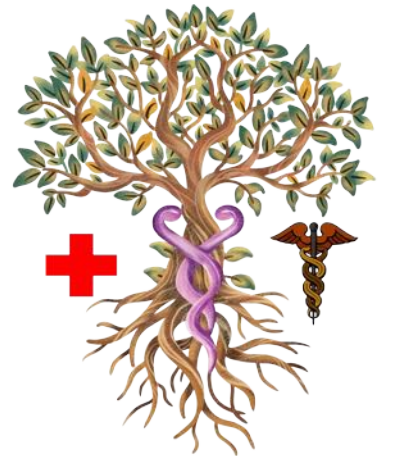


# Basic Wound Care

Mike Dacre | Wee Free Medic ([wfmed.org](http://wfmed.org))



# Basic Wound Care

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- Principles
  - Kinds of Wounds
  - Optimizing Healing
- Cleaning
- Bandaging
- Red Flags for Higher Care

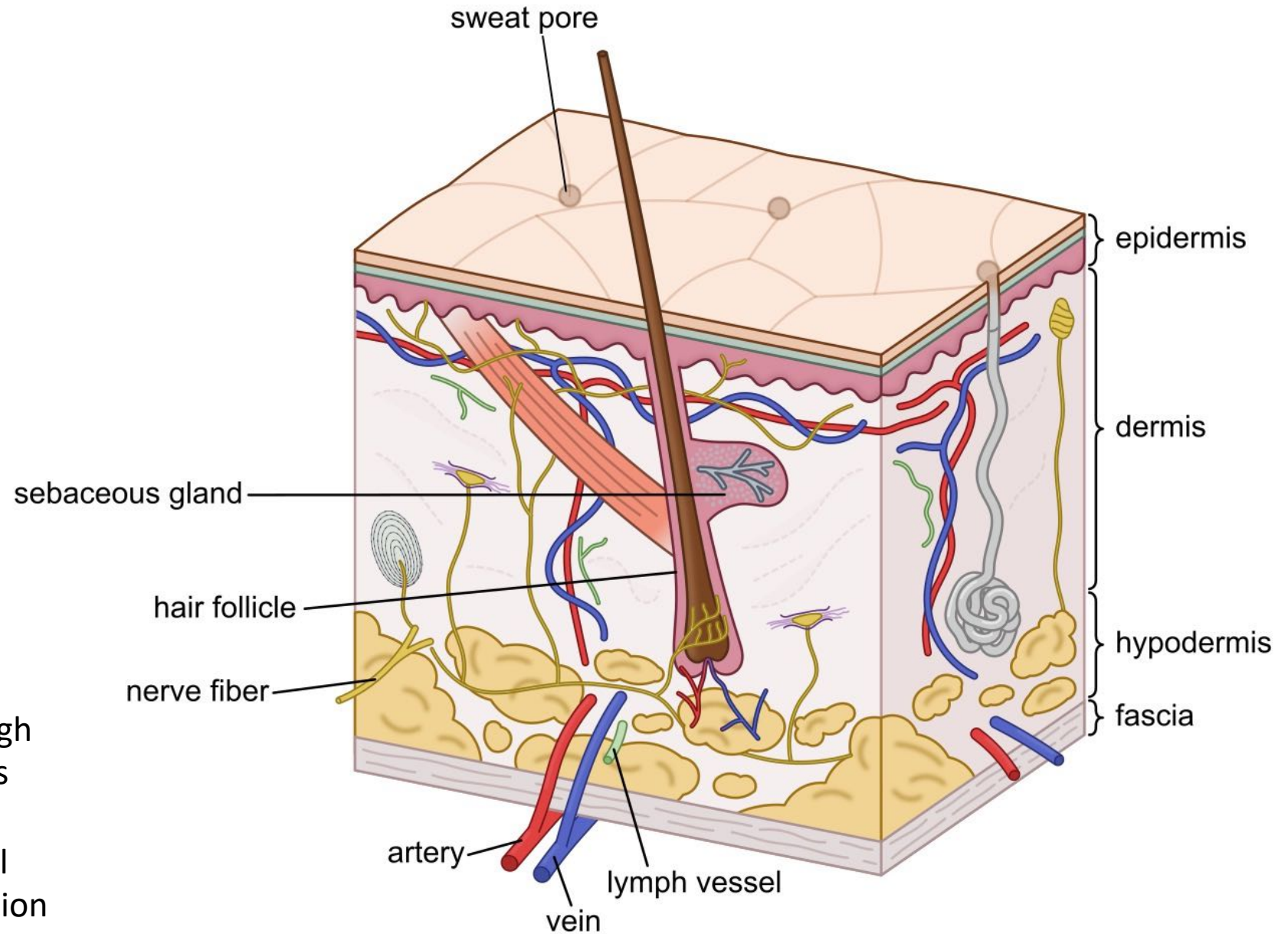




# Layers of Skin

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Most chronic wounds extend through the dermis and into the hypodermis (fat/blood vessels).  
If they break the bottom fascia level and muscle is showing, lethal infection risk is extremely high.



# Types of Wounds/Barriers to Healing



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- Wounds happen because of an injury\*, they struggle to heal if:
  - Not enough oxygen (blood)
    - Not enough getting there (arterial blockage or diabetes)
    - Not enough getting out (bad veins/lymph/etc)
  - Too much inflammation/irritation
    - Bacteria
    - Dirt
    - Chemicals
    - Scratching/reinjury

\*injuries are more likely with diabetes and some other things because you can't feel your feet

# Optimizing Healing

- To help wounds get better, we thus need to:
  - Improve blood flow (more advanced wound care)
  - Reduce inflammation/irritation ==

**KEEP IT CLEAN!**

- Recognize when it needs more, e.g.
  - debridement (lots of dead skin/black)
  - advanced bandaging (bad swollen legs)
  - surgery (lots of bleeding, black dead parts)
  - antibiotics (bad infections [last slide])





# Cleaning

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- **Cleaning is the most important thing in wound care**
- Most useful = soapy water
- Sterile saline works great →
  - Can make your own: clean water and 9g of table salt
- Avoid caustic cleaning
  - For small wounds, hydrogen peroxide works well, **don't use on big open wounds**
