Chapter 43

Care of the Patient with an Integumentary Disorder

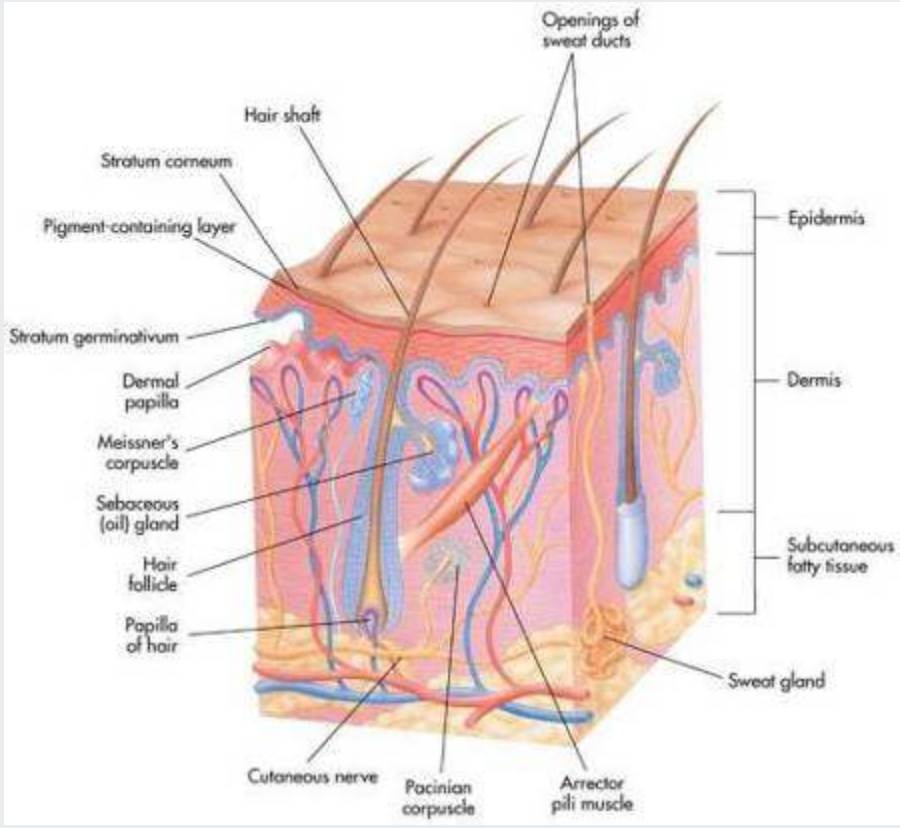
Overview of Anatomy and Physiology

- Functions of the skin
  - Protection
  - Temperature regulation
  - Vitamin D synthesis
- Structure of the skin
  - Epidermis
    - The outer layer of the skin
    - No blood supply
    - Composed of stratified squamous epithelium
    - Divided into layers: Stratum germinativum, pigment-containing layer, stratum corneum

Basic Structure of the Skin

- Structure of the skin
  - Dermis
    - “True skin”
    - Contains blood vessels, nerves, oil glands, sweat glands, and hair follicles
  - Subcutaneous layer
    - Connects the skin to the muscles
    - Composed of adipose and loose connective tissue

Figure 43-1



(From Thibodeau, G.A., Patton, K.T. [2005], *The human body in health and disease.* [4th ed.]. St. Louis: Mosby.)

Structures of the skin.

Basic Structure of the Skin

- Appendages of the skin
  - Sudoriferous glands—sweat glands
  - Ceruminous glands—secrete cerumen (earwax)
    - Located in the external ear canal
  - Sebaceous glands—“oil glands”
    - Secrete sebum
  - Hair
    - Composed of modified dead epidermal tissue, mainly keratin
  - Nails
    - Composed mainly of keratin

Assessment of the Skin

- Inspection and palpation
  - Ask the patient about:
    - Recent skin lesions or rashes
      - Where the lesions first appeared
      - How long the lesions have been present
    - Recent skin color changes
    - Exposure to the sun without sunscreen
    - Family history of skin cancer
  - Observe the skin color
  - Assess any skin lesions

