

# Allergic Rashes and Their Mimickers

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# Disclosures

- Speakers' Bureau/Advisory Board:
  - Arcutis (psoriasis), Dermavant (psoriasis), Galderma (acne), Incyte (atopic dermatitis), Pfizer (atopic dermatitis), Sanofi/Regeneron (atopic dermatitis).
  - All relevant financial relationships have been mitigated.

# Objectives

- Present challenging cases to improve differential diagnoses in dermatitis patients
- Discuss management approach to challenging cases
- Demonstrate a systemic way of working through difficult dermatitis cases

# Case 1

- 28-year-old healthy female in the third trimester of first pregnancy presented with a pruritic, erythematous scaly, coin shaped patch on her abdomen. PMH included AD as a child, allergic rhinitis and cholecystectomy 5 years previous. The rash had appeared 10 days earlier.

# Physical Exam

Coin-shaped erythematous plaque on the abdomen.



# DDx

- Atopic Dermatitis (very pruritic, coin shaped plaques)
- Psoriasis (smaller size, thicker plaques, typical psoriatic sites)
- Tinea corporis (grouped lesions, scaly or pustular edge)
- Contact dermatitis (look for contact factors)
- Lichen simplex (lichenified plaques, may co-exist with nummular dermatitis)
- PUPPP (pruritic urticarial papules and plaques of pregnancy, presents in 3<sup>rd</sup> trimester, presents in stretch marks)

# Plan

- Skin scraping?
  - Skin swab?
  - Patch testing?
  - Skin biopsy?
  - Blood tests?
- 
- Rx'd fluocinonide 0.05% cream BID x 2 weeks, gentle cleansers, CeraVe cream BID. Patient calls 10 days later stating her rash has worsened and she has fatigue, headaches and loss of appetite. Thinks she has ringworm.

# Physical Exam

- Light pink papules and annular plaques with minimal scale
- Lymphadenopathy



# Pityriasis Rosacea

- Starts with a herald patch on the trunk in up to 90% of cases
- The patch is erythematous with slightly elevated scaling borders and a lighter center
- Can measure 3 cm or more in diameter and may be the only manifestation for approximately 2 weeks

# Pearls

- Pityriasis rosea occurring during pregnancy has been associated with increased risk of fetal demise and miscarriage, particularly if the lesions appear within the first 15 weeks of gestation.
- In pregnant individuals, the eruption may present in a more widespread distribution compared with classic pityriasis rosea and may be associated with systemic symptoms such as fatigue, headache, and loss of appetite.
- Lymphadenopathy is a rare finding

# Pearls

- Consider drug-related pityriasis rosea-like eruption if PR fails to improve after 8 weeks (Captopril, Clonidine, Omeprazole, NSAIDs, Metronidazole, Terbinafine, Lamotrigine, amongst others)
- Drug-related pityriasis rosea-like lesions may appear more red-violet in color, typically do not present with a herald patch.

## Case 2

- 40-year-old female with a PMH of asthma, seasonal allergies and resolved childhood eczema presents with a chief complaint of “itchy rash x 5 years.” She has seen multiple providers in the past 5 years, the last two dermatologists diagnosed her with “dermatitis.”

