Name That Rash!

by
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Agenda

- I generally do not like agenda slides. Waste of time
- All names are not actual patient names
- This is a general pediatrician's view of dermatology
- This presentation is to help your clinical judgement, not replace it

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Nicholas Cage

- 11 year old male comes into your office
- Over the winter Nick has developed his typical dry scaly rash, but it is worse than usual.
- Recently increased erythema and itchiness
- Scratches constantly
- Positive personal and family hx of asthma and allergic rhinitis

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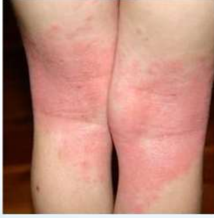
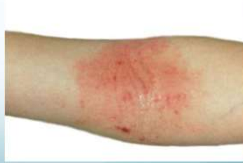
Nick Cage



Diagnosis

1. Eczema herpecticum
2. Drug reaction
3. Psoriasis
4. Atopic Dermatitis



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Atopic Dermatitis

- Most common skin problem seen by pediatric dermatologists
- In the first year of life, it generally presents on the trunk and cheeks. Later it tends to occur more in flexural creases
- "The itch that rashes" and the itch – scratch cycle
- The basic issue: the skin can't hold onto moisture
- The different phases of eczema: dry vs inflamed vs infected
- Aggravating factors can include humidity level, clothing, food allergy, skin colonization with S Aureus, frequent hand washing, detergents with perfume/dyes
- It's genetic. Atopic diseases: asthma, AD, allergies

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Atopic Dermatitis

- Treatment: Moisturize, moisturize, moisturize.
  Daily bath in lukewarm water, pat dry and then moisturize with emollients.
  Repeat emollients frequently.
- Topical steroids are for anti-inflammatory control. Select least potent. May need higher potency for control, then scale back. Topical calcineurin inhibitors (Elidel) are used for face instead of more potent steroids due to risk of skin atrophy
- Oral antihistamines and / or cool compresses can be used to control itchiness
- Can do a bleach bath to reduce skin colonization with Staph Aureus
- Watch for s/s infection – impetigo or cellulitis
- Biologics are systemic anti-inflammatory medications/injections prescribed by dermatologists for moderate to severe eczema
- No need to exclude from school for basic or inflamed eczema

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Pig-Pen

- 7yo healthy male presents with an oozy rash
- Has had URI symptoms for a few days. Constantly rubbing his nose and picking at it
- Rash started yesterday inside of his nares and now is spreading onto his face
- A little itchy. No fever. Not tender

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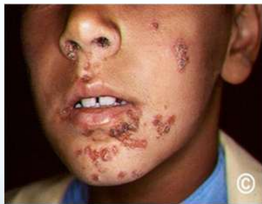
Pig-Pen



1. Impetigo
2. Chicken Pox
3. Just a gross dirty boy
4. Eczema

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Impetigo

- Mild superficial bacterial skin infection caused by staph or strep (common skin flora) that enters thru a break in the skin
- "highly contagious" (not really)
- Diagnosis is clinical. Can do a culture if resistant to treatment
- Treatment can be topical or oral antibiotics mostly based on quantity and location of lesions
- Different than cellulitis which is deeper in the skin = painful and indurated
- Can cover it and send them back to class. Can return to school after 12hrs of treatment. Wrestling guidelines are return after 72hrs of treatment

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Celine Dion

- 5 yo in kindergarten with low grade fever, stuffy nose, and loose stools 3 days ago.
- Today teacher notices rash on cheeks and sends her to you.
- Not itchy.
- Otherwise healthy appearing child.

