# Common Skin Complaints and Updates

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MedNet21 Center for Continuing Medical Education

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## Disclosures

- No financial disclosures
- I will be discussing the off-label use of spironolactone in the treatment of acne

## Agenda

- Sunscreen
- Acne vulgaris
- Rosacea
- Seborrheic dermatitis
- Tinea
- Intertrigo
- Scabies
- Herpes

## Sunscreen

- **Broad-spectrum** (protects against UVA and UVB rays)
- **SPF 30 or greater**
- **Water-resistant**
- Chemical vs physical sunscreens
  - **Physical: zinc oxide or titanium dioxide**
  - **Tinted sunscreens** protect against **visible light (indoors)** which can worsen dark spots and melasma

## Sunscreen

- **FDA** issued a **proposed rule** in 2019, later a **proposed order** in 2021
  - Generally recognized as safe and effective (GRASE)
    - **Zinc oxide**
    - **Titanium dioxide**
  - Not GRASE (these aren't present in legal US sunscreens)
    - PABA
    - Trolamine salicylate
  - Requesting more information
    - Commonly used in US: ensulizole, octisalate, homosalate, octocrylene, octinoxate, oxybenzone, avobenzone
    - Not commonly used in US: cinoxate, dioxybenzone, meradimate, padimate O, sulisobenzone

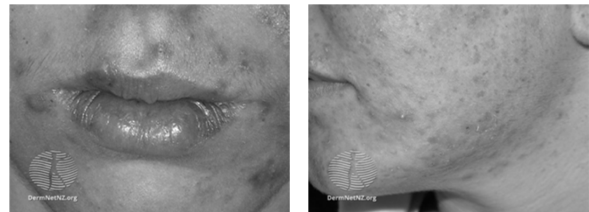
## Take home sunscreen points

- The FDA has not deemed these ingredients unsafe and has not asked the public to stop using sunscreens that contain them
- If the proposed rule makes you or your patients uneasy, look for sunscreens whose **active ingredients** are the physical blockers **zinc oxide or titanium dioxide**

## Acne vulgaris

- Assess severity
  - Mild
  - Nodules, scarring
    - Moderate
    - Severe
- Target treatments based on severity
  - **Mild** may respond to **topicals alone**
  - **Moderate to severe** typically necessitates **oral therapy** (antibiotics, isotretinoin)
- Key point: **oral antibiotics should be prescribed WITH topicals** as the latter will hopefully serve as the long-term maintenance regimen

## Acne vulgaris: moderate



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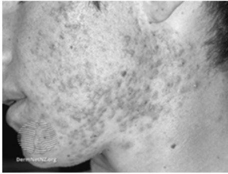
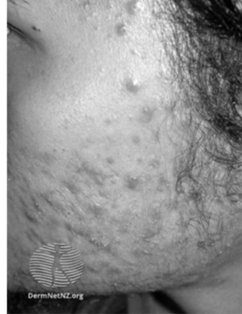
## Acne vulgaris: severe





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## Acne vulgaris

- Prescription topicals
  - **Topical antibiotics** (**clindamycin, erythromycin**): should **be given with anti-bacterial** like **benzoyl peroxide (BPO)** to prevent formation of antibiotic-resistant bacteria
    - BPO 5%/Clindamycin 1%(Benzaclin) and BPO 5%/Erythromycin 3% (Benzamycin) are popular
    - BPO comes in wash, solution, and gel forms
      - Wash is great for back/chest acne
    - Some patients may only tolerate BPO as a spot treatment because of side effects (dryness)

## Acne vulgaris

- Prescription topicals
  - Topical antibiotics
    - **Dapsone 7.5% gel**: can consider if above topical antibiotics not effective or patient not tolerating combo with BPO, typically **more expensive/harder to get** (even though now generic), **cannot use with BPO due to temporary yellow/orange discoloration** of skin and hair

