Nursing Care of Patients with Skin Disorders and Burns

Chapter 51

Inflammatory disorders

Dermatitis

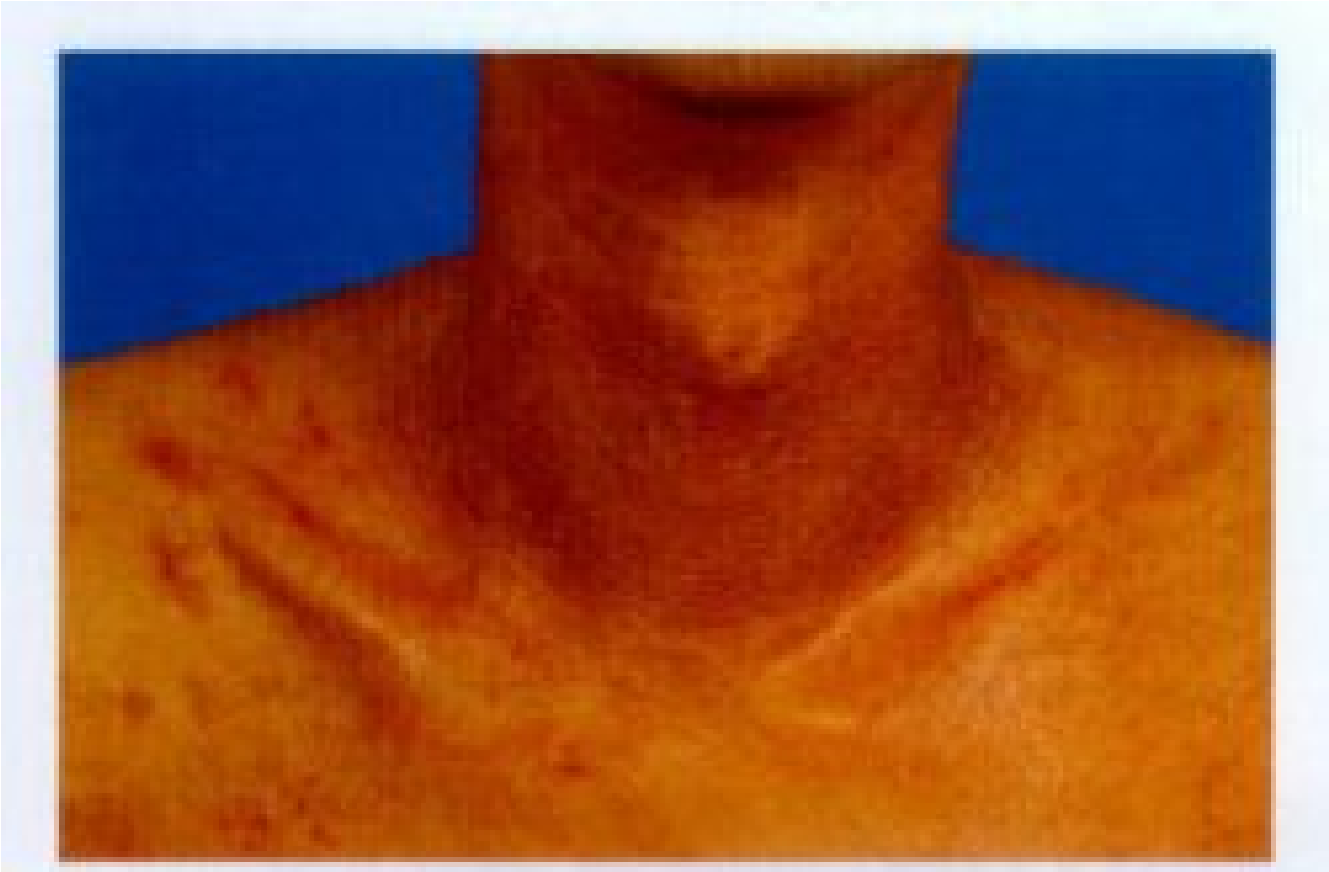
- Pathophysiology
  - Inflammation of the skin
- Etiology
  - Allergens
  - Irritants
  - Heredity
  - Stress
  - Unknown

Dermatitis

Types

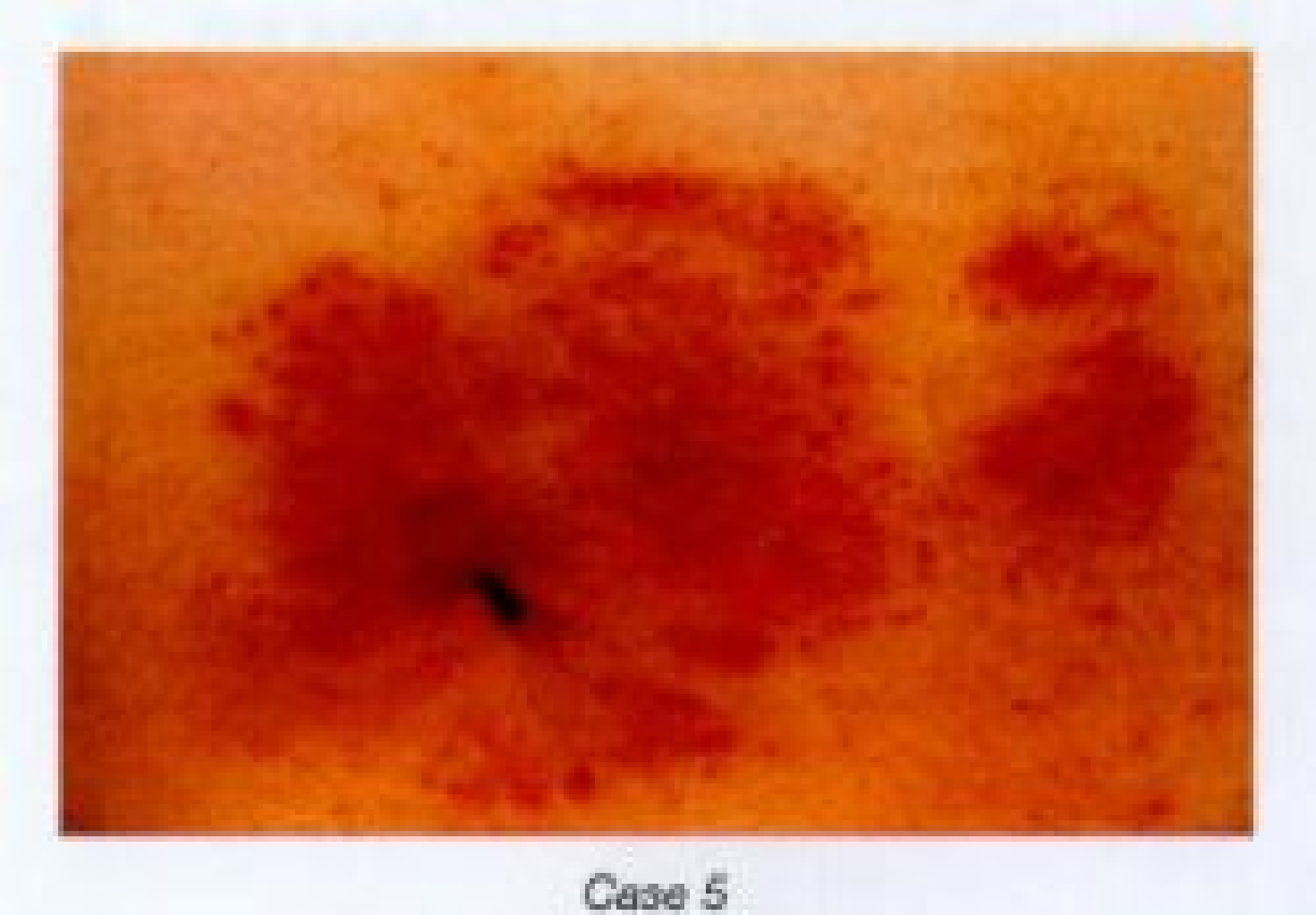
- Contact
  - Irritant
  - Allergic
- Atopic
- Seborrheic

Which type of dermatitis is it?



