Common Skin Complaints and Updates

Natalie Spaccarelli, MD
Assistant Professor, Department of Dermatology
Director, Pigmented Lesions and High Risk Skin Cancer Clinic
The Ohio State University Wexner Medical Center

MedNet21
Center for Continuing Medical Education

The Ohio State University
Wexner Medical Center

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

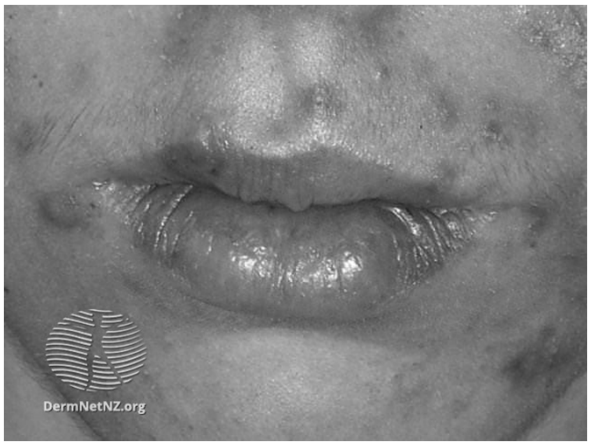
Take home sunscreen points

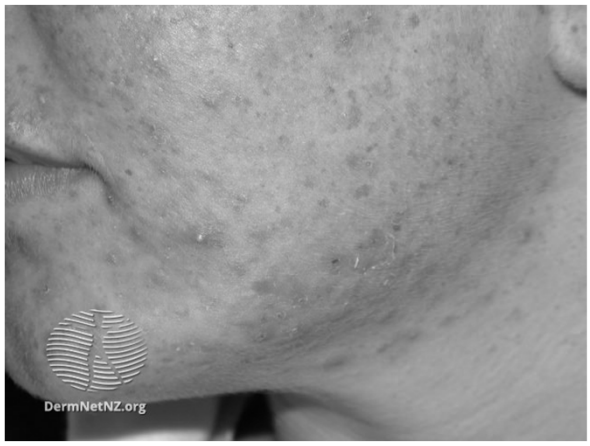
- The FDA has not deemed these ingredients unsafe and has not asked the public to stop using sunscreens that contain them
- If the proposed rule makes you or your patients uneasy, look for sunscreens whose **active ingredients** are the physical blockers **zinc oxide or titanium dioxide**