Assessment of the Skin

- Inspection and palpation *(continued)*
  - Assess for rashes, scars, lesions, or ecchymoses
  - Assess temperature and texture
  - Inspect nails for normal development, color, shape, and thickness
  - Inspect hair for thickness, dryness, or dullness
  - Inspect mucous membranes for pallor or cyanosis
  - Assess the ceruminous and sebaceous gland for overactivity or underactivity

Assessment of the Skin

- Assessment of dark skin
  - Degree of lightness or darkness is genetically determined
  - Melanocytes account for skin color
  - Lips and mucous membranes are easier to assess as the skin is thinner
  - Rashes may be difficult to see and will require palpation

Assessment of the Skin

- Primary skin lesions
  - Macule
  - Papule
  - Patch
  - Plaque
  - Wheal
  - Nodule
  - Tumor
  - Vesicle
  - Bulla
  - Pustule
  - Cyst
  - Telangiectasia
  - Scale
  - Lichenification
  - Keloid

  (See Table 43-1.)

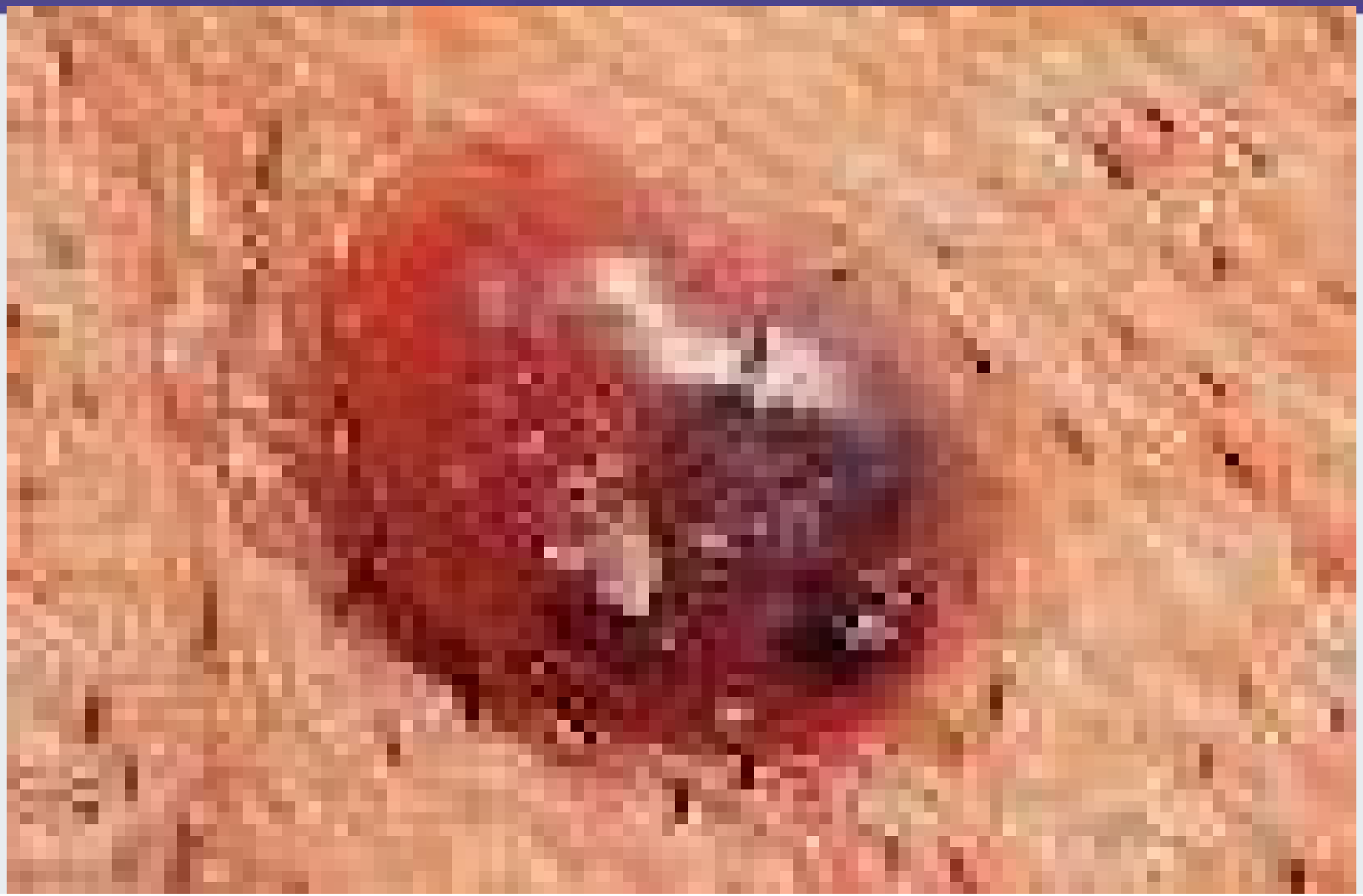
- Scar
- Excoriation
- Fissure
- Erosion
- Ulcer
- Crust
- Atrophy

