/refills
• Alternate with steroid-sparing agents
• Intriginous areas/face proceed with caution

TAKING MY PATIENTS SOCKS OFF... SKINCELLS BELIEVE
Psoriasis

- Plaque, Inverse, Nail, Scalp
- Guttate Psoriasis
- Psoriatic Arthritis
- Long-term effects
- Psychosocial impact

**Treatment**
- Topical (Steroids, Retinoids, Vit D Analogs)
- Oral (Otezla)
- Biologics (TNF, IL-17, IL-23)

Hidradenitis Suppurativa

- Decaying skin disease that causes painful nodules under the skin
- Cause is unknown
- Can cause significant scarring and sinus tracking
- Psychosocial impact

**Treatment**
- Mild/Early cases can be managed with topical medications, oral antibiotics and spironolactone for females
- Only one medication is FDA approved for HS—Humira

*Definition of Teenager: Hormonal little freaks that run around thinking they know it all.*

[https://www.facebook.com/Justforfun](https://www.facebook.com/Justforfun)
Acne

“There is no single disease which causes more psychic trauma, more maladjustment between parents and children, more general insecurity and feelings of inferiority and greater sums of psychic suffering than does acne vulgaris.”

R. Fried 2019

Comedonal Acne

“Comedonal acne has two main causes: acne bacteria on the surface of the skin and plugged pores. Another common cause is hormonal changes in the body that cause the sebaceous glands on the skin to produce too much sebum, which mixes with dead skin cells on the surface of the skin and creates plugs that clog pores.”

Derm Review Nov 20 2018

Treatment mainstay is topical retinoids: tretinoin, tretinoin combo products, adapalene, tazarotene.

Consistency is key.

Set expectations—60-80% improvement in 6-8 weeks.
Inflammatory acne

Propionibacterium acnes (P. acnes)

Delayed treatment of comedonal acne

Treatment

- Antibiotics: Minocycline, Doxycycline, Seysara
- Topical antibiotics: Clindamycin, Sulfur
- Topical antibiotics/retinoid combo products (Veltin, clinda/tret)
- BPO/retinoid combo products (Epiduo, Epiduo Forte)

Cystic, Nodulocystic Acne

Severe acne with inflammation affecting the deeper layers of skin

Extremely likely to scar

The longer the delay in treatment more likely permanent and lasting results from the acne

Treatment

- Oral/Topical Antibiotics
- ACCUTANE (Isotretinoin)

Accutane Before/After
ACCUTANE

- Iplege
- Side effects
- Contraception
- Flare

Figure 39

Keratosis Pilaris

- Keratosis Pilaris: plugging of the hair follicles with keratin
- Genetic
- Worsens in the pre-pubescent/pubescent years

- Treatment
  - Keratolytics
  - Retinoids
  - Eucrisa

Figure 40

Figure 41
Hyperhidrosis

- Excessive sweating—axilla, hands, and feet most common
- Certain-Dri (OTC)
- Drysol (currently on backorder)
- Oral anticholinergics—Robinal
- Topical anticholinergics—Qbrexa
- Botox

Bromohidrosis

- Odor caused by bacteria due to hyperhidrosis
- Control the hyperhidrosis
- Control the bacteria
  - Antibacterial soaps
  - Panoxyl (Benzoyl Peroxide) Wash
  - Bleach baths/sprays
  - Hand sanitizer
  - Topical antibiotics (clindamycin wipes, solutions, gel)
Androgenetic Acne

- Adult female acne
- Lower on the face
- More cystic in nature
- “Never come to a head”

**Treatment**
- Spironolactone
- Sulfa cleansers
- Low dose Doxycycline
- Accutane

Androgenetic Alopecia

Post-menopausal females

- Frontal thinning, bi-temporal recession or widening part-line

**Treatment**
- Baseline lab: CBC, CMP, ferritin, Vit D, ANA reflex, T-4, and TSH
- Spironolactone

Hidradenitis Suppurativa

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- Cause is unknown
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**Treatment**
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Basal Cell Cancer

- Most common skin cancer
- In the US alone, more than 4 million cases will be diagnosed each year
- Slow growing
- Fair skinned
- UV sun exposure
- Multiple sunburns
- Different subtypes: nodular, pigmented, superficial, morpheaform, infiltrative to name a few, important in determining treatment plan.

Basal Cell

- Treatment of BCC depends on location, size, type and depth
  - Mohs
  - Curretage
  - Excision
  - Imiquimod (alone or in combination of other treatments)
Squamous Cell Cancer

- Second most common skin cancer
- Fair skin
- UV sun exposure/tanning beds
- HPV virus
- Age > 50
- History of actinic keratosis

Treatment of Squamous Cell

- Biopsy SCC in situ, depending on location
  - Excision
  - Curretage
  - M0Hs

Invasive SCC in appropriate locations
- M0Hs
Mohs Micrographic Surgery

- Gold standard for skin cancer treatment when location and skin cancer appropriate
- 98% cure rate
- Limits unnecessary tissue removal
- Mohs AUC app

Mohs AUC

Melanoma
Melanoma

- Most dangerous form of skin cancer
- Not as common as non-melanoma skin cancers
- 20-30% arise in existing moles
- Approximately 50% will arise in normal skin
- Fair skin
- Correlation between breast cancer and melanoma
- UV exposure/tanning beds—Tanning beds increase risk by 75%
- About 200,000 cases will be diagnosed in 2019 and around 7,000 people will die from melanoma in 2019
- 5 Year survival rate if caught in the early stages is 98%

Treatment of Melanoma

- Depends on pathology report and depth
- Breslow is most important in determining treatment
  - Breslow 0.1mm-0.7mm typically wide excision
  - Breslow 0.7-1.0 "gray area"
  - Breslow >1.0 referral to surgeon for wide excision and sentinel nodes, oncology consult
- Other things to consider: age, location, mitotic index

WHEN IN DOUBT—BIOPSY or REFER

- Shave biopsy
- Punch biopsy
- Excisional biopsy
Skin Cancer Prevention

- Limit sun exposure during most intense hours: 10am-4pm
- Hats, Sun Protective clothing
- Sunscreen
  - SPF >30
  - Physical Blocking Ingredients: Zinc oxide and Titanium Dioxide
  - Reapply water resistant for 80 minutes
- Regular Skin Exams
What’s the diagnosis?

What’s the diagnosis?

What’s the diagnosis?
What's the diagnosis?

Figure 79

Figure 80

Figure 81

Figure 83
Bibliography


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