Keeping up with the Kid-RASH-ians

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Speaker Introduction

• Cassandra Newell is a pediatric nurse practitioner. She received her master’s degree in nursing from Yale University School of Nursing. After graduation she worked in general pediatrics at KU before moving to the emergency department at Children’s Mercy Kansas City. She has been working there for the last 10 years. She is an active member on the local and national levels of NAPNAP. Ms. Newell currently is serving as a volunteer advocate for the Alliance for Children in Trafficking (ACT), a program by NAPNAP Partners for Vulnerable Youth, raising awareness and educating community healthcare providers on human trafficking.

Disclosures

I have no disclosures
I have no clothing or make-up lines
I do not have a reality TV show
I am not famous for being famous

Season One: Episode 1

Starring: South West, a healthy 15 month old female that flew in with a rash present for 24 hrs

• Rash started on face and legs, now spreading to neck and arms
• Rash “burns” and feels warm to touch
• Parents applying Vaseline to skin. PO Tylenol
• Denies itching, fever, vomiting, diarrhea or cough
• Had a runny nose and nasal congestion for few days prior
• No new skin contacts, medications, sushi or other catered foods
• No one else at their homes with a rash. No recent travel
• Patient drinking and urinating well. Parents too

PMH: no prior history of eczema or previous skin infections or problems

Vital Signs: T: 37.1 C; RR: 40; HR: 156; O2: 100%

Physical Exam

• Skin: Erythematous patches with overlying desquamation of the upper lip and nasal tip, erythematous patches of the bilateral antecubital fossa and groin without desquamation. Erythematous patches on her upper medial back and neck. Scabbed excoriations on left lateral face.
What is your diagnosis?
• A. Viral exanthem
• B. Allergic contact dermatitis
• C. Staphylococcal Scalded Skin Syndrome (SSSS)
• D. Irritant dermatitis from recent chemical peel used to maintain that baby soft skin

Staphylococcal Scalded Skin Syndrome (SSSS)
• Differential Diagnoses:
  • Scalding burns
  • Toxic epidermal necrolysis (TEN)
  • Drug-induced severe exfoliative condition
  • Epidermolysis bullosa/other blistering d/o (present at birth)
  • Nutritional deficiency dermatosis (zinc or protein deficiency)
  • Graft-versus-host disease
  • Staphylococcal Scalded Skin Syndrome (SSSS)

Staphylococcal Scalded Skin Syndrome (SSSS)
• Incidence: Occurs in neonates and young children
• Common sites of infection: Start in the conjunctivae, nares, perioral, perineum or umbilicus, then to flexural creases but may involve entire skin surface
• Signs and Symptoms:
  • Irritability, pain, fever, poor feeding
  • Erythema of the skin that progresses to large, superficial fragile blisters that rupture easily, giving denuded, desquaming, erythematous and tender skin
  • Exotoxin produced by Staph. aureus – cleaves Desmoglein-1, an anchoring protein found in the upper epidermis
Treatment

• Goal: Eradicate toxin-producing staphylococci and stop toxin production
• Mild disease may be treated with oral antibiotics and closely monitored as an outpatient
• Severe disease or high risk requires hospitalization
  • Fluid and electrolyte management
  • Pain management (NSAIDs, narcotics)
  • Systemic Antibiotics:
    - First or third generation cephalosporin (Cefazolin)
    - Clindamycin (know your regional Clindamycin-resistance rate in MSSA & MRSA)
  • Possible in vivo reduction in exotoxin production by binding 50S ribosomal subunit

Season One: Episode 2

Starring: Wes Koaste, a healthy 6-year-old male who presents with a worsening rash x 6 months
• Rash started on back of legs, spread to lower back and now buttocks
• Rash is painful and itchy
• Parents applying Pond’s age-defying lotion and Arbonne serum with no immediate results
• No new soaps or bronzers
• Concierge physician prescribed desonide ointment, Triamcinolone 0.1% ointment which helped slightly, but quickly flares when stopped
• Parents are tired of the rash and want to get to the bottom of it

PMH: no prior history of skin problems

Physical Exam

• General: Alert. No acute distress. Non-toxic appearance. Pt scratching bottom, not wanting to sit down

• Skin: Erythematous scaly patches, papules and plaques with a large expansive annular appearance around the buttocks. Erythematous papules and mild eczematous plaques on the posterior thighs and bilateral popliteal fossae

What is your diagnosis?

