

Human Ectoparasites: Scabies, Lice in Athletes

Background

1. Typically spread via prolonged skin to skin contact, less commonly by fomites

Pathophysiology

1. Pathology of disease
 - *Sarcoptes scabiei*
 - *Pediculus humanus capitis, corporis, or pubis*
2. Risk factors
 - Sharing clothing, towels, equipment

Diagnostics

1. History
 - Scabies: intense pruritis and excoriation along waist line, perineum, axilla, between fingers
 - Lice: pruritis and excoriation
2. Physical exam
 - Scabies: characteristic burrows between fingers and flexor aspects of wrists and elbows
 - Papules or vesicles may also be seen
 - Lice: direct visualization of organism
3. Diagnostic testing
 - Scabies: skin scrapings and microscopic visualization
 - Lice: direct visualization of organism

Differential Diagnosis

1. Insect bites
2. Atopic dermatitis
3. Contact dermatitis
4. Psoriasis

Therapeutics

1. Scabies:
 - Topical anti-scabietic agents:
 - Permethrin cream: apply from chin down, leave on for 8-14 hours, then rinse
 - Lindane: apply to area, leave on for 8-12 hours, then rinse
 - Oral
 - Ivermectin 200mg/kg x1 dose
 - Repeat in 2 weeks.
2. Lice:
 - Topicals: retreatment in 7-10 days to kill newly hatched organisms
 - Permethrin
 - Pyrethrins
 - Malathion
 - Lindane
 - "Nit combs" to physically remove the eggs

Prevention

1. Do not share equipment, towels, or clothing

References

1. Buescher SE. Infections associated with pediatric sport participation. *Pediatr Clin North Am.* 2002 Aug; 49(4):743-51. Review.
2. Cordoro KM, Ganz JE. Training room management of medical conditions: sports dermatology. *Clin Sports Med.* 2005 Jul; 24(3):565-98, viii-ix.

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