

SKIN COURSE FOR THE BODY ARTIST

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QUINCY HEALTH DEPARTMENT

Structure of skin

- a. epidermis - barrier (moisture, chemical) via cornified envelope, lipids
- b. dermis - structural scaffold; tensile strength, vessels, nerves, collagen
- c. subcutis - fat; insulation (temperature, trauma)

1. Epidermis

- a. top: cornified, no viable skin cells; few immune system cells (too many suggests infectious or inflammatory disorder)
- b. bottom: basal cell layer; regenerative; melanocytes
- c. turnover time: 1 month (2 weeks basal, 2 weeks upward)
- d. disorders of turnover/regeneration:
 - psoriasis
 - basal cell carcinoma (BCC)
 - squamous cell carcinoma (SCC)
- e. epidermal scars: translucent, visible vessels, loss of skin markings

2. Dermis

- a. site of target for tattoo pigment (perivascular)
- b. scarring - post-inflammatory hyperpigmentation, fibrosis, keloid; ulcer vs. erosion

3. Subcutis

- a. atrophy - injection of certain medications, HIV-medications, inflammatory disorders (L-tryptophan and eosinophilia-myalgia syndrome)
- b. panniculitis

Potential complications after skin procedures

1. Infections of skin

- a. **bacterial** (strep, staph; fresh water inhabitants)

incubation period: days

skin findings: redness, swelling, honey-colored crust, pain, thick/cloudy discharge, furuncle

systemic symptoms: fever, “flu-like” symptoms

treatment: antibiotics

small area, no fever – topical antibiotics

large area, blisters, large red “halo,” fever – oral antibiotics

Bacitracin, Neomycin, Neosporin, Polysporin, triple antibiotic ointment: contact allergy Vaseline petroleum jelly as preventative

- b. **viral** (wart, molluscum contagiosum; herpes; hepatitis C, B)

wart, molluscum: skin-colored or pink papule (small raised solid skin lesion)

incubation period: days to weeks; perhaps months

treatment: salicylic acid “wart/corn remover” at bedtime, apply under tape.

facial molluscum: may suggest immune system deficiency

herpes - small blisters, later clustered small crusts

incubation period: days

recurrent or primary

if frequent or severe with potential scarring, or with facial involvement, seek medical assistance

hepatitis - via blood-blood contact (needle, direct blood contact, equipment)

- c. **fungal** (yeast; plant-induced injury- e.g. sporotrichosis with rose thorn)
unlikely in a healthy person

2. Hypersensitivity to tattoo pigments

COLOR	PIGMENT	DERMATITIS
White	Titanium	(laser blackening)
Yellow	Cadmium	Photosensitivity
Green	Chromium or Copper	
Blue	Cobalt	
Red	Mercury	Contact dermatitis
Purple	Manganese	
Black	Carbon	
Brown	Iron	(laser blackening)

Additional hypersensitivity – nickel, found in many jewelry items. Most common metal to cause allergic contact dermatitis. Dimethylglyoxime test can be used to test jewelry before purchase or piercing, will not harm metal.

3. Abnormal scarring or healing

- a. hypertrophic scar or keloid
- b. warts
- c. psoriasis
- d. chronic ulcer

Common diseases of the skin

acne

“blackheads” (open comedones) or “whiteheads” (closed comedones), pustules, pink papules, on the face and upper body

folliculitis

small red/pink papules or pustules at hair follicles

keratosis pilaris (KP)

prominence and redness of the follicular openings; upper arms and thighs

eczematous dermatitis

rough pink skin with a hint of wet discharge or crusted discharge, often itchy

fungal infections (tinea)

round pink lesion with scale at periphery; redness around nails, nail yellowing and thickening

parasitic (lice, scabies)

severe itch, scratch marks; lice in head or pubic area and their eggs are visible with close inspection

viral infections (warts, herpes, shingles/zoster)

shingles is one sided and looks like a belt from the front midline to the spine; it stings or burns.

shingles or herpes on the nose, cheeks, eyes, or forehead *should be treated with all due haste* to avoid involvement of the eye

keloids

shiny firm scar, darker than surrounding skin; may be spontaneous on chest in some ethnicities
may be familial: ask about family members with keloids or poor wound healing/scarring

moles (pigmented nevi) - concerning for melanoma, a potentially lethal form of skin cancer

- A asymmetry**
- B border irregularity**
- C color (more than 1 per mole, or 1 mole that is darker than all others)**
- D diameter (larger than 6 mm, the size of a pencil head eraser)**
- E evolution (new in an adult, growing, disappearing, bleeding darkening, itching, etc.)**

burns (sunburns)

skin cancer (melanoma, squamous cell carcinoma, basal cell carcinoma; premalignant actinic keratosis)

should be evaluated as soon as possible to diagnose and treat

psoriasis

scaly salmon-colored lesions with adherent silvery scale, usually at sites of trauma or pressure (elbows, knees, buttocks/lower back), scalp, nails

Chronic diseases can be exacerbated by skin procedures
Use caution when tattooing these clients

Diabetes – increased risk of infection (bacterial, fungal)

Psoriasis – may develop at site of skin break

Poor healers

Immune suppressed individuals (cancer, undergoing chemotherapy, AIDS) – increased infection risk

Artificial heart valve, pacemaker, vascular shunts, or joint “hardware”

Viral hepatitis

Pregnant women

Clients at risk for bleeding (on blood thinning medicine (aspirin, Coumadin) or clients with hemophilia)

Clients who scar easily