Basic Dermatology in Sports Medicine

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Learning Objectives

1. Review basic dermatologic terminology and general principles of approach to dermatologic issues related to sports activity.

2. Review basic dermatology terminology as basis for evaluating sports related skin issues.

3. Discuss history, diagnosis, treatment and prevention strategies for common sports related skin conditions (mainly traumatic injuries), direct cutaneous injury, infections, and dermatosis.

4. Review presentation, diagnosis, treatment and prevention of Methicillin-resistant *Staphylococcus aureus* (MRSA).
General Principles

- Skin is interface between athlete and environment.
- Protects athlete from environment.
- Skin may develop pathology directly related to sports activity.
- Most skin issues of athletes are easily seen, recognized early, and appropriately treated; with good care, they rarely seriously interrupt training or competition.
General Principles

- Trauma can cause troublesome compensatory changes in skin (callus, chafing, etc.).
- Many infective organisms are in athletic setting and skin is exposed.
- Some skin issues are specific to athletics, others are not, but equally interfere with athletic activity. Some issues cause massive loss of practice/competition time.
General Approach Considerations

• Skin issues must be recognized and diagnosed quickly, regardless of setting.
• Age, skin type, and sex of athlete influence susceptibility to skin problems.
• Consider physical demands, equipment, training setting, intensity/amount of training in treatment decisions.
Skin infections are of greater concern in contact sports.

MRSA, impetigo, molluscum contagiosum can be spread to opponents, coaches, teammates, family, etc.

Complete skin checks are a great defense.
General Approach Considerations

- Management easier if condition identified early.
- Be prepared with well stocked training room and coverage bag.
- Assess skin lesions before return to play.
- Consider evaluating other team members.
- Follow state/local/other return to competition rules.
Evaluating Sports Related Dermatologic Lesions

- History
- Distribution
- Primary lesion
- Secondary lesion
- Changes/characteristics
- Configuration
- Tests/diagnostics
- Differential diagnosis/diagnosis
History

- Duration rate
- Time of onset
- Symptoms
- Treatment so far
- Family history
- PMH
- Exposures
- Itch

Distribution

- Extent
- Nails
- Hair
- Mouth/throat
Physical Examination

• Look at all of the skin, beginning with affected areas of concern, include scalp, mouth, nails.
• Other lesions may be associated with the index lesions and can help with diagnosis.
• Important incidental lesions may be found (3-4% cancer detection).
Physical Examination

• Have enough of right kind of light
  – Bright overhead fluorescent
  – Moveable incandescent
  – Penlight
  – Special purpose lights
Physical Examination

• Inspection, then
  – Palpate to assess tenderness and consistency and to reassure patients
  – Rash eruption or growth (neoplasm)
  – Epidermal, dermal, subcutaneous
  – Configuration/pattern
  – Morphology (more important)
Primary Lesion

- Original lesion
- Best represents underlying pathology

Secondary Lesion

- Alteration of primary lesion by something – trauma, treatment, complication, etc.
Basic Primary Skin Lesion Terminology

**Macule:** Flat, nonpalpable, circumscribed, <1cm diameter (vitiligo)

**Patch:** Flat, macule, > 1cm diameter (vitiligo)

**Papule:** Solid, elevation, without fluid, <1cm diameter (acne)

**Plaque:** Papule > 1cm diameter (psoriasis)
**Basic Primary Skin Lesion Terminology**

**Nodule:** Circumscribed, **elevated**, **solid**, >1cm diameter (wart)

**Mass:** Large Nodule

**Vesicle:** **Fluid** containing epidermal **elevation**, <1cm diameter (HSV)

**Bulla:** Vesicle > 1cm diameter (blister)

**Pustule:** Pus containing well circumscribed elevation of epidermis, **size variable** (impetigo)
Basic Primary Skin Lesion Terminology