• A. Inverse psoriasis
• B. Atopic dermatitis
• C. Bidet deficiency
• D. Toilet seat dermatitis

Toilet Seat Dermatitis

• Allergic contact dermatitis
• Due to exposure to toilet seats
  • Wooden seats
    - Contained wood-binding resins
  • Plastic seats
    - Ammonia containing cleaners (Pine Sol, Lysol, Clorox wipes, etc.)
    - Fragranced products or sprays
  • Essential oils
  • Gold seats? – theoretically possible due to gold allergy in more affluent restrooms

Toilet Seat Dermatitis

• Differential Diagnoses:
  • Atopic dermatitis
  • Psoriasis
  • Irritant dermatitis
  • Molluscum dermatis
  • Tinea corporis
  • Toilet seat dermatitis
Treatment
• Goal: Avoidance
  • Can be difficult to control exposure (school, manicurist, etc.)
  • Wipe toilet seats with warm water prior to use
  • Plastic toilet seats in place of wooden seats
  • Avoid ammonia-based cleansers or fragranced cleansers:
  • Dilute bleach and water, white vinegar cleansers, etc.
  • Plastic wraps/covers for travel
• Mild to moderate potency topical corticosteroids
  (2.5% hydrocortisone ointment - 0.1% triamcinolone ointment)
• Topical moisturizers (Vaseline, Aquaphor, Vaniply ointment)

Season One: Episode 3
Starring: Chye Towne, a 7 year old male with a history of eczema presents with worsening skin
• His skin care consists of hot showers every other day, uses Old Spice soap and Axe body spray
• Moisturizer includes evergreen lotion and a nighttime lavender lotion before bed
• Family states, "We have tried everything-1% hydrocortisone cream, Eucrisa ointment and even aloe vera gel without results"
• He has been itching and not sleeping well despite melatonin and limiting his reality screen time to just 4 hrs before bedtime
• No known ill contacts PMH: history of eczema

Atopic Dermatitis
What is the next appropriate step in management?
A. Reduce bathing to weekly, start shea butter and oral steroids
B. Fragrance free soaps and moisturizing ointments, regular bathing, topical steroids and oral antihistamines
C. Gluten free diet and a detoxifying cleanse
D. Benzoyl peroxide wash, topical clindamycin lotion and oral doxycycline
What do we know about atopic dermatitis?

- One of the most common inflammatory skin disorders
- It can range from mild to severe, usually starts early in childhood
- Itchy rash, comes and goes, majority of affected children develop eczema before 5 years of age
- May be associated with allergic rhinitis and asthma
- Many comorbidities: reduced sleep, irritability, affected social interactions
**Antihistamines**
- Diphenhydramine (1.25mg/kg/dose every 6-8h)
  - Watch out for paradoxical hyperactivity
- Hydroxyzine (0.5mg/kg/dose every 6-8h)
- Tolerance to the sedating effects can happen within days to weeks

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**Season One: Episode 4**
Starring: Rhyann Seekrest, a 3 year old female, here for evaluation of new skin lesions
- Started a week ago, red rings on arms, legs, trunk and face
- Noticed by the nanny while they were listening and dancing to “Put a Ring on it” by Beyonce
- Their health care provider called in some Griseofulvin for presumed ringworm
- Now her hands and feet are swollen. Obviously having a reaction to the Griseofulvin
- Lesions now appear bruised in the center
- Parent worried that patient has developed Steven-Johnson Syndrome after an exhaustive Google search in the waiting room

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**Physical Exam**
- General: Alert. No acute distress. Non-toxic appearance
- HEENT: Face and eyelids slightly swollen. Eyes and Oral/pharynx clear. No lip swelling
- Lungs: No shortness of breath. CTA: No wheeze
- Skin: Erythematous edematous annular papules and plaques, several which have a bluish hue/bruised appearance centrally. No visible scale noted. Hands and feet slightly swollen
What condition is this patient experiencing?

