Challenging Rashes!

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Neonatal Lupus

• Associated with maternal antibody Ro(SSA), La (SSB), U1RNP, often from asymptomatic mother
Neonatal Lupus

• Onset - birth to 12 weeks - usually 6 weeks
• Often facial, related to sun exposure
• Red ovoid/annular lesions, flat or raised
• Scale often present; mistaken for tinea
• Associated with maternal antibody Ro(SSA), La (SSB), U1RNP, often from asymptomatic mother
Neonatal lupus erythematosus

- Extracutaneous disease
  - Cardiac: heart block, prolonged QT, cardiomyopathy
  - Hepatic: cholestasis, transaminitis
  - Hematologic: thrombocytopenia > anemia, neutropenia

- CNS: hydrocephalus (~10); macrocephaly (~15%)
3 weeks ago, the child developed an itchy pink, red eruption. There is no fever or constitutional symptoms. Exam shows edematous, pink “juicy” papules, 2-6 mm on the elbows and knees.

A. Eczema herpeticum
B. Eczema herpeticum and impetigo
C. Molluscum contagiosum
D. Molluscum with id reaction
E. Gianotti-Crosti disease
Molluscum Contagiosum:

- DNA Pox virus
  - Virus has been sequenced
  - Not yet propagated in culture
- Cutaneous infection only
- Contact spread
- Truly are self-limited… **BUT**…
MOLLUSCUM- The Bump That Rashes: Inflammatory Reactions

696 molluscum patients: mean age, 5.5 yrs

- Molluscum dermatitis: 39%
- Inflamed MC: 22%
- Gianotti-Crosti like: 5%

Atopic Dermatitis:
- Risk factor for MC
- More MC-dermatitis (51%)

Molluscum-Associated Gianotti-Crosti Like Syndrome

- **Id-like:** like with tinea or disseminated eczema with allergic contact dermatitis
- More pruritic
- More **localized** to elbows and knees
- Better response to topical corticosteroids

Cutaneous Larva Migrans

• AKA: “Creeping Eruption”
• Usually caused by dog and cat hookworms (*Ancylostoma caninum* and *Ancylostoma braziliense*)
• Most frequently seen in warm climates
  • Southeastern US (esp. Florida and Georgia)
  • Caribbean; Mexico
  • Central and South America
  • Africa; Southeast Asia
Cutaneous Larva Migrans

• Most common tropically acquired dermatosis

• Hookworm larvae penetrate exposed human skin contacting sand contaminated with ova-laden animal feces
  – Hx of sunbathing, barefoot beach walking, etc

• Skin-limited: Humans are “accidental tourists”

• Itchy, edematous, SERPIGINOUS plaques
Cutaneous Larva Migrans

- Slow advancement: 1-2 cm/day
- Systemic signs: Can have eosinophilia; pulmonary infiltrates (BUT RARE!)
  - Impetigo and allergic reactions reported
- **Treatment:** Local destruction (LN2: No)
- Thiabendazole topical: SURE...try to get it!
- Ivermectin: Most practical (12 mg dose- 81-100% cure); Albendazole alternative 3-7 days

Staph Scalded Skin Syndrome

• **Seen in:** neonates, young children; can be seen in older children to adulthood

• **Early symptoms:** Fever, malaise, irritability, followed by erythema and patches diffusely with fragile bullae, peeling, denuded “scalded appearance”
  – **Common:** Accentuation in folds (neck, axillae, perineal areas); “Sunburst pattern” by mouth
Staph Scalded Skin Syndrome

- Exfoliating (epidermolytic) toxin (ET) from phage II *Staphylococcus aureus*
- 2 types of ETs: ETA and ETB (mostly A in West)
  - Target: desmoglein-1, a cell-to-cell adhesion molecule in the stratum granulosum
4 year old has a hyperpigmented plaque x 4 months; anterior neck

Lesion is asymptomatic
No change with soaps and wipes
Has atopic dermatitis, reactive airway disease. Family history of type II diabetes.

• General exam: Non-obese (BMI 16 kg/m$^2$).
• Skin: Somewhat cobblestone-like on neck. Rest of skin: WNL
4 year old has a hyperpigmented plaque x 4 months; anterior neck

Bloodwork
CBC: within normal limits
Glucose: 82 mg/dL (normal 60-110)
Insulin: 3 mU/mL (normal < 17)
Cholesterol: 136 mg/dL (normal <200)
Triglycerides: 79 mg/dL (normal 32-116)
Terra firma-forme dermatosis

- Dirt-like plaques develop on the skin despite normal hygiene
- *Terra firma* means “solid earth” in Latin
- Brown or black hyperkeratotic plaques
- Berk et al: 31 cases: Neck, ankles, face most commonly affected areas

Differential Dx

• Acanthosis nigricans
• Confluent and reticulated papillomatosis (CARP)
• Pityriasis versicolor

16 year old with 2 days of rash

• Had URI recently, but no fever or weakness.
• Lesions quite itchy
• Took oral benadryl
• Was in Mexico 2 weeks ago; recently moved into aunt’s house
• Medications prior to the rash were limited to “Cold Tylenol”
Cimex lectularius

• Only take blood meal at night; not often felt or noted by patient

• Tend to live off bed along floorboards or in furniture

• Can survive without blood meals for 1 year
Leishmaniasis

Intracellular protozoan infection, with clinical spectrum depending on species and immune response

- **Old World:** Mediterranean basin, Middle East, Asia, Africa, Southern Europe
- **New World:** Latin America
- **SAND FLEAS:** Happy to help!
  - Phlebotomus genus (OW); Lutzomyia genus (NW)
Cutaneous Leishmaniasis

Multiple species

Old World: Benign cutaneous disease

• May be self-limiting….or not (severe mucosal or ulcerative lesions)

**DIAGNOSIS:** Biopsy

**TREATMENT:**

* **CDC:** reference diagnostic services

Rx: Variable: Imidizoles; Miltefosine
Leishmaniasis Gone Viral: Social Media and an Outbreak of Cutaneous Leishmaniasis

- Centers for Disease: Leishmania major identified using polymerase chain reaction
- Patient used Facebook; posted t-shirt to connect with other
- Second post-with pictures
- 13 in California seen and rx’ed
  - 12 rx with topical paromomycin
  
Parents report that there are 7 nests from sparrows and doves under the roof of their house.

Classic “window ledge” location.
Window air conditioners may be a risk factor.
Dermanyssus gallinae or Chicken Mite
Ornithonyssus sylviarum
Bird mite dermatitis

Dermatoses from nonburrowing blood sucking mites from birds

• Life cycle is on birds!

Ornithonyssus sylviarum: Robins, sparrows, pigeons, swallows, wagtail and gerbils

Dermanyssus gallinae – canary, pigeon, gerbil

• Found in nests, air-conditioning systems, ventilation ducts, gerbils
Bird mite dermatitis (Gamasoidosis)

Exam: Pruritic papules, exposed surfaces. Can be vesicular, urticarial

Ddx: bedbug bites, flea bites, scabies, dog mange, pediculosis, urticaria, molluscum contagiosum

• Tx: Pest control!
   Topical corticosteroids, antihistamines