Pediatric Rashes, Bumps and Bites... And Things That Itch in the Night!

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Disclosures

• Dr. Marusinec has nothing to disclose

• Dr. Marusinec’s background
  • 22 years practicing board-certified pediatrician
  • 7 years primary care
  • 4.5 years practicing in a dermatology clinic
  • 1 year Pediatric Dermatology Clinical Research Fellowship
  • 7.5 years practicing pediatric urgent care
Learning Objectives:

• Develop an approach to pediatric rashes in the acute care setting
• Understand basic classifications of pediatric rashes
• Review a variety of common and less common pediatric skin disorders
• Identify basic treatment considerations of common pediatric rashes
Teaser Questions:

1. What is PLEVA:
   a. A Tik Tok dance
   b. A new diet
   c. A political party
   d. Some kind of skin disorder
2. Dr. Marusinec’s approach to pediatric skin conditions includes (one or more are correct):
   a. Consult a Magic 8 Ball
   b. Call a friend
   c. Make something up
   d. Rule out something dangerous
Agenda:

• Approaches and classifications of pediatric skin conditions
• Caveats for urgent care/primary care
• COVID-19 skin manifestations
• Insect bites and stings
• Lyme disease
• Infestations and fungal infections
• Dermatitis, inflammatory skin conditions, post-infectious, etc
• The spectrum from urticaria to toxic epidermal necrolysis
• Wrap-up and resources/references

• Viral infections (probably won’t get to, here for your review)
• Bacterial infections (probably won’t get to, here for your review)
Dr. Morelli’s Approach to Rashes (Pediatric Dermatologist in Denver)

1. “Rub a cream on it”
2. “Do nothing”
3. “Cut it out”

He had a nice sense of humor...and this is sortof true...
Dr. Laura’s Approach to Rashes

1. **Name it if you can**
   - No one likes uncertainty
   - This can help create a management plan with confidence (and you can look it up!)
   - Hopefully this presentation will help

2. **Rule out a dangerous rash**
   - Systemic toxicity
     - Ex meningococcemia, Steven Johnson’s
   - Neonatal specific (HSV...)
   - Hemorrhagic, bacterial, dangerous to contacts...
   - Ex RMSF, petechial/purpuric, scalded skin, measles...

3. **Categorize for treatment and prognosis**
   - Inflammatory (topical steroids, antihistamines...)
   - Xerotic/dry (emollients)
   - Allergic (antihistamines +/- topical steroids)
   - Viral (symptomatic, observe)
   - Bacterial (antibiotics)
   - Lichenified/lichenoid (emollients, keratolytic)
   - Etc
Knowledge Check  Q1

1. Reported Dermatologic manifestations of COVID-19 include:
   a. Pernio (chilblain) like lesions on toes
   b. Urticaria
   c. Morbilliform rash
   d. Purpuric lesions
   e. All of the above
   f. None of the above
<table>
<thead>
<tr>
<th>Lesion</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Macule</td>
<td>Circumscribed area of change without elevation</td>
</tr>
<tr>
<td>Papule</td>
<td>Solid raised lesion ≤1 cm</td>
</tr>
<tr>
<td>Nodule</td>
<td>Solid raised lesion ≥1 cm</td>
</tr>
<tr>
<td>Plaque</td>
<td>Circumscribed elevated confluence of papules ≥1 cm</td>
</tr>
<tr>
<td>Rash</td>
<td>An eruption on the skin; more extensive than a single lesion</td>
</tr>
<tr>
<td>Pustule</td>
<td>Circumscribed area containing pus</td>
</tr>
<tr>
<td>Vesicle</td>
<td>Circumscribed fluid-filled area ≤1 cm</td>
</tr>
<tr>
<td>Bulla</td>
<td>Circumscribed fluid-filled area ≥1 cm</td>
</tr>
<tr>
<td>Petechia</td>
<td>Small red/brown macule ≤1 cm that does not blanche</td>
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</table>
Categorization—Many Options!