## Acne vulgaris

- **Topical retinoids (adapalene, tretinoin):** mainstay of acne treatment, works on skin turnover, particularly effective for comedones, can improve dyspigmentation, a bit of wrinkle reduction
  - Apply to full face (avoid periocular skin)
  - **Tretinoin**: I typically start at 0.05% (mid-strength) and escalate to 0.1% (highest strength) if tolerated
  - **Adapalene**: low strength (0.1%) now available OTC

## Acne vulgaris

- Counseling
  - Acne **worsens before it improves**
  - Can take **3-4 months to see full effects** of meds
  - Dryness/flaking/redness/peeling! Most will **build tolerance with consistent use**, but minority of patients cannot tolerate these
  - Use **non-comedogenic moisturizer** to counteract side effects
  - Start topical retinoids every other night and **increase to nightly as tolerated**
- **Gentle face washes** are best, do not need to scrub harshly

## Acne vulgaris

- Oral antibiotics
  - Guidelines advise **only 3-4 month courses**!
    - If patient does not respond after 3-4 months OR does not maintain adequate response on topicals alone after finishing antibiotics, should be referred to derm for consideration of isotretinoin
  - Because of side effect profile (short and long term), **doxycycline is typically preferred over minocycline or bactrim**
  - Typical regimen: **doxycycline 100 mg BID x 3-4 months**
    - **WITH topicals!**
- Isotretinoin (only dermatologist can prescribe)

## Special considerations

- **Spironolactone** in females
  - **Off-label, but extensively used**
  - Unlike oral antibiotics, **can be long-term option**
  - 50 mg daily can suffice, but can increase to 100-200 mg daily
  - Counseling: should not get pregnant while on drug, debate over lab monitoring, I don't typically check potassium unless taking greater than 100 mg daily, can cause **menstrual irregularities** like spotting

## Special considerations

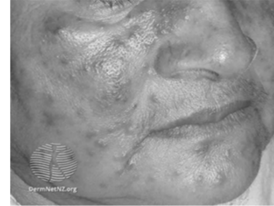
- Newer topicals: studies almost always compare to vehicle alone (not existing acne topicals), usually more expensive/harder to get
- **Clascoterone 1% cream** (Winlevi, 2020): topical androgen receptor inhibitor, approved for males and females age 12 and older, applied BID
  - Consider adrenal suppression when using large amounts
  - I consider in patients whom I suspect hormonal component to acne, females who don't want spironolactone, can use with topical retinoid if tolerated
- **Clindamycin 1.2%/adapalene 0.15%/BPO 3.1% gel** (Cabtreo, 2023)

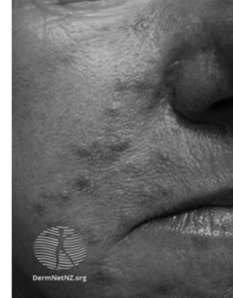
## Benzenes in BPO products

- **Benzene** is a **carcinogen** and can form when BPO degrades, low levels of benzenes are acceptable but high levels are concerning
- **Independent testing lab** (Valisure) studied levels of benzene in BPO-containing cleansers and lotions, found **elevated levels** of benzene when products incubated at **room temp, 98.6 F (body temp), 122 F (accepted pharmaceutical stability testing temp), and 155 F (hot car temp)**
- Valisure used FDA's methods for measuring benzenes which are more accurate than USP's methods
- My take: do not dismiss findings, more data needed, telling pts to refrigerate BPO products, discard after 3-6 months, avoid heated storage

https://www.dermatologytimes.com/view/updates-on-benzene-in-benzoyl-peroxide-products-at-aad

## Rosacea





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https://dermnetnz.org/images/rosacea-images