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

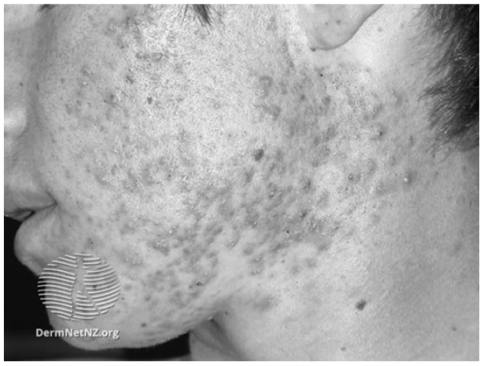
Acne vulgaris: moderate

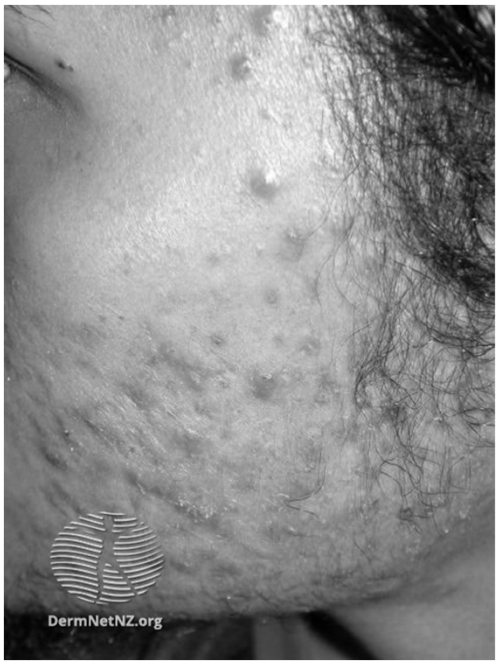




Source:DermNet - https://dermnetnz.org/topics/acne-face-images

Acne vulgaris: severe





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

https://dermnetnz.org/topics/acne-face-images

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

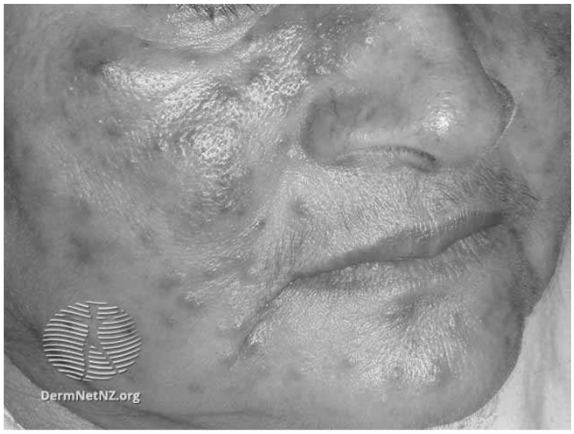
- Newer topicals: studies almost always compare to vehicle alone (not existing acne topicals), usually more expensive/harder to get
- **Clascoterone 1% cream** (Winlevi, 2020): topical androgen receptor inhibitor, approved for males and females age 12 and older, applied BID
  - Consider adrenal suppression 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)