- Appearance/morphology (macular, popular, lichenoid, pigmented, annular, erythematous, scaly...)
- Distribution (location-scalp, flexoral, acral...; discrete, scattered, confluent)
- Acute vs chronic
- Systemic sx or not
- Symptoms (pruritic, painful)
- Cause (infectious, inflammatory, allergic...)
- Histologic
- Genetic/hereditary
- Traumatic
- Neoplastic
- You can use these when looking things up (ie search “scaly annular rash”)
Primary Care/Urgent Care Caveats

• More difficult – often early presentation, haven’t tried anything, don’t always have much history
• Can’t biopsy
• You often need to be OK with uncertainty
• Most rashes aren’t dangerous
• Many rashes will go away on their own
• It’s OK not to know what it is!
• Take photos if unsure, unusual, or concerning
• You CAN look things up!
• You CAN ask a colleague
• You CAN consult dermatology (in most cases) and include photos
Approach in the office

• Look first, ask questions later?
  • Opposite of usual history then exam
  • Lets you focus your questions
  • Don’t forget to ask the important questions

• While the appearance of the rash is like a picture - worth a thousand words - rashes, like kids, don’t always follow “the rules”

• Helpful hx:
  • Age
  • Time-onset, duration, change over time, recurrence
  • Pruritic or not, painful?
  • Location of rash (acral, flexural or extensor surfaces, skin folds, scalp, diffuse…)
  • Any new exposures (food, meds, soaps/detergents, bites/stings, travel, pools/lakes, allergens/irritants, other people with similar rash…)
  • Systemic symptoms, viral symptoms
  • Anything making it better or worse?
  • Hx eczema or other skin conditions, family hx?
COVID-19

• Reported dermatologic manifestations of COVID-19 include:
  • Exanthematous (morbilliform) rash – commonly on the trunk
  • Pernio (chilblain)-like acral lesions (“Covid toe”)
  • Livedo-like/retiform purpura/necrotic vascular lesions
  • Urticaria
  • Vesicular (varicella-like) eruptions
  • Multisystem inflammatory syndrome in children (MIS-C) – An erythematous, polymorphic rash, erythema and/or firm induration of hands and feet, oral mucositis, and conjunctivitis, along with systemic, laboratory, and imaging findings of atypical, severe Kawasaki disease, have been described
  • Less frequently reported dermatologic manifestations include papulosquamous eruptions, erythema multiforme-like lesions, dengue-like rashes, petechiae, and gangrene.
  • Some infants born to mothers with COVID-19 at birth have had transient rash.
COVID-19 Rashes

• **Pernio (chilblain)-like acral** ("COVID toes") in the absence of cold exposure or underlying conditions associated with pernio.

• Present as erythematous-violaceous or purpuric macules on fingers, elbows, toes, and lateral aspect of the feet, with or without accompanying edema and pruritus.

• Resolution may occur in two to eight weeks.

• High-potency topical corticosteroids may help treat discomfort.
Insect bites and stings

Focusing on mosquito bites and their reactions vs cellulitis

A few other reactions and examples
Knowledge Check Q2

The most distinguishing factor between local reactions and insect bites/stings from cellulitis is:

a. Presence or absence of warmth
b. Presence or absence of low grade fever or malaise
c. Presence of pain
d. Timing of onset of symptoms
Mosquito bites: Local Reactions

• Normal reaction:
  • Inflammatory reaction at the site of the bite
  • Appears in minutes, improves in hours
  • Consists of pruritic local erythema and edema
  • In some cases, a local reaction is followed by a delayed skin reaction consisting of local swelling, itching, and redness
Are these cellulitis??


https://pontevedra.mosquitosquad.com/blog/2017/5/3/am-i-allergic-mosquito-bites-or-infection/
Differentiating large local reactions from infection

