Test Your Skills: Dermatologic Conditions in Children

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No Conflicts of Interest to Disclose

HANDOUT
• This will be a fun, interactive session to test your skills
• To make it more challenging I don’t want to “give away” the answers
• For those of you who like a handout, what follows is an alphabetic list of some of the conditions to be discussed with background information useful to clinical practice

Objectives
• Identify selected pediatric dermatologic conditions encountered in primary care settings
• Develop strategic approaches for managing pediatric patients with these conditions
• Distinguish similar appearing rashes in children

Atopic Dermatitis (AD)
Description: “Itch that rashes”
Clinical pearl: IF not itchy, not AD; Not in places child can’t reach to scratch
Epidemiology:
- onset < age 2, chronic w/ flares
- often FH/personal history allergic rhinitis, asthma

Atopic Dermatitis con’t
Treatment:
– emollients and good skin care KEY
– topical hydrocortisones - judicious use
– itch control
– avoidance
**Drug Reaction**

Description:
- Erythematous macules and papules often start on trunk and extend to become generalized.
- 1-2 weeks after medication admin
- Palms and soles maybe involved.
- Fever, pruritus.
- Monitor mucous membranes

Clinical pearl: IF morbilliform consider drug reaction

**Drug Reaction (con’t)**

Treatment:
- discontinue drug
- supportive / stay out of sun / emollients
- antihistamines
- maybe low dose topical corticosteroids
- monitor for internal involvement

**Eczema Herpeticum**

Description: “Punched out” erosions.

Etiology: Super infection w/ herpes simplex virus

Clinical pearl:
Children w/ atopic dermatitis more susceptible. Sick.

**Eczema Herpeticum (con’t)**

Treatment:
- IV antivirals & +/- clindamycin
- usually hospitalization
- stop steroids for eczema

**Guttate Psoriasis**

Description: salmon pink, oval or round, drop like with fine scale, on trunk/face/proximal limbs, < dime size, may initially be no scale, sudden onset

Epidemiology: onset 10-30 years of age

Differential:
- Pityriasis rosea (no herald patch)
- morbilliform viral exanthem

**Guttate Psoriasis (con’t)**

Treatment: Treat strep infection. May resolve on own in 2-3 weeks. May be isolated incident or chronic.

Clinical pearl: Check for PSD and strep pharyngitis. Can precipitate guttate psoriasis. (Often viral or strep infection 2-3 wks prior to emergence)
Hand, Foot and Mouth (HFMD)

Description: Vesicles/ ulcers around: uvula, palms, soles, buttocks; fever
Epidemiology: usually < age 5
Season: Summer/ fall
Treatment:
- good pain control prn
- encourage fluids
- monitor hydration

Atypical HFMD

EV-71, Coxsackie virus A6

Concerns:
- Child to adult transmission (atypical)
- Severe rash
- Entero virus – more aseptic meningitis, encephalitis, neonatal sepsis, myocarditis, pericarditis, hepatitis
- More hospitalizations/deaths

Juvenile Plantar Dermatitis

Description: Toe webs clear, skin w/ glazed look.
Etiology: Constant wetting and drying of skin
Clinical pearl: Tinea uncommon in preadolescence
Treatment:
- prevention/avoidance
- cotton socks / breathable footwear
- emollient while still wet
- occasionally low dose corticosteroids or calcineurin inhibitors

Kawasaki Disease (KD)

Description: High prolonged fever, IRRITABLE!!
See diagnostic criteria. Rash often starts on trunk, accentuated in perineal area. Acute self limiting vasculitis.
Etiology: ??; Likely infectious cause/ trigger in susceptible patient causing uncontrolled immune response
Season: Winter / early spring

Kawasaki Disease (KD) con’t

Epidemiology:
- Age: 50% < 2 yrs
  - 80% < 4 yrs
- Sex: Males > females
- Community outbreaks, more common
- Asian/ Pacific Island descent
Kawasaki Disease (KD) con’t