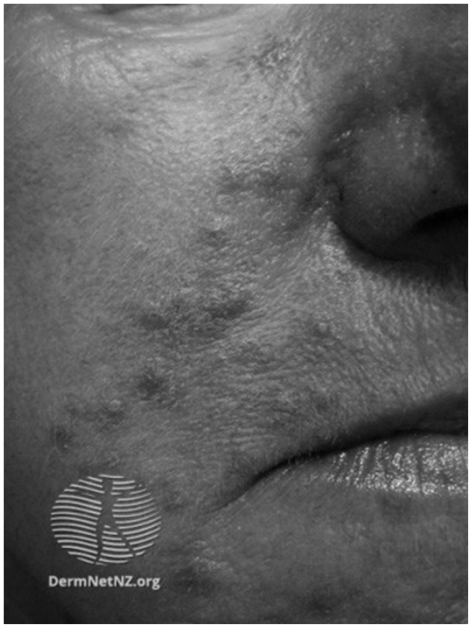
Benzenes in BPO products

- **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





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

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

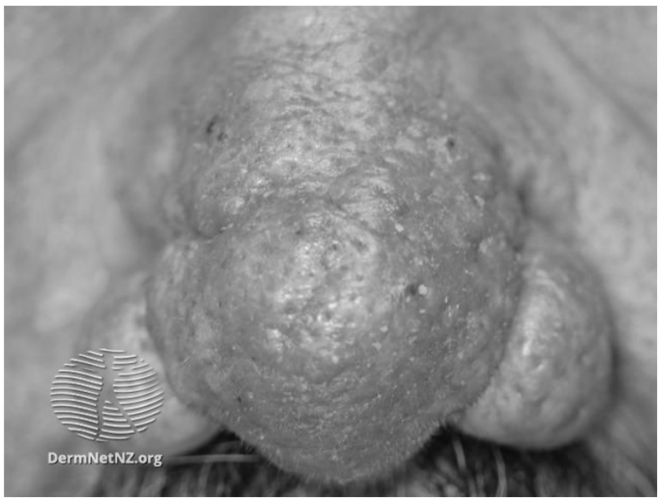
Rosacea

- **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

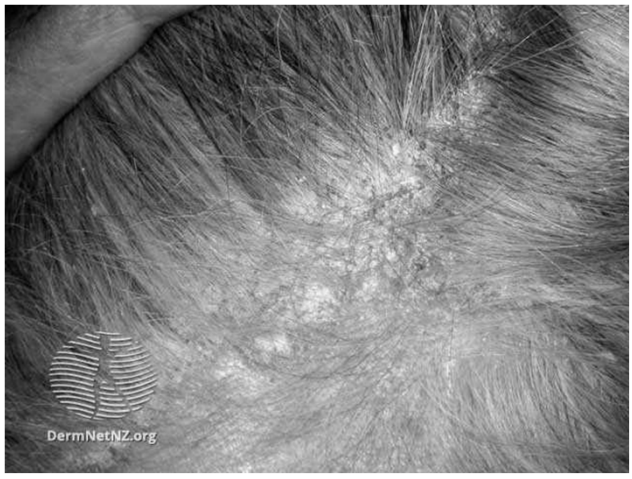
Phymatous rosacea

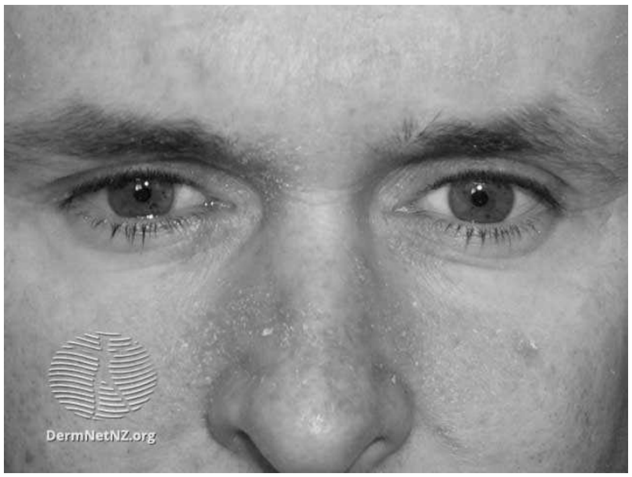


Source:DermNet - CC BY-NC-ND 3.0 NZ

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

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)