- By inspection and palpation, it can be difficult to differentiate between local reaction and secondary bacterial infection (such as cellulitis) after scratching the bites.
- **Timing of onset of the red, warm swollen area at the site of a bite in relationship to the time of the bite**
- Large local reactions typically begin within hours. Secondary bacterial infections typically begin within days (usually after 48 hours).
- Cellulitis usually more painful than itchy, may have pus or drainage, red streaking, or enlarged lymph nodes.
- Infection drainage often has pus, inflammatory reactions tend to have serous fluid.
Large local reactions

• The most common type of allergic reactions to mosquito bites
• Typically consist of an itchy or even painful area of redness, warmth, swelling, and/or induration that ranges from 2 – 10+ cm in diameter
• Develop within hours, progress over hours to 1-2 days, and resolve within 3 - 10 days
• Can involve the entire periorbital region and much of the face or an entire extremity
• Severe large local reactions can be accompanied by low-grade fever and malaise
• Common in children-usually outgrow
• “Skeeter syndrome”
Cellulitis

https://www.slideshare.net/Prezi22/pediatric-rash
What is this?
Papular Urticaria

• A hypersensitivity disorder due to insect bites, often fleas, mosquitoes, or bedbugs
• Recurrent or chronic itchy papules on exposed areas of skin (i.e., arms, lower legs, upper back, scalp)
• Typically age 2 - 10 years
• Lesions typically 0.5 - 1 cm
• Often urticarial at the start
• Often have central punctum
• Persistent and papular and/or nodular with time
Papular Urticaria - Management

• Nonsedating antihistamines prn for pruritus (i.e. cetirizine)
• Mid-potency topical corticosteroids applied to individual lesions as needed (i.e. triamcinolone)
• Reassurance, as it resolves spontaneously, though it may take time
Systemic allergic reactions

• Systemic allergic reactions to insect bites are rare
• More common with stings
• Present with some combination of generalized urticaria, angioedema, wheezing, vomiting, hypotension, loss of consciousness, or other manifestations of anaphylaxis
• A medical emergency! Call 911 and give Epinephrine!
A few other bites

I see you scratching!
Flea bites
Bed Bugs

https://www.healthline.com/health/bug-bites#pictures
Bed Bugs! Sorry to ruin your day...
Spider-Brown recluse
A few stings

• Bee

• Yellow Jacket
General Treatment for Insect Bites and Stings

• Usually symptomatic
• Wash the area with soap and water
• Ice/cool compresses
• Topical emollients, aloe, menthol, calamine lotion, baking soda paste, etc
• Topical steroids (triamcinolone, hydrocortisone)
• Oral antihistamines (cetirizine)
• Pain control
• Avoiding scratching
• Observing for signs/sx of infection
Lyme Disease
It can be tricky, but you CAN sort this out-sort of!

- Erythema Migrans – initial lesion

UpToDate

Seen in CHW urgent care in June, hx camping in woodsy area 2 weeks prior
Lyme Disease

• Three stages:
  • Early localized disease (Erythema Migrans) sx within 1 month of bite
  • Early disseminated disease – sx days to months after bite
  • Late disease – months to a few years after bite

• Erythema Migrans
  • Can be “bulls eye” or uniform erythema
  • Appears at site of tick bite, usually 7-14 days after, can range from 3-30 days
  • Begins as red macule and expands, usually become annular
  • Minimal symptoms of rash (ie minimal to no pruritis)
  • May be associated with mild systemic symptoms
  • Labs not usually helpful, treat with clinical suspicion (doxycycline, amoxicillin, or cefuroxime)
  • Tick bite often not recognized
Lyme Disease:

• **Early disseminated disease:**
  - Occurs days to several months after tick bite
  - 90% with positive serology (EIA followed by Western blot (IgM and possible IgG))
  - Multiple erythema migrans
  - Cranial nerve palsy (often facial nerve)
  - Meningitis
  - Carditis
  - Systemic signs and symptoms common, ie fever, malaise, myalgias. Rare to be only sx.
Lyme Disease

• Late disease
  • Months to a few years after infection if not treated
  • Arthritis – knee most common
  • Prognosis is good, especially if treated
Lyme disease