Diagnostic Criteria:
• Rash
• Inflamed oral mucous membranes
• Bilateral conjunctival injection – no discharge
• Extremity changes
• Cervical lymphadenopathy

  5 days high fever & 4/5 criteria

Clinical pearl: suspect KD with high prolonged fever. Common to be misdiagnosed by multiple providers w/ diagnoses like strep throat or flu

Kawasaki Disease (KD) con’t

Treatment:
- Hospitalize
- IV immune globulin
- High dose aspirin
- Monitor for cardiac complications

• Leading cause of acquired heart disease
• Infants more likely than older kids to get coronary aneurysms

Measles

Description: “C’S”:
• Cough
• Coryza (runny nose)
• Conjunctivitis (exudative)
• Confluent rash
• Koplik’s spots
• Cranky

Measles (con’t)

Epidemiology: Highly communicable.
Unvaccinated
Season: Late winter/Spring – in temperate areas
Treatment:
- No specific antiviral- maybe IV ribavirin for immunocompromised w/ severe dx
- Isolation 4 days after onset rash
- Prevention w/ vaccine best
Perineal Strep Dermatitis (PSD)

Description: fiery, erythematous based confluent rash, no satellite lesions, well defined borders, superficial; starts at anus and spreads outward

Symptoms: +/- rectal pain; +/- itchy; +/- strep pharyngitis; usually no constitutional sx

Perineal Strep Dermatitis (con’t)

Differential dx:
• Candida
• Seborrhea
• Pinworms
• Sexual abuse

Clinical pearl: send wound culture; not office rapid strep (NOT CLIA approved)

Perineal Strep Dermatitis (con’t)

Treatment:
• Amoxicillin 40-50 mg/kg/day bid X 10 days
• Penicillin
• Clindamycin

Small study:
• Cefuroxime (Ceftin)
  20 mg/kg/day bid X 7 days

Roseola
(6th disease)

Description: Generally well appearing
- 2-3 days sustained high fever
- Fever drops, pink morbilliform rash appears
- Occ cervical lymphadenopathy/ eyelid edema

Etiology: Human Herpesvirus 6
Age: Infant to 2 yrs
Treatment: Supportive

Tinea Capitis

Etiology: Trichophyton tonsurans or microsporum canis

Treatment:
- Griseofulvin PO 4-6 wks
- Terbinafine PO 2-4 wks
- TOPICALS not effective if hair shaft involvement
- Antifungal shampoo

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Organism</th>
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<tbody>
<tr>
<td>First disease</td>
<td>Measles (rubeola)</td>
</tr>
<tr>
<td>Second disease</td>
<td>Scarlet fever</td>
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<tr>
<td>Third disease</td>
<td>German measles (rubella)</td>
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<tr>
<td>Fourth disease</td>
<td>no longer</td>
</tr>
<tr>
<td>Fifth disease</td>
<td>Erythema Infectiosum</td>
</tr>
<tr>
<td>Sixth disease</td>
<td>Roseola Infantum</td>
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Tinea Corporis/ Faciei

Description: Scaly, circular patch with central clearing. May have pustules. NO hair shaft involvement

Treatment:
- topical antifungal bid 2-4 wks
- nystatin (class = Polyene) not effective

ID Reaction

Description: Fine, acute papular / papular vesicular eruptions; symmetrical, mod to severe pruritus

Cause: Hypersensitivity reaction to infecting fungus

Treatment:
- Control primary dermatitis (often tinea)
- Control pruritus
- Occasionally need 2-3 wks systemic corticosteroids

Kerion

Description: Inflammatory lesion, boggy nodule often w/pustules. Hair loss. Delayed hypersensitivity.

Clinical pearl: pustules are STERILE, expect s. aureus on skin surface

Treatment:
- griseofulvin PO 4-6 wks or terbinafine PO 6 wks
- no antibiotics
- rarely oral steroids 1.5 – 2 mg/kg/day X 2 wks w/ taper 20 mg max

References

Dermatlas.org