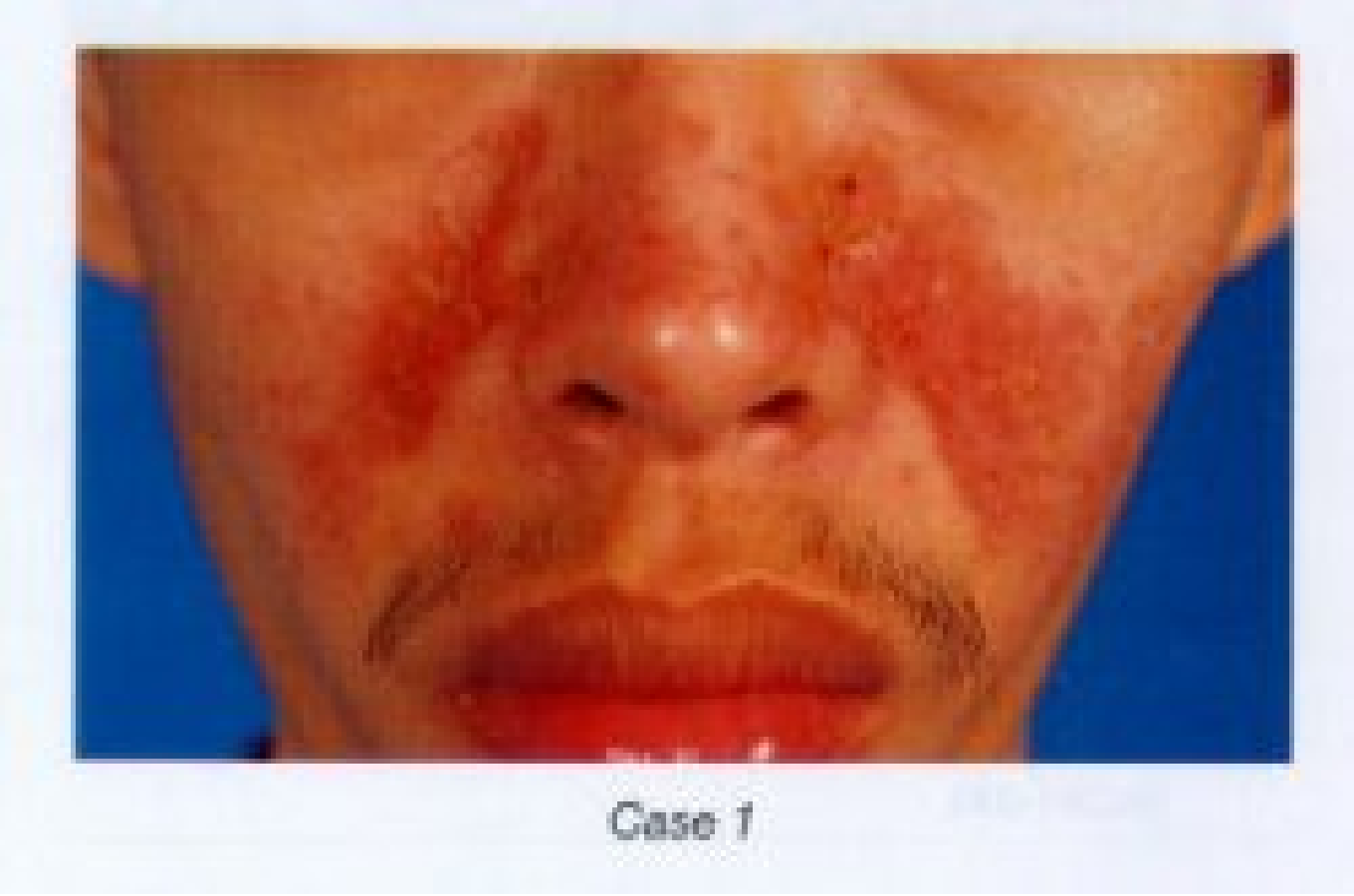
Case 4

Which type of dermatitis is it?



Case 5

Which type of dermatitis is it?



Case 1

Dermatitis

Prevention

- Avoid allergens
- Control perspiration
- Short, tepid baths
- Substitute superfatted soaps for deodorant soap
- Lubrication
- Avoid scratching

Signs and Symptoms

- Rash, itching, redness
- Lesions
  - Scales
  - Crusts
  - Fissures
  - Macules
  - Papules
  - Pustules

Complications

- Infection
- Sepsis
  - If becomes systemic

Diagnosis

- H&P
- Culture and sensitivity
  - If infection is suspected

Treatment

1. Antihistamines
2. Analgesics
3. Antipruritics
4. Steroids
    1. Topical, intralesional or systemic
5. Baths
    1. Colloidal oatmeal
6. Wet dressings

Nursing Diagnoses

- Impaired skin integrity
- Disturbed body image
- Deficient knowledge

Psoriasis

Pathophysiology/Etiology

- Chronic inflammatory disorder
- Proliferation of epidermal cells
- Scaling & inflammation
- Exacerbations & remissions
- Exact cause unknown, genetic component
- Onset common late 20’s

Psoriasis

Aggravating Factors

- Stress
- Strep pharyngitis
- Hormone changes
- Cold weather
- Skin trauma
- Some drugs

Psoriasis

Signs and Symptoms

- Papules, plaques
- Silvery scales – if untreated
- Itching
- Areas most affected
  - Elbows
  - Knees
  - Scalp
  - Umbilicus
  - Genitals

Psoriasis

Signs and Symptoms

Psoriasis

Signs and Symptoms

Complications

- Secondary infection
- Psoriatic arthritis
  - Destructive arthritis of large joints
- Nail changes
- Severe & widespread disease
  - Fever, chills
  - ↑ cardiac output
  - Benign lymphadenopathy

Diagnosis

- Physical exam
  - Usually sufficient
- Diagnostic tests may be necessary
  - r/o other possible diseases
  - r/o infection

Treatment

- Daily tub baths
- Steroids
- Salicylic acid
- Keratolytics
- Coal tar, anthralin
- UV light
- Chemotherapy
- Topical cortiosteroids
- Occlusive dressings

Infectious Skin Disorders

- Bacterial
- Viral
- fungal

Impetigo Pathophysiology

- Localized bacterial infection of the skin
- Two types
  - Bullous
  - Epidemic
- Primarily affects children
- Staphylococcus aureus
- Group A streptococci

Impetigo Pathophysiology

- Very contagious
- Spread by child from one part of body to the other by scratching
- Spread by contact with towel, clothing, stuffed animal
- Need to stay home from school or daycare until healed

Impetigo
(Infected atopic dermatitis)

Impetigo
Signs and Symptoms

- Bullous impetigo
  - Large bump on the skin (bulla)
  - Develops scab-like, honey-colored crust
  - Usually no redness or pain
  - Pruritis

Impetigo
Signs and Symptoms

- Epidemic impetigo
  - Small vesicle surrounded by a circle of erythema
  - Appear first on face and legs
  - Skin surface can ulcerate
  - Untreated—possibility of glomerulonephritis

Impetigo Diagnosis

- History and physical
  - Characteristic appearance of skin
  - Fluid from vesicles can be cultured

Impetigo Treatment

- Topical antibiotics
- Widespread case or systemic symptoms—oral or intravenous antibiotics
- Good handwashing
- Observe pt. for 6-7 weeks for s/s of glomerulonephritis

Impetigo
Prognosis

- Excellent
- Majority recover quickly and completely

Impetigo Prevention

- Good hygiene
- Handwashing
- Keep fingernails well trimmed
- Cuts covered
- Stay home from school or day care until completely healed

impetigo

Furuncle

- Small tender boil
- Occurs in hair follicle
- Spreads to surrounding dermis
- Usually caused by Staph
- Prone to areas of perspiration, friction and irritation

Furuncle

- Usually comes to purulent head
- Localized pain, tenderness, and cellulitis
- Lympadenopathy may be present

Carbuncle

- Extension of a furuncle
- Deeper abscess involving skin and subcu tissue
- May be associated with systemic s/s
  - Fever
  - Pain
  - Leukocytosis
  - Fatigue

Furuncles & Carbuncles

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Complications

- Carbuncles can progress to sepsis
- Contagious
- Scarring

Treatment

- Avoid squeezing and trauma
- Topical antibacterial ointment
- Surgical I&D may be done
- Systemic antibiotics may be necessary, especially carbuncles
- Analgesia and antipyretics
- Strict handwashing

Herpes Simplex

Pathophysiology/Etiology

- Viral infection
  - HSV1: Above waist
  - HSV2: Below waist
- Primary infection
  - Direct contact
  - Respiratory droplet
  - Fluid exposure from another infected person
- Lies dormant – pt is asymptomatic
- Recurs with stress

Herpes Simplex

Prevention

- Avoid contact with blistered lesion
- Avoid sharing contaminated items
  - Toothbrushes, lipsticks, cups, etc.
- Avoid stressors if possible
- Sunscreen

Herpes Simplex

Signs and Symptoms

- Prodromal phase
  - Hours before eruption
  - Burning, tingling
- Erythema & swelling
- Vesicles and pustules in 1 – 2 days
  - Burning, itching, pain
- Contagious until scabs form

Herpes Simplex

Signs and Symptoms

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Herpes Simplex

Complications

- Meningoencephalitis
  - Infection of newborn
  - Contact with HSV II in mother
- Blindness
  - Severe infection of eyes
  - Self inoculation from other area

Herpes Simplex

Diagnosis

- H&P
- Culture
  - Provides definitive diagnosis

Herpes Simplex

Treatment

- No cure, recurrence common
- Zovirax ointment
  - Primary lesions
  - Suppresses vesicle multiplication
- Oral acyclovir
  - Used for frequent attacks (>6 yr)
- Antibiotics
  - Secondary infections
- Avoid triggers of recurrence

Herpes Simplex

Nursing Care

- Educate patient
  - Disease
  - Recurrence
  - Contagious
    - Self inoculation
    - Others

Herpes Zoster (Shingles)

Pathophysiology

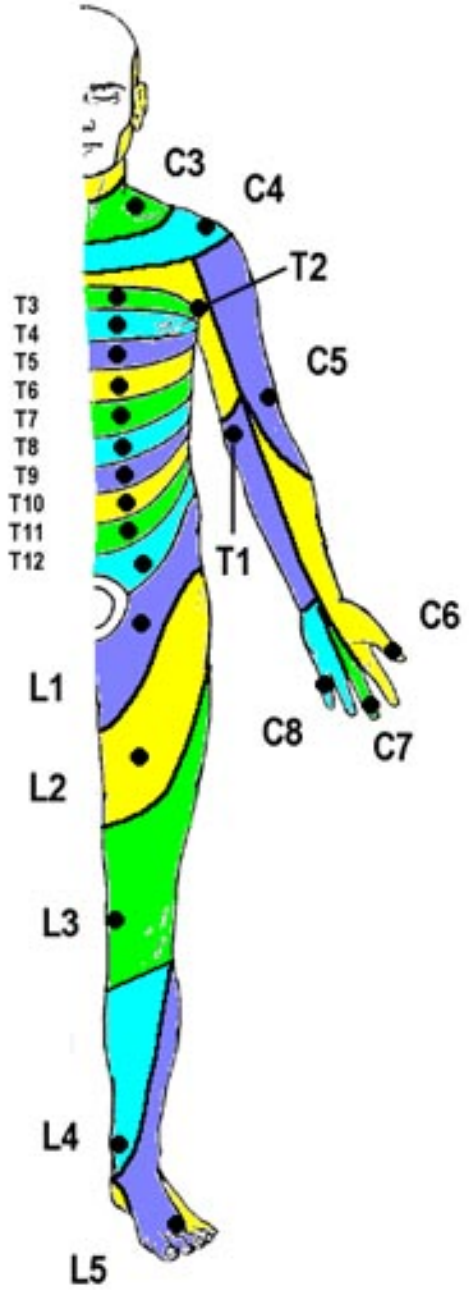
- Acute inflammatory and infectious disorder
- Painful vesicular eruption
- Follows nerve distribution
- Usually one-sided

