

# **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.

**Author:** Lisa Kafchinski, RN, *University of Nevada Reno FPRP*

**Editor:** Carol Scott, MD, *University of Nevada Reno FPRP*