• Treatment (early disease)
  • **Doxycycline first line (10-21 days)**
    • Liquid is very expensive
    • Use capsules/tabs when able
    • Ok to use in peds for short duration
    • Sun sensitivity is common side effect
  • Amoxicillin or cefuroxime axetil 2nd line (14-21 days)
    • Amox dosing **50 mg/kg/day divided TID**

• Testing
  • Not helpful for very early sx or EM only
  • Lyme ab with reflex Western Blot (Children’s WI)
  • If Lyme ab >5, very suspicious!
  • Western blot positive for IgM if at least 2/3 proteins reactive
  • Western blot positive for IgG if at least 5/10 proteins reactive
  • Grey-zones, not always specific
  • Consider re-testing in several weeks if unsure
Is this early disseminated Lyme?
Sometimes you need to “call a friend” and take some time

- Patient seen by me late June in UC
- No hx tick, but lives in somewhat high risk area
- Started with 1-2 lesions on trunk, outside clinic thought ringworm, treated with antifungals (didn’t help)
- Lesions are macular, no wheal/flare or induration
- Differential includes early disseminated Lyme, nonspecific viral, urticaria multiforme, Erythema multiforme?
- Consulted Dermatology, wasn’t convinced it was Lyme

-- Takeaways- It can be confusing!
- Consult specialists (Derm or ID)
- You have time to sort this out
- Lab testing not always reliable-but can be helpful after a few weeks

** F/U: Rash improved quickly with cetirizine, derm thought likely viral (urticaria multiforme?)
Common Pediatric Rashes

Let’s have some fun!
Infestations and Fungal Infections
Scabies

Very itchy!!
Scabies

https://www.healthline.com/health/bug-bites#pictures
Tinea corporis

https://www.webmd.com/children/ss/slideshow-common-childhood-skin-problems
Tinea Capitis

Dermatophyte
Tinea Versicolor

Malassezia globosa

https://www.slideshare.net/lasvegasem/pediatric-rashes-25241889
Inflammatory, dermatitis, post-infectious, lichenoid etc

Cool stuff ahead!
Knowledge Check Q3

Another name for Gianotti Crosti is:

a. Unilateral laterothoracic exanthum
b. PLEVA
c. Papular acrodermatitis
d. Sixth Disease
Atopic Dermatitis/Eczema

https://www.aafp.org/afp/2015/0801/p211.html
Contact Dermatitis

- Inflammation of the dermis and epidermis as a result of direct contact between a substance and the surface of the skin
- Irritant (more immediate reaction) or Allergic (more delayed reaction)
- Irritant
  - Results from exposure to substances that cause physical, mechanical, or chemical irritation of the skin
  - Diaper rash, pacifier, dry skin dermatitis
- Allergic
  - An acquired, inflammatory reaction of the skin that requires absorption of antigen from the skin surface and recruitment of previously sensitized, antigen-specific T lymphocytes into the skin.
  - Delayed reaction
  - Poison ivy, nickel...
Irritant (Pacifier) Dermatitis

https://www.slideshare.net/lasvegasem/pediatric-rashes-25241889
Allergic Contact Dermatitis

• Allergic – acute, subacute, chronic
  • Poison ivy, oak, and sumac common
  • Nickel
  • Fragrances
  • Preservatives
  • Topical antibiotics (ie Neomycin)
Think about Strep
- This pt seen at Children’s UC
- **Silvery scale**, distribution
- Usually spontaneous remission after weeks to months
- Treat the strep if present
- Topical steroids, UV light
- Oral meds
PR-Pityriasis Rosea

- “Christmas tree distribution” on trunk
- Herald patch may not be obvious
- Somewhat scaly, occasionally mildly pruritic

https://www.aafp.org/afp/2015/0801/p211.html
PLEVA-what the heck is that? You ask
PLEVA