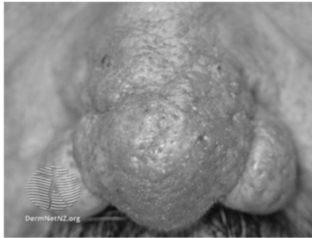
## Rosacea

- **Pink bumps and pustules** respond to **topicals and oral antibiotics**, but redness does not typically respond much
  - **Metronidazole gel or cream** daily (1% - once daily, 0.75% BID)
    - **Azelaic acid 15% gel** once daily: some activity against redness, more irritating than others
    - **Ivermectin 1% cream** once daily
    - Sodium and sulfur combo: **sulfacetamide sodium-sulfur 10%-5% topical lotion** once daily (great for combo rosacea/sebderm)
  - Some compounding pharmacies combine several of above into one topical
  - **Doxycycline**: flare dosing is similar to acne (100 mg BID x 3-4 months), if pts recurs off flare dosing can consider **40-50 mg once daily long term**

## Rosacea

- Redness/flushing
  - **Avoid triggers**
  - **Sun protection**
  - **Gentle skin care**
  - **Topical vasoconstrictors** (brimonidine 0.33% gel, oxymetazolone 1% cream): typically used QAM
    - More data on oxymetazolone re: rebound redness
  - **Most responsive to laser** (PDL, KTP), usually requires cash payment, multiple treatments

## Phymatous rosacea



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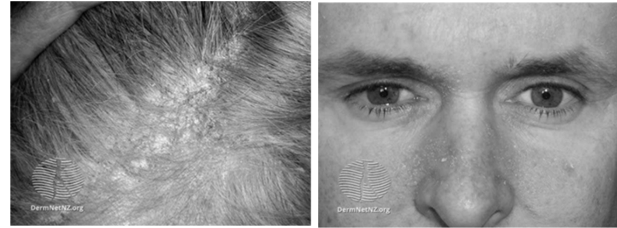
## Seborrheic dermatitis



Source:DermNet - CC BY-NC-ND 3.0 NZ
https://dermnetnz.org/topics/seborrhoeic-dermatitis

## Seborrheic dermatitis

- **Ketoconazole 2% shampoo** is mainstay, works better than OTC shampoos, use **2-3 times weekly**, leave on for 2 min or so before rinsing off, can also use as face wash
  - **Ciclopirox 1% shampoo** is alternative for those who don't like how keto makes their hair feel
  - Can also use **ketoconazole 2% cream** BID x 2-3 week to active rash on face
  - Alterating shampoos, including OTCs, helpful for some
- **Topical steroids** in solution or oil form can help with itch
  - I typically give clobetasol 0.05% solution – can use BID prn to itchy spots on scalp
  - Alternatives: lidex (fluocinonide 0.05% solution), dermasmooth (fluocinolone 0.01% oil)

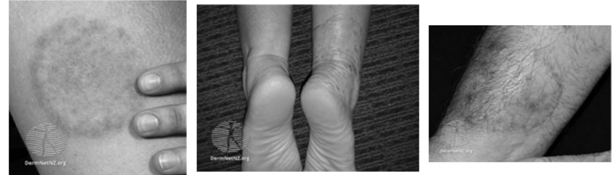
## Seborrheic dermatitis

- Differential diagnosis: psoriasis

## Tinea

- **Tinea capitis** is **rare in adults** (more likely in children), flaky scalp should be treated as seborrheic dermatitis, if not responsive should be referred to derm
- Tinea corporis
- Tinea pedis
- Tinea unguum/onychomycosis

## Tinea corporis



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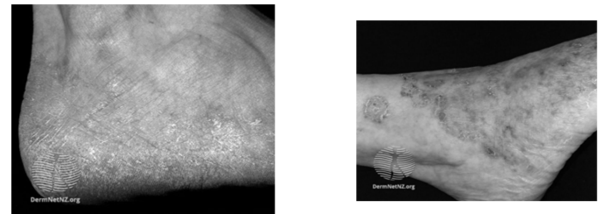
## Tinea corporis

- If focal, treat with **ketoconazole 2% cream BID x 2-3 weeks**, refer to derm if does not clear
- If more extensive, can treat with oral antifungals, I typically use **terbinafine 250 mg daily x 2 weeks** if no contraindications, refer to derm if does not clear
- Differential diagnoses: nummular dermatitis (variant of eczema), granuloma annulare, cutaneous T-cell lymphoma

