Skin Infections in Wrestlers

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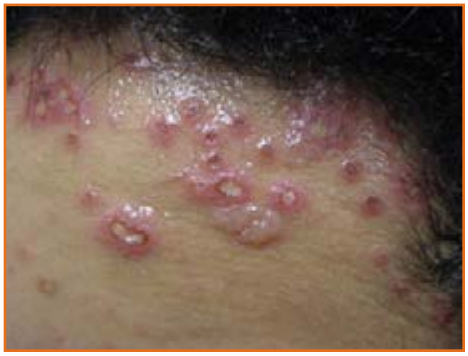
Why is this important?

Skin infections in athletes are very common. They are especially common in wrestlers because of the close skin-to-skin contact that the sport requires. For this reason, it is very easy to spread infection amongst teammates and competitors. Skin infections frequently result in lost time from practice and competition. It is important to have regular skin checks and to have any suspicious lesion evaluated by a doctor so that the athlete can have proper treatment.

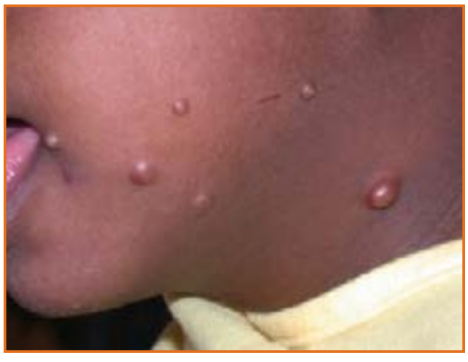
What are the common infections?

Herpes Gladiatorum



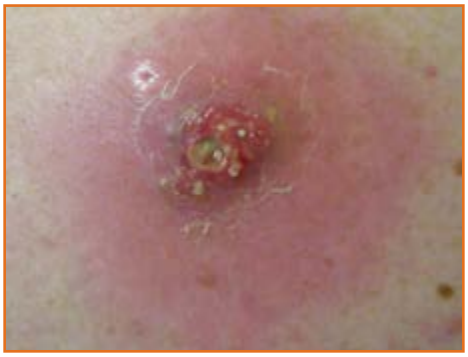
In wrestlers, herpes simplex virus (HSV) can cause skin lesions called Herpes Gladiatorum (HG). This infection is typically spread by skin-to-skin contact. HG are small groupings of painful vesicles, or small blisters, surrounded by red inflamed skin. This type of infection can have other symptoms which include sore throat, fever, fatigue and enlarged lymph nodes. It needs to be treated with antiviral medication. Wrestlers who have their first HG infection must be treated for at least 10 days prior to returning to competition.

Molluscum Contagiosum



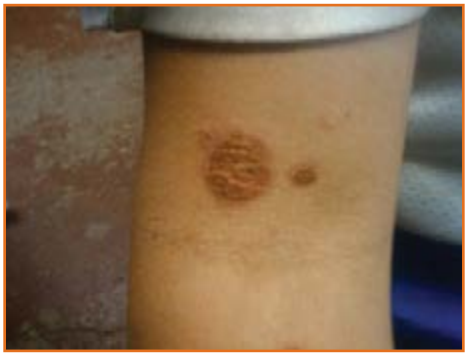
Molluscum is a viral infection that is common among wrestlers. It is characterized by small, round, raised, skin colored lesions and is spread by skin-to-skin contact. In order to prevent spread of the infection, there are several treatments that can be used. Your doctor may prescribe a topical medication like salicylic acid or a retinoid or they may use cryotherapy (liquid nitrogen) to freeze the lesions, or curettage which involves scraping off the lesion. Once the lesions have been curetted and covered, wrestlers may return to play immediately.

MRSA



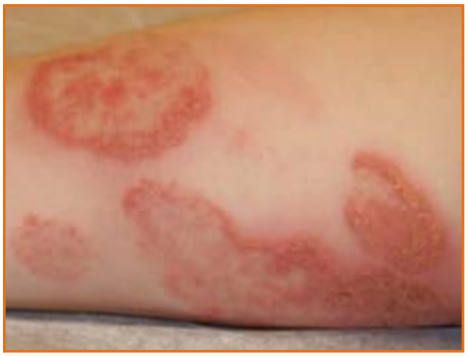
Methicillin Resistant Staph Aureus (MRSA) is a serious bacterial infection that is becoming more common. These lesions can start as a small "pimple", but become large, red, warm and painful. These often require a doctor to perform an incision and drainage, along with antibiotics. To return to play, all lesions must be scabbed over, and the wrestler must have been treated with antibiotics for at least 72 hours.

Impetigo



Impetigo is a bacterial infection caused by staph or strep. It is typically characterized by small vesicles or blisters that ooze and have honey-colored crusts. This infection can be treated with either topical or oral antibiotics. Wrestlers may return to play if all lesions are crusted over and no new lesions have appeared in the last 48 hours. Also, the wrestler must be treated with antibiotics for at least 72 hours before returning to competition.