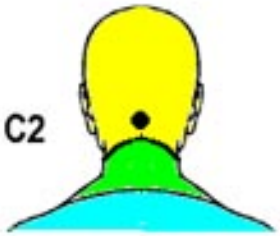
Herpes Zoster (Shingles)

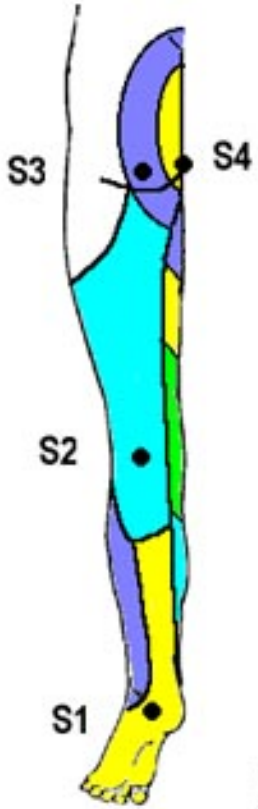
Etiology

- Reactivation of varicella zoster virus (chickenpox virus)
- Occurs with reduced immune function
  - Elderly
  - AIDS
  - Immunosuppressed

DERMATOME CHART







Upper Quarter Screen

C2 - Occipital Protuberance
C3 - Supraclavicular Fossa
C4 - Acromioclavicular Joint
C5 - Lateral Antecubital Fossa
C6 - Thumb
C7 - Middle Finger
C8 -Little Finger
T1 - Medial Antecubital Fossa
T2 - Apex of Axilla

Lower Quarter Screen

L1 - Upper Anterior Thigh
L2 - Mid Anterior Thigh
L3 - Medial Femoral Condyle
L4 - Medial Malleolus
L5 - Dorsum 3rd MTP Joint
S1 - Lateral Heel
S2 - Popliteal Fossa
S3 - Ischial Tuberosity
S4-5 - Perianal Area

Note: test dermatomes at dots

Herpes Zoster (Shingles)

Signs and Symptoms

- Vesicles, plaques
- Irritation
- Itching
- Fever
- Malaise
- Pain

Herpes Zoster (Shingles)

Signs and Symptoms

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Herpes Zoster (Shingles)

Complications

1. Postherpetic neuralgia
2. Persistent dermatomal pain
3. Hyperesthesia
4. Opthalmic herpes zoster
5. Sepsis

Herpes Zoster (Shingles)

Diagnosis

- H&P
  - Signs & symptoms
  - Clinical picture
- Culture
  - If secondary bacterial infection

Herpes Zoster (Shingles)

Treatment

- Acyclovir
  - Intravenous, orally, topically
- Analgesics
- Corticosteroids
  - May help prevent post-herpetic neuralgia
- Antihistamines
  - Control itch
- Antibiotics for secondary bacterial infection

Herpes Zoster (Shingles)

Nursing Care

- Teach spread prevention
- Cool compresses
  - BID or TID
  - Aid in drying lesions/decrease itch
- Compression wraps
  - Provide continuous pressure
  - May help ↓ hyperesthesia
- Pain control

Fungal Infections

Pathophysiology/etiology

- Dermatophytosis
  - Fungal infection of the skin
- Direct contact with fungus
- Grows in warm moist environment
- ***Tinea***
  - Term used to describe fungal infections

Fungal Infections

Types

- Tinea pedis
  - Athlete's foot
- Tinea capitas
  - Ringworm of scalp
- Tinea corporis
  - Ringworm of body
- Tinia cruris
  - Jock itch
- Tinea unguium (onychomycosis)
  - Ringworm of nails

- Tinea pedis

Tinea Pedis

- Athlete's foot
- Most common warm, moist, sweaty feet
- Tight shoes
- Increased friction or trauma

Tinea Pedis

- Three types
  - Acute vesicular—acute vesicular eruptions, itchy, and painful
  - Interdigital—most common—erosion, scaling, and fissuring in webs of toes—painful, burning, and itchy, offensive odor
  - Chronic plantar—scaling, redness, absence of itch

Tinea Pedis Treatment

- Kerolytics
- Topical antifungals—apply thin coat, continue for prescribed time even after symptoms resolve
- Soaks
- Patient education

- Tinea capitis

Tinea Capitis

- Appears as scattered round, red, scaly patches
- May have small papules or pustules
- Hair is brittle
- Temporary hair loss

Tinea Capitis

- Treatment
  - Systemic antifungals are commonly prescribed
  - High rate of reoccurence with topical
  - Monitor for side effects
- Prevention
  - Contagious—do not share combs, brushes, head gear, hats, pillowcases
  - Check pets—if reoccurence

- Tinea corporis

Tinea Corporis

- Red macule with clear center
- May be isolated or appear in clusters
- Moderate to intense pruritis
- Usually appear on exposed part of body

Tinea Corporis

- Treatment
  - Topical antifungals for localized regions—apply thin layer—cover rash and few cms beyond
  - Oral antifungals for severe, widespread, or resistant cases
  - Topical steriods to control itch

- onychomycosis

Onychomycosis

- Usually lifelong disease
- Very difficult to treat
- Yellow thickening of nails

Onychomycosis

- Treatment
  - Oral antifungals usually necessary
  - Topical usually not effective
  - Nails may need to be removed surgically

Cellulitis

- Pathophysiology
  - Inflammation of skin/connective tissue
    - Infection
      - Staph
      - Strep
- Etiology
  - Open wound/trauma
    - i.e., Decubitus ulcer, bug bite
  - May be unknown

Cellulitis

Signs and Symptoms

- Warmth
- Redness
- Edema
- Pain, tenderness
- Fever
- Lymphadenopathy

Cellulitis

Signs and Symptoms

Cellulitis

Signs and Symptoms

Cellulitis

Cellulitis
Diagnosis

- Culture and sensitivity
- Blood cultures

Cellulitis

Treatment

- Antibiotics
  - Topical
  - Systemic
- Debridement

Cellulitis

Nursing Care

- Monitor size of inflamed area
- Report increasing inflammation, temperature
- Elevate
  - Decreases edema
- Administer analgesics
- Apply warm compresses
- Institute standard precautions

Acne Vulgaris

Pathophysiology/Etiology

- Common skin disorder
- Hormonal changes are most common cause
  - ↑ androgen production
    - ↑ sebum production
- Obstruction of ducts through which sebum flows
  - Inflammatory response
    - Papules, pustules, nodules and cysts

Acne Vulgaris

Signs & Symptoms

- Comedomes
  - Closed or whiteheads
    - Small white papules with small follicular openings
  - Open or blackheads
- Inflammation
  - Can lead to pustules, nodules, cysts or abscesses

Acne Vulgaris

Signs & Symptoms

Acne Vulgaris

Medical Treatment

- Topical agents
  - May be used alone or in combo
  - May take 3 – 6 weeks to see improvement
    - Benzoyl peroxide
    - Antibiotics
    - Vitamin A acid

Acne Vulgaris

Medical Treatment

- Severe cases
  - Systemic antibiotics
    - Long term, low dose
  - Isotretinoin (Retin – A)
  - Oral contraceptives
  - Systemic corticosteroids
    - Nodular acne

Acne Vulgaris

Medical Treatment

- Other
  - Comedo extraction
  - Intralesional steroid injections
  - Cryosurgery (freezing)
  - Mild peeling (UV light, mild acid)
  - Dermabrasion (deep chemical peel)
  - Excision of scars
  - Injection of fibrin or collagen

Acne Vulgaris

Nursing Care

- Patient teaching
  - Medications
  - Gently wash face twice daily
    - Mild soap
  - Avoid sun exposure with tretinoin
  - If mixing agents
    - Tretinoin at night
    - Other agents in morning
  - Keep hair clean & off face

Parasitic Skin Disorders

Pediculosis

- Pathophysiology/etiology
  - Infestation by lice
  - Transmission by direct contact

Pediculosis

Types

1. Pediculosis capitis
2. Pediculosis corporis
3. Pediculosis pubis

Pediculosis Capitis

- Female louse lay eggs (nits) close to scalp
- Nits firmly attach to hair shaft
- Commonly found back of scalp and behind the ears
- Nits are 1-3 mm—shiny, white
- Spread by direct contact