## Tinea pedis



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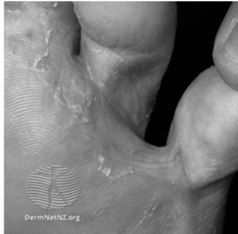
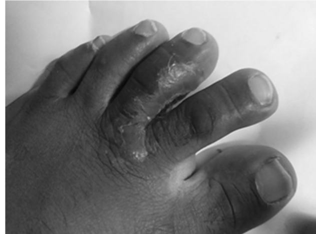
## Tinea pedis





Source:DermNet - CC BY-NC-ND 3.0 NZ
https://dermnetnz.org/topics/tinea-pedis-images

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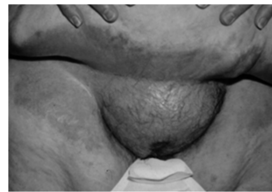
## Tinea pedis

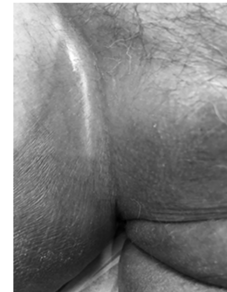
- Tinea pedis (and lower legs): can be itchy, can also service as nidus for infection (cellulitis) so I'm more inclined to treat
  - I first try **ketoconazole 2% cream BID x 2-3 weeks** when rash active, if responds but recurs have pt use BIW even when clear

## Tinea unguum/onychomycosis

- Unsightly for pts, but not dangerous, **treatments are not reliably effective**, topicals have about 5-8% success, oral antifungals have about 50% success rate
  - **Oral terbinafine** 250 mg x 3 months, debate about lab monitoring, some do LFTs prior to starting and after 6 weeks in older pts or those with co-morbidities
  - **Pulse itraconazole**, beware of drug-drug interactions

## Intertrigo





Brodell RB, et al. Intertrigo. In: UpToDate, Connor RF (Ed), Wolters Kluwer. (Accessed May 7, 2024.)

## Intertrigo

- Presents in **skin folds**, most commonly inguinal folds and under breasts, sometimes in axillae
- Secondary to a combination of **heat, moisture, bacteria, fungus/yeast**
- Mild cases respond to topical anti-fungals/yeast, more severe cases require topical anti-inflammatory and barrier cream (diaper paste) as well and/or oral antifungal

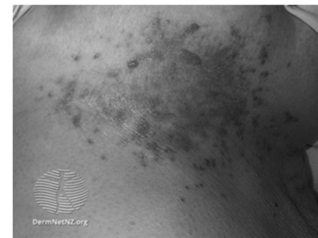
## Intertrigo

- I generally start with **ketoconazole 2% cream** BID x 2-3 weeks to active rash, if resolves but recurs try use BIW even when clear
  - If interested in clearing faster/providing more immediate relief, you can also have pt use **hydrocortisone 2.5% cream or ointment 1-2 times daily for 1 week BUT must be careful about overuse** bc of side effects and that overuse of topical steroids may exacerbate some of the drivers of intertrigo long-term

## Intertrigo

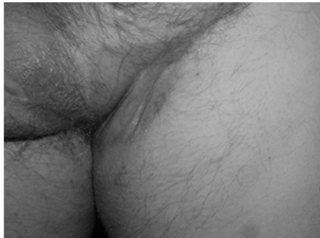
- If recalcitrant, I have patients start using **zinc oxide barrier/diaper paste** (I like Triple Paste or Extra Strength Desitin) daily, always applying over any prescription topicals
- Sometimes short courses of **oral fluconazole** are necessary for quicker relief, but topicals will still be maintenance regimen
  - If **satellite papules**, likely strong **yeast** component and would go for fluconazole earlier

## Candida intertrigo



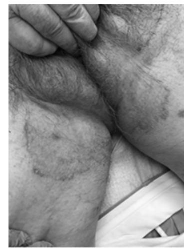
Source:DermNet - CC BY-NC-ND 3.0 NZ
https://dermnetnz.org/topics/skin-problems-associated-with-diabetes-mellitus

## Inverse psoriasis



Brodell RB, et al. Intertrigo. In: UpToDate, Connor RF (Ed), Wolters Kluwer. (Accessed May 7, 2024.)