- A. Johnson & Johnson Syndrome
- B. Nummular eczema
- C. Granuloma annulare
- D. Urticaria multiforme

Urticaria Multiforme

- Named for the distinctive clinical features of acute **annular** urticaria
- Causes can be varied from infectious, drug or idiopathic
- Clinical similarities exist between acute annular urticaria, erythema multiforme and serum-sickness like reactions: can be confusing
- Lesions can be few to numerous
- Varied stages: edematous papules and plaques, can be annular, polycyclic, etc.
- Centers can have a distinctive blue or bruised appearance
- Associated facial and distal extremity swelling is common
- Lesions can last days, episodes can last ~1-3 weeks

Urticaria Multiforme: Differential Diagnoses:

- Erythema multiforme or MIRM (Mycoplasma)
- Serum sickness syndrome (antibiotics are common triggers)
- Anaphylactic reaction (IgE process)
- Erythema chronicum migrans (Lyme disease)
- Tinea corporis (lesions are often scaly and may have pustules)
- Annular psoriasis
- Urticaria multiforme

Urticaria Multiforme

- Symptomatic control with oral antihistamines
  - First generation H1-blocking antihistamines (more sedating)
    - Hydroxyzine (0.5mg/kg/dose every 6 hrs)
    - Diphenhydramine (1.25mg/kg/dose every 6 hrs)
  - Partially sedating H1-blockers (less sedating)
    - Cetirizine (0.2cc/kg/day)
    - Fexofenadine
  - H2-blocking antihistamines may offer additional benefit to the above
    - Ranitidine (NDMA contamination noted recently)
    - Famotidine
  - Oral steroids not recommended/proven for treatment for acute urticaria
  - Resist parental pressure for oral steroids

Season One: Episode 5

Returning Star: **Chye Towne**, a 7 year old male with a history of eczema seen earlier

- Was doing much better until recently...
- Presents today with a tactile fever and worsening eczema
- Not feeling well, complaining of severe skin pain
- Topical medications not helping, even restarted taking old partially-used Rx for Clindamycin
- Mother recently had a "painful reaction" to her new lip gloss product line (She has had this reaction every few months to her previous lip glosses)
- PMH: history of eczema

Physical Exam

- Ill appearing, non-toxic, irritable
- Skin: TNTC crusted papules and monomorphic erosions coalescing together on the neck, bilateral arms, legs and hands. Several areas with crustng. Scattered lesions on the face and around the eyes
What is your diagnosis?

A. Allergic reaction to his iPad and nickel jewelry
B. Eczema herpeticum
C. Atopic dermatitis with eczema coxsackium
D. Exacerbation of atopic dermatitis

Eczema Herpeticum

• What is it?
  • HSV virus infection in the setting of atopic dermatitis
  • From other infected humans

• Occurs most commonly with patients with atopic dermatitis
• Why? Impaired skin barrier from a severe disseminated HSV infection
  • Often occurs when their atopic dermatitis is not flaring/is under good control

• Common Symptoms:
  • Abrupt onset of fever, malaise
  • Widespread of monomorphic vesicles and erosions
  • Not responding to standard topical therapies or oral antibiotics

Differential Diagnoses

• Atopic dermatitis flare
• Atopic dermatitis with bacterial superinfection
• Allergic contact dermatitis
• Eczema coxsackium
• Eczema herpeticum

Management/Treatment

• Goal to prevent complications: keratoconjunctivitis, secondary bacterial superinfection, fluid loss and viremia

• When in doubt, obtain viral cx/PCR and consider treatment
  • Outpatient management:
    • Acyclovir 20 mg/kg/dose PO four times a day for 7-10 days
    • Topical: No topical steroids! Bland emollients (Vaseline/Aquaphor) four times daily and prn
    • Any lesions on eyelids or near eyes - Ophthalmology consult

  • Inpatient management:
    • IV Acyclovir: 10 mg/kg/dose q 8 hours, hydration, pain and fever control
    • Any lesions on eyelids or near eyes - Ophthalmology consult

Season One: Episode 6

Starring: Whey South, a 4 year old male with acute penile swelling

• Father noticed it this morning and called his PCP who sent them to the ED
• Father is very concerned
  • Requesting his son be seen by a Urologist, “This isn’t normal”
  • Some discomfort with voiding

• Patient was playing outside their summer home in the garden
• Dad complained that they were having their plumbing redone because patient had flushed his mother’s Spanx down the toilet the day prior
Physical Exam
• General: Alert. No acute distress. Non-toxic appearance
• HEENT: Eyes and Oral/pharynx clear. No lip swelling
• Lungs: No shortness of breath. CTA. No wheeze
• GU/Skin: Very notable penile swelling, appears almost gelatinous no discharge

What is your diagnosis?
• A. Priapism
• B. Balanitis
• C. Bullous pearly penile papules
• D. Summer penile syndrome