**Comedone:** Sebaceous, Keratinous material in hair follicle opening (open = blackhead, closed = whitehead)

**Cyst:** Solid or fluid filled, circumscribed, with wall and tunnel

**Milia:** Small superficial keratin cyst without visible opening

**Burrow:** Narrow, elevated channel, from parasite

**Telangiectasia:** Dilated superficial blood vessel
Basic Primary Skin Lesion Terminology

**Purpura**: Red or purple nonblanching discoloration, 0.3 – 1.0 cm

**Petechiae**: nonblanching purpura, <1 cm diameter

**Ecchymosis**: nonblanching purpura, 1 cm or more diameter

**Wheal**: Firm, edematous plaque from infiltration of dermis with fluid, transient, <24 hours
Changes/Characteristics

• Blanchable, nonblanchable
• Erythema
• Purpura, hemorrhage

Configuration

• Shape

Tests/Diagnostics

Differential/Final Diagnosis
Secondary Skin Lesion Terminology

- Solitary
- Satellite
- Group
- Diffuse
- Discrete
- Localized
Secondary Skin
Lesion Terminology

**Scale:** From rapid epidermal proliferation, excess dead epidermal cells

**Crust:** Dried pus, serum, blood, moist & yellow – brown

**Excoriation:** Superficial abrasion from scratching

**Erosion:** Loss of epidermis alone, heals without scar
Secondary Skin Lesion Terminology

**Ulceration:** Loss of epidermis and dermis heals with scar

**Fissure:** Linear loss of epidermis and dermis with sharply defined nearly vertical walls

**Scar:** New connective tissue, implying dermal damage

**Atrophy:** Depression of skin from thinning of epidermis and dermis
Primary Skin Lesion Terminology

**Lichenfication**: Thickened skin and accented markings from rubbing/scratching

**Pigment Change**: hyper, hypo, depigmentation

**Annular**: Ring shaped

**Gyrate**: Ring/spiral shaped

**Linear**: Line shaped
Secondary Skin Lesion Terminology

**Nummular/discoid**: Coin shaped

**Punctate**: Snake-like

**Striae**: Depressed bands of thin, white shiny skin

**Keloid**: Benign overgrowth of connective tissue after skin injury
Lacerations

- Must be handled efficiently.
- No competition if athlete bleeding or blood soiled uniform.
- Strict universal precautions.
- Often can be quickly closed and returned to play.
- Informed consent, especially for minors, is essential.
Lacerations

• Adequate anesthesia.
• Then thoroughly clean/irrigate with sterile saline.
• Lavage with 18 gauge needle or larger.
• No iodine containing solution directly into wound.
• Close wound and bandage well.
Lacerations

- If need sutures during competition, may close with steri-strip, then suture at half-time or after game.
- Be prepared with proper equipment.
- Local anesthetic, closure material/suture, skin glue, etc.
- Clean, dry, and free from active bleeding.
- Clean completely before closure.
Suggested Wound Management Supplies for Medical Coverage

- Wound Cleaning
  - Sterile saline
  - Syringe; 18 gauge needle
  - Antiseptic cleanser
  - Betadine, alcohol swabs
  - Sterile Gauze
  - Antibiotic cream
Suggested Wound Management Supplies for Medical Coverage

• Anesthetic
  – Lidocaine with/without epinephrine
  – Ethyl Chloride spray
  – Lidocaine applicator ampules
Suggested Wound Management Supplies for Medical Coverage

• Wound Closures
  – Bandages and tape
  – Steri-strips
  – Tincture of Benzoin
  – Suture material
  – Sterile suture kit
  – Acrocyanate (skin glue)
Suggested Wound Management Supplies for Medical Coverage

- Cold pack
- Hemostasis supplies
- Skin protection
  - Second skin
  - Moleskin
Direct Skin Injuries

- Friction
- Pressure
- Environmental
Friction

Callus

– Protective response to pressure
– Most common on feet/hands
– Sometimes competitive advantage
  • Gymnasts, batters, etc.

Dx: Thick, hypertrophied stratum corneum, no core/black dots (corns)

Tx: Prevent blisters; pare, soak, abrade, serial trichloroacetic acid and debride every 2-3 days

Px: Proper equipment – fit and type
Callus
Friction

Blisters

– Often under calluses; due to shearing force; more common in moist areas

Dx: Tender Vesicle/Bulla; possible fluid/blood

Tx: Keep “roof” intact; if not, hydrocolloid gel (Duoderm) for several days; blister band aid and tape

Px: Keep skin dry, proper shoe/sock fit, lubricant (Aquaphor) over pressure points.
**Friction**

**Chafing**
- Mechanical friction; skin on skin or fabric on skin
- Long distance sports
- Worsened by sweat, excess muscle or subcutaneous fat

**Dx:** Abraded superficial erosion of epidermis
- Most common in upper thighs, axilla, neck; can be anywhere

**Tx:** Cool compress, exposure to air, soothing ointment to add lubrication (Aquaphor, Neosporin, etc.)

**Px:** Friction reducing powder, Tegasorb, lubricating ointment, low friction fabric.
Jogger’s Nipples

Most common in men with running long distance; friction from coarse fabric, jersey, logo, etc.