## Tinea cruris



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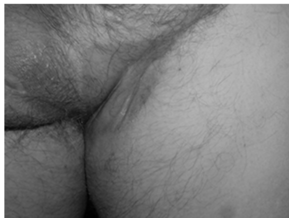
## Inverse psoriasis



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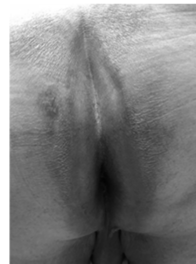
## Intertrigo



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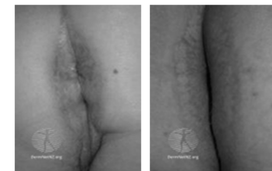
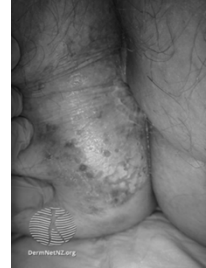
## Lichen sclerosus



## Lichen sclerosus

- **Females: labial, perineum, perianal** skin
- Clinical clues: **tearing** during intercourse, **fissures** (sometimes very shallow), **itching and/or pain** (but not always), **loss of architecture** later in disease course
- Also consider in pre-menopausal adult women
- **Males:** typically involves **tip/head of penis**
- **Requires high potency topical steroids** (usually **clobetasol 0.05% ointment**) usually daily during flares and twice weekly as ongoing maintenance
- Recommend **specialist referral** to confirm diagnosis (often with biopsy) and for ongoing monitoring given increased risk for dysplasia

## Perianal extramammary Paget disease




Source:DermNet - CC BY-NC-ND 3.0 NZ

https://dermnetnz.org/topics/extramammary-paget-disease

## Combination topicals

- **Clotriamzole/betamethasone**: dermatologists mostly steer clear of combination topical anti-fungal/yeast and steroids bc of the risk for **tinea incognito**
  - Topical steroid helps with visible inflammation in the short term, but actually promotes the growth of fungus/yeast (if they're present) such that the rash continues to recur and the fungus/yeast are actually driven deeper in the skin and are harder to treat, eventually requiring oral meds

## Topical anti-inflammatories

- Topical steroids
  - **Face, groin, folds of skin: low strength**
    - **Hydrocortisone 2.5%** cream/ointment
    - **Desonide 0.05%** cream/ointment
  - **Torso and extremities: medium strength**
    - **Triamcinolone 0.1%** cream/ointment
  - **Hands, feet, scalp: high strength**
    - **Clobetasol 0.05%** cream/ointment/solution (scalp)

## Topical anti-inflammatories

- General rules for topical steroids
  - **Ointments stronger than creams** but also **more greasy**
  - **Creams can be more irritating than ointments** bc they contain alcohol
  - Can use BID prn, if using BID daily need to start thinking about taking breaks, I advise BID Mon-Fri and breaks on weekends OR BID x 2 weeks and then 1 week break before restarting

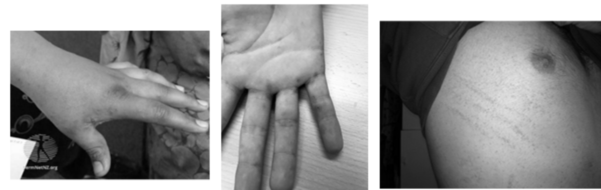
## Topical anti-inflammatories

- Topical non-steroidal anti-inflammatories
  - Can be nice because you don't have to worry about topical steroid side effects of thinning/atrophy with consistent use
  - Burning sensation may limit use in some
  - Generally not used diffusely, often considered for face, folds, neck
  - **Tacrolimus 0.1% ointment**: BID prn to affected skin
    - Can be used on face, groin, and folds, but may be more likely to burn in these locations
    - 0.03% ointment is strength approved for kids, may be helpful for pts who cannot tolerate 0.1% secondary to burning
  - **Pimecrolimus 0.1% cream**: BID prn to affected skin