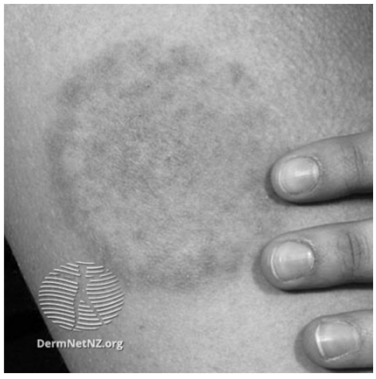
Seborrheic dermatitis

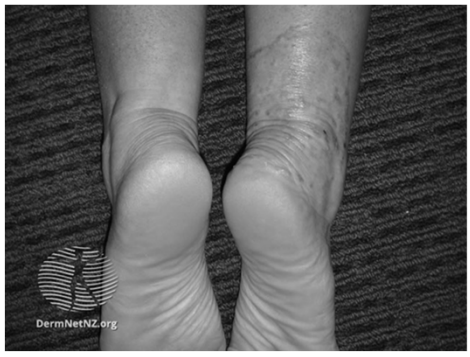
- Differential diagnosis: psoriasis

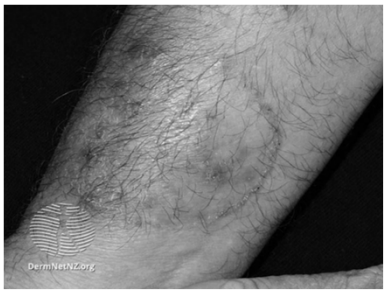
Tinea

- **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







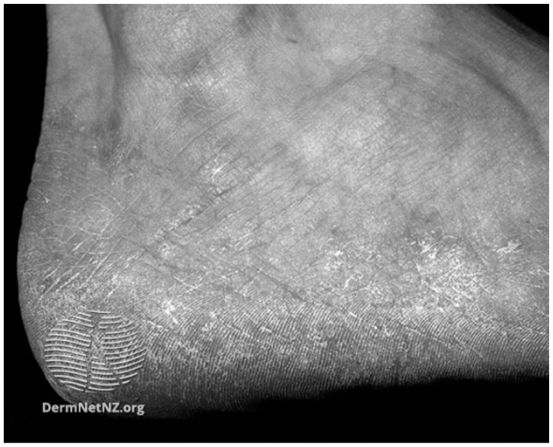
Source:DermNet - CC BY-NC-ND 3.0 NZ

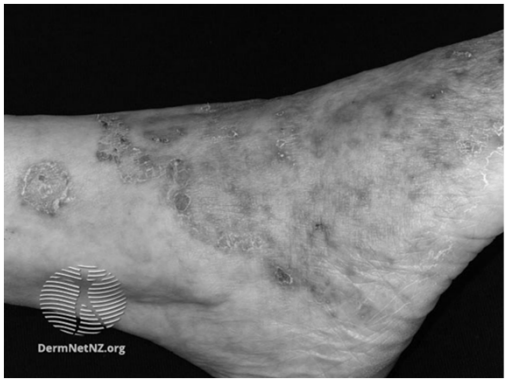
https://dermnetnz.org/topics/tinea-corporis-images

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

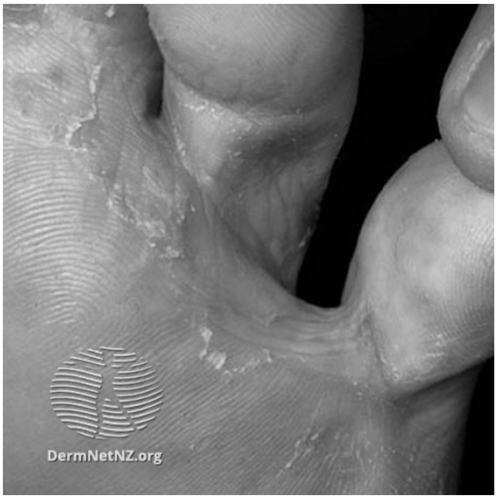




Source:DermNet - CC BY-NC-ND 3.0 NZ

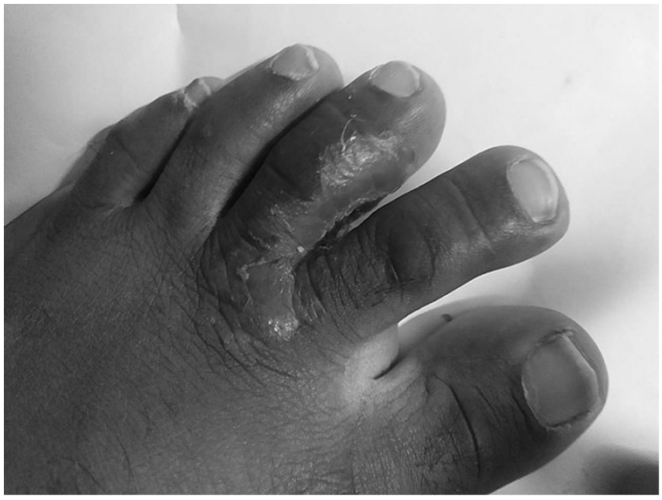
https://dermnetnz.org/topics/tinea-pedis-images