**Dx:** Denuded, painful dry erosion of nipple/areola

– Erythema, scaling, bleeding can occur if severe

**Tx:** Compress with warm water and antibacterial soap, and antibiotic cream, lubricating ointment

**Px:** Run without shirt; use sports bra (women); soft fabric; lubricating ointment, minimal adhesive on nipple/areola, petroleum jelly
Friction

Abrasions

– Applied friction – turf/mat/burn, “road rash”, “strawberry”

Dx: Exposed skin injured with denuded epidermis and upper dermis; punctate bleeding and exudate

Tx: Initially clean with warm water and antibacterial soap; remove foreign bodies; hydromembrane (Duoderm) for a few days; antibiotic cream (not ointment) or spray; non-adherent dressing changed daily;

Px: Additional skin protection in vulnerable areas; aggressive treatment early to prevent infection
Friction

Black Heel/Plantar Petechiae

– Calcaneal petechiae from shearing (planting, sudden stops); very common in adolescents / young adults

Dx: Often asymptomatic; black/blue punctate petechiae on posterolateral heel; seen in palm of weight lifters, golfers, and tennis players

Tx: Intelligent neglect; reassurance that not malignant; resolves on its own with decreased offending activity

Px: Hard to do; proper fit shoes, gloves, racquet, etc.
Friction

Acne mechanica

– Caused by heat, occlusion, pressure, and friction
– Seen in contact sports, golf (carrying bags), hockey (stick), dancers (from leotards)

**Dx:** Inflammatory papules and pustules in areas under equipment/clothing

**Tx:** Clean area well after workout with mildly abrasive cleaner; apply topical astringent or 10% benzoyl peroxide

**Px:** Clean, absorbent clothing under equipment; remove clothing immediately after workout
Friction

Follicular Keloidalisis

– Mostly in African American athletes, follows Inflammatory Folliculitis.

**Dx:** Non-tender, firm, papules around edges of helmet under shin/thigh pads.

**Tx:** Inject dilute Triamcinolone directly into papules after season is over.

**Px:** Pad equipment to reduce friction; treat folliculitis aggressively.
Corns

– Often very tender, most common on feet at distal metatarsal head; happen after switch to new footwear; hyperkeratotic pressure area

**Dx:** Usually other pressure points have central “core”, no punctate vessels like plantar warts.

**Tx:** Pare with pumice stone, scalpel; 50% trichloroacetic acid under 40% salicylic acid plaster X 2 days.

**Px:** Modify footwear to reduce pressure.
Subungual hemorrhage

- From repeated forceful contact of anterior nail plate with anterior shoe
- Lateral shearing of nail from nail plate
- Pain varies

**Dx:** Blood under nail and causative history

**Tx:** Acutely, drain blood; soak in warm water; eliminate causative factors.

**Px:** Proper nail trimming and shoe fit.
Sunburn

– Inadequate protection from sun

**Dx:** Varied erythema, vesicles may form. Systemic illness can occur.

**Tx:** Depends on severity; ASA or Ibuprofen; OTC hydrocortisone for minor burns; moisturizing lotion; cortisone spray if more severe/painful; systemic steroids/analgesics if severe, disabling, or with vesicles.

**Px:** Protective clothing; sunscreen
Frostnip

Cutaneous injury from hyperthermia; Superficial frostbite of skin and superficial subcutaneous tissue.

**Dx:** Numb, white patches of skin; numbness 48–72 hrs.; burning pain possible, flushed ears, cheeks, nose

**Tx:** Indoor rewarming.

**Px:** Cover / protect exposed skin; “layer”; natural oil on face; water-free emulsions; cream-based sunscreen
Chilblains/Pernio
Cold induced Vasoconstriction and inflammation of distal digits.

**Dx:** Violaceous to cyanotic areas on distal toes, fingers; pain variable.

**Tx:** Topical low potency steroids proper clothing.

**Px:** Proper non-constrictive clothing
Impetigo
Superficial skin infection caused by gram positive bacteria. Vesicles initially and form early pustules then break to form crusts, often honey colored.