## Topicals for itchy, dry skin

- **Thick, bland** emollient **without scent** in **tub or jar**
- Vaseline/petroleum jelly
- Cetaphil
- CeraVe
- Vanicream
- Sarna anti-itch cream/lotion (camphor-menthol 0.5%/0.5%)
- Aquaphor: contains lanolin which is an allergen for some

## Scabies



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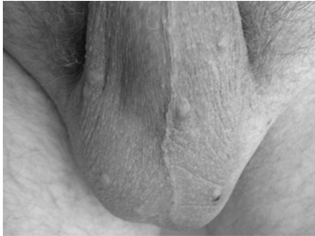
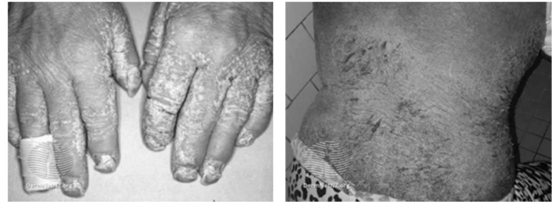
## Scabies



Author: Dogad75

## Scabies



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https://dermnetnz.org/topics/tinea-pedis-images

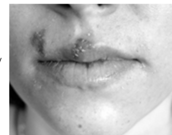
## Scabies

- **Permethrin 5% cream**: apply from neck down once, rinse off 6-8 hours later, repeat this 7 days later
- Alternative: **oral ivermectin** 200 mcg/kg as single dose followed by a repeat dose in 1-2 weeks
  - 0.2 x weight in kg
  - Only comes in 3 mg pills
- Wash sheets in hot water
- Close contacts should be treated as well

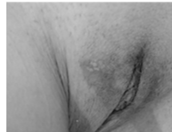
**Herpes simplex virus (HSV)**

- Classic presentations: orofacial or genital

https://commons.wikimedia.org/wiki/File:Herpes_labialis_-_opryszczka_wargowa.jpg



https://commons.wikimedia.org/wiki/File:Genital_herpes_female.jpg



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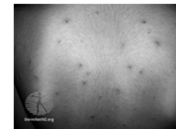
**Varicella zoster virus (VZV)**

- Classic presentations: varicella (chicken pox) or zoster (shingles)



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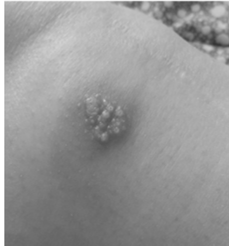
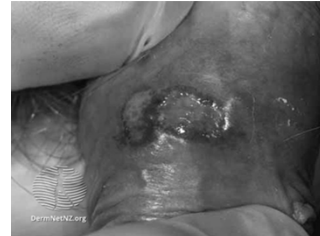
https://dermnetnz.org/topics/tinea-pedis-images

## HSV and VZV: 'dew drops on a rose petal'



Author: Arenavittorio - CC BY-SA 4.0

## HSV and VZV: scalloped borders

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https://dermnetnz.org/topics/tinea-pedis-images

## HSV and VZV

- Diagnosis
  - PCR swab the base of lesion (de-roof if base is not exposed)
  - Send for HSV 1/2 PCR and VZV PCR (2 separate orders)

## HSV and VZV

- Treatment
  - **Best if initiated within 72 hours of onset**, but likely still some benefit thereafter (definitely if still getting new lesions)
  - Recommend looking up because regimen depends on HSV or VZV, local or generalized, primary or recurrent, and whether patient is immunocompromised
  - I prefer valacyclovir over acyclovir because less frequent dosing and better absorbed