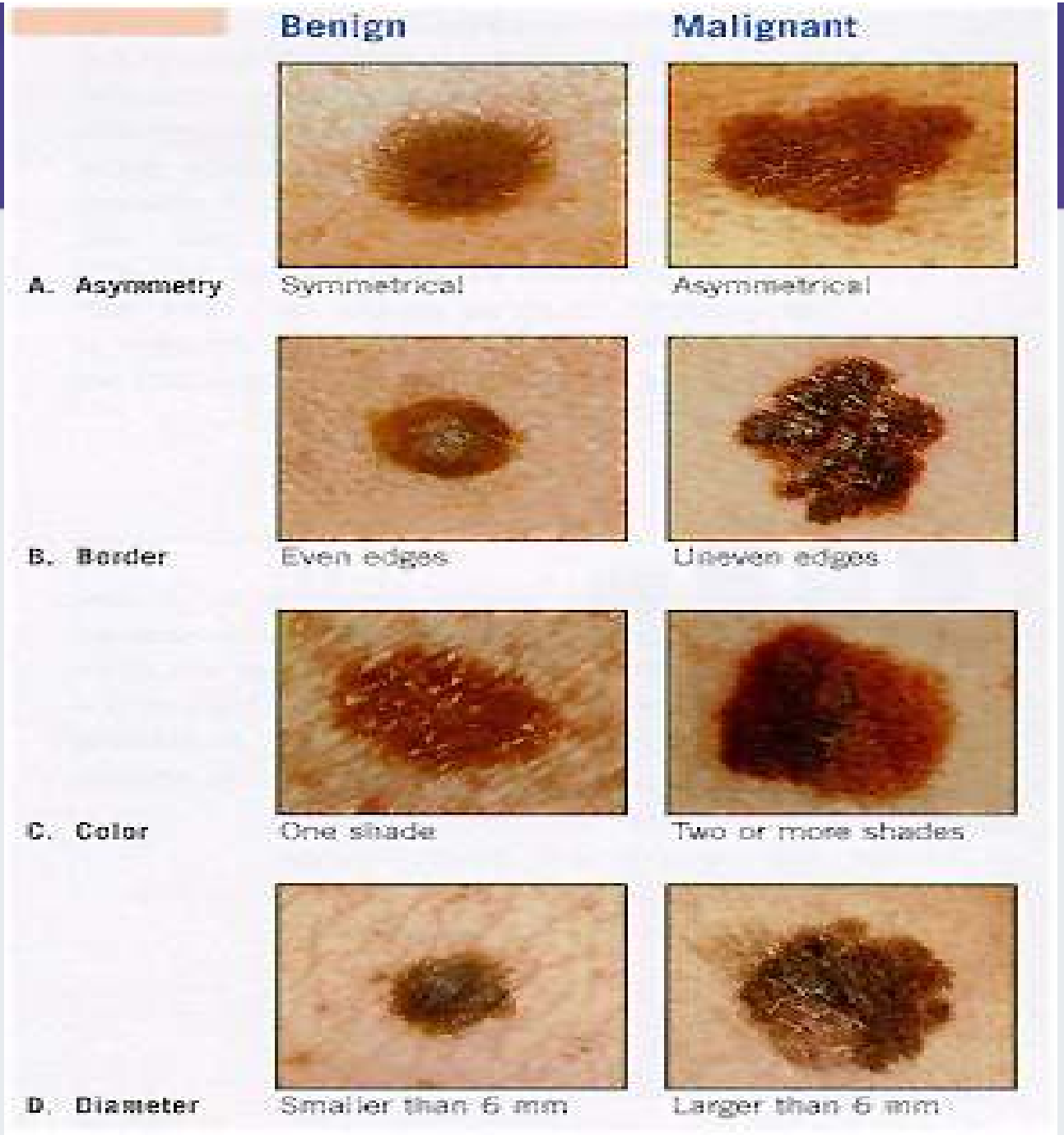
Assessment of the Skin

- Chief complaint assessment tool
  - P = Provocative and Palliative factors
  - Q = Quality and Quantity
  - R = Region
  - S = Severity of the signs and symptoms
  - T = Time the patient has had the disorder

Assessment of the Skin

- Identification of a potential malignancy
  - A = Asymmetrical lesion
  - B = Borders irregular
  - C = Color (even or uneven)
  - D = Diameter of the growth (recent changes)
  - E = Elevation of the surface





Psychosocial Assessment

- May affect body image and self-esteem
  - Assess coping abilities
  - Nurse's attitude should be nonjudgmental, warm, and accepting
  - Provide consistent information
  - Include family in treatment plan
  - Provide positive feedback

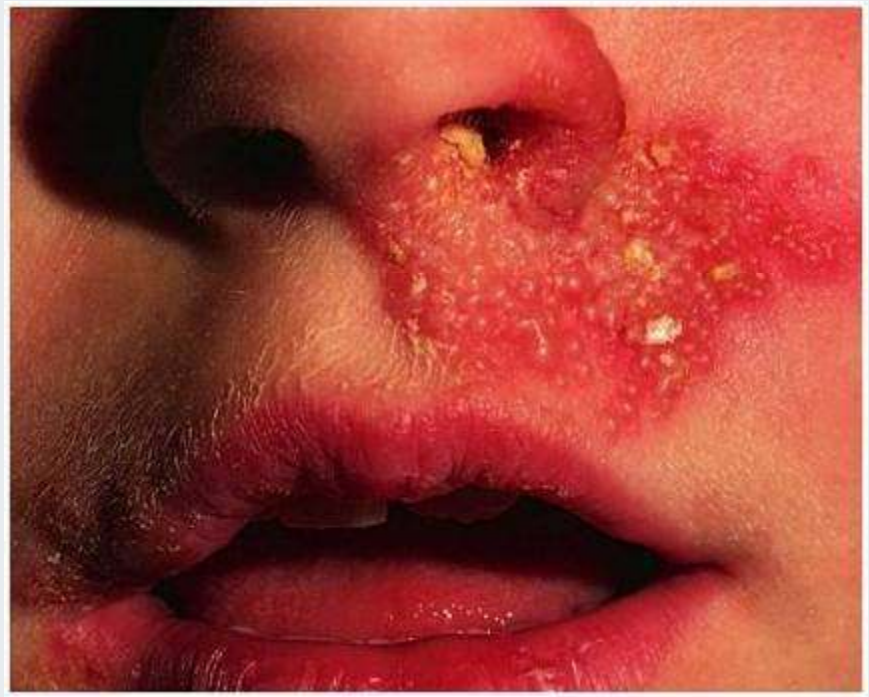
Viral Disorders of the Skin

- Herpes simplex
  - Etiology/pathophysiology
    - *Herpesvirus hominis*
      - Type 1
        - Most common
        - Common cold sore
      - Type 2
        - Genital herpes
    - Transmission
      - Direct contact with an open lesion
      - Type 2—primarily sexual contact

Viral Disorders of the Skin

- Herpes simplex *(continued)*
  - Clinical manifestations/assessment
    - Type 1
      - Vesicle at the corner of the mouth, on the lips, or on the nose—“cold sore”
      - Erythematous and edematous
      - Malaise and fatigue
    - Type 2
      - Various types of vesicles on the cervix or penis
      - Flu-like symptoms

Figure 43-2



(From Habif, T.P. [2004]. *Clinical dermatology: a color guide to diagnosis and therapy.* [4th ed.]. St. Louis: Mosby.)

Herpes simplex.

