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

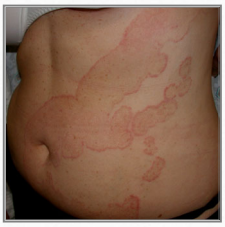
What you will take home

- 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

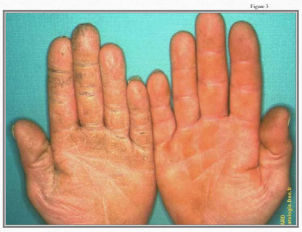
Figure 2



Tinea Corporis

- "Ringworm"
- Well-demarcated border, scaly, itchy
- Multiple fungi can cause
- Topical treatment is effective if not widespread—loprox cream bid x1 month
- Terbinafine qd x 2 weeks and topical therapy if widespread
- If involving scalp or beard area, needs oral therapy for 4-6 weeks

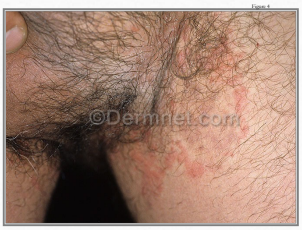
Figure 3



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 onychomyosis

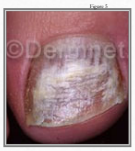
Figure 4



Tinea Cruris

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

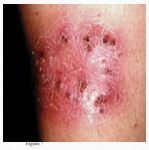
Onychomycosis

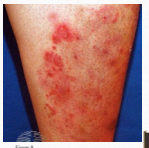


- Superficial White onychomycosis- treat with topical antifungals (ketoconazole/loprox) bid x 1month or clear or Jublia qd until clear
- Onychomycosis- nail biopsy for PAS
- Treat with topical Jublia (insurance coverage challenging)
- Terbinafine qd x 6 weeks (fingernails)
- Terbinafine qd x 12 weeks (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 pityrisporin 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 7days
- Ketoconazole/Loprox shampoo qd in shower
- Can use ketoconazole/loprox shampoo 2-3 x week for prevention

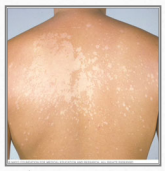


Figure 10

Dermatitis

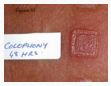
- Contact
- Atopic
- Seborrheic
- Perioral
- Hand

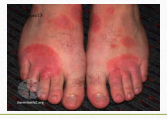
Contact Dermatitis

Most common allergens are soap, detergents, hair dyes and jewelry

Can present due to an ingested allergen, especially eyelid dermatitis—nickel, artificial sweetners

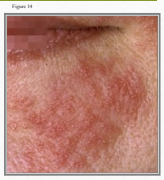
Patch testing options: 36 True, NAC 80



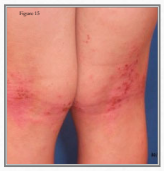
Perioral Dermatitis

- More common in females
- Season changes, stress related
- Often mistaken for acne or delayed treatment
- Considered a variant of rosacea
- Treatment
  - Doxycycline/Minocycline
  - Finacea, Metrogel
  - Clindaycin

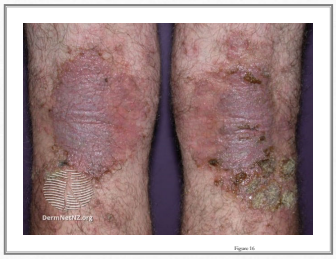


Atopic Dermatitis

- "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



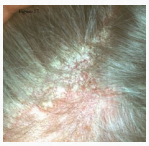
Atopic Dermatitis--Treatment

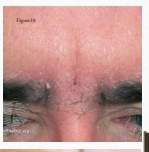


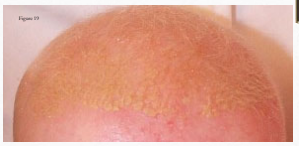
- Mild –moderate cases and flares- topical steroids paired with steroid-sparing agents (Protopic, Elidel, Eucrisa)
- Severe cases ages 12 and above- Dupixent
- Bleach sprays
- Zyrtec/Singulair
- Moisturizers- Cerave, Cetaphil Pro Line

