

## Issue #3: Viral Infections of the Skin

### Herpes Gladiatorum

#### Definition/Cause:

- Is a cutaneous infection caused by the HSV-1 and spreads through direct skin to skin contact
- Common sites include the head, upper extremity and trunk

#### Signs and Symptoms:

- Usually begins with tingling or burning at infected site followed by clusters of vesicles on an erythematous base that with time become crusted
- Infection may also involve fever, lymphadenopathy, malaise or myalgia

#### Diagnosis:

- Based upon appearance and clinical grounds

#### Treatment:

- Antiviral medication in early stages; Topical benzoyl peroxide if lesions are ulcerated; Antiviral medications may be taken prophylactically
- Athlete should be withheld from any participation until athlete is asymptomatic, there are no new lesions for three days and there is a firm crust on each lesion and the athlete has been taking antiviral medication five days

#### Prevention:

- Covering skin lesions does not reduce or prevent infection from spreading
- Practice good hygiene
- Regular equipment and environmental cleaning



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### Herpes Simplex

#### Definition:

- A virus that affects the skin and nervous system

#### Causes:

- Caused by both herpes simplex virus 1 (HSV-1) and herpes simplex virus 2 (HSV-2)
- Herpes viruses cycle between periods of active disease followed by a remission period, during which lesions disappear
- After initial infection, the viruses move to sensory nerves, where they reside as life-long, latent viruses

#### Signs and Symptoms:

- Herpes simplex is most easily transmitted by direct contact with a lesion or the body fluid of an infected individual but may also occur through skin-to-skin contact during periods of asymptomatic shedding

#### Diagnosis:

- Visual inspection of lesions is used for diagnosis
- A culture of the vesicle will provide definitive results in 24 to 48 hours or direct immunofluorescence assay produces results in a matter of hours

#### Treatment:

- There is no cure for herpes. Antiviral medications can reduce the frequency, duration, and severity of outbreaks as well as reduce asymptomatic shedding.

#### Prevention:

- Avoid skin to skin contact
- Practice good hygiene
- Avoid sharing towels or clothing with anyone

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### Verrucas Virus (Warts)

#### Description:

- Verrucas are warts which grow on the soles of the feet. These are non-cancerous skin growths

#### Causes:

- Verrucas are caused due to the Human Papilloma Virus (HPV)
- More than 70 types HPV can lead to a wart

#### Signs and Symptoms:

- Seen as a small, round, elevated lesion with rough dry surface
- May contain markings resembling small black seeds
- Focal pressure on lesion increases pain

#### Diagnosis:

- Visual diagnosis

#### Treatment:

- The wart may disappear on its own as the immune system reacts to the virus
- Otherwise, treatment may involve liquid nitrogen, salicylic acid, or dissection. Warts should be covered during participation

#### Prevention:

- Wear flip-flops in public showers, swimming pools and other communal areas.
- Walking barefoot can spread the virus.

### Molluscum Contagiosum

#### Description:

- A skin rash caused by a virus
- The virus is a member of the Poxvirus family
- It is common worldwide and accounts for about 1% of all skin disorders in the United States
- It primarily affects children (boys more often than girls) and young adults

#### Causes:

- Transmitted by direct contact, either person to person or by shared items, such as clothing, towels, and washcloths
- Can be spread by contact sports
- Can also be spread if a person touches the rash and then another part of his or her body (known as autoinoculation)

#### Signs and Symptoms:

- Presents as a small, skin-colored, smooth and dome shaped papule with a central spot. Lesions are very contagious

#### Diagnosis:

- Based on its distinctive appearance
- In most cases, no tests are necessary

#### Treatment

- Lesions spontaneously resolve in 6-12 months
- Aggressive treatment involves use of liquid nitrogen on each lesion or curetting each lesion

#### Prevention:

- Good personal hygiene is a key factor in avoiding transmission of this disease

#### References:

Adams, B.B. (2008). Skin infections in athletes. *Dermatology Nursing*, 20(1), 39-44.

Andersen, Hall and Martin. *Foundations of Athletic Training*, 3rd Edition, 2004, pp 742-743.

Cuppett and Walsh. *General Medical Conditions in the Athlete*, 2005, pp 331-334.

York: McGraw-Hill Medical, 2009. Retrieved via StatRef, December 4, 2009.

Stulburg DL, Penrod MA, Blanty RA. Common Bacterial Skin Infections. *American Family Physician*. 2002;66(1):119-124.



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