- Dakin's solution is great for chronic wounds
  - My favorite formula: in one Nalgene (one liter) of warm clean (not sterile) water:
    - 9 g (~1.5 teaspoon) of table salt (stops the water from wrinkling the wound)
    - ~ 1 tablespoon of bleach (relatively strong because we use it as a wash), can also do 1-2 teaspoon
    - A little dish soap
  - Use this to clean wounds and gently scrub them with gauze



# Bandaging

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- No antiseptics on open wounds ever!
  - Can use on unbroken skin adjacent to wound
- Barrier to prevent bacteria is the best: petrolatum
- Need a sterile bandage against the wound surface
  - After that, clean is fine
- Can use xeroform on wet oozing wounds, or a thick layer of petroleum jelly with regular gauze
- Wrap loosely, do not make compression bandage unless a wound care professional says to
  - Hard to tell if its venous insufficiency/lymphedema (need compression) vs arterial issue (compression very bad)
- Cover with a tougher elastic bandage, wrapped loosely
- Secure with tape at the top and bottom











Quick Bandaging Example On Very Minor Wound  
No Gauze Wrap required

Clean with Water and Gauze







Barrier Layer of Petrolatum



## Sterile Gauze on Skin

- Loosely cover
- Petrolatum gauze is best for wet/oozing wounds
- Regular sterile gauze fine for dry wounds







## Loose Wrapped Bandage

Tape it at the  
top and bottom  
(not shown)

Lymphangitis: infection spreading,  
needs antibiotics



## Red Flags

Should go to doctor/  
hospital

- Extreme pain
- Wound on one leg
- Hot or cold, one side more than the other
- Streaking
- Crunchiness or crackles
- Active heavy bleeding



Cellulitis (skin infection, needs antibiotics)  
- One sided/red/hot



# Thank You! Your Work Matters

I'm always available for questions

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