Tinea pedis



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

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



Author: Dr Hari K Kasi - CC BY-NC-ND 3.0 NZ

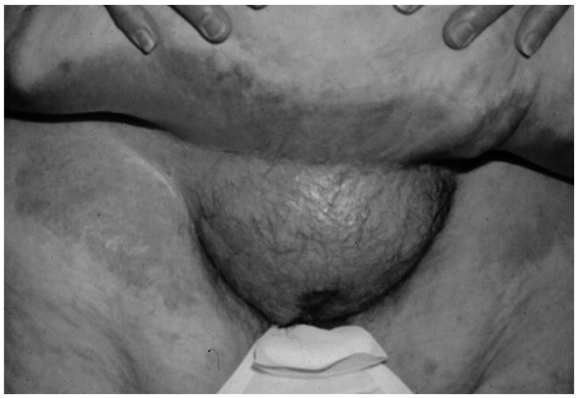
Tinea pedis

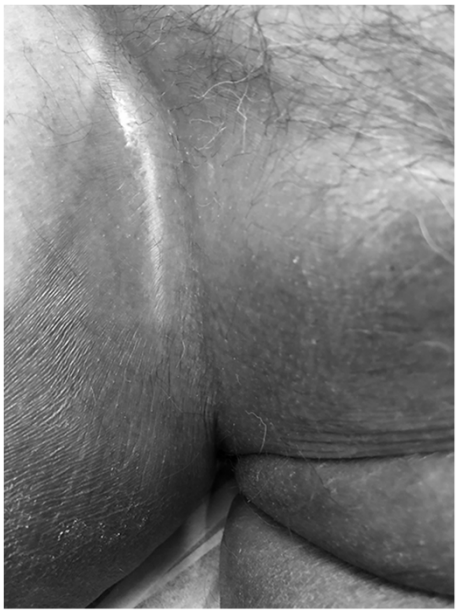
- Tinea pedis (and lower legs): can be itchy, can also service as nidus for infection (cellulitis) so I'm more inclined to treat
  - I first try **ketoconazole 2% cream BID x 2-3 weeks** when rash active, if responds but recurs have pt use BIW even when clear

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

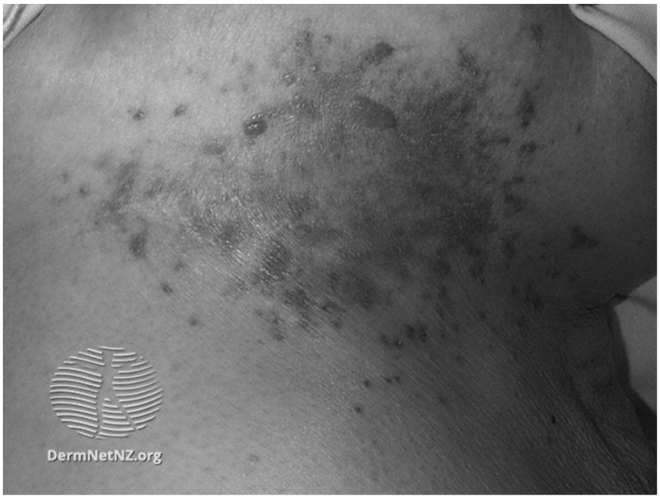
Intertrigo

- 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 recalitrant, 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

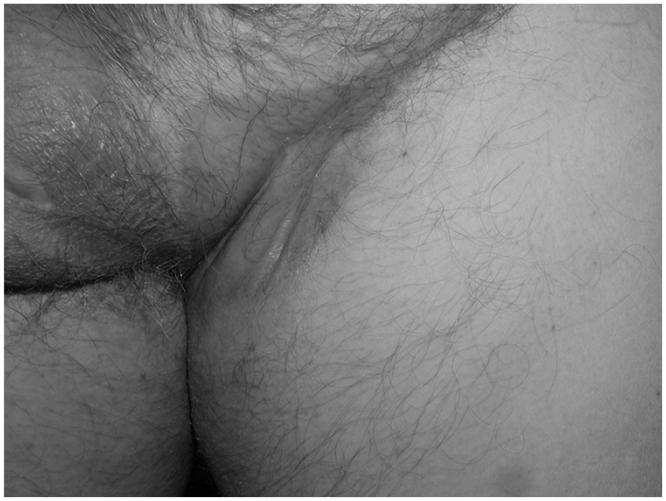
Candida intertrigo



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

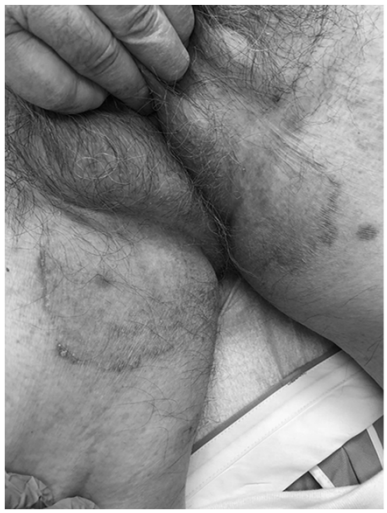
https://dermnetnz.org/topics/skin-problems-associated-with-diabetes-mellitus