# Physical Exam

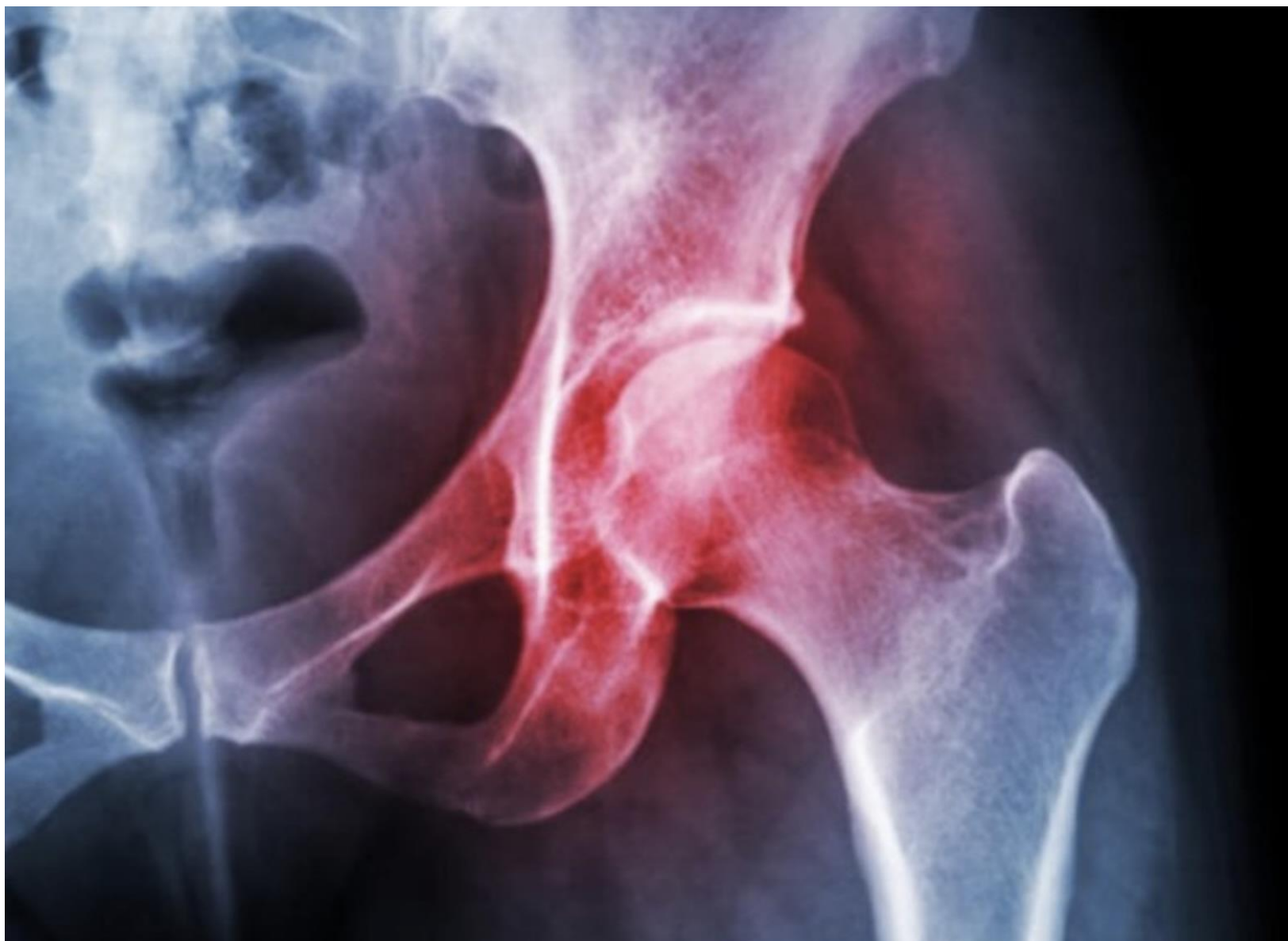


# DDx

- Atopic Dermatitis
- Allergic contact dermatitis
- Irritant contact dermatitis
- Eczema craquele
- Tinea corporis
- Psoriasis
- Pityriasis rosea
- Seborrheic dermatitis
- Lichen simplex chronicus
- Mycosis Fungoides

# Plan

- Prior treatment includes betamethasone ointment, TAC 0.1% cream, Elidel cream with some benefit. She takes Claritin 10 mg BID.
- She has been treated with intramuscular triamcinolone (ILK) and oral steroid tapers every 2-6 weeks for 18 months. It always helps but the rash returns once she discontinues it.
- During this time period she tried MTX for 3 months, Sulfasalazine for 4 weeks, Cyclosporin for 1 month, and Azathioprine for 4 weeks all which made little difference.



# Steroid-related side effects

- Avascular necrosis
- Mood changes, such as irritability, anxiety, and depression
- Increased risk of infections, including fungal and bacterial infections
- Increased risk of osteoporosis and fractures
- High blood pressure
- Elevated blood sugar levels
- Cataracts and glaucoma
- Adrenal gland suppression

# Case 3

- Patient is a 51-year-old male who presents for itchy rashes for the past 6 months. He was diagnosed with hives and started on a 5-day Medrol Dose Pack by urgent care. This provided some temporary relief but he is still very itchy and the rash has returned.
- He is very fidgety and doesn't want to change into a gown.

# Physical Exam



# DDx

- Insect bites
- Papular urticaria
- Atopic dermatitis
- Nummular dermatitis
- Bedbug bites
- Seabather's eruption
- Id reaction
- Prurigo nodularis
- Bullous pemphigoid

# Physical Exam



# Physical Exam



# Physical Exam



# Scabies clinical pearls

- I suspect scabies but prep negative consider scabies PCR from Vikor Scientific
- Collect scraping from 6 different high yield areas
- Put scrapings in a urine cup and send to Vikor Scientific lab
- If any scabies DNA is present they will detect it!
- More sensitive than scrapings under a microscope

# Scabies

- Every adult who presents with a new onset pruritis, non-specific rash should have empiric treatment for scabies
- Ivermectin 1mg/10 lbs + Permethrin cream (5%) applied to all areas of the body from the neck down and washed off after 8-14 hours
  - Repeat in 1 week
  - Treat family and close contacts with permethrin
  - Address fabrics contacting skin in week prior
- OR Ivermectin 1% lotion applied to the entire body from the neck down. Leave on for 8-14 hours. Repeat 7 days later if symptoms persist.