• Pityriasis lichenooides et varioliformis acuta (PLEVA)
  • A rare benign skin disease that presents with recurrent crops of inflammatory lesions (recur over weeks to months)
  • Lesions may demonstrate ulceration, vesiculation, pustulation, hemorrhage, or crusting
  • Asymptomatic to mildly pruritic
  • Looks like Chicken Pox (without prodrome/systemic sx)
  • The hemorrhagic lesions are helpful in diagnosis
  • Also known as Mucha-Habermann disease (because THAT is SO easy to remember also!)
  • A T-cell lymphoproliferative disorder
  • Treatment is symptomatic-pruritis, local care; some experience with erythromycin, tetracycline, and phototherapy
Unilateral laterothoracic exanthum
ULE

- Also known as asymmetric periflexural exanthem of childhood
- Usually preceded by viral sx (URI, GE, low grade fever)
- Typically begins on one side of the trunk and extends toward the axilla; less often, it starts in the inguinal crease or on an extremity.
- Spreads centrifugally (moves towards center) and may become bilateral, although mainly unilateral predominance
- Early lesions may have a morbilliform appearance, sometimes with a surrounding pale halo.
- Over time, lesions tend to become more scaly or eczematous and occasionally develop a central dusky or gray color.
- Many have mild pruritus.
- Treatment- emollients, antihistamines for pruritus.
- Self-resolving in weeks.
Gianotti Crosti (papular acrodermatitis)
Gianotti Crosti

• Also known as papular acrodermatitis

• A sudden symmetric eruption of multiple small papular or papulovesicular lesions. The lesions are monomorphous, flat-topped, pink-brown papules or papulovesicles, 1 to 10 mm in diameter; they may coalesce into plaques

• Most common on face, buttocks, extensor aspects of forearms and legs, and feet. Truncal lesions are often present, though less so.

• Pruritus usually is of mild to moderate severity

• May last for a few months

• Treatment-sx, emollients, antihistamines
Lichen Striatus
Lichen Striatus

• Typically presents with a sudden eruption of red, pink, or skin-colored flat-topped papules arranged in a linear band that follows the lines of Blaschko.

• Usually narrow, solitary, and unilateral, and may be continuous or interrupted.

• Usually asymptomatic. Pruritus reported in up to 1/3\textsuperscript{rd} of patients, usually with atopy.

• Benign, self-limited. May last several months. Hypopigmentation may last longer.

• Treatment is usually not necessary. Low to mid potency topical corticosteroids may be used for pruritus but have no effect on the duration of the disease or postinflammatory dyspigmentation.
Lichen nitidus
Lichen nitidus

- Benign, chronic, cutaneous eruption characterized by the presence of small, discrete, uniform, often skin-colored papules that present in clusters or linear arrays.
- Most common in children and young adults.
- May be generalized or focal.
- Commonly found on the chest, abdomen, flexor surfaces of the upper extremities, dorsal hands, and anogenital region (including the shaft and glans of the penis).
- May have mild pruritus.

- Etiology unclear. Possible medication-related cases and familial forms.
- The majority of patients clear spontaneously over several months without residual skin changes.
- Pruritus can be controlled with topical antipruritic agents such as lotions that contain menthol, camphor, pramoxine, or phenol.
- Topical corticosteroids may be used sparingly as needed.
Lichen Planus, Lichen Sclerosis less common in children

Topical corticosteroids are commonly used as first-line treatment for localized cutaneous lichen planus.

A superpotent topical corticosteroid (like clobetasol) is the preferred first-line therapy for lichen sclerosis.
Kawasaki’s Disease
Kawasaki’s

• Unknown etiology (often post-infectious)
• Peaks 18-24 months
• Clinical findings:
  • Fever at least 5 days
  • Conjunctivitis
  • Polymorphous rash
  • Oral changes
  • Cervical adenopathy
• Think about possible COVID-19 (esp older children)

https://www.slideshare.net/Prezi22/pediatric-rash
HSP

- Henoch-Schonlein purpura
- IgA vasculitis
- Etiology unclear, often post-viral
- Peak age 2-10
- Palpable purpura over buttocks/lower extremities
- Transient migratory arthritis
- Possible renal and GI involvement
- Treat pain (NSAIDS), avoid steroids unless severe sx
- Need f/u UA and blood pressures

https://www.slideshare.net/Prezi22/pediatric-rash
The Spectrum of Urticarial Conditions: From Urticaria to TEN (toxic epidermal necrolysis)

