Furunculosis

Background

1. Common in football players (up to 25%), basketball players (up to 20%), rugby players

Pathophysiology

- 1. Pathology of disease
 - o Staphylococci sp.
 - Typically susceptible to methicillin
 - Streptococci sp.
- 2. Risk factors
 - Skin trauma
 - o "Turf burn" from artificial and nonskid surfaces
- 3. Morbidity / mortality
 - o Post-streptococcal glomerulonephritis "scrum kidney"
 - Rare complications:
 - Toxic Shock Syndrome
 - Necrotizing fasciitis

Diagnostics

- 1. History
 - o Painful lesions that may spontaneously drain
- 2. Physical Examination
 - o Well defined, erythematous, tender nodules
 - Common location: upper extremities
- 3. Laboratory evaluation
 - o Culture and sensitivity if suspicious of CA-MRSA in Athletes

Differential Diagnosis

- 1. Herpes gladiatorum
- 2. Tinea corporis gladiatorum
- 3. Acne
- 4. Atopic dermatitis

Therapeutics

- 1. Acute treatment
 - o Topical antibiotics
 - Mupirocin 2% apply BID x 7 days
 - Oral antibiotics
 - Dicloxacillin 500mg PO TID x 10 days
 - Cephalexin 500mg PO TID x 10 days
 - Erythromycin for athletes with PCN allergies
- 2. Further management
 - Warm water soaks

References

- 1. Adams BB. Dermatologic disorders of the athlete. Sports Med. 2002; 32(5):309-21.
- 2. Adams BB. Transmission of cutaneous infections in athletes. Br J Sports Med. 2000 Dec; 34(6):413-4.
- 3. Beck CK. Infectious diseases in sports. Med Sci Sports Exerc. 2000 Jul; 32(7 Suppl):S431-8. Review.
- 4. Buescher SE. Infections associated with pediatric sport participation. Pediatr Clin North Am. 2002 Aug; 49(4):743-51. Review.
- 5. Stacey A, Atkins B. Infectious diseases in rugby players: incidence, treatment and prevention. Sports Med. 2000 Mar; 29(3):211-20. Review.
- 6. Stevens DL, Bisno AL, Chambers HF, Everett ED, Dellinger P, Goldstein EJ, et al. Practice guidelines for the diagnosis and management of skin and soft-tissue infections. Clin Infect Dis 2005 Nov 15; 41(10):1373-406.

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