Inverse psoriasis



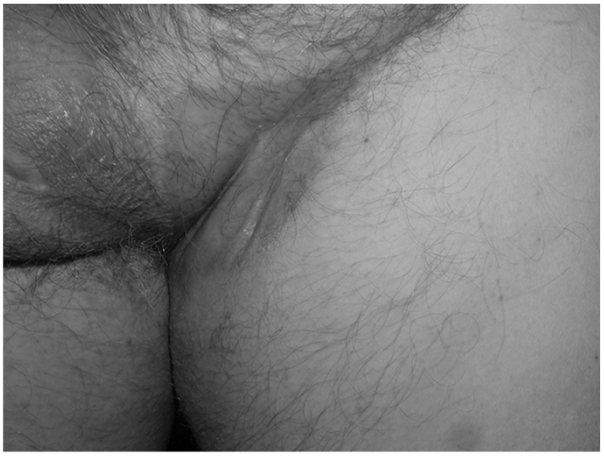
Brodell RB, et al. Intertrigo. In: UpToDate, Connor RF (Ed), Wolters Kluwer. (Accessed May 7, 2024.)

Tinea cruris



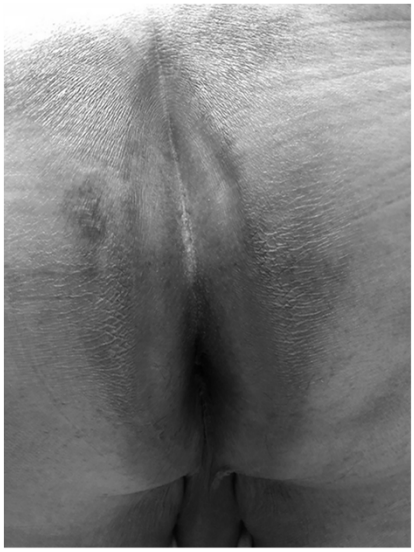
Brodell RB, et al. Intertrigo. In: UpToDate, Connor RF (Ed), Wolters Kluwer. (Accessed May 7, 2024.)

Inverse psoriasis



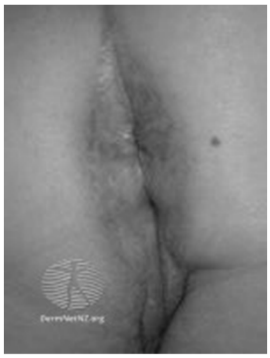
Brodell RB, et al. Intertrigo. In: UpToDate, Connor RF (Ed), Wolters Kluwer. (Accessed May 7, 2024.)

