Dermatology Conditions Specific to Sports and Competition
John Hatzenbuehler, MD
Maine Medical Center
Sports Medicine Program

Dermatology Tips
- Wet-dry, dry-wet
- Different modes of delivery
  - Liquid-cream-gel-ointment-paste-powders
- Know your steroid classes - Class I (strongest), Class VII (weakest)
- Monitor for tachyphlaxis – decreasing effectiveness with repeated dosing
- buy HABIF
- Disqualifying Conditions
  - Open
  - Oozing
  - Infectious
  - Contact
    - surface or player
  - Painful
- Wrestling dermatologic rules = “gold standard”
- When in Doubt . . . Keep them OUT

Dermatologic conditions caused by trauma

Corns and Calluses
- Cause - friction forces, anatomy causing poor equipment fit (ie shoes)
- Cure - eliminate friction
- Treat
  - paring, protect
- Prevent
  - “break in time”
  - proper fitting equipment

Abrasions and Road Rash
- Concerns - secondary Infection
- Treatment
  - cleanse throughly
  - use soap (Dawn) or scrub brushes, remove debris
  - topical antibiotic
  - non stick dressing (ie telfa)
  - consider bio-occlusive dressing

Blisters
- Cause - shearing forces in dermis
- Consider - epidermolysis bullosa simplex if widespread and not on contact surfaces
- Hot and humid increases moisture and shearing forces
  - Treatment
    - “To pop or not to pop”
    - “no pain - no drain”
  - Prevent
    - improve equipment fit, toughen surface (ie “moleskin”)

Subungual Hematoma- “Runners toe”
  - Leads to onycholysis and nail dystrophy
  - Treat - drill (18g needle or cautery device)
  - Prevent - proper shoe fit
  - Think melanoma if chronic discolored lesion under nail, focal and not resolving as expected

Talon Noir - “black heel”
  - Cause - horizontal shearing of epidermis over rete pegs of dermis
  - Treatment - self limited, or paring if painful
  - Think melanoma if not resolving or cannot remove with scalpel

Tache noir - palm of hand
  - Treatment - self limited or paring if pain

Joggers nipples
  - frequent cause of visit to marathon medical staff after blister
  - cause - Friction
  - Often painless, bleed
  - Prevent - mitigate friction
    - petrolatum, bandaid, softer fabric
  - Consider - Paget’s disease (nipple cancer) if recurrent and does not resolve with mitigating friction

Surfers Nodules
  - Cause - repetitive trauma to dorsum of knuckle pads, tibial tubercle and dorsum of foot
  - Dermal fibrous nodules which can ulcerate with repeated trauma, bigger size

Rowers rump
  - Cause - friction over ischial tuberosities
  - Can progress to lichen simplex chronicus
  - More common in pts with eczema
  - Differential diagnosis – evaluate for fungal cause or psoriasis if persistent
  - Prevent - modify seat to limit friction
  - Treat
    - Low potency steroid or antihistamines

Runners rump
- cause - friction causing ecchymoses at top of gluteal cleft
- Treat - reduce trauma

Piezogenic Pedal Papules
- Herniation of subcutaneous fat through dermis on side of calcaneous.
- papules may only be visible with weight bearing
- Common in the community, and occ painful
- Women more likely than men to have
- Treatment difficult- can try to cushion heal, +/- inject with steroid for atrophy effect

Return to Play (after skin trauma)
- Universal Precautions
- No active bleeding/oozing
- Wound/area covered and wound permits return (ie will not enlarge with sport activity)
- Athlete desires return

Environmental

Cold Injury
- Frostnip- early stage of frost bit with cold exposure but no tissue damage
- Frostbite - tissue damage due to skin exposure to cold
  - Mountain Frostbite
    - Due to cold, hypoxia, altitude, and dehydration
- Treatment
  - Rapid rewarm in tub at 100F (20-40min)
  - Analgesia
  - Debride clear blisters, not hemorrhagic ones
  - Don’t rewarm unless you’re sure you won’t refreeze!
  - Don’t rub!!! Will cause friction injury an more trauma.