Viral Disorders of the Skin

- Herpes simplex *(continued)*
  - Diagnostic tests
    - Culture of lesion
  - Medical management/nursing interventions
    - Pharmacological management
      - Antiviral medications and analgesics
    - Comfort measures
    - Patient education

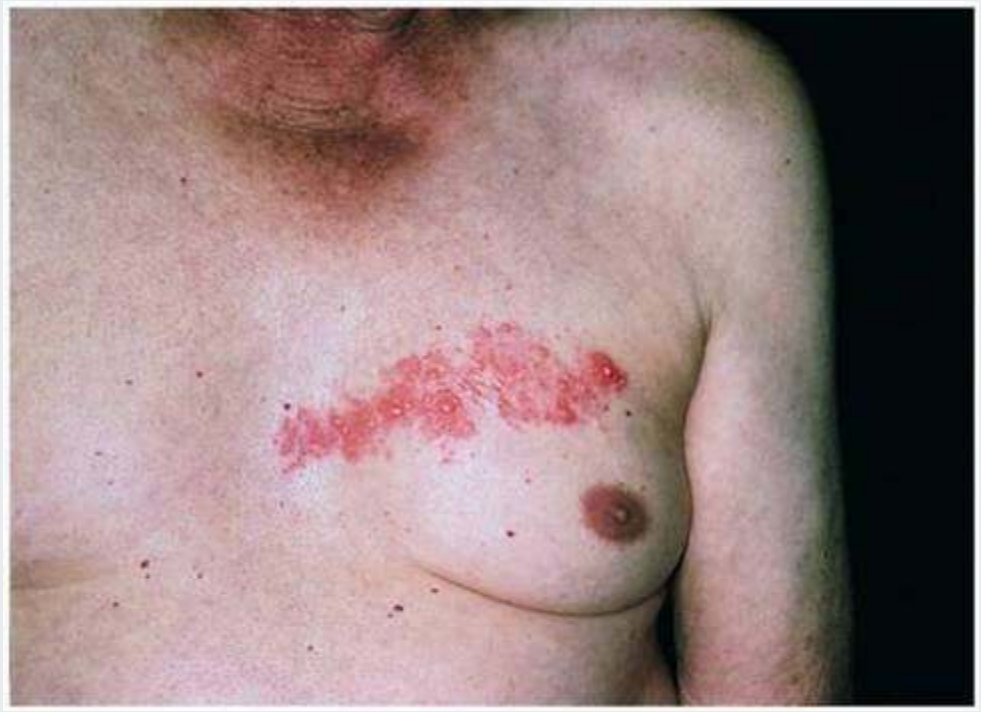
Viral Disorders of the Skin

- Herpes simplex *(continued)*
  - Prognosis
    - No cure
      - Type 1
        - Lesions heal within 10 to 14 days
        - Recur with depression of immune system: physical and/or emotional stress
      - Type 2
        - Lesions heal within 7 to 14 days
        - Recur with depression of immune system

Viral Disorders of the Skin

- Herpes zoster (shingles)
  - Etiology/pathophysiology
    - *Herpes varicella* (same virus that causes chickenpox)
    - Inflammation of the spinal ganglia (nerve)
    - Occurs when immune system is depressed
  - Signs and symptoms
    - Erythematous rash along a spinal nerve pathway
    - Vesicles are usually preceded by pain
    - Rash usually in the thoracic region
    - Vesicles rupture and form a crust
    - Extreme tenderness and pruritus in the area

Figure 43-3



(Courtesy of the Department of Dermatology, School of Medicine, University of Utah.)

Herpes zoster.