Summer Penile Syndrome
• "It's a guy thing"
• Common during the summer months (peaks around 4th of July)
• A hypersensitivity reaction to harvest mite (chigger) bites
• Chiggers inject a secretion causing itching and they typically fall off when they are scratched off
• Peeing outside is a risk factor
• Wearing only shorts and no underwear (bugs have easier access)
• Most common in boys 6-10 yrs of age
• When a chigger bites the penis the reaction causes acute swelling and pruritus
• Swelling pronounced, may cause some dysuria/retention
• Most boys have history of recent exposure to woods, parks or lawns

Differential Diagnoses
• Balanitis
• Bacterial infection
• Allergic contact dermatitis
• Phimosis
• Hair tourniquet
• Summer penile syndrome

Management/Treatment
• Goal: Prevent with insect repellent (20-30% DEET) when outdoors, tight fitting clothing
• Oral Antihistamines: Diphenhydramine or hydroxyzine
• Cool baths or cool compresses/ice pack to affected area
• Mild potency topical steroids
• If secondary infection suspected
  • Perform a bacterial culture and start oral antibiotic

Season One: Episode 7
Starring: Stormy Rhaine, a 7 year old male presents today with a red itchy and painful rash for the past 3-4 days
• He does have an outdoor dog named Snoop
• Using calamine lotion and taking oatmeal baths without any resolution
• Family noted a large black dot within the lesion
• Denies any new products, recent tattoos or Henna exposure
• Parents have tried cleaning the black spot with Goop soap and water repeatedly, but the black lesion remains
Physical Exam

- General: Alert. No acute distress. Non-toxic appearance
- HEENT: Face slightly swollen. Eyes and Oral pharynx clear. No lip swelling
- Lungs: No shortness of breath. CTA. No wheeze
- Skin: Erythematous and edematous plaque with some fluid-filled vesicles and bullae, centrally there is a dark black macule. There are scattered red papules scattered on the left leg and some on the right

What condition is this patient experiencing?

- A. Pigmented spitz nevus or possible melanoma
- B. Varicella zoster with necrotizing fasciitis
- C. Thermal burn/injury
- D. “Black spot” poison ivy

Black spot poison ivy

- Poison ivy, poison oak, and poison sumac – most cases of Allergic Contact Dermatitis (ACD) in US
- These are Rhus plants from the Toxicodendron species
- Grow as tall shrub or woody rope-like vine in vacant lots, among grasses, and on trees or fences
- The undiluted sap from these plants turns black when exposed to dry surfaces and skin causing the black lacquer on the skin “black spot poison ivy”
- Delayed contact hypersensitivity reaction to an oleoresin [active sensitizing ingredient is pentadecylcatechol]  
- Pets can get oleoresin on their fur, transmitting it to humans
- Fall when brush and leaves are burned, sensitizing oil may be vaporized and transmitted by smoke to exposed cutaneous surfaces
  - Rhus dermatitis usually first appears in susceptible, sensitized individuals within 1 to 3 days after contact with the sensitizing oleoresin; in highly sensitive individuals it may occur within 8 hours of exposure
  - Sx: itching, redness, papules, vesicles, and bullae
Black Spot Dermatitis

Differential Diagnoses
• Atypical melanocytic nevus or pigmented spitz nevus
• Burn (thermal or electrical)
• Varicella zoster
• Brown recluse spider bite
• Black spot poison ivy

Management
• Goal to prevent/avoid contact with poison ivy, especially plants with black spots on them
• Chemical destruction or physical removal of poison ivy is indicated
• Heavy-duty vinyl gloves should be used if the plants are uprooted, since the urushiol is soluble in rubber and can penetrate latex gloves
• Certain commercially available barrier preparations have been shown to diminish reactivity significantly (IvyBlock, Stokogard, Hollister Moisture Barrier, Hydropel)
• Known exposure should wash thoroughly with soap and water as rapidly as possible so that removal of the oil is accomplished, within 5 to 10 minutes of exposure
• CHANGE CLOTHES, WASH SKIN
• WASH ALL CLOTHES/SHOES and Dog

Treatment
• Moderate to high potency topical steroids on body and extremities; milder potency on face or groin
• Systemic corticosteroids if extensive or severe (Consider 2-3 week course to avoid a rebound flare)
• Oral antihistamines (Diphenhydramine, hydroxyzine)
• Bland emollients (Vaseline/Aquaphor) four times daily and prn
• The black deposits cannot be physically removed
• They will eventually peel off and the underlying skin heals without scarring
• Calamine lotion or Sarna lotion for itching (OTC)
• Topical preparations containing potential sensitizers such as diphenhydramine or benzocaine should be avoided
• Cool compresses with plain tap water or Domeboro soaks