Dx: Superficial, no ulcer, more common on face, no vesicles.

Tx: Topical and systemic antibiotics (cephalexin, Doxycycline, erythromycin, topical Mupirocin)

Px: Antibacterial soap, appropriate hygiene
Bacterial Infection

Pyoderma

Spreads by contact with infected opponent often via superficial abrasion.

Dx: Thin walled vesicles or bullae; can progress to crusted margined lesions.

Tx: Warm water compress with antibacterial soap; antibacterial cream; systemic antibiotics.

Px: Infected athletes don’t play; disinfect mats/etc.; shower immediately with antibacterial soap.
Bacterial Infection

Occlusive folliculitis
Under heavy protective padding or wet suits/clothes deep follicular infection.

**Dx:** Inflamed pustular plaques, tender to touch; involved area coincides with equipment / clothing; infected gluteal fold in swimmers.

**Tx:** Topical antibiotic solution (clindamycin phosphate) or erythromycin to involved area; possible systemic antibiotics:

**Px:** Use absorbent powder in involved areas; remove causative equipment / clothing ASAP.
Otitis externa

Usually in water sports: *Pseudomonas* sp. and alkalination of ear canal; pain/itching; can cause fever and decreased hearing.

**Dx:** Erythema in EAC; drainage from EAC, usually bilateral.

**Tx:** Antibiotic, antifungal drops; if severe systemic anti-*Pseudomonas*, antibiotics.

**Px:** Gentle drying of ear canal; 2% hydrocortisone acetic acid into ear canals (not if TM punctured)
NCAA Participation Rules for Bacterial Infection

• No new lesions for at least 48 hours
• Over 72 hours of antibiotics completed
• No moist, exudative or draining lesions
• If above not met, active infections will not be covered to allow participation
Plantar Warts (HPV)
Macerating effect of perspiration; viral exposure; painful if over weight bearing surface:
**Dx:** Small black dots in the wart.
**Tx:** Topical 50% trichloroacetic acid under 40% salicylic acid X 2-3 days; paring; OTC salicylic acid daily; Excision, lasers, electrodissection have no advantage and can cause scarring.
**Px:** Foot powder 20% aluminum chloride to feet, decrease exposure
Molluscum contagiosum (Molluscipoxvirus)

“Close contact” sports, “etc.”.

**Dx:** Small, grouped waxy, hard, smooth painless papules, often with central dimple, may be linear, anywhere, but often on hands, trunk, face, and genital area.

**Tx:** Curettage, after season?; LN₂, Imiquimod cream, strip with high quality adhesive tape; Griseofulvin x 2-3 months if widespread. May take months to resolve on its own.

**Px:** No close contact/competition; remove first lesion to avoid self-inoculation; disinfection of clothing/surfaces.
Viral Infection

Herpes Simplex

Recurrent, grouped vesicles in same location
  – 1 week incubation
  – 1-2 day prodrome
  – 10 days eruptions
  – 10 days crusting/healing

Most common on lips, genitals, buttocks, perineum.
Herpes Simplex

**Dx:** Indurated erythema, thin grouped vesicles on erythematous base, itching or burning pain; prodrome; Tzanck smear.

**Tx:** Acyclovir, Famciclovir, Valacyclovir, penciclovir, Docosanol. Treat partner(s).

**Px:** Sexual contact; asymptomatic subclinical shedding. Dangerous to neonate, immune compromised.
**Viral Infection**

**Herpes gladiatorum (HSV-1)**

Vesicles, recur in same places, may burn/tingle; often appear 1 week after exposure.

**Dx:** Group vesicles on erythematous base; usually head, neck upper limbs; dermal edema.

**Tx:** Systemic acyclovir 500 mg BID at 1st symptom, X 5 days for recurrence, X 10 days for initial; intralesional dilute Triamcinolone speeds clearing.

**Px:** Prophylactic Acyclovir if recurrent; no competition/exposure x 5-6 days.
NCAA Regs re: Herpes infections and participation

• Primary infection=no systemic symptoms, no new lesions for 3 days, all lesions crusted, on oral meds > 5 days, crusts covered

• Recurrent infection= ulcers dry, covered by firm adherent crust, on oral meds > 5 days, crusts covered
Viral Infection

Condyloma Accuminata

Soft, moist papule/plaque, sessile/smooth or pedunculated verrucous surface on genitalia, perineum, anorectal, urethral, vagina, inguinal folds; may be in clusters.