Seborrheic Dermatitis

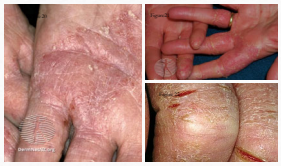
- Overproduction of sebum—scalp, ears, eyebrow, ala, and nasolabial fold
- If very scaly use keratolytic to help remove scale—Tsal shampoo, Am- lactin lotion
- Ketoconazole shampoo/cream
- Eucrisa, Calcineurin Inhibitors (Elidel, Protopic)
- Vanicream Z-bar (zinc pyrithione)
- Steroids for severely inflamed or recalcitrant cases







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
  - Maintainence therapy—Eucrisa, Elidel, Protopic
  - Moisturizers/Skin Barrier –Cerave Hand Cream, Skin Fix

Steroids

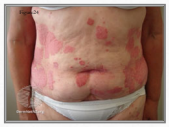
Figure 22

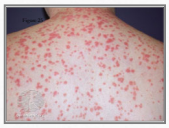
- Important for controlling acute skin disease and chronic
- Tachyphylaxis
- Skin Atrophy
- Limit amount/refills
- Alternate with steroid-sparing agents
- Intriginous areas/face proceed with caution

Figure 24

Psoriasis

Plaque, Inverse, Nail, Scalp
Guttate Psoriasis
Psoriatic Athritis
Long term effects
Psychosocial Impact

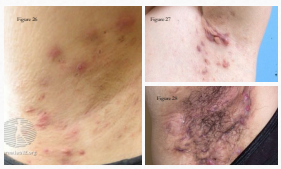




Treatment

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

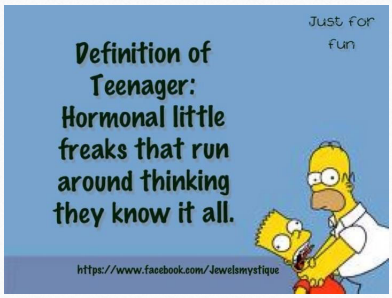
Hidradentitis Suppurativa



- Devasting 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



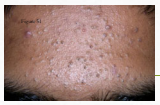
Acne

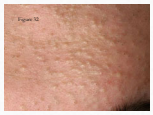
"There is no single disease which causes more psychic trauma, more maladjustment between parents and children, more general insecurity and feelings of inferiority and greater sums of psychic suffering than does acne vulgaris."[1] R. Fried 2019

"I've got goose pimples."

Figure 30

Comedonal Acne





- Comedonal acne has two main causes: **acne bacteria on the surface of the skin and clogged pores**. Another common cause is **hormonal changes** in the body that cause the sebaceous glands in the skin to produce too much sebum, which mixes with dead skin cells on the surface of the skin and to create 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

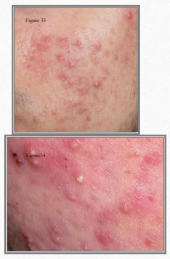
Inflammatory acne

Propionibacterium acnes (P. acnes)

Delayed treatment of comedonal acne

Treatment

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



Cystic, Nodulocystic Acne

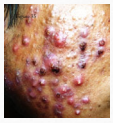
Severe acne with inflammation affecting the deeper layers of skin

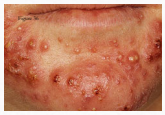
Extremely likely to scar

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

Treatment

- Oral/Topical Antibiotics
- ACCUTANE (Isotretinoin)