Season One: Episode 8
Starring: CHLOE*, a 5 year old with a history of febrile seizures
• Recently has had lots of URIs and intermittent fevers
• Every time she has a fever she has a febrile seizure
• Seen by neurology for the repeated febrile seizures
  -Started on Phenobarbital in hopes of controlling the seizures
• Now presents 2-3months later.....
• Developed facial swelling, fever (103.5 F), LAD and purple red rash

Physical Exam
• General: Alert and oriented. Ill appearing.
• HEENT: bilateral periorbital edema/facial swelling, mild erythema to posterior pharynx
• Lungs: No shortness of breath. CTA. No wheezes
• CV: no murmur, < 3 sec cap refill
• Skin: Diffuse dark purple/red patches and plaques on face, trunk and extremities
• Lymphadenopathy: bilateral cervical, axillary and inguinal lymphadenopathy
What is your diagnosis?

A. Henoch-Schonlein Purpura (HSP)
B. Kawasaki disease
C. Drug hypersensitivity syndrome
D. Urticaria multiforme

Drug Hypersensitivity Syndrome

• Clinical presentation: fever, malaise, cervical lymphadenopathy, pharyngitis initially
  • Fever usually precedes cutaneous eruption, maybe concurrent
  • Fever is usually 38–40 degrees C
  • Fever may persist for several weeks after discontinuation of offending medication
• Eruption usually starts on face, spreads caudally
  • Characteristic facial edema, often periorbital
  • Visceral involvement follows: hepatic, hematologic, renal most commonly
  • Symptoms persist weeks to months; progress after d/c of offending medication

Differential Diagnoses

• Kawasaki syndrome
• SJS/TEN
• Infection: EBV, CMV, viral hepatitis, toxic shock syndrome, mycoplasma, streptococcal, atypical measles
• HSP
• Drug hypersensitivity syndrome

Management/Treatment

• DC offending drug and cross reacting drugs (Need Med-alert bracelet and Phone banner alert)
  • Aromatic anticonvulsants: Phenobarbital, Phenytoin, Carbamazepine
  • Other anticonvulsants: Lamotrigine
  • Bactrim
• Labs: CBC with diff, Liver panel, BMP, urinalysis
• CXR if any respiratory symptoms
• Ophthalmology consult
• Treatment
  • Inpatient admission: severe diffuse, blisters, hepatic involvement (higher mortality)
    • Organ involvement: Kidneys standard 1.2-1.5mg/kg/day
    • Closely follow labs, skin and fever trend
  • Outpatient
    • Oral antihistamines and topical corticosteroids may help with pruritus in mild cases
    • Systemic corticosteroids (0-2 mg/kg/day) for severe weeks, with gradual taper thereafter (weeks to potentially months)
    • If elevated LFTs, consider prednisolone rather than prednisone

Season One: Episode 9

Starring: Clemontine, a 16 year old female with a rash on her leg

• Nanny said they recently traveled to the Island of Capri over spring break on a sunny day
• Hiked to the top of the island and had lunch & fresh lemonade
• Denies any new products
  • PMH- is negative
Physical Exam

- General: Alert and oriented
- Skin: Erythematous, brown, tan, round to linear patches on upper thigh and lower leg with overlying peeling

What is your diagnosis?

A. Non-accidental trauma
B. Sunburn
C. Capri-sun reaction
D. Phytophotodermatitis

Phytophotodermatitis

- Plant induced photosensitivity is most common phototoxic reaction of children
- Such plants include limes, lemons, celery, parsnips that contain furocoumarin compounds
- Phytophotodermatitis occurs within a day after exposure of the furocoumarin compound and sunlight
- The reaction can be mild erythema with or without severe blistering and then leads to an inflammatory hyperpigmentation
- Most commonly occurs on the face, chest, hands and lower legs
- Streaks on the trunk have been noted from dripping of lime juice and fingerprints-shaped macules may be seen on lateral aspects of trunk from parent picking up child with furocoumarins on their fingers

Differential Diagnoses

- Child abuse
- Herpes simplex virus/zoster if blistering
- Thermal or Chemical burn/staining
- Allergic contact dermatitis
- Phytophotodermatitis
Management/Treatment

• No treatment necessary, the hyperpigmentation will fade on its own over several weeks to months
• In more severe cases, antibiotic ointment for any open sores, Vaseline, wound care as needed

Season One: Episode 10
Starring: L-a, a 11 year old female presents with an itchy rash on her upper back

• Long history of atopic dermatitis and nickel dermatitis
• 2 month history of an itchy rash on her neck/upper back
• Lesion is not responding to topical mupirocin ointment and her usual 0.1% triamcinolone ointment
• Patient went to urgent care, given mometasone ointment to use. Rash is still getting worse
• Family wanted child to be seen and cleared up before they film a special reality episode tomorrow at their home

What is your diagnosis?