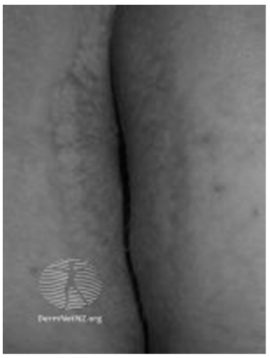
Intertrigo



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

Lichen sclerosus

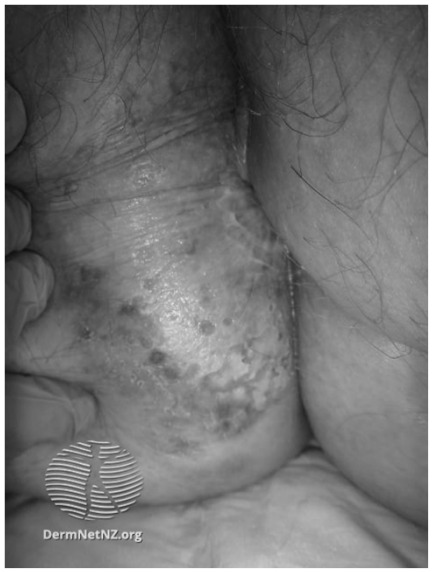




Lichen sclerosus

- **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

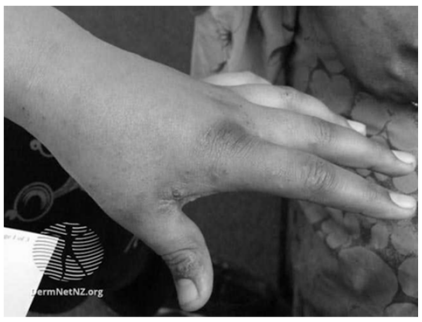
Topical anti-inflammatories

- 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

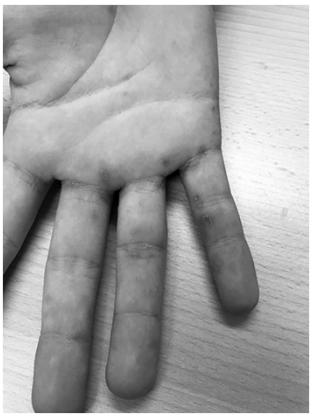
Topicals for itchy, dry skin

- **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

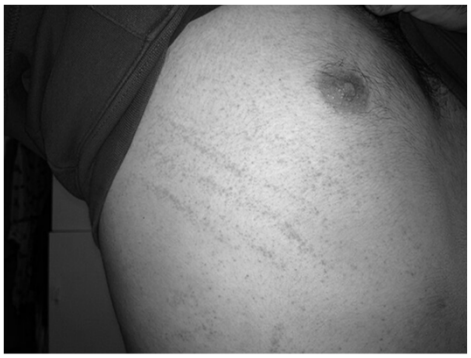
Scabies



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

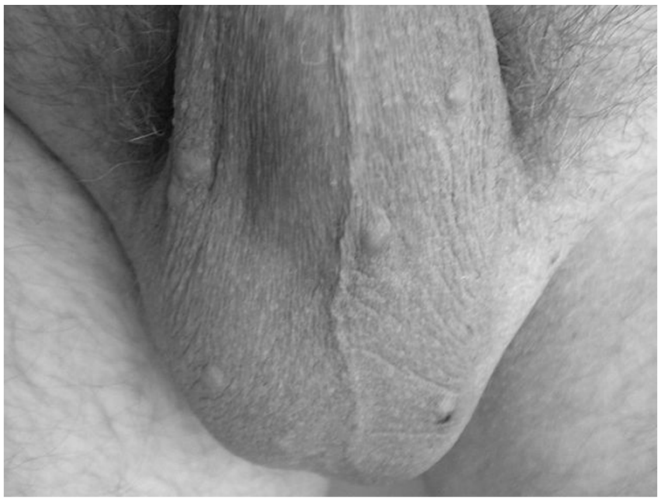


Author: Gzzz- CC BY-SA 4.0



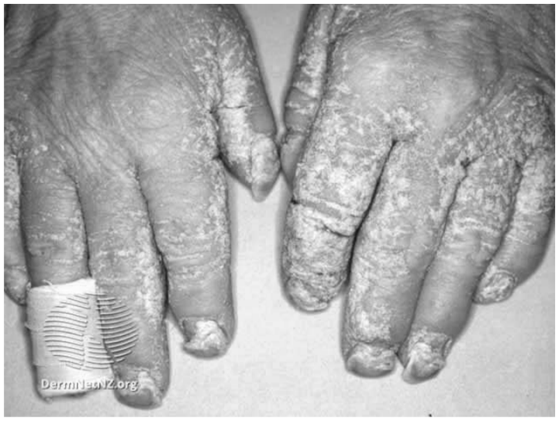
Author: Fhgd - CC BY-SA 3.0

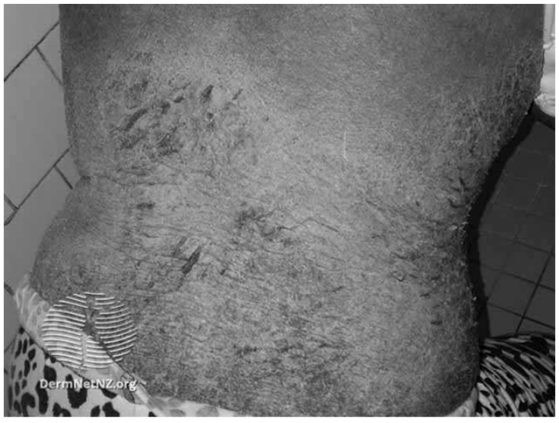
Scabies



Author: Dogad75

Scabies





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

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