Fungal Infections



Fungal infections are common in wrestlers, including tinea corporis (on the body) and tinea capitis (on the scalp). Tinea corporis (aka ringworm) is a sharply demarcated, red, scaly, circular plaque with central clearing, located on the body. Tinea capitis is a red, scaly plaque seen on the scalp that can lead to hair loss. Uncomplicated tinea corporis can be treated with a topical antifungal cream for 2 weeks. For tinea capitis or extensive tinea corporis, oral antifungals are recommended. For skin lesions, the athlete must be treated 72 hours prior to returning to play. For scalp lesions treatment is 2 weeks. Lesions should then be covered prior to participation.

How can these infections be prevented?

- Good hygiene practices are very important for preventing the spread of infections.
- Athletes should shower after every practice and game with antimicrobial soap and water.
- Athletes should not share towels, athletic gear, disposable razors or hair clippers.
- Practice clothing and uniforms should be laundered daily.
- Cleaning and disinfection of frequently touched surfaces such as wrestling mats, treatment tables, locker room benches and floors should be done on a regular basis.
- Athletes should have frequent skin checks; any suspicious lesion should be evaluated by an athletic trainer or doctor to help prevent the spread of infection.

*Herpes, Molluscum, Impetigo & Fungal infection photos courtesy of ©Nationwide Children's Hospital.

MRSA photo courtesy of the CDC & Gregory Moran, M.D.

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Skin infections in athletes are very common. They are especially common in wrestlers because of the close skin-to-skin contact that the sport requires. Tinea Corporis affects over 50% of high school wrestlers each season while approximately 1% contract a community acquired MRSA infection annually. Up to 30% of high school wrestlers are colonized or infected by Herpes Simplex Virus (HSV)*. The close skin-to-skin contact makes it very easy to spread infection amongst teammates and competitors. Skin infections frequently result in lost playing time from practice and competition. Approximately 20% of wrestlers lose practice or competition time due to skin infections each year. It is important for athletes to have regular skin checks so that the various infections can be evaluated and treated promptly.

Infection	Presentation	Treatment	Return-to-Play
Impetigo	Caused by Staph or Strep. Oozing vesicles that evolve into honey crusted lesions.	• Topical mupirocin • Oral antibiotic for persistent infection: Cephalexin, Dicloxacillin	• All lesions scabbed over, no oozing or discharge • May return to contact practices and competition after 72 hours of treatment provided no new lesions for 48 hours.
Methicillin Resistant Staph Aureus (MRSA)	Starts as a small pustule and rapidly progresses to red, warm painful lesion.	• Typically requires I&D • Obtaining cultures and sensitivities is advised • MRSA coverage includes Bactrim or clindamycin • All lesions scabbed over, no oozing or discharge	• May return to contact practices and competition after 72 hours of treatment provided no new lesions for 48 hours.
Tinea Corporis	Raised, Erythematous, scaly, annular plaques with central clearing.	• Topical antifungal cream such as Clotrimazole or Terbinafine for isolated lesions • Consider oral antifungal for diffuse infection	• Minimum of 72 hours of treatment prior to participation • Cover solitary lesions with bio-occlusive dressing
Tinea Capitis	Erythematous scaly patches that lead to alopecia	• Oral antifungal (Griseofulvin, ketoconazole) for 2-6 weeks • Selenium sulfide shampoo	• Minimum of 2 weeks oral treatment
Herpes Gladiatorum	Caused by HSV-1. Numerous grouped painful vesicles or pustules on an erythematous base. Typically have a prodrome of burning or stinging. Can be accompanied by systemic symptoms including sore throat, fever, malaise and lymphadenopathy.	• Primary infection: Valacyclovir 1g TID for 10 days • Recurrent infection: Valacyclovir 500mg BID x 7 days • Consider prophylactic therapy throughout the duration of the season	• After all lesions are healed with well adherent scabs • No new vesicle formation for 48 hours • Antiviral medication: ◦ 10 days for primary infection without systemic symptoms, ◦ 14 days with systemic symptoms, ◦ 5 days for recurrent infection
Molluscum Contagiosum	Small, round flesh-colored papules with central umbilication.	• Sharp Curettage • Liquid Nitrogen	• After curettage, may wrestle immediately if covered
Verruca (Warts)	Skin colored papules with rough hyperkeratotic surfaces.	• Sharp Curettage • Liquid Nitrogen • Salicylic acid	• May continue to play if lesions are covered
Scabies	Severe itching. Small red papules typically seen in the webspace of fingers, on the wrists and along the waistline. Sometimes burrows are visualized.	• Permethrin cream applied all over body at night, washed off in the morning • Ivermectin PO	• May return 24 hours after treatment

As health care providers, we can help prevent the spread of infection by promoting good hygiene practices, including the following

- Athletes should shower after every practice and game with antimicrobial soap and water.
- Athletes should not share towels, athletic gear, disposable razors or hair clippers.
- Practice clothing and uniforms should be laundered daily.
- Cleaning and disinfection of frequently touched surfaces such as wrestling mats, treatment tables, locker room benches and floors should be done on a regular basis.
- Athletes should have frequent skin checks; any suspicious lesion should be evaluated by an athletic trainer or doctor to help prevent the spread of infection.

*Peterson et al. Infectious Disease in Contact Sports. Sports Health: A Multidisciplinary Approach. 2018.