Dx: No callus; Location and characteristics

Tx: Cryotherapy, podophyllox, imiquimod cream

Px: Avoid contact.
Warts/Verruca Vulgaris

- HPV
- Unsightly
- Possibly painful
- Black dots appear after being shaved down
- Tx: salicylic acid patch, cryotherapy, occlusion.
- NCAA: cover before competition
Tinea Pedis
Interdigital maceration and erythematous scale from perspiration/moisture; exposure in locker room. Pain, itching, rash. Diffuse plantar scaling in older patients.

**Dx:** Toe webs; erythema and scaling over feet; vesicles may form. Nail may be thickened, discolored.

**Tx:** Boro /Burow soaks (aluminum acetate in water) for maceration; topical antifungal cream (butenafine, terbinafine, etc.); systemic (econazole, oxiconazole, terbinafine, etc.) in short term during season.

**Px:** Dry skin after showers; antifungal foot powder, aluminum chloride if maceration; long term systemic antifungal in some cases. Keep skin clean.
Fungal Infection

Tinea Cruris

Most common in males (axilla and groin), but females can get it; Red scaly patch, maceration from moisture; can spread to an entire team. Dermatophyte infection.

Dx: Differentiate from yeast!

- Erythema, scaling, pruritic sharp margination. Can be painful.
- Not on genitalia/scrotum, no satellite lesions.

Tx: Topical antifungals; oral meds if needed;
(Miconazole, Clotrimazole, Terbinafine)

Px: Shower immediately and dry well; change clothing quickly/often; disinfection. No corn starch!
Tinea Corporis
Annular, elevated, scaling border
Central clearing (not in eczema)
Tx/Px: Same as Tinea Cruris

NCAA RTP for Tinea: > 72 hrs treatment, DQ if extensive lesions, cover lesions w/ OpSite and tape after antifungal shampoo and cream
Fungal Infection

Yeast Infection
Most common in females, but males can get it.

**Dx:** In skin folds; deeper, **beefy red** color than dermatophyte; **includes** genitalia; **satellite lesions.**

**Tx:** Topical Miconazole, Terbinafine, Clotrimazole.

**Px:** Shower immediately, change clothing often, absorbent powder.
Hyperhidrosis

Contributes to infection; can affect performance.

**Dx:** Excess sweating, especially palms, axillae, plantar surfaces.

**Tx:** Topical desiccating agents-aluminum chloride, etc.; systemic propantheline or glycopyrrolate; botulinum toxin.
Bites and Stings

• Very common; be aware of athlete’s allergy history.

• Be prepared! 20% of population has Hymenoptera allergy.

• Immediate wheal and flare; erythema with warmth, dermal edema, pruritus, (30-120 deaths each year in USA)
Bites and Stings

**Allergic Rxn:** Diaphoresis, lightheadedness, SOB, wheezing, edema of tongue.

**Tx:** Meat tenderizer, topical corticosteroids; remove stinger; Diphenhydramine; ice/cold packs; elevate limbs; systemic antibiotics if infected; systemic steroids; if severe rxn., IV crystalloid + diphenhydramine, and epinephrine plus H₂ blockers

**Px:** Insect repellant, avoid bright colored clothing, scented lotion/fragrance, shiny jewelry.
Scabies

**Intense itching**, esp. nocturnal, very contagious, spread by towels, clothing, equipment. *(Sarcoptes scabei mite)*

**Dx:** Papules or small vesicles in **linear** distribution following mite **burrows**; finger webs, ext. surfaces; diagnostic if on penile shaft. Scrape for definitive dx.

**Tx:** Aggressive and persistent; Permethrin cream or Lindane lotion to whole body (neck down) X 1 day, then to affected areas every 3 nights till resolved. May alternate corticosteroid cream in mentholated lotion with Lindane 2 X days. Treat all family members and close contacts. NCAA=verified tx and neg. scrapings.

**Px:** Avoid exposure. *(Note: Lindane C.I. in infants & PG)*
**Physical Urticarias**

Cholinergic (rapid temperature changes; emotional stress, exertion), cold, aqua genic, pressure (under clothing and equipment).

