

Parasitic Infestations of the Skin

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Scabies

- Scabere = to scratch (Latin)
- Common contagious disease - worldwide
- Caused by the mite *Sarcoptes scabies* var. *hominis*
- Acquired: overcrowding, poor personal hygiene, during sexual contact, homeless, prolonged physical contact
- All ages, races, socioeconomic groups
- Female scabies mite burrows in epidermis and lays eggs
- Incubation period = 1 month
- Hypersensitivity to mite faeces occurs after 4-6 weeks
- Itch is severe
- Polymorphism of lesions: short burrows, excoriated papules, eczematization, pustules, nodules
- Sites of involvement: axillae, wrists, webspaces of fingers, toes, genitalia, buttocks
- Secondary infection is common

Treatment of Scabies

- Info to patients/parents
- All family members treated
- Benzyl benzoate emulsion (Ascabiol) or 2-5% sulphur/UEA in infants and young children - over whole body from neck down to toes for 3 consecutive nights
- Alternatives:
 - Spregal spray (single application)
 - topical antipruritic: Eurax-hydrocortisone (on face/neck in babies)
 - 5% Permethrin cream (wash off after 8-24 hrs)
 - Lindane lotion (leave on skin for 12-24hr, then wash off; repeat - 1 week)
- Do not prolong treatment as irritation, dryness and eczema may result

Crusted Scabies (Norwegian Scabies)

- Rare type of scabies caused by the same mite
- Severe crusted, hyperkeratotic lesions containing thousands of mites and eggs - very contagious
- Altered host response to their presence (mentally retarded, physically incapacitated, immunosuppressed)
- Dx may be missed
- Treatment:
 - patient should be isolated
 - all nursing staff in contact with patient treated with a scabicide
 - several applications of scabicide
 - systemic treatment with Ivermectin
 - systemic antibiotics if secondary infection

Pediculosis Capitis

- **Worldwide infestation, all social classes**
- **Caused by blood-sucking, wingless, six-legged insects (which live only on hairs of head and feed on scalp)**
- **Acquired by head to head contact**
- **All ages (more in children 3-11 yrs); more frequently in girls**
- **Prevalent in Blacks in Africa**
- **Clinical features - intense pruritus**
 - nits (behind ears, occiput, nape of neck),
 - impetigo (scalp pyoderma as secondary infection)
- **Treatment - 2 applications 1 week apart:**
 - » Permethrin 1% - 10 min topically; fair response
 - » Melathion 0,5% - 8-12hr; excellent response
 - » Topical Ivermectin - 10 min; good effect
 - » Oral Ivermectin - excellent response
 - » Lindane 1% - 10 min application; poor response

Pediculosis Pubis

- **Incorrect designation - crab lice/phirus pubis (infestation may involve beard hairs, eyelashes, axillae, perianal region)**
- **Transmitted by sexual contact or close physical contact**
- **Female crab lice stick their eggs to hair shafts**
- **Clinical features**
 - pruritus of pubic region
 - ± erythema around hair follicles
 - excoriations + secondary infection
 - regional lymphadenopathy
 - festooning of eyelashes/axillary hairs with lice eggs
- **Treatment**
 - pediculocides in aqueous base - 2 applications 1 week apart
 - white soft paraffin several times a day for 2-3weeks - for eyelashes

Pediculosis Corporis

- **Body lice (pediculus humanus humanus)**
- **The body or clothing louse is a parasite of poverty and poor hygiene (homeless, refugees, victims of war, natural disasters)**
- **Body lice do not live or lay eggs on people but in their clothing**
- **Are vectors of epidemic typhus, trench fever, relapsing fever**
- **Clinical presentation**
 - intense itching, excoriations
 - pinpoint red macules, papules, crusts
 - secondary infection (impetigo) and lymphadenopathy
- **Treatment**
 - bathing of the patient
 - disinfestation of all clothing, bedding
 - delousing with Permethrin powder

Papular Urticaria

- Typical response to the bites of various arthropods (mosquitoes, mites, fleas, bed bugs)
- Small urticated papules surmounted by a tiny vesicle; very pruritic; excoriations
- They arise as a result of hypersensitivity reactions to antigens in saliva of insects
- **Bed bugs**
 - uncommon nowadays
 - live in dilapidated houses
 - feed on blood of sleeping occupants
 - reaction to bites
 - papular urticaria
 - bullous lesions
 - eczematization
 - secondary infection

Larva Migrans (sandworm)

- Known as creeping eruption
- Caused by larvae of the cat and dog hookworm *Ankylostoma brasiliense* and *A. caninum*
- Hot, humid, tropical climate (Natal beaches)
- Children > adults
- Acquired by walking barefoot on contaminated soil
- Lesions
 - oedematous, erythematous, serpiginous burrows
 - very pruritic
 - usually on feet, buttocks, thighs
- Migration of larvae - 1-2cm per day; begins 4 days after penetration; rarely beyond the skin
- Self limited
- Complications - impetigo, allergic reaction
- Treatment
 - Albendazole (Zentel) - 15mg/kg/day BD
 - Ivermectin 12mg/kg/day single dose
 - Topical 10-15% Thiabendazole sol./oint.