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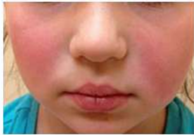
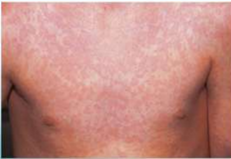
Celine Dion





1. Influenza
2. Rubella
3. Parvovirus B19
4. Sunburn
5. Measles

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Parvovirus B19

- 5th Disease or "Slapped Cheek Rash"
- Mostly in school aged kids 5-10 years old
- Symptoms non specific– stuffy nose, fever rarely, HA, loose stools -- then 2-5 days later rash appears
- Rash starts on face, then lacy rash starts on neck and moves down to upper trunk & extremities
- Diagnosis is clinical.
- Lab can be done if unclear or arthralgia (IgM persist for 30-90 days)

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Parvovirus B19 Infection

- Treatment:
  - Symptomatic treatment
  - Supportive care – NSAIDs for arthralgia
  - Rash will appear brighter with heat
- Management:
  - Not contagious once rash appears.
  - Good hand washing/ cover sneezes (before the rash)
  - **Check if exposed to pregnant women (hydrops fetalis)**
  - More than half of adults are immune (50-80%).
  - No need to exclude from school.

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John Cena

- 15 yo healthy male
- Scaly spot on arm for 2 weeks
- Has tried a "bunch of creams" his mom told him to use but it hasn't changed
- Currently on the high school wrestling team

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John Cena

1. Eczema
2. Tinea Corporis (ringworm)
3. Herald patch of Pityriasis Rosea
4. Lyme disease
5. TikTok salt and ice challenge

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Tinea Corporis (ringworm)

- Raised, red, scaly ring with central clearing. Hair loss in the area is typical
- Fungal infection of the skin. Not caused by worms.
- Can occur anywhere on the body
- Fungi are part of our normal skin flora. They are just waiting for an opportunity to invade. Looking for a warm moist environment.
- Diagnosis is mostly clinical, but can do a skin scraping for KOH prep or culture

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Tinea Corporis (ringworm)

- Treatment is primarily topical antifungals. OTC usually works if given enough time. Prescription creams are available but not necessary unless OTC fails. Oral therapy is very rare
- Prevention is good skin hygiene. Keeping the skin dry. Decreasing friction ie loose clothing, powder
- Treat any break in the skin as a potential route of infection
- Cover it and send them back to class
- Athletes are excluded from person to person contact sports for 72 hrs after treatment has started unless the area can be covered

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Uma Thurman

- 11 yo girl with no significant past medical hx
- Today comes in with rash that “keeps spreading”. Has had for over a month. Also present under arms and on flank
- Uma participates in swimming and loves to share towels with everyone

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Uma

1. Varicella
2. Molluscum Contagiosum
3. Acne
4. Poison Ivy

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Molluscum Contagiosum

- Member of the poxvirus family. It is only passed person to person.
- Characteristic flesh colored, umbilicated papules that can appear anywhere on the body, except palms and soles.
- Transmitted by scratching and touching lesions. People can get MC by sharing towels and clothing. Common in wrestlers, gymnasts, swimmers.
- Increased risk in patients with atopic dermatitis due to impaired skin barrier.

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Molluscum Contagiosum

- Individual lesions resolve ~ 2 months. Complete clearance 6-12 months. (rare cases 3-5 yrs)
- Treatment:
  - Debated, since it self-resolves
  - No strong evidence for 1st line therapy
    - Cryotherapy, curettage, cantharidin, salicyclic acid
    - Tape stripping
    - Astringents (skin toners), tea tree oil, apple cider vinegar

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Molluscum Contagiosum

- Patient education:
  - Avoid scratching/picking lesions (unless mom wants to pick out the core and then hand sanitize)
  - Avoid sharing towels
  - Resolution begins when the lesion looks infected or has an eczema like rash underneath a cluster of them
  - Considered an STD if in genital area and sexually active
  - No need to exclude because they are so common, but good to keep them covered if possible

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Katy Perry

- 6 year old who started on amoxicillin 4 days ago for R otitis media.
- She has history of ear infections and has been on amoxicillin before.
- Last night mom noticed a few “bumps” on back shoulder. They were itchy. Mom thought they were bug bites. She used hydrocortisone cream and put her to bed.
- Katy got this morning’s dose of medicine right before going to school, then 1 hour later Katy is covered with an itchy rash

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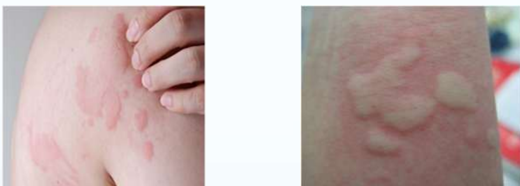
Katy Perry