Accutane Before/After

Figure 37

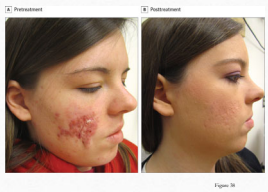


Figure 38

ACCUTANE

- Ipledge
- Side effects
- Contraception
- Forms

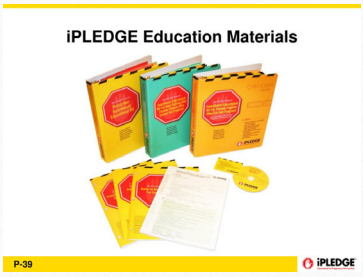


Figure 39

Keratosis Pilaris

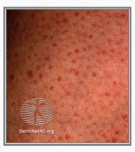


Figure 40

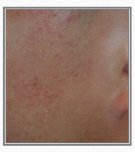


Figure 41

- Keratosis Pilaris- plugging of the hair follicles with keratin
- Genetic
- Worsens in the pre-pubescent/pubescent years
- Treatment
  - Keratolytics
  - Retinoids
  - Eucrisa

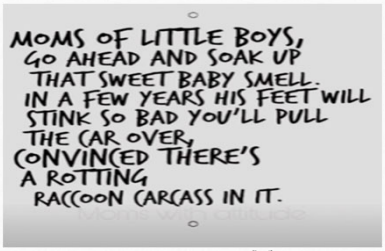


Figure 42

Hyperhidrosis

- Excessive sweating—axilla, hands, and feet most common
- Certain-Dri (OTC)
- Drysol (currently on backorder)
- Oral anticholenergics—Robinal
- Topical anticholenergics-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, solution, 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
- Aczone

Figure 43

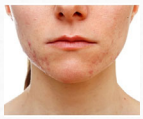


Figure 44

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

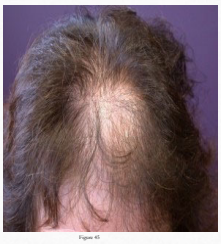


Figure 45

Hidradentitis Suppurativa

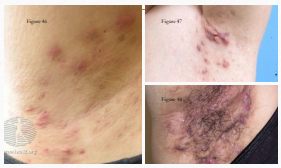


Figure 46

Figure 47

Figure 48

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

Treatment

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Skin Cancer

Non-Melanoma Skin Cancer

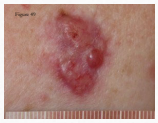
Basal Cell

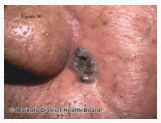
Squamous Cell

Basal Cell Skin Cancer

Basal Cell Cancer

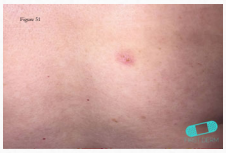
- Most common skin cancer
- In the US alone, more than 4 million cases will be diagnosed each year
- Slow growing
- Fair skinned
- UV sun exposure
- Multiple sunburns
- Different subtypes (nodular, pigmented, superficial, morphea-form, infiltrative- to name a few). Important in determining treatment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



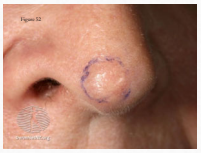


Basal Cell

BCC



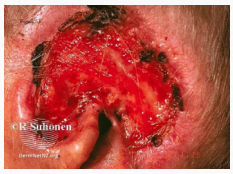
BCC



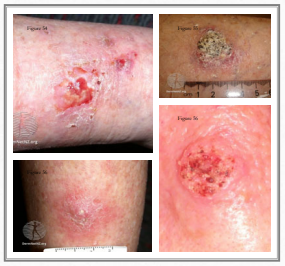
Treatment of BCC

Depends on location, size, type and depth

- MOHs
- Curretage
- Excision
- Imiquimod (alone or in combination of other treatments)

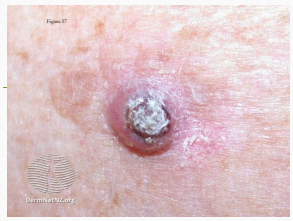


Squamous Cell Cancer



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

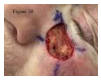
Bowens (SCC in situ) depending on location

