PEDiATRIC DERMATOLOGY

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PERLECHE

ETIOLOGY

- *Candida albicans*
- Other Candida species
PERLECHE

CLINICAL FINDINGS

- Erythema
- Maceration
- Fissures
PERLECHE DIAGNOSIS

- Potassium hydroxide examination
- Gram stain
- Culture
PERLECHE THERAPY

- Avoid excessive moisture
- Topical anti-fungal
  - ketoconazole cream 2% bid
- Topical antibacterial
  - mupirocin 2% bid
  - retapamulin 1% bid
- Topical corticosteroid
  - Hydrocortisone ointment 1%
TINEA CORPORIS
ETIOLOGY

- *Trichopyhton tonsurans*
- *Trichophyton rubrum*
- *Trichophyton mentagrophytes*
- *Microsporum canis*
TINEA CORPORIS

CLINICAL FINDINGS

- Usually single lesions
- Asymmetrical distribution if multiple
- Annular, circular or oval lesions
- Erythematous lesion with scale
- Vesiculopustular lesion may be seen
TINEA CORPORIS
DIAGNOSIS

- Potassium hydroxide examination
- Culture
TINEA CORPORIS THERAPY

- Topical anti-fungals for 2 weeks
- Oral anti-fungals if the infection persists or multiple lesions are present
  - Griseofulvin-2-3 week course
  - Fluconazole-1-2 week course
  - Itraconazole-1-2 week course
  - Terbinafine- 1-2 week course
TINEA CAPITIS
ETIOLOGY

◆ *Trichophyton tonsurans*
◆ *Microsporum canis*
◆ *Microsporum audouini*
◆ *Trichophyton violaceum*
TINEA CAPITIS

CLINICAL FINDINGS

- Patchy alopecia with scale
- Diffuse scale
- Crusting or pustules
- Occipital lymphadenopathy
- Kerion may develop
TINEA CAPITIS
DIAGNOSIS

- Clinical findings
- Potassium hydroxide examination
- Wood’s light examination
- Fungal culture
ANTIMYCOtic AGENTS

**ACTIONS**

- Griseofulvin – decreases microtubule function
- Fluconazole – decreases sterol 14-alpha demethylation
- Itraconazole – decreases fungal sterol synthesis
- Terbinafine – decreases squalene epoxidase, increases squalene
GRISEOFULVIN

- >40 years experience
- 15-20 mg/kg/day (microsized) for tinea capitis
- 6-8 week course for tinea capitis
- Good safety profile
- Available in liquid formulation 125mg/5ml
- Administer with fatty foods
- Efficacy low for onychomycosis
GRISEOFULVIN – SIDE EFFECTS

- Headache
- Gastrointestinal disturbances
- Urticaria
- “ID” reaction
FLUCONAZOLE

- Available since 1990’s
- Imidazole
- 6 mg/kg/day for tinea capitis
- 20 day course for tinea capitis
- Liquid formulation 40mg/ml
FLUCONAZOLE – SIDE EFFECTS

- Gastrointestinal disturbances
ITRACONAZOLE

- Available since late 1980’s
- Imidazole
- 3-5 mg/kg/day for tinea capitis
- 4-6 week course for tinea capitis
- Liquid formulation available – 10mg/ml
- Capsule should be administered with food
ITRACONAZOLE – SIDE EFFECTS

- Gastrointestinal disturbances
- Cyclodextrin can cause diarrhea
- Hepatotoxicity
- Headache
TERBINAFINE

- Developed in 1979
- Allyamine
- 62.5 mg/day (10-20kg); 125 mg/day (20-40kg); 250 (>40kg) for tinea capitis
- 2-4 weeks for tinea capitis
- No liquid formulation available
- Tinea capitis due to *Microsporum canis* responds slowly
TERBINAFINE – SIDE EFFECTS

- Gastrointestinal disturbances
- Taste loss (1.1-2.8%)
TINEA CAPITIS –
ADJUNCTIVE THERAPY

- Selenium sulfide shampoo 1%, 2.5%
- Ketoconazole shampoo 1%, 2%
- Antibiotics
- Corticosteroids

References

HERPES SIMPLEX
ETIOLOGY

- Herpes simplex type 1
- Herpes simplex type 2
HERPES SIMPLEX

CLINICAL FINDINGS

- Direct inoculation of any cutaneous surface
- Prodrome of itching, stinging, or burning
- Grouped vesicles with an erythematous surround
- May become vesiculopustular lesions
HERPES SIMPLEX
DIAGNOSIS

- Tzanck smear
- Fluorescent antibody
- Culture
HERPES SIMPLEX THERAPY

- Analgesics
- Prevent secondary bacterial infection
- Topical docosanol 10% cream 5X’s/day
- Topical penciclovir 1% cream 5X’s/day
- Oral anti-virals- episodic or suppressive therapy
Reference

PEDICULOSES
ETIOLOGY

- *Pediculus humanus capitis*
- *Pthirus pubis*
PEDICULOSES

CLINICAL FINDINGS

- Pruritus
- Lice
- Excoriations
- Nits
PEDICULOSSES THERAPY

- Vaseline to eyelashes
- Pyrethrins
- Lindane
- Permethrin 1% cream rinse
- Malathion
PEDICULOSIS CAPITIS TREATMENT

- Petrolatum
- Mayonnaise
- Trimethoprim/sulfa
- Permethrin 5% cream
- Off-label  Ivermectin 200 micrograms/kg dose po once
Reference

CONGENITAL SYPHILIS

- Transplacental mode of transmission
- With early untreated syphilis, 40% of pregnancies result in spontaneous abortion, stillbirth, or perinatal death
- Transmission can occur at any stage
- Rate of transmission 60-100% during secondary syphilis
CONGENITAL SYPHILIS

- Desquamation
- Vesicobullous lesions
- Condylomata lata
- Maculopapular or papulosquamous eruptions
- Rhagades
CONGENITAL SYPHILIS

- Treatment for proven or highly probable disease
  - Aqueous crystalline penicillin G, 100,000-150,000U/kg/day, administered as 50,000U/kg/dose IV, q12hours during first 7 days of life then every 8 hours for a total of 10 days
  - OR - Penicillin G procaine 50,000U/kg/day IM (1 dose/day) for 10 days
Reference

SCABIES

CLINICAL FINDINGS

- Pruritus, especially at night
- Eczematous patches and papules
- Finger web spaces, axillae, wrists, belt-line, and groin area
- Characteristic burrows
- Vesicular and nodular lesions in infants
- Crusted scabies in immunosuppressed patients
SCABIES
DIAGNOSIS

- Scraping with a #15 scalpel blade or Nasal Fomon Knife
- Mineral oil preparation
- Microscopic examination
SCABIES THERAPY

- Cover hands with socks or mittens
- Apply under the nails
- Apply to affected areas of the scalp in infants
- Oral antipruritics
SCABIES THERAPY

- Permethrin 5%
- Lindane 1%
- Crotamiton 10%
- Sulfur 15%
- Off label-Ivermectin 200 micrograms/kg po single dose
SCABIES - References