1. Insect bites
2. Contact dermatitis
3. Urticaria
4. Erythema Multiforme

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Urticaria

- Red, itchy, raised welts on the skin that appear in varying shapes and sizes
- The only rash that totally comes and goes. Can look alarming, then 4 hours later be completely gone – pictures are very helpful!
- Hives are common but exact cause is often elusive
  - Viruses are the most common cause
  - allergy – food or medications
  - environmental - cold
- Treatment: symptomatic with oral antihistamines
- No need to exclude from school unless the rash is too distracting

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Arianna Grande

- Arianna is sent to you for a rash evaluation. Teacher is totally freaked out.
- Initially they looked like hives but did not wax and wane and now look bruised in the center.
- No change after mom gave diphenhydramine.
- She seems fine otherwise. Drinking well.
- She is just getting over a viral illness.
- Mucus membranes intact and clear.

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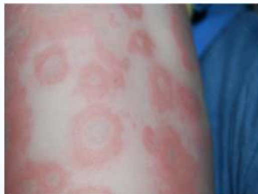
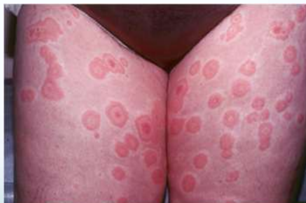
Arianna Grande





1. Erythema Multiforme
2. Urticaria
3. Viral Exanthem
4. Measles
5. The worst lyme disease ever

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Erythema Multiforme

- Hypersensitivity reaction to an infection or, in rare cases, medication.
- Starts as pale pink or red blotches, then develop into red, target shaped or “bulls eye” patches on skin.
- Rash develops quickly.
- Rash will typically be all over body within 24 hours.
- When it affects mucous membranes– lips, inside of mouth, eyes = erythema multiforme major or SJS

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Erythema Multiforme

- Believed to be a reaction to an infection that causes the bodies immune system to damage the skin cells.
- Over half of cases are associated with HSV infection. But mycoplasma is also common trigger.
- Medication triggers (less common)
  - Antibiotics – PCN, sulfa drugs
  - NSAIDS
  - Anesthesia drugs – barbiturates
  - Seizure medications

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Erythema Multiforme

- Treatment:
  - Supportive care
    - Cool compress, Tylenol, antihistamines
    - More severe cases can consider oral steroids
    - Stop medication if antibiotic trigger
  - Resolution 2-4 weeks
  - Not contagious. Send them back to class

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Justin Timberlake

- JT had field day 2 days ago
- Last night told mom legs were itchy a few red spots around ankles
- This morning rash has spread. Some areas of rash are linear in appearance

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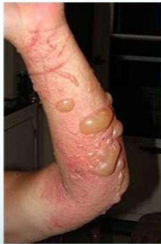
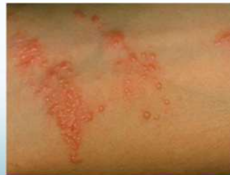
JT



1. Poison ivy
2. Eczema herpeticum
3. Impetigo
4. Sunburn



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Poison Ivy

- "Leaves of three, let them be" "Berries of white, run in fright" "Hairy vine, no friend of mine"
- Urushiol oil is the culprit. Also found on pistachios and cashew shells, and on mango skin.
- S/S: intense pruritus and erythema. Can develop papules, vesicles or bullae often arranged in linear or streak-like configurations
- Rash develops ~ 4 - 72 hours after exposure and lasts about a week.
- Lesions can present at different times and locations based on amount of urushiol exposure and skin thickness
- 25% of people are not sensitive; while 25% are very sensitive

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Poison Ivy

- Treatment:
  - Wash off the oil (including clothes, footwear and sports equipment). Need to exfoliate
  - Symptomatic – topical therapies: oatmeal baths, calamine lotion, cool compresses, 1% HC cream
  - Higher potency topical corticosteroids (prescription)
  - Oral steroids for significant coverage or if face / genital areas are involved.
- Management: Not contagious but clinical judgement should rule on sending back to class ie extent, area

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SKITTLES POX

ARE THEY CONTAGIOUS?

QUESTIONS?

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