# Scabies

- This is more aggressive than normal scabies treatment, we want to make certain we have treated it appropriately. Launder bed linens, towels, and clothing used in the last 72 hours prior to treatment in hot water and dry on high heat. Items that cannot be laundered can be sealed in air-tight plastic bags for 10-14 days. All carpets and upholstered furniture should be thoroughly vacuumed and the vacuum bags or canisters disposed of.

# Scabies Pearls

- Pruritis can be severe, worse at night, especially just after getting into bed
- A negative scabies prep does not rule out this diagnoses; mites can be infrequent and difficult to isolate
- Look for and/or inquire about lesions and symptoms in family members and caregivers.
- Look closely for the burrow; mites are almost never found by scraping papules or excoriated lesions. The tiny black dot present at the edge of an intact linear papule represents a mite.
- Vikor scientific has a PCR for scabies.

# Case 4

- A 23-year-old female presents with a 3-month history of an itchy, red rash on the face
- She has tried OTC Hydrocortisone 1% with minimal improvement
- When asked what products she uses on her face she pulls out a bag of 25 different products but says she knows it isn't any of them since she's used all these for years
- "It doesn't burn when I put on any of my lip balms!"

# Physical Exam



# DDx

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# Irritant Contact Dermatitis Causes

- Cherry Chapstick
- Burt's Bees Lip Balm
- Tom's of Main
- EOS Lip Balms
- Mints, Mouthwash, Toothpaste
- Balsam of Peru: Cinnamon, Tomatoes, Citrus, Chocolate, Spices such as Vanilla or Cloves
- Fragrance additives [including botanicals], formaldehyde, lanolin, oxybenzone, or methylisothiazolinone.

# Lip products

- Stop chapsticks (Burt's Bees, Blistex, Carmex, EOS, and all other lip balms)
- Stop chewing gum, mints, mouthwash
- Use only pure Vaseline petroleum jelly for lips (no fragrance or flavoring) or [Vanicaream Ointment](#) (may order at 1-800-325-8232)
- Lip balm with sun protection: [Vanicaream Lip Protectant/Sunscreen](#) (may order at 1-800-325-8232)
- Other options are 100% coconut oil and 100% shea butter.

# Toothpaste

- [Cleure Toothpaste for Sensitive Teeth](#) (may order at [888-883-4276](#))
- Pepsodent
- [VMV Hypoallergenics Essence Simple-Gentle Skin-Saving Toothpaste](#) (212-217-2762)
- Tom's of Maine Silly Strawberry Children's Fluoride-Free Toothpaste (this flavor only!)

# Lip Gloss/Lip Liners

- Bobbi Brown Art Stick Lip Pencil
- Bobbi Brown Lip Pencil
- Cleure Natural Mineral Shea Butter Lip Gloss
- Laura Mercier Lip Pencil
- NARS Velvet Gloss Lip Pencil
- Revlon ColorStay Lip Liner Pencil

# Lipstick

- Cleure Mineral Lipstick
- BareMinerals Statement Luxe-Shine Lipstick
- Lancome Color Design Lipstick
- Laura Mercier Velour Lovers Lipstick
- VMV Hypoallergenics Velvet Matte Lipstick (order via their website: [www.vmvhypoallergenics.com](http://www.vmvhypoallergenics.com))

# Make-Up Removers

- Albolene Moisturizing Cleanser
- CeraVe Makeup Removing Cleanser Cloths
- Clinique Take the Day Off Remover or Towelettes
- L'Oreal Paris Clean Artiste Waterproof & Long Wearing Eye Makeup Remover
- Neutrogena Eye Makeup Remover Lotion, Hydrating

# Perioral dermatitis



# Perioral Dermatitis Pearls

- Change to non-fluoride dental products and discontinuing cosmetics until improved, with reintroduction slowly to ascertain a possible etiologic role.
- Topical pimecrolimus 0.1% cream applied to affected area every 12 hours.
- Doxycycline 100 mg BID for 1 month
- Sulfur cleansers (Naturium Sulfur 8% spot treatment from Target)

# Case 5

- Patient is a 55-year-old female who present for chronic itch for the past 3 months. 3 month prior she immigrated to the US. She states that she thinks it may be a food allergy because she eats shrimp regularly. Individual lesions are pruritic and last less than 24 hours. She has hypothyroidism and on thyroid replacement. Her most recent TSH 6 weeks ago was normal. 3 months ago she started lisinopril for high blood pressure. She uses Tylenol #3 prn for back pain and recently had a runny nose and nasal congestion and was on a 10-days course of Augmentin. She has diarrhea and a possible yeast infection

# Physical Exam



# Ddx

- Urticaria
- Fixed drug reaction
- Contact dermatitis

# Case 6

- A 5-year-old girl presents to their pediatrician with chronic skin picking. Mom states she does this when she is upset. Pediatrician notes picking/scratching on the left posterior neck and shoulder. They diagnosed behavioral picking and dermatitis and start TAC 0.1% cream BID.