A. Allergic contact dermatitis
B. Tinea incognito
C. Lyme disease
D. Steroid-resistant atopic dermatitis

Physical Exam

• General: Alert and oriented
• Skin: Erythematous slightly scaly patches and plaques, appear to be coalescing together on the upper portion of the back

Physical Exam

• General: Alert and oriented
• Skin: Erythematous slightly scaly patches and plaques, appear to be coalescing together on the upper portion of the back

What is your diagnosis?

A. Allergic contact dermatitis
B. Tinea incognito
C. Lyme disease
D. Steroid-resistant atopic dermatitis

Tinea Incognito

• A dermatophyte infection with a clinical presentation modified by previous treatment
  • topical corticosteroids (mod-high potency)
  • systemic corticosteroids
  • topical immunomodulators (pimecrolimus and tacrolimus)
• Topical steroids can initially reduce redness via vasoconstriction
  • Gives families false impression that the steroid is helping the rash
  • Remind families to stop using them (possible flare)
• Trichophyton and Microsporum are most common organisms
• First described over 50+ years ago
• Diagnosis is frequently missed or delayed
• Lesions start locally, can rapidly spread
• Perform a fungal culture (gold standard – takes 2 weeks to grow)

Differential Diagnoses

• Psoriasis
• Atopic dermatitis
• Seborrheic dermatitis
• Lupus erythematosus
• Contact dermatitis
• Tinea
Management/Treatment
- Focal, smaller lesions may respond to topical antifungals (topical ketoconazole, econazole, terbinafine cream)
- Often systemic antifungals are required (in widespread cases or on/near hair-bearing areas)
- Griseofulvin Microsize (20-25mg/kg/day x 6-8 weeks)
- Terbinafine daily for 4-6 weeks (Microsporum requires longer course)
- Identify source: sibling, pet (dog, cat, guinea pig, hamster, etc)
- Re-culture after if need to prove cure

Season One: Episode 11
Starring: Linnae Are, a 6 year old female presents with an itchy rash on her hand for a few weeks
- Parent reports she recently was on a playdate to the park with several classmates
- She played on the swings, making sand-castles using old Solo cups and playing "Ring around the Rosie"
- They called their PCP's office who could not get them in until the following day
- Family was impatient and came into the ED to get a handle on the situation

Physical Exam:
Skin: Crusted fissured papules between the right 4th/5th interdigital webspace with an adjacent linear pink plaque. Left hand, trunk, BLE clear.

What is your diagnosis?
- A. Cutaneous larva migrans (CLM)
- B. Tinea manum
- C. Scabies
- D. Lichen striatus

Cutaneous Larva Migrans (Creeping Eruption)
- Self-limited skin eruption
- Due to the larval stages of the dog (Ancylostoma caninum) and cat hookworms (Ancylostoma braziliensis)
- Humans become incidental hosts when larve burrow through intact skin that comes into contact with the infested soil
- The disorder is quite common in children because of high-risk behaviors (i.e. playing in the sand) seen in this age group
- The most commonly involved areas are the extremities (especially feet), buttocks, and genitalia; moves 1-2mm per day
- The incubation period for CLM may be prolonged for weeks to months

Cutaneous Larva Migrans
Differential Diagnoses
- Scabies
- Sand fleas
- Allergic contact dermatitis
- Lichen striatus
- Hookworm
Treatment/Management

- Liquid nitrogen cryotherapy
  - Not traumatic, not very effective
- Thiabendazole: 25 mg/kg/d PO, divided BID, for 2 to 5 days
- Albendazole: 400 mg PO twice daily for 3 days
- Ivermectin: 12 mg PO daily for 2 days (200-400 mcg/kg)
- Topical Ivermectin: 4 times a day x 1 week
- Topical thiabendazole: (500 mg/5 ml) can be applied 4 times daily x 1 week

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