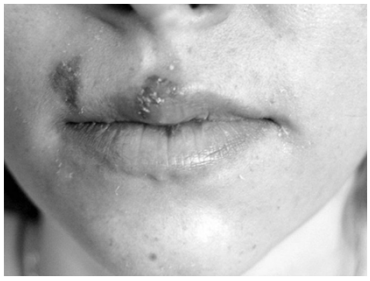
Scabies

- **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

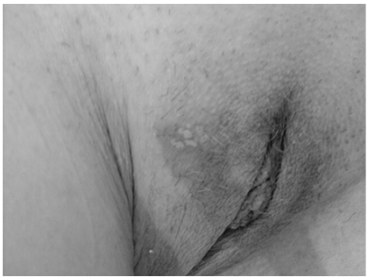
Herpes simplex virus (HSV)

- Classic presentations: orofacial or genital

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



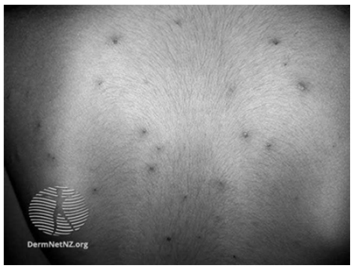
https://commons.wikimedia.org/wiki/File:Genital_herpes_female.jpg



Author: - CC BY-SA 3.0

Varicella zoster virus (VZV)

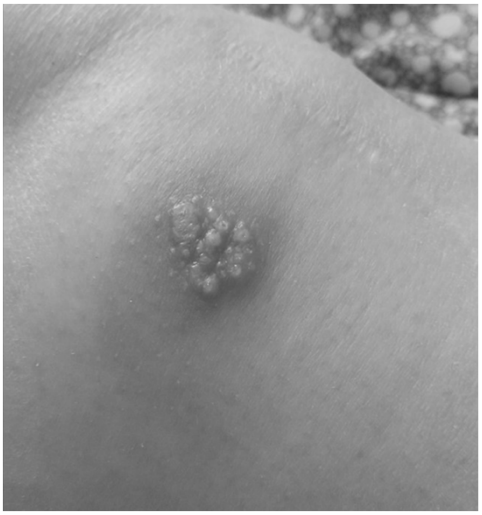
- Classic presentations: varicella (chicken pox) or zoster (shingles)



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

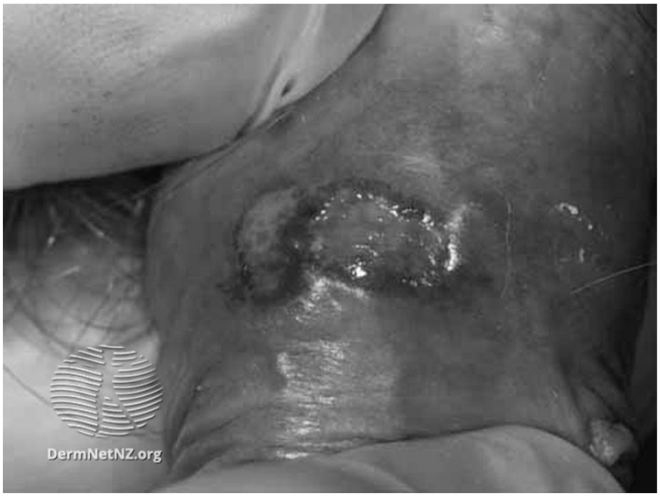
https://dermnetnz.org/topics/tinea-pedis-images

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



Author: Arenavittorio - CC BY-SA 4.0

HSV and VZV: scalloped borders



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

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