How to tell them apart??
Knowledge Check Q4

1. True or False- Serum sickness and serum sickness-like reactions usually have mucocutaneous involvement
   a. True
   b. False
Urticaria

- **Intensely pruritic** erythematous plaques
- May be accompanied by angioedema
- **Individual lesions transient**
- Common triggers:
  - Medication
  - Infection
  - Insect bite/sting
  - Food
  - Unknown most common!
- Treatment: 2\(^{nd}\) generation antihistamines
- Steroids only if severe (5-7 days)
Angioedema

- Localized subcutaneous or submucosal swelling
- May occur alone, with urticaria, or be a component of anaphylaxis
- May occur due to vasodilation and increased vascular permeability resulting from other inflammatory mediators, especially bradykinin (ie angioedema caused by ACE inhibitors)-this is NOT associated with urticaria or pruritus.
- Often face, lips, throat, GI
- Onset often minutes to hours
- Usually benign and transient, unless a part of anaphylaxis
- Treat acute allergic angioedema with antihistamines and/or oral steroids
Erythema Multiforme

- Acute, immune-mediated disorder that presents with **cutaneous and/or mucosal lesions**
- EM Minor - minimal mucosal lesions, less severe sx
- EM Major - more mucosal lesions, more severe sx
- Triggered often by infections, often HSV (less common-mycoplasma). Rarely by medications
- Target lesions common (extremities common)
- Pruritus uncommon
- Lesions last several days, EM may last several weeks
- Treatment often depends on mucus membrane involvement
- Ocular involvement requires immediate referral

© 2013 VisualDx
Steven Johnson/TEN (toxic epidermal necrolysis)
Steven Johnson - <10% BSA
TEN - >30% BSA

- Part of a spectrum (SJ/TEN 10-30% BSA)
- **Severe mucocutaneous reaction**
  - Often fever >38°, mucositis, skin tenderness, and blistering
- **Erythematous, widespread rash**
- Extensive necrosis and detachment of the epidermis
- Usually a reaction to a medication or infection (peds-sulfonamide antimicrobials, certain anti-epileptics; mycoplasma)
- Fluid losses, infection, electrolyte imbalances, multiple organ dysfunction syndrome
- **A medical emergency!** (mortality rate 10-50%)
Serum Sickness
(uncommon in children)

• Classic features are rash (pruritic), fever, malaise, and polyarthralgias or polyarthritis.

• Symptoms begin 1-2 weeks after the first exposure to the responsible agent and resolve within a few weeks of discontinuation.

• Causes-anti-toxins/venoms, immune modulators (incl biologics), vaccines (rabies), insect stings

• Patients may appear very ill and uncomfortable during the acute febrile stage.

• Is usually self-limited, and prognosis is excellent once the responsible drug is stopped.

• **Immune complex-mediated** hypersensitivity disease to a foreign protein.

• NO mucus membrane involvement
Serum Sickness-Like Reactions

- Serum sickness-like reactions more common in children
  - Different mechanism
  - Caused by drugs (most common antibiotics, cefaclor most common) or infections (strep, viral, Hep B...)
  - “Urticaria with arthritis”
  - Individual skin lesions last longer than urticaria, gradually expand, may have central clearing
  - Fever less common or low grade
  - Lymphadenopathy may be present
  - Erythema and edema of hands and feet may be present
  - NO mucocutaneous involvement
<table>
<thead>
<tr>
<th></th>
<th>Urticaria</th>
<th>Angioedema</th>
<th>Erythema Multiforme</th>
<th>Serum Sickness</th>
<th>Serum sickness-like reactions</th>
<th>Stevens Johnson/TEN</th>
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<td>Lesions transient</td>
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<td>No (”burning”)</td>
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<td>Common (limited)</td>
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<td>Ill appearing</td>
<td>Uncommon</td>
<td>Possible</td>
<td>EM Major</td>
<td>Often (low mortality)</td>
<td>Uncommon</td>
<td>YES (high mortality)</td>
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Viral Infections
Measles

