Rash Decisions
_A quiz for the pediatric clinician_

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_Rash Decisions_

- Common dermatoses seen in primary care
- Each case will have an ARS question
- For each case you will learn a diagnostic or therapeutic tip
- Two themes of this talk to guess
  - Medical
  - Recent news event

_Conflicts of Interest & Credits_

- None
- Slides for one case courtesy Dr. Kelly Cordoro
Rash for a month in spite of hydrocortisone cream 1%

ARS #1: Best treatment to try next

a) Hydrocortisone cream 2.5%
b) Ketoconazole cream
c) Nystatin ointment
d) Terbinafine cream
e) Petrolatum jelly

ARS #1: Best treatment to try next

- Hydrocortisone cream 2.5%
- Ketoconazole cream
- Nystatin ointment
- Terbinafine cream
- Petrolatum jelly
**Full skin examination reveals**

Scaly red plaques on both arms.
A diagnostic test was done.

**Tinea facei Dx Tip**

- Can appear seborrheic dermatitis-like
- Look for tinea capitis or corporis
- Look for animal contact
Rash on hand and foot

- 12 year old healthy boy
- Gradually developed rash on right dorsal hand, then on right dorsal foot over past 2 months
- Slightly painful/tender but not itchy

ARS #2: The next step is

- Scrape for KOH & fungal culture
- Treat with topical steroid
- Refer to dermatology for skin biopsy
- Check fasting glucose
- Check antinuclear antibody
**Granuloma annulare Dx tip**

- Smooth without scale
- Skin lines are intact
- Variable color: skin, a little red or hyperpigmented
- Tends to be on body sites commonly traumatized such as extensor extremities

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**4 year old with acute onset widespread rash**

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**ARS #3: Treatment of Choice**

a) Amoxicillin
b) Prednisone
c) Hydroxyzine
d) Aspirin
**ARS #3: Treatment of Choice**

a) Amoxicillin  
b) Prednisone  
c) Hydroxyzine  
d) Aspirin

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At follow up visit 1 week later rash is resolving with dusky nonblanching erythema

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**ARS #4: The diagnosis is**

a) Urticaria  
b) Erythema multiforme  
c) Urticaria multiforme  
d) Serum sickness
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a) Urticaria
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Diagnostic Tip Urticaria Multiforme

a distinct clinical variant of urticaria

- Urticarial hypersensitivity reaction, often related to infection
- Mild fever, antecedent URI, OM, GE, antibx, vaccines
- Annular, polycyclic, targetoid wheals + acrofacial angioedema
### Diagnostic Criteria for Urticaria Multiforme

- Acrofacial angioedema **but no** arthralgias or arthritis
- Annular/polycyclic urticarial morphology
  - Pruritic
  - Variable ecchymosis or dusken
  - No true targets, necrosis, blistering or mucosal changes
  - Individual lesions last < 24 h
  - Lasts 8-10 days
  - Responds to antihistamines
  - Modest ↑ in acute-phase reactants, WBC

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### Urticaria Multiforme

May resolve with asymptomatic dusky, ecchymotic areas

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### Acute Urticaria

- Fade without residua in < 24h
- ~50% concurrent angioedema
- Annular/geographic patterns
Acute Urticaria

- Annular
- Disappears

2 week-old term female

- Term infant without complications in pregnancy
- Gradually developing pink annular rash at 2 wks
- Otherwise infant doing well, nursing and gaining weight, normal activity.
ARS #5: Next test to order is

a) KOH  
b) Tzanck smear  
c) Bacterial culture  
d) Complete blood count

Diagnostic tip: Ro/SSA and La/SSB on mom or infant; ANA, URNP

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Neonatal lupus erythematosus

- Cutaneous
- Cardiac
- Congenital heart block
- Hematologic
- Hepatobiliary
  - Elevated transaminases
    - Clin Pediatr (Phil)
    - Jan 2010
Dx Tip NLE: Cutaneous findings

- Pink annular plaques
  - Can be smooth or slightly scaly
  - Owl-like facial red plaques
  - Usually present in the first weeks of life & resolve about 6 months of age
  - Occur in 95% of cases of NLE
  - Erosions, cutis marmorata-like
- Purpura and petechiae
- Jaundice

ARS #6: 17 year old with foot rash

- 17 year old just back from summer trip to Costa Rica
- Itchy rash on foot came up the last few days there
- “OMG I have leishmaniasis,” says she in a panic
**ARS #6: Most likely diagnosis**

a) Leishmaniasis
b) Cutanea larva migrans
c) Tinea corporis
d) Bullous impetigo

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**Leishmaniasis?**

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**Tinea Corporis Dx Tips**

- All that is annular is not fungal
- If it scales, scrape it!
- If KOH negative, do fungal culture
- Remember pustular, vesicular and crusted plaques can also be tinea

**Tinea Corporis Diagnostic Tip**

- Scrape edge for KOH
- Do fungal culture if KOH negative or in an outbreak e.g. tinea gladiatorum
- Use moist cotton swab or toothbrush and rub scaliest area, usually border
- Swab media & send

**Juvenile Plantar Dermatosis**
Tinea Treatment Tip

- Topicals: terbinafine, clotrimazole, miconazole, butenifine cream BID for 2 weeks
- Avoid combination topical steroid/antifungal creams
- Use sequential treatment if unsure of the diagnosis.
- Nystatin for candida; not effective for dermatophyte
- If fails topical, use oral griseofulvin 15-20mg/kg for 3 weeks

Rash Decisions

- Common dermatoses seen in primary care
- For each case you learned a diagnostic or therapeutic tip
- Guess the themes
  - Medical
  - Recent news event

And the themes are

There’s a hint right here
Tinea head to toe

Annular Eruptions