Pediculosis

Types

Pediculosis Corporis

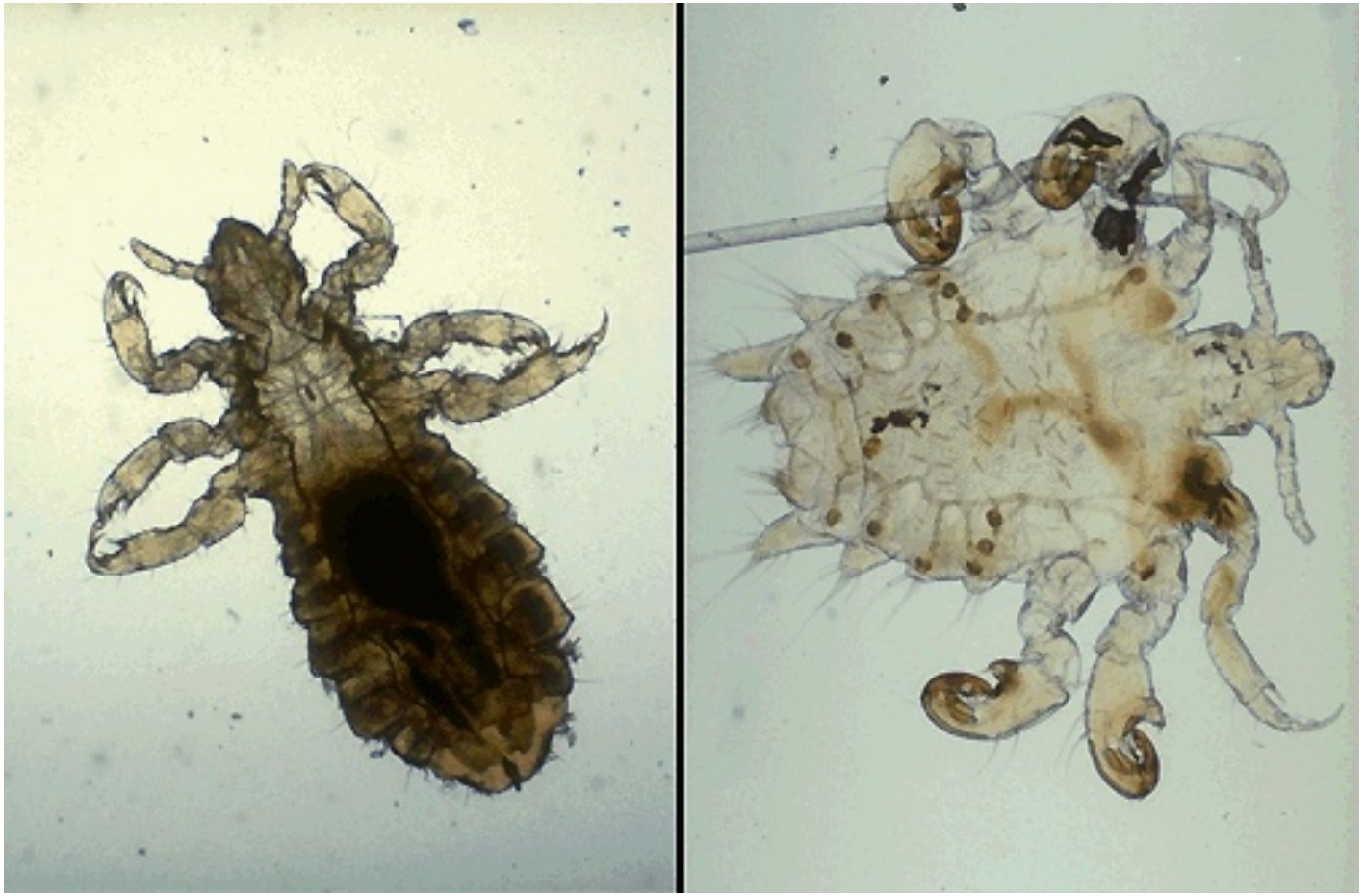
- Body lice
- Usually poor hygiene
- Neck, trunk and thighs most commonly affected
- Can lay eggs in seams of clothing—bite skin

Pediculosis Pubis

- Crab lice
- Usually located in genital region—can also occur on chest, axilla, eyelash and beard hairs
- Lice are 2 mm and look like crabs
- Most commonly transmitted through sexual contact—can be spread through inanimate objects like linen

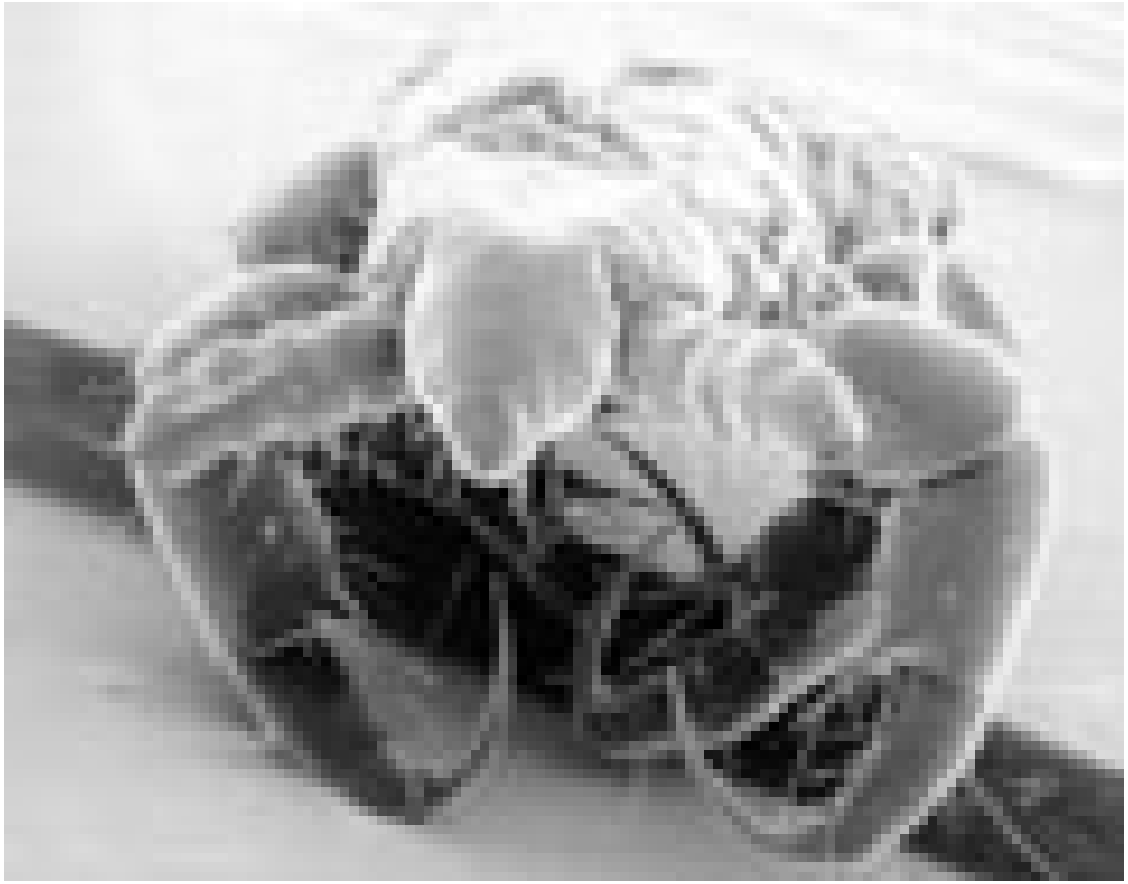
Pediculosis

Types



Pediculosis

Types



Pediculosis

Signs and Symptoms

- Itching
- Macular or papular rash
- Presence of lice, nits, and excreta
- Minute hemorrhagic points

Pediculosis

Signs and Symptoms

Pediculosis

Complications

- Secondary bacterial infections
- Body lice may be vector for rickettsiae disease
- Dermatitis, eczema, hyperpigmentation
- Coexistence with other STDs

Pediculosis

Diagnosis

- History and physical
- Test for STD if pediculosis pubis

Pediculosis

Treatment

- Pediculosides
  - Permethrin (Nix)
  - Pyrethrins (RID, A-200 Pyrinate)
  - Physostigmine ophthalmic ointment
    - Eyebrows and lashes
- Mechanical removal
- Antipruritics
- Topical corticosteroids

Pediculosis

Nursing Care

- Patient education
  - Self-medication
  - Removal of nits
  - Cleaning of clothing and objects
  - Inspection of family and friends

Scabies

Pathophysiology/Etiology

- Extremely contagious disease
- Prolonged contact with infected clothing or animals
  - *Sarcoptes scabiei* mites burrow into skin
    - Short, wavy, brownish-black lines

Scabies

Pathophysiology/Etiology

Scabies

Prevention

- Treat all contacts at time of dx
  - Mite lives < 24hrs w/o human contact
- Wash bed linens, clothes, towels
- Furnishing need not be cleaned

Scabies

Signs and Symptoms

- Initially may be asymptomatic
- Intense itching
- Rash
- Burrows

- scabies

Scabies

Signs and Symptoms

Scabies

Signs and Symptoms

Scabies

Diagnosis

- Shaving of lesion
- Microscopic evaluation
  - Adult male
  - Eggs
  - Feces

Scabies

Medical Treatment

- Topical scabicides
  - Entire body application
  - 8 – 12 hrs (usually overnight)
  - Washed off in AM
  - One or two applications is curative
- Antipruritics and Corticosteroids
  - Control itching

Pemphigus

Pathophysiology/Etiology

- Acute to chronic skin dx
  - Bullae on skin and mucous membranes
- Probable autoimmune disorder
- More common in middle to older age

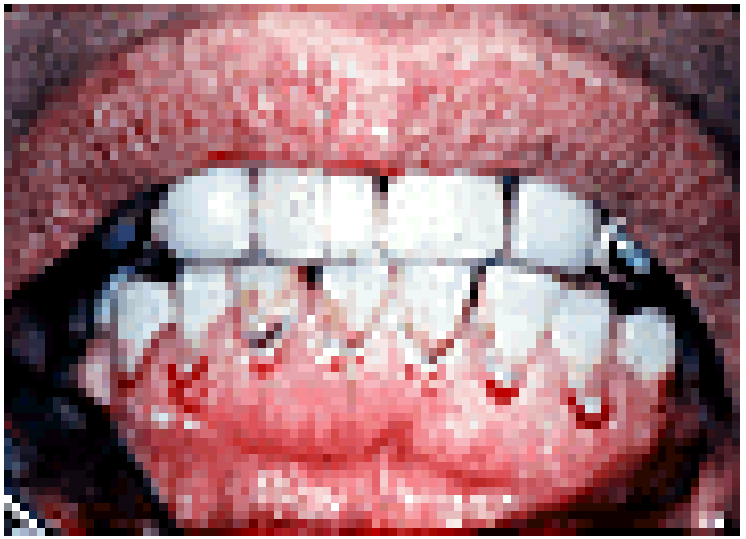
Pemphigus

Signs and Symptoms

- Bullae
  - Usually originates in mucous membranes
  - Spread to skin
  - Large areas of body may be involved
    - Rupture
    - Raw wounds
- Pain
- Burning
- Itching