- Excision
- Curretage
- MOHs

Invasive SCC/or appropriate locations

- MOHs

Mohs Micrographic Surgery



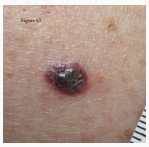
- Gold standard for skin cancer treatment when location and skin cancer appropriate
- 98% cure rate
- Limits unnecessary tissue removal
- Mohs AUC app

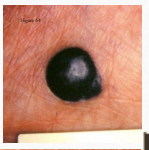
Mohs AUC

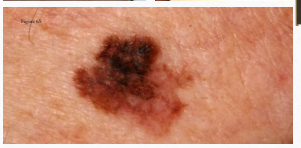
Melanoma

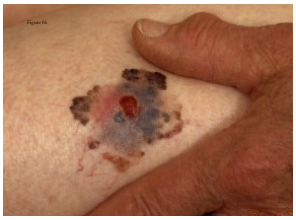
Melanoma

- Most dangerous form of skin cancer
- Not as common as non melanoma skin cancers
- 20-30% arise in existing moles
- Approximately 70% will arise in normal skin
- Fair skin
- Correlation between breast cancer and melanoma
- UV exposure/tanning beds—Tanning beds increase risk by 75%
- Almost 200,000 case 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

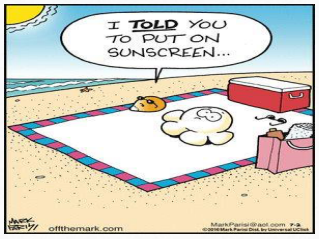
- Depends on pathology report and depth
- Breslow is most important in determine treatment
  - Breslow 0.1mm-0.7mm typically wide excision
  - Breslow 0.7-1.0 "gray area"
  - Breslow >1.0 referral to surgeon for wide excision and sentinel nodes, oncology consult
  - Other things to consider: age, location,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



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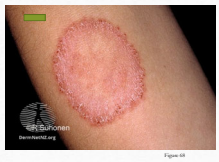

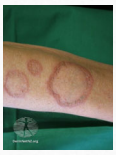

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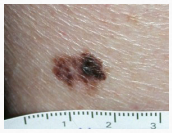

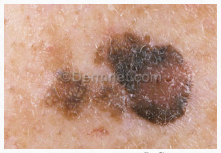

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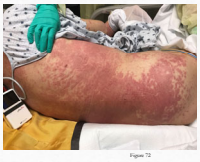

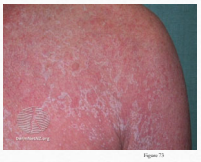

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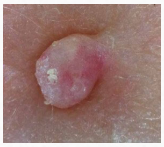


Figure 73

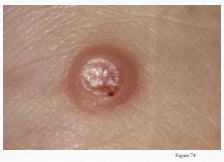
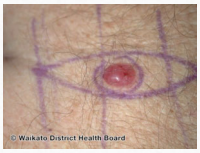


Figure 74

What's the diagnosis?



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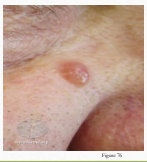
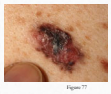


Figure 76

What's the diagnosis?



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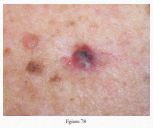

Figure 78

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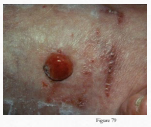

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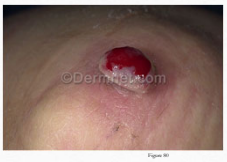

Figure 80

What the diagnosis?

Figure 80

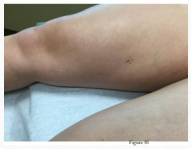

Figure 80

What's the diagnosis?

Figure 83

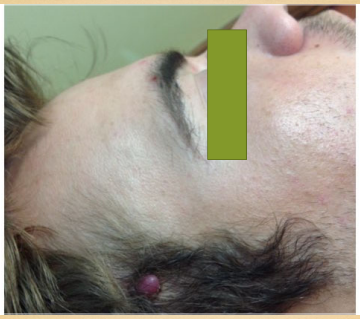

Figure 84

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