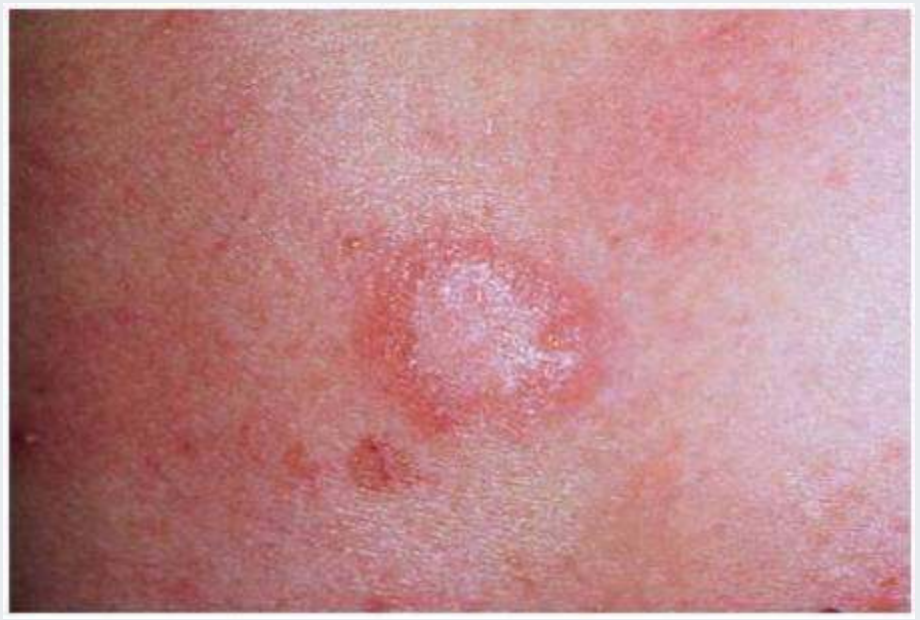
Viral Disorders of the Skin

- Herpes zoster (shingles) *(continued)*
  - Diagnostic tests
    - Culture of lesion
  - Medical management/nursing interventions
    - Pharmacological management
      - Analgesics, steroids, Kenalog lotion, corticosteroids, acyclovir (Zovirax)
      - Ativan and Atarax: decrease anxiety
    - Comfort measures
    - Patient teaching

Viral Disorders of the Skin

- Pityriasis rosea
  - Etiology/pathophysiology
    - Virus
  - Clinical manifestation/assessment
    - Begins as a single lesion that is scaly and has a raised border and pink center
    - Approximately 14 days later, smaller matching spots become widespread
  - Diagnostic tests
    - Inspection and subjective data from patient

Figure 43-4



(Courtesy of the Department of Dermatology, School of Medicine, University of Utah.)

Pityriasis rosea herald patch.

Viral Disorders of the Skin

- Pityriasis rosea *(continued)*
  - Medical management/nursing interventions
    - Usually requires no treatment
    - Moisturizing cream for dryness
    - 1% hydrocortisone cream for pruritus
    - Ultraviolet light may shorten the course of the disease

Bacterial Disorders of the Skin

- Cellulitis
  - Common pathogens
    - *Staphylococcus aureus*
    - *Haemophilus influenzae*
  - Risk factors
  - Transmission of the infection

Bacterial Disorders of the Skin

- Cellulitis
  - Clinical manifestations
    - Erythema
    - Pain
    - Tenderness
    - Vesicle formation
    - Enlarged lymph nodes

Bacterial Infections of the Skin

- Cellulitis
  - Assessment parameters
  - Diagnostic tests
  - Medical management
  - Nursing interventions

Bacterial Disorders of the Skin

- Impetigo contagiosa
  - Etiology/pathophysiology
    - *Staphylococcus aureus* or streptococci
    - Common in children
    - Highly contagious
  - Clinical manifestations/assessment
    - Lesions begin as macules and develop into pustules
    - Pustules rupture—form honey-colored exudate
    - Usually affects face, hands, arms, and legs
    - Highly contagious—direct or indirect contact
    - Low-grade fever; leukocytosis

Bacterial Disorders of the Skin

- Impetigo contagiosa *(continued)*
  - Diagnostic tests
    - Culture of exudate from lesion
  - Medical management/nursing interventions
    - Pharmacological management
      - Antibiotic therapy
    - Medical management
    - Nursing interventions

Bacterial Disorders of the Skin

- Folliculitis, furuncles, carbuncles, and felons
  - Etiology/pathophysiology
    - Typically attributed to *S. aureus*
    - Folliculitis
      - Infected hair follicle
    - Furuncle (boil)
      - Infection deep in hair follicle; involves surrounding tissue
    - Carbuncle
      - Cluster of furuncles
    - Felons
      - Infected soft tissue under and around an area

Bacterial Disorders of the Skin

- Folliculitis, furuncles, carbuncles, and felons *(continued)*
  - Clinical manifestations/assessment
    - Pustule
    - Edema
    - Erythema
    - Pain
    - Pruritus
  - Diagnostic tests
    - Physical examination
    - Culture of drainage