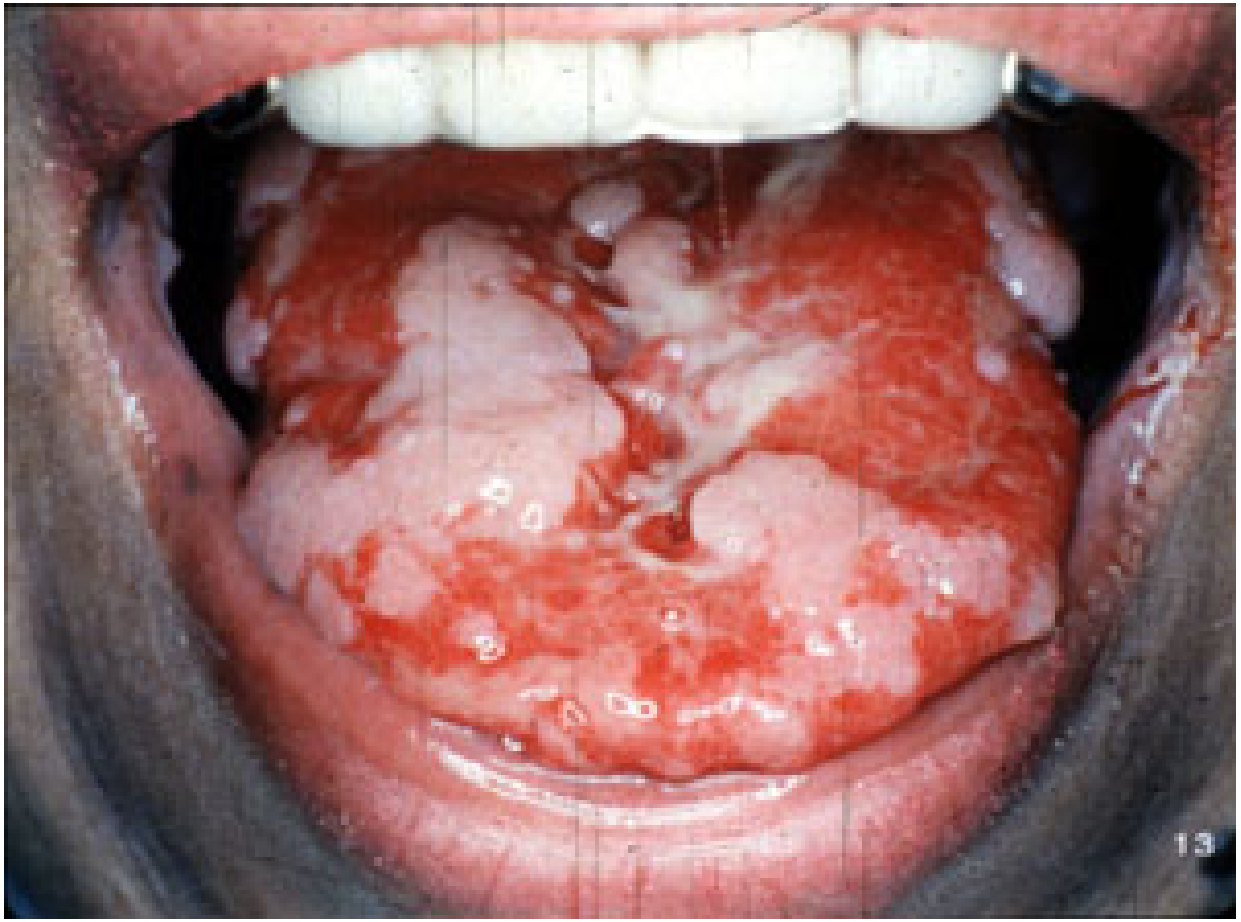
Pemphigus

Signs and Symptoms



Pemphigus

Signs and Symptoms



Pemphigus

Signs and Symptoms

Pemphigus

Diagnosis

- Positive Nikolsky's sign
  - Sloughing/blistering of normal skin
    - Minimal pressure
- Biopsy of blister
  - Reveals acantholysis
    - Separation of epidermal cells from one another

Treatment

1. Corticosteroids
2. Cytotoxic agents
3. Analgesics
4. Antipruritics
5. Fluid replacement
6. Diet

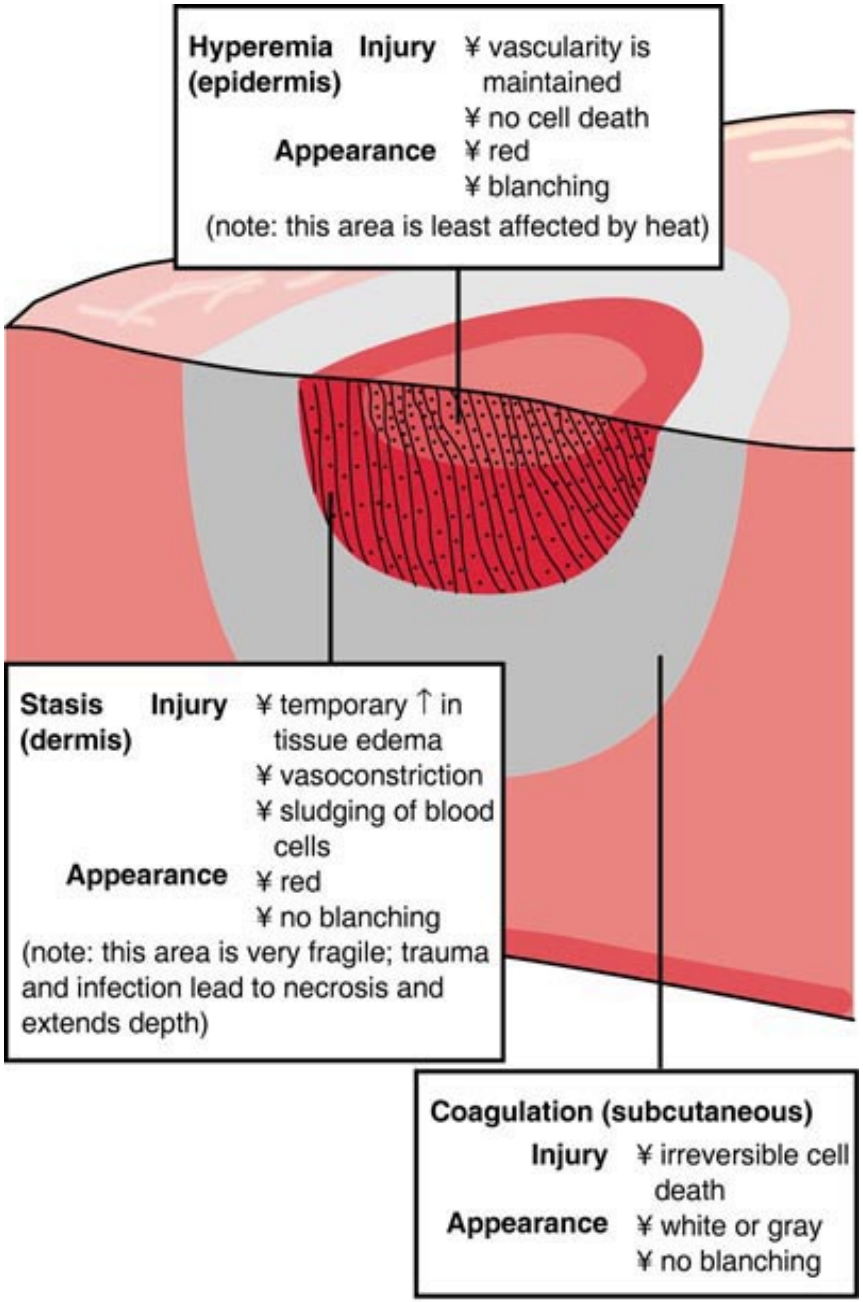
Nursing Care

1. Monitor fluid balance
2. Monitor diet
3. Administer wet dressings or baths
4. Control pain
5. Maintain oral hygiene
6. Provide psychosocial support

Burns

Pathophysiology

- Energy transfer from heat source to body
  - Tissue damage
- Heat denatures cellular protein
  - Irreversible damage
- Interruption of blood supply



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Burns

Pathophysiology

- Amount of damage r/t
  - Temperature of burning agent
  - Type of burning agent
  - Duration of exposure
  - Thickness of involved dermal structures

Burns

Pathophysiology

- Alteration in Normal Skin Functioning
  - Loss of protective function
  - Impaired temperature regulation
  - Risk for infection
  - Change in sensory function
  - Fluid loss
  - Impaired skin regeneration
  - Impaired secretory and excretory function

Burns

Pathophysiology

- Systemic Responses
  1. Increased capillary permeability
     1. Leakage of plasma and proteins
     2. Loss of intravascular volume
  2. Decreased cardiac output
     1. Hypovolemic shock
     2. Leukocyte and platelet aggregation
        1. Thrombosis