Contact Dermatitis
- skin contact with allergens of any kind
- treat - avoid, steroids

Physical Urticaria - hives, caused by various exposures
- Sun
- Heat/cold
- Exercise/sweat
- Pressure/vibration
- Treatment
  - Avoidance
  - Antihistamines

Dry Skin or worsening eczema with sport
- Exposed areas most vulnerable, worsened with cold, increased altitude and wind
- Prevention
  - no soap, use petroleum
- Treatment
  - emollients
  - alpha hydroxy acids
  - topical corticosteroids

Sunburn
- Shouldn’t get but - if you do . . .
- Treatment
  - Cold bath/compress
  - vinegar compress
  - analgesics (have mercy!)
  - Aloe, moisturizers
- Prevent
  - SPF
  - Consider time of day, latitude, altitude

Infections

Impetigo
- typical causes - Group A Strep, Staph aureus
- Classic appearance
  - vesicles, bullae with yellow drainage and “honey” colored crusting lesions
- Management
  - gently debride and cleanse
  - dry (Burrows solution)
  - oral (Keflex) v. topical (Bactroban)

Return to Play - Impetigo
- High Level of Concern
- 72 hrs of treatment with oral antibiotics
- No new lesions - 48 hrs
- All lesions DRY
- Not allowed to cover to RTP sooner

Folliculitis
- Inflamed hair follicle, typically Staph aureus
- Differential
  - acne
  - fungal infection
  - keratosis pilaris (esp if upper arms)
- pseudofolliculitis barbae (mechanical folliculitis)
  - Treat
  - cleanse thoroughly, antibiotic soap
  - topical antibiotic solution usually ok

Return to Play - Folliculitis
- No new lesions for 48 hours
- Completed 72 hours of oral antibiotics
- Cannot cover to allow RTP sooner

Furuncles
- Usual - Staph aureus, consider MRSA
  - Treatment
  - Incision and Drainage
  - oral antibiotics?
  - recurrent furuncles - consider MRSA eradication vs oral prophylaxis vs chlorhexidine

Fungal Dermatitis
- Tinea = fungal = dermatophyte = ringworm
- Hot and moist increase likelihood of developing fungal dermatitis

Fungal Dermatitis
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- Diagnosis
  - classic rash, erythematous ring with raised borders and central clearing
- Treatment
  - topical - most OTC antifungals work
  - Cidal medications – Lamisil, Naftin
  - continue topical treatment for several days to 1 week after rash gone
- Consider oral for diffuse lesions

- Tinea Versicolor
  - usually on trunk
  - spots lighter OR darker
- Treatment
  - Selsun blue, daily – 10min!!
  - topical antifungals 2-4 week
  - Oral antifungals if resistant

Jock Itch - fungal until proven otherwise
- Treatment
  - OTC topicals (Lamisil)
  - keep dry
- Jock Itch - “Fungal rash you can’t fix” might be Erythrasma
  - Dark discoloration
  - asymptomatic or pruritic
- Diagnosis: Woods light +, KOH -
- Treatment - oral erythromycin
**Athlete's Foot - Fungal**

- **Treatment**
  - mild: OTC antifungal powder
  - moderate: OTC or prescription cream
  - severe: oral and topical antifungal.

- **Prevent?**
  - dry feet
  - consider drying powders

**Return to Play - Fungal Dermatitis**

- Disqualified if extensive, active and can't cover
- Minimum 72 hours of topical treatment for skin lesions with a cidal drug
- Minimum of 2 weeks systemic treatment for scalp lesions
- Must be "adequately covered" if rash still present after 72 hrs
- Suggest oral therapy in wrestlers

**Molluscum Contagiosum**

- Viral etiology, can cause diffuse outbreaks
- Classic appearance, umbilicated papules

- **Treatment**
  - typical self limited
  - can freeze with liquid nitrogen
  - may curette
  - if diffuse and resistant may try Retin- A

**Return to Play - Molluscum Contagiosum**

- Must cover to play
- need to have removed all lesions.

**Herpes Simplex - Labialis**

- Classic appearance, grouped vesicles on erythematous base
- can be HSV type I or II
- very CONTAGIOUS via respiratory secretions or direct contact

- **Treatment**
  - Oral antivirals
  - Must increase water intake
  - consider prophylaxis

**Herpes Simplex - Gladiatorum**

- "Scrum pox" transmitted via direct contact

**Return to Play - Herpes simplex**

- High level of concern
- No systemic symptoms such as fevers, malaise
- No new lesions in 72hrs
- All lesions dry and crusted
- 120 hrs oral treatment
- Cannot cover to RTP sooner

Infestations
- Pediculosis or Scabies
  - severe itch
  - see nits
- Treat
  - Kwell very effective
  - 5% Permethrin (Nix)
  - remove nits
  - Scabies may need Crotmiton (Eurax)
  - Oral ivermectin
  - HOT wash ALL clothing, bedding

Return to Play - Infestations
- treated adequately
- must be free from infestation

Acne
- Can be “disabling”
- Grading = treatment considerations
  - topical vs oral
- Precipitants
  - puberty
  - mechanical irritation
  - consider use of anabolic steroids if widespread

Return to Play - Disqualifying Conditions
- Open, oozing
- Infectious
- Contact with other players or surface or shared equipment