# History

- Patient returns to pediatrician 4 more times for 1 year. Diagnosed with behavioral picking. Referred to pediatric dermatology who sees patient on several occasions.
- Diagnosis: behavioral picking. No differential diagnoses. Increased steroid to fluocinonide 0.5% cream BID. No improvement. Referred to plastic surgery for wound care. Pt. sees plastics who diagnose pt. with behavioral picking.

# Physical Exam

- See's plastic surgery, performing wound care for 1 year without much improvement
- Allergy sees patient and rules out allergies. NO differential diagnoses.
- Dermatology diagnosis behavioral picking and continues topical steroids and oral antihistamines
- Referral is made to psychiatry and cognitive behavioral therapy who start antipsychotics and anti-depressants

# Plan

- Push pause
- Fresh eyes
- Avoid the trap, anchoring bias and social proofing
- Ask for records
- Formulate a differential diagnoses
- Use human knowledge + machine (UpToDate, VisualDx)
- Assess for medication failure
- “I’m not going to be able to diagnose you today, I need more information”

# Clinical Pearls for “Pickers”

- N-acetylcysteine is derived from the amino acid L-cysteine
- JAMA Psychiatry in 2016, N-acetylcysteine dosed at 1200-3000 mg a day for 12 weeks resulted in a significant reduction in skin-picking and was well-tolerated.
- Of the 32 participants who were assigned to NAC treatment and completed the study, 15 of the 32 participants were “much” or “very much improved” compared with just 4 of the 21 participants who were assigned to placebo that finished the study.
- \$21 for a 2-month supply of 120 pills

# Case 7

43-year-old female with erythematous patches on hands. Has history of AD in childhood with episodic flares during the year but current flare lasting 6 months. Has tried topical steroids, tacrolimus, wet wraps with no improvement.

# Physical Exam



# Contact vs. Irritant Chronic Hand Eczema

- Can have similar morphology in both the acute and chronic phase
- Patch testing: expanded series
- Symptoms sometimes vary
  - ICD: can have burning/pain
  - ACD: Usually pruritis
- Consider patch testing when
  - New onset CHE > 3 months especially without history of atopy
  - Acute worsening of CHE
  - CHE refractory to conservative therapy

# Top contact allergen of the year

2025: Toluene-2,5-Diamine Sulfate (Aromatic amine used in hair dyes.)

2024: Sulfites (Group of compounds used to preserve food and drink products.)

2023: Lanolin (Natural wax from sheep's wool, often used in skincare products.)

# Case 8

- 23-year-old female with mod to severe AD since childhood
- AD history, allergic rhinitis
- Was well controlled on Dupilumab x 3 years, but started development increasing redness of the face which is now bothersome in appearance

# Physical Exam



# Dupilumab Facial Redness (DFR)

- Presents as erythema and scaling of the head and neck.
- Hypotheses for its pathogenesis include an inflammatory response to *Malassezia* yeast, an unmasking of allergic contact dermatitis, localized treatment failure, dupilumab hypersensitivity, increased colonization of the follicular *Demodex* mite, or a combination of the above.
- Reported successful treatments include allergen avoidance, topical corticosteroids, topical calcineurin inhibitors, ketoconazole cream, terbinafine cream, oral itraconazole, and topical minocycline with topical corticosteroids and brimonidine tartrate 0.33% topical gel.

# Dupi drug reaction





# Case 9

- 6-week-old baby with new onset diaper rash, worsening in last few weeks. No other medical history. Parents are panicking. Has tried OTC desitin, hydrocortisone 1%

# Physical Exam



2 days later...



# Pearls for Diaper Dermatitis

- Change the wipes or make your own
- Pure zinc oxide ointment- apply like cake frosting
- May consider mupirocin or stronger TCS in some cases
- Barrier spray- Cavilon
- Try to manage diaper free time
- Magic compound: zinc + HC + nystatin + cholestyramine
  - Binds bile acids in stool
  - Very helpful for tough cases

# Thank you!

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