

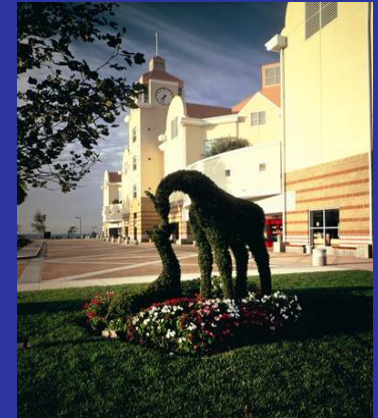
Challenging Rashes!

Lawrence F. Eichenfield, M.D.

Professor of Dermatology and Pediatrics

University of California, San Diego

Rady Children's Hospital, San Diego



UNIVERSITY of CALIFORNIA, SAN DIEGO
MEDICAL CENTER



Rady
Children's
Hospital
San Diego



Neonatal Lupus

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

Neonatal Lupus

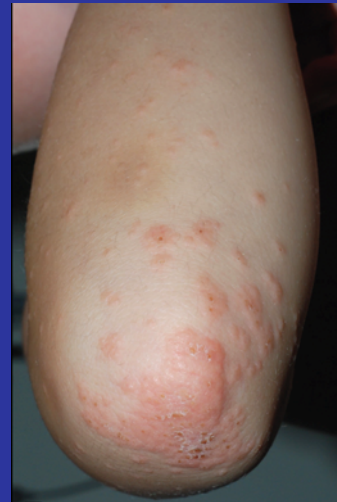
- Onset - birth to 12 weeks - usually 6 weeks
- Often facial, related to sun exposure
- Red ovoid/annular lesions, flat or raised
- Scale often present; mistaken for tinea
- Associated with maternal antibody Ro(SSA), La (SSB), U1RNP, often from asymptomatic mother

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 brasiliense*)
- 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)

Caumes E. Clin Infect Dis 2000;30:811-14

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/m²).
- 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

Berk DR. *Pediatr Dermatol.* 2011;29(3):297-300.

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

• [Mongkolrattanothai K et al. Pediatr Dermatol 2016 Sep;33\(5\):e276-7. doi: 10.1111/pde.12910.](#)

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