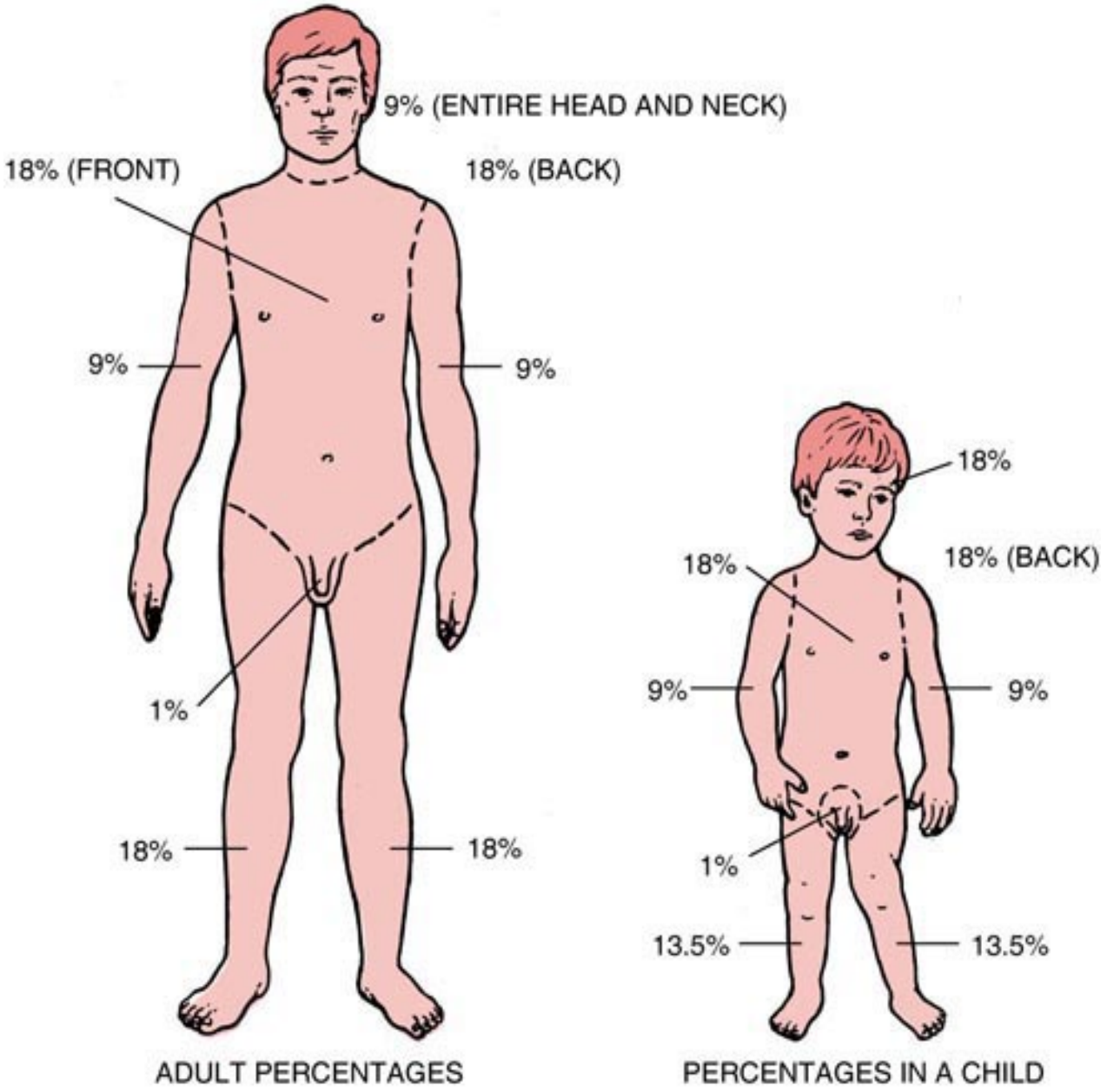
Burns
Pathophysiology Systemic

- Systemic Responses (cont.)
  3. Hypermetabolism, catabolism
  4. Stress response
  5. Gastrointestinal complications
  6. Renal insufficiency
  7. Pulmonary damage
  8. Risk for infection

Burns

Classification

- Severity
  - Depth of destruction
  - % of injury
  - Cause of burn
  - Age
  - Concomitant injuries
  - Medical hx
  - Location of burn