Got vaccines?!
Roseola
Roseola

• Roseola infantum (also known as exanthem subitum or sixth disease) is a clinical syndrome characterized by 3-5 days of high fever that resolves abruptly and is followed by development of a rash.
• Usually caused by human herpesvirus 6 (HHV-6)
• Peak prevalence between 7 - 13 months. Ninety percent of cases occur in children younger than two years.
• Not contagious once fever gone.
Fifth’s disease
Chicken Pox
Herpes

**HERPES SIMPLEX**

- On skin- in form of grouped vesicles on erythematous base.
- On mucous membrane- blister base-erosion, is seen due to easy shedding of blister roof.
- **Site** – 60% of primary infection in oral cavity, Lips, nose, cheeks, fingers, eyes & scalp are common sites.
- Caused by HSV 1

https://www.slideshare.net/ramkeshmeena7796/pediatric-skin-diseases-by-dr-ramkesh-meena?next_slideshow=1
Neonatal Herpes Simplex — an Emergency!

**NEONATAL HERPES SIMPLEX**

- Develop in ~10% of infants of parents with active HSV2 infection.
- Grouped vesicles on erythematous base may appear up to 7th day after birth.
- Disease may be mild with primary skin lesions.
- Usually systemic illness with jaundice, progressive HSM, dyspnea, severe encephalitis.
- Treatment: Skin & mouth disease—Acyclovir 20mg/kg-8hrly IV for 14 days
- Encephalitis & systemic disease—21 days.

https://www.slideshare.net/ramkeshmeena7796/pediatric-skin-diseases-by-dr-ramkesh-meena?next_slideshow=1
HFM

https://www.slideshare.net/Prezi22/pediatric-rash
Molluscum Contagiosum

Bacterial Infections
Impetigo

https://www.slideshare.net/Prezi22/pediatric-rash
Bullous Impetigo

https://www.slideshare.net/Prezi22/pediatric-rash
Scarlet Fever

https://www.slideshare.net/Prezi22/pediatric-rash
Staph Scalded Skin

https://www.slideshare.net/Prezi22/pediatric-rash
Meningococcemia

https://www.slideshare.net/Prezi22/pediatric-rash
RMSF

Rocky Mountain Spotted Fever

- Erythematous blanching macules
Do you Haiku?? (obtain photos for EHR)

- A great way to communicate rashes to derm, PMD, colleagues etc
- Recommended for lacerations-pre-suture, immediately after suture, and at f/u
- Can follow progress of suspected cellulitis, etc
Photo documentation

• Laceration repair:

No after removal photo taken 😞
Helpful Resources:

- Textbooks:
  - Clinical Pediatric Dermatology – Hurwitz
  - Color Textbook of Pediatric Dermatology – Weston, Lane, and Morelli
  - Urgent Care Dermatology: Symptom-Based Diagnosis E-Book – Fitzpatrick, High, and Kyle
- The Society for Pediatric Dermatology (pedsderm.net)
- American Academy of Dermatology (www.aaad.org)
- UpToDate (www.uptodate.com)
- VisualDX (www.visualdx.com)
References:

• UpToDate - multiple topics and images
• VisualDx - several topics and images
• https://www.slideshare.net/lasvegasem/pediatric-rashes-25241889
• https://www.slideshare.net/Prezi22/pediatric-rash
• https://www.slideshare.net/ramkeshmeena7796/pediatric-skin-diseases-by-dr-ramkesh-meena?next_slideshow=1
• https://www.healthline.com/health/bug-bites#pictures
Thank-you!

Obligatory picture of my dog! (the small one 😊)

Please feel free to reach out to me at lmarusinec@chw.org