**Dx:** Papular erythema with dermal edema; most common on inner arms and legs, and lateral flank.

**Tx:** Cyproheptadine at bedtime; combination of H₁ and H₂ blockers; alternate day steroids if severe.

**Px:** Slow temperature changes, biofeedback; prophylactic cyproheptadine or H₁-H₂ blockers.
Contact Dermatitis

Due to contact allergen/irritant; contact with equipment

**Dx:** Sharp margination; erythema initially; possible scaling/exudate later; vesicles in acute, very sensitive cases. May be pruritic.

**Tx:** Topical corticosteroids; systemic “burst” of steroids if very acute; cool compresses; antihistamines for itching; aluminum acetate solution, lotions/creams

**Px:** ID/eliminate causes; barrier + skin+ cause.
Eczema

Dry skin with rash, possible blistering, redness, cracking, etc.

Dx: Poorly marginated erythema, often with scaling, flexor areas/neck most common; itching and excoriation may occur.

Tx: Topical steroids in ointment or emollient cream base, antihistamines for itching; systemic steroids if very severe.

Px: Avoid dry skin; use oil/cream based soaps; use skin lubricant/emollient.
Psoriasis

- Inflammatory rash with epidermal proliferation (scale)
- Sharply demarcated, erythematous papules and plaques, with silvery scales (not in intertriginous zones)
- On scalp, elbows, knees
- In intergluteal cleft
- Nails pitted, punctate
Psoriasis

Tx:  Topical and systemic medications include:
Topical tars/ Anthralin
Steriods and Retinoids
Antimitotic Vitamin D derivatives
UV light,psoralen plus UV light A (PUVA)
Folate antagonists, TNF inhibitors
Biologic agents-MTX
And, sunbathing,eliminate triggers,moisturizers.
MRSA

• Nosocomial MRSA known since 1963.
• Infection in athletes first reported in 1993 in USA.
• Nosocomial and community acquired MRSA differ in genetic makeup; CA-MRSA has more pathogenicity.
• Resistance to beta-lactam antibiotics due to mecA free sequence that decreases bacterial affinity for beta-lactam antibiotics.
• Many variations in mecA gene sequence.
• Cause skin infections - cellulitis, folliculitis, abscesses
MRSA- con’t

• MC in football, wrestling, rugby, fencing, basketball, soccer, military recruits
• Over 50% of patients presenting with skin infections to EDs have + MRSA cultures
• If immunocompromised patient, can rapidly progress to endocarditis, septicemia, necrotizing fasciitis, osteomyelitis, and multi-organ failure.
CA-MRSA more virulent than nosocomial
25-30% of population colonized with MRSA on skin and in nasal passages.

Presentation
- Initially, as folliculitis on soft tissue/skin infection
- “Infected pimple”, “insect bite”
- May progress to abscess
- May manifest as rapidly progressive pneumonia or sepsis
- Red, warm swollen area, possible concomitant joint pain/swelling, pain elsewhere.
Most common in open wound (abrasion) or contact with a carrier.

Spread person-to-person, also through injured skin

Also, poor hand washing, personal hygiene (no shower after workout) sharing personal items, failure to clean/disinfect clothing or equipment mats.

Severe cases may involve endocarditis, septicemia, osteomyelitis, necrotizing fasciitis, multisystem organ failure, and sepsis and may progress rapidly.
Skin/soft tissue infection: Consider I&D abscess and antibiotics; culture wound exudate before tx.

Oral TMP/SMX BID; may add Rifampicin if slow to respond to indicated antibiotics. (also doxycycline 100 mg BID, clindamycin 450 mg TID (resistance increasing), etc.), fluoroquinolones, e-mycin

Ciprofloxacin, Cephalexin not recommended due to resistance; oral vancomycin has poor oral absorption. Re-assess patient often.
MRSA Prevention

- Proper hygiene: hand washing; soap and water with antibacterial hand gels.
- Cover and protect open wounds and abrasions.
- No sharing of towels, razors, clothing, etc.
- Universal precautions Carrier?
- Routine cleaning of training tables, mats, whirlpools.
- RTP if mild case when antibiotics ongoing and transmission risk reduced / eliminated.
- No RTP till on abx, no risk of spread, re-eval often.
Many skin issues can impact athletic performance.

Players, coaches, ATC’s should work together to identify issues early and seek treatment.

Infections pose big risk for spread among athletes.

Many skin issues can be anticipated and prevented by understanding demands of sport, environmental conditions, and equipment involved.