RULE OF NINES

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Burns

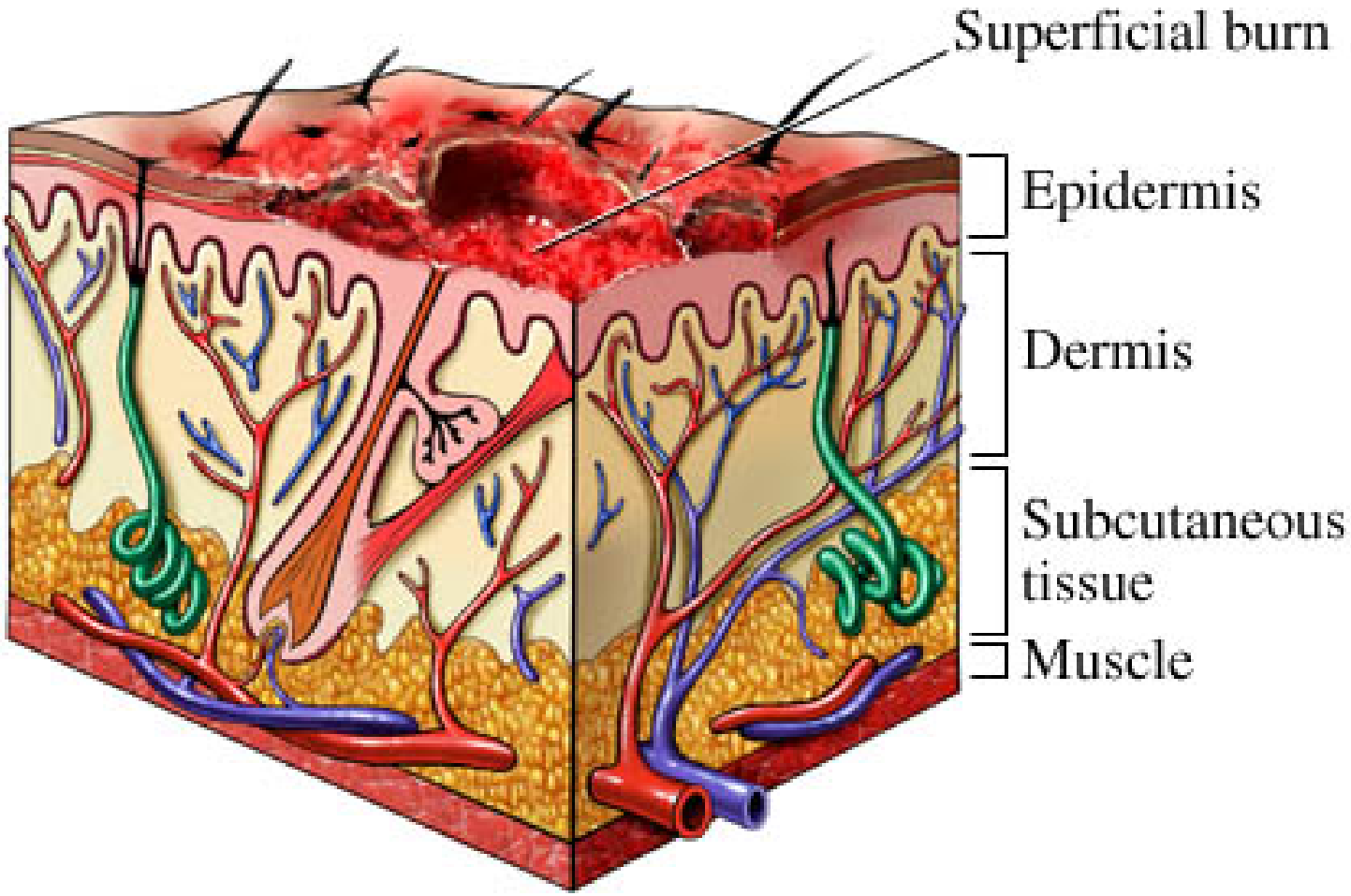
Classification

Depth

- Partial thickness: Superficial
- Partial thickness: Deep
- Full thickness

Burns

Classification

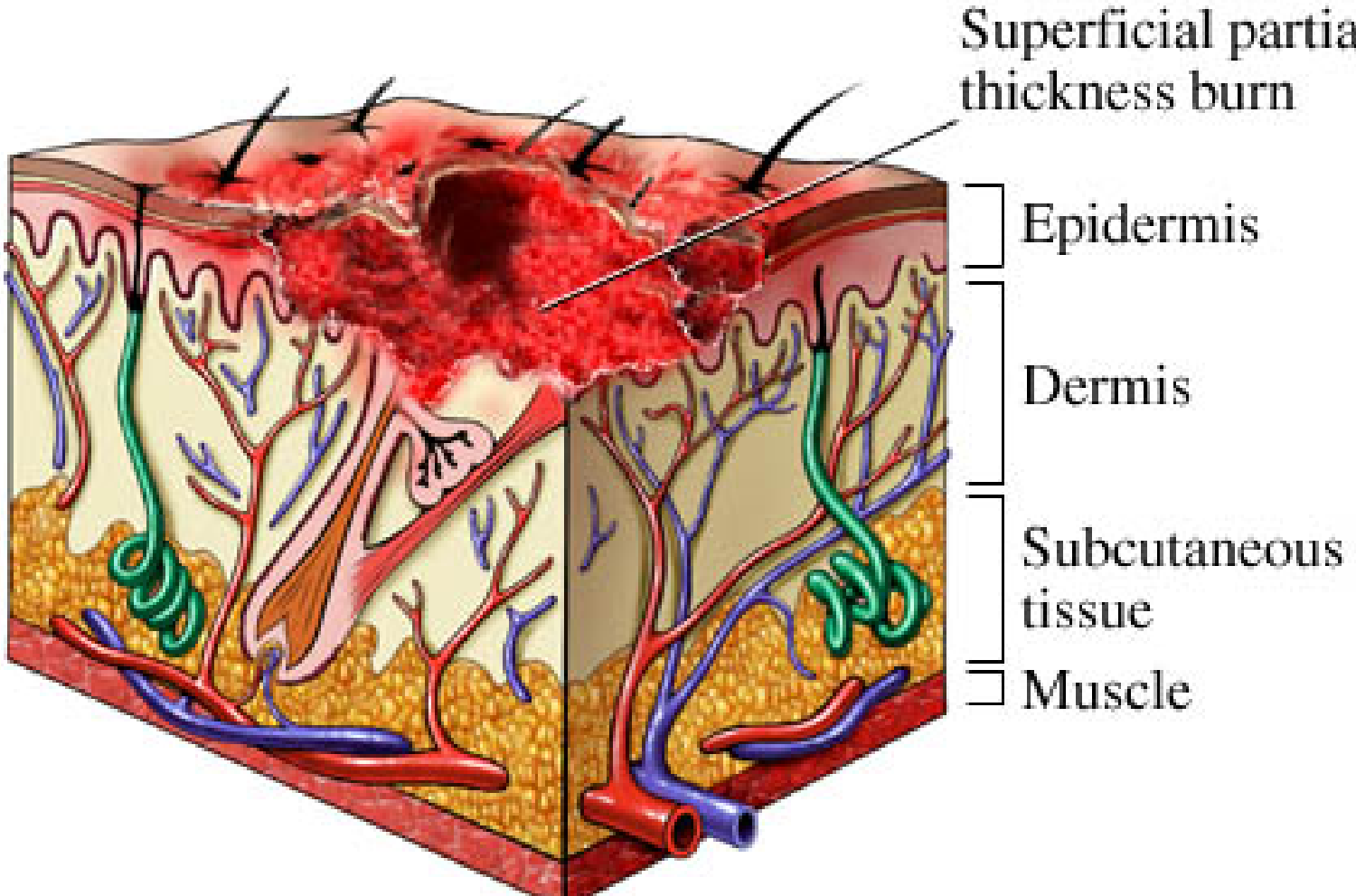


Burns

Classification

Burns

Classification



Burns

Classification

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Burns

Classification

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Burns

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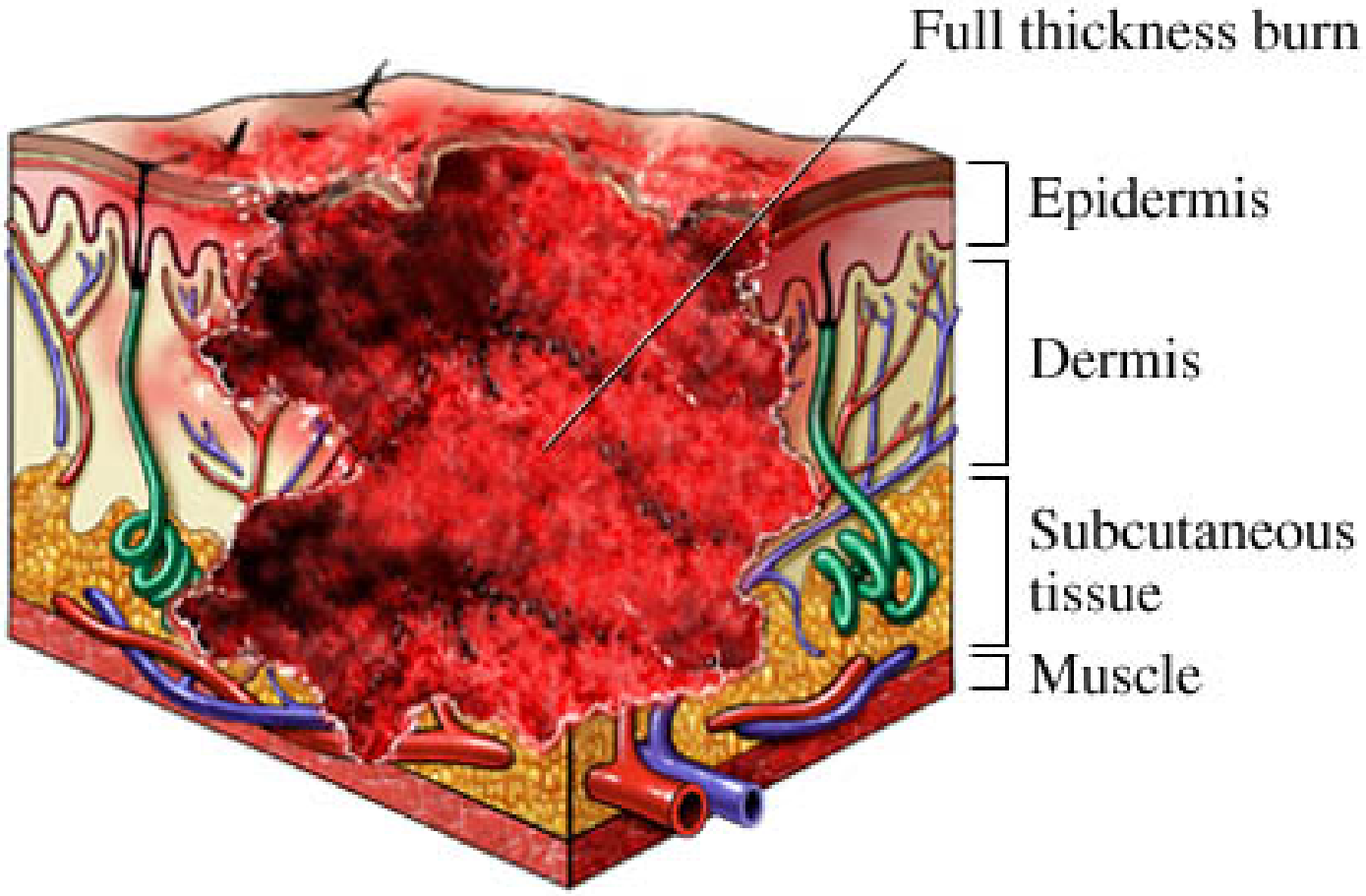

Burns

Classification

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Burns

Etiology

- Flame
- Contact
- Chemical
- Electrical
- Radiation

Burns

Complications

- Inhalation injury
  - Occurs w/flame burns
- Infection
  - Risk increases w/burn size
- Neurovascular compromise
  - Eschar formation

Burns

Diagnosis

- History and physical
- CBC
- BUN
- Glucose
- Electrolytes
- Blood protein, albumin
- Urine cultures
- Clotting studies
- X-ray examination
- EKG
- ABGs
- Cultures

Burns

Treatment

- Three stages
  - I (emergent)
    - Onset of injury to completion of fluid resuscitation
  - II (acute)
    - Start of diuresis to near completion of wound closure
  - III (rehabilitation)
    - Wound closure to return of optimal level

Burns

Treatment

- Emergent stage
  - ABCs
  - Stop burning process
  - Stabilize related injuries

Burns

Treatment

- Acute Stage
  - Wound cleansed daily
  - Debrided daily
    - Mechanical
    - Chemical
    - Surgical

Burns

Treatment

- Acute Stage (cont.)
  - Escharotomy
    - Performed for circumferential burns
    - Burn acts like a tourniquet
    - Common on extremities
    - If on chest
      - Respiration can be compromised

Burns

Treatment

Burns

Treatment

- Acute Stage (cont.)
  - Application of dressings & topical agent
    - Depends on area involved
    - Extent and depth of injury
    - MD preference
  - Refer to Table 51-7 (Williams & Hopper)
    - Topical agents

Burns

Treatment - Acute Stage (cont.)

- Dressing types
  - Open
    - Topical agents w/o drsgs
  - Closed
    - Occlusive drsg over wound
  - Biologic
    - Living or deceased skin used as drsg
  - Synthetic
    - Man made materials

Burns

Treatment - Acute Stage (cont.)

- Skin grafts
  - Autograft (pt's own skin)
    - Split-thickness skin graft (STSG)
      - 0.006 to 0.016 inch
      - Includes epidermis & part of dermis
      - Applied as sheet or meshed graft
    - Full-thickness skin graft (FTSG)
      - 0.035 to 0.040 inch
      - Epidermis & entire dermis

Burns

Treatment - Acute Stage (cont.)

- Care of skin grafts
  - Immobilize the site until graft takes
  - Do not disturb drsgs
    - May be bulky to assist w/immobilization
  - Frequent vascular checks
    - Color, warmth, sensation, pulses, and capillary refill
  - Elevate site

Burns

Treatment - Acute Stage (cont.)

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Burns

Rehabilitation Stage

- Reconstructive surgery
- Prevent contracture
  - Physical therapy
- Psychosocial care
  - Consider
    - Age of pt
    - Burn location
    - Recovery
    - Cause
    - Ability to return to previous functioning level

Burns

Rehabilitation Stage

Burns

Nursing Diagnoses

- Impaired skin integrity
- Impaired gas exchange
- Deficient fluid volume
- Pain
- Ineffective peripheral tissue perfusion
- Risk for sepsis

Burns

Nursing Diagnoses

- Imbalanced nutrition
- Activity intolerance
- Self-care deficit
- Disturbed body image
- Ineffective coping

Malignant Skin Lesions

Pathophysiology/Etiology

- Cancer arising from
  - Basal cell layer (basal cell carcinoma)
  - Epidermis (squamous cell carcinoma)
  - Menalocytes (malignant melanoma)
- Major cause
  - Overexposure to UV rays
    - sunlight

Malignant Skin Lesions

Pathophysiology/Etiology

- Basal cell carcinoma
  - Arises from basal cell layer of epidermis
  - Most common cancer
  - Found on sun-exposed areas
  - Appear small, pearly or translucent papule
    - Rolled waxy edge
    - Depressed center
    - Telangiectasis
    - Crusting & ulceration

Malignant Skin Lesions

Pathophysiology/Etiology

- Basal cell carcinoma

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Malignant Skin Lesions

Pathophysiology/Etiology

- Squamous cell carcinoma
  - Arises from epidermis
  - Can occur on sun-exposed areas/mucous membranes
  - May develop on normal skin or preexisting lesion
    - i.e., Actinic keratosis
  - Appears single, crusted, eroded papule, nodule or plaque
  - May ooze or bleed
  - Considered invasive cancer

Malignant Skin Lesions

Pathophysiology/Etiology

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Malignant Skin Lesions

Pathophysiology/Etiology

- Malignant melanoma
  - Malignant growth of melanocytes
  - Highly Metastatic = high mortality rate
  - Can occur anywhere on body
  - ½ arise from pre-existing nevi or moles
  - 3 types
    - Lentigo maligna melanoma
    - Superficial spreading melanoma
    - Nodular melanoma

Malignant Skin Lesions

Pathophysiology/Etiology

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Malignant Skin Lesions

Pathophysiology/Etiology

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Malignant Skin Lesions

Risk Factors

- Ultraviolet rays
- Fair skin
- Genetic tendency
- X-ray therapy
- Chemicals
- Immunosuppressive therapy

Malignant Skin Lesions
Prevention

- Limit exposure to UV rays
  - Avoid during highest intensity
    - 10AM to 2PM
- Use sunscreen = 15 SPF or more
- Report change in mole or lesion
  - Color
  - Size
  - Shape
  - Sensation
  - Character

Malignant Skin Lesions

Diagnosis

- Examination
  - Appearance of lesion
- Biopsy
  - Provides definitive diagnosis

Malignant Skin Lesions
Treatment

- Surgical excision
  - Takes additional 1 to 2 cm margin
  - May take regional nodes
  - Grafting may be needed
- Chemotherapy
  - metastasis
- Radiation therapy
  - Adjunct therapy
    - Deep invasive tumors or poor surgical risk pts

Benign skin lesions

- Cyst
- Seborrheic keratosis
- Keloid
- Pigmented nevi
- Warts
- Hemangiomas

Benign skin lesions
Cyst

Cyst

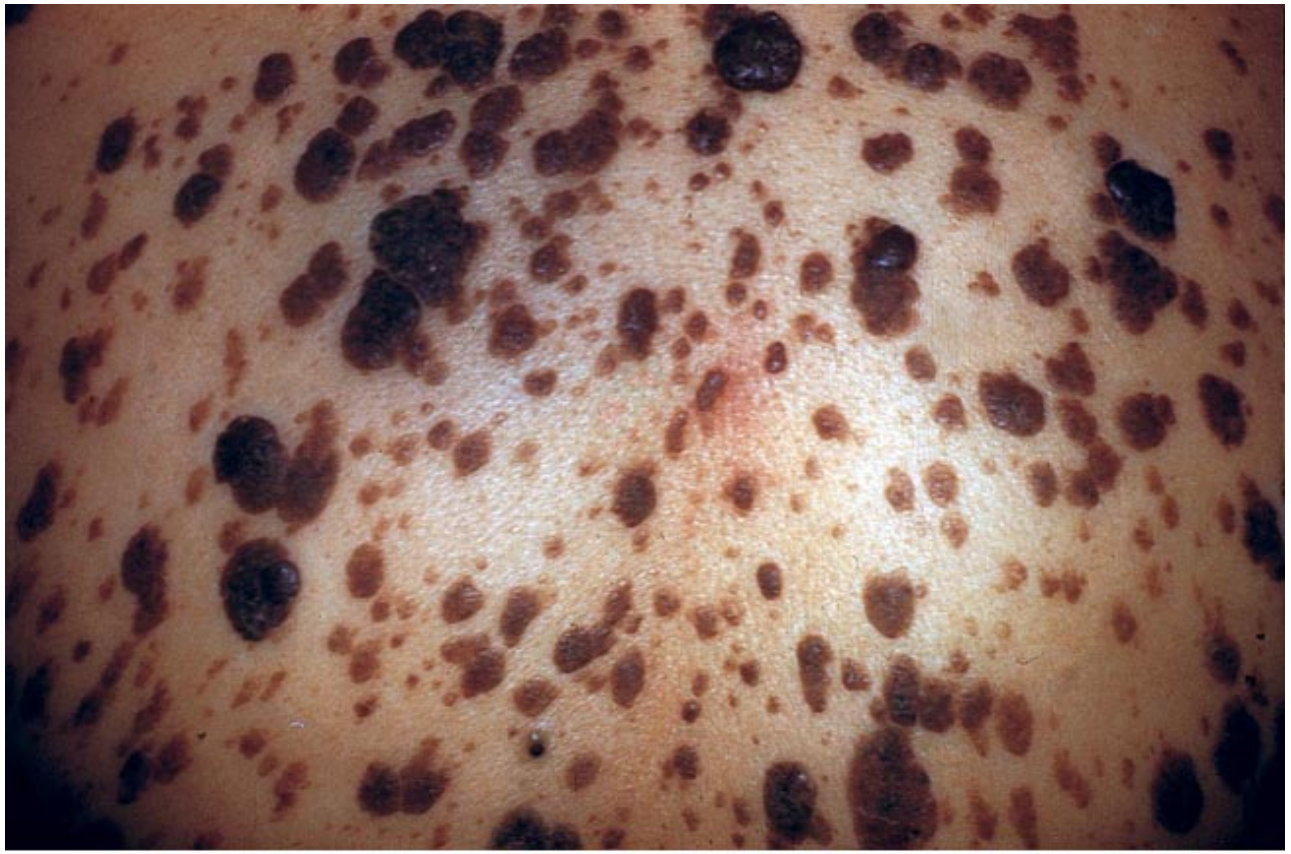
- Saclike growth
- Definite wall
- May contain liquid, semifluid, or solid material
- Epidermal cyst—upper portion of hair follicle—usually face, neck, or upper trunk—soft nodule

Cyst

- Sebaceous cyst—middle portion of hair follicle—contains hair and cuticle-like material—usually on scalp—hard nodule
- Treatment
  - Surgically excised if bothersome
  - Necessary to remove entire cyst wall to prevent recurrence

Benign skin lesions

Seborrheic keratosis



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Seborrheic Keratosis

- Proliferation of epidermal cells and keratin
- Accumulate on skin
- Cause unknown
- Occur in people over 40 and the elderly

Seborrheic Keratosis

- Benign wart like growths
- Color varies
- Usually light tan to dark brown
- Painless
- Usually located on face, chest, shoulders, and back

Seborrheic Keratosis

- Slightly elevated, flat lesion
- “Pasted on” appearance
- Rough or wart like texture
- May be single, but usually multiple growths

Seborrheic Keratosis

- Diagnosis based primarily on appearance
- Occasionally misdiagnosis of malignant melanoma
- Skin lesion biopsy may be necessary

Seborrheic Keratosis

- Treatment not usually required
- Unless growths become irritated by friction or clothing
- Or cosmetically displeasing to patient
- Treatment—surgical removal or cryosurgery

Keloid

- Overgrowth of connective tissue at the site of a healed skin injury
  - Surgical incision
  - Vaccination site
  - Traumatic wound
  - Burn
  - Minor scratch

Keloid

- More common in dark skinned individuals
- Hereditary
- Can be flesh colored, red, or pink
- Pruritis may be present during formation and growth
- Can be irritated by friction

Keloid

- Usually flatten and become less noticeable over time
- Extensive keloids may become binding, limiting mobility
- Diagnosis based on appearance
- Treatment is usually not required

Keloid

- May be reduced in size with cryosurgery, corticosteriod injections, laser treatments, radiation, or surgical removal
- Unfortunately—not unusual for keloids to reappear—sometimes larger than before after treatment

Benign skin lesions

Pigmented nevi

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Pigmented nevi

- Birthmark
- Color varies—from brown or black to bluish or blue-gray
- Small clusters of pigmented skin cells
- Large moles present from birth more likely to become malignant

Pigmented Nevi

- Any change in the birthmark should be reported
- Observe for any change in size, color, sudden ulceration, bleeding, or itching in the birthmark

Mongolian Spot

- Usually bluish or bruised looking appearance
- Common over lower back or buttocks
- Mainly seen in dark skinned individuals
- May persist for months to years
- No greater chance for malignancy

Benign skin lesions

Warts

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Warts

- Small, usually painless growths
- Caused by a virus
- Usually harmless
- Can be disfiguring or embarrassing
- Occasionally itchy or painful as with plantar wart

Warts

- Common wart
  - Usually appear on hands, but can appear anywhere
- Flat wart
  - Face and forehead
  - Common in children

Warts

- Genital warts
  - Found on genitals, pubic area, and between thighs
  - Can appear inside the vagina or anal canal
- Plantar warts
  - Soles of feet

Warts

- Subungual and periungual warts
  - Appear under and around the fingernails and toenails
- S/S—raised round or oval growth with a rough surface
- Usually no discomfort unless in area of friction or pressure

Warts

- Plantar warts can become extremely painful
- Warts around and under nails more difficult to cure
- Treatment—over the counter medication—Compound W
- Applied to wart daily for several weeks

Warts

- Do not use on face or genitals
- Prescription strength available for persistent warts
- Surgical removal, cryotherapy, burning, or laser treatment also available

Warts

- Often go away on their own within two years
- Can be contagious
- Transmission from person to person is uncommon

Warts

- Notify physician if
  - s/s of infection—red streaking, pus, discharge, or fever
  - Wart does not respond to home treatment
  - Pain associated with wart
  - Presence of anal or genital warts
  - You're a diabetic or individual with a weakened immune system with a wart

Warts

  - Any change in the color or appearance of the wart
- Prevention
  - Avoid direct contact with a wart on someone else
  - After filing a wart—wash the file carefully—to avoid spreading virus to other parts of body
  - After touching warts—wash hands

Hemangioma

- Strawberry Nevus
- Abnormal build up of blood vessels in the skin
- Capillary hemangioma—visible red skin lesion in the top layers of skin
- Cavernous hemangioma—deeper in the skin

Hemangioma

- Usually present at birth or few months after birth
- Site usually appears slightly dusky or differently colored than surrounding skin
- Superficial capillary hemangiomas may disappear without any treatment

Hemangiomas

- Large cavernous hemangiomas may develop secondary infections and ulcerate
- Bleeding is common
- Bleeding can be significant following injury to the hemangioma

Hemangiomas

- Diagnosis—physical exam—CAT scan or MRI for deep or mixed lesions—check for deeper involvement
- Treatment—superficial or “strawberry” hemangiomas often are not treated
- If on eyelid—may interfere with the development of normal vision—must be treated in the first few months of life

Hemangiomas

- Treatment of eyelid consists of steroid injection or laser treatment—to rapidly reduce the size of the lesion to allow normal vision development
- Laser damage the vessels in the hemangioma without damaging the overlying skin

Dermatologic surgery

- Plastic or reconstructive surgery
  - Corrects
    - Defects
    - Scars
    - Malformations
    - Restores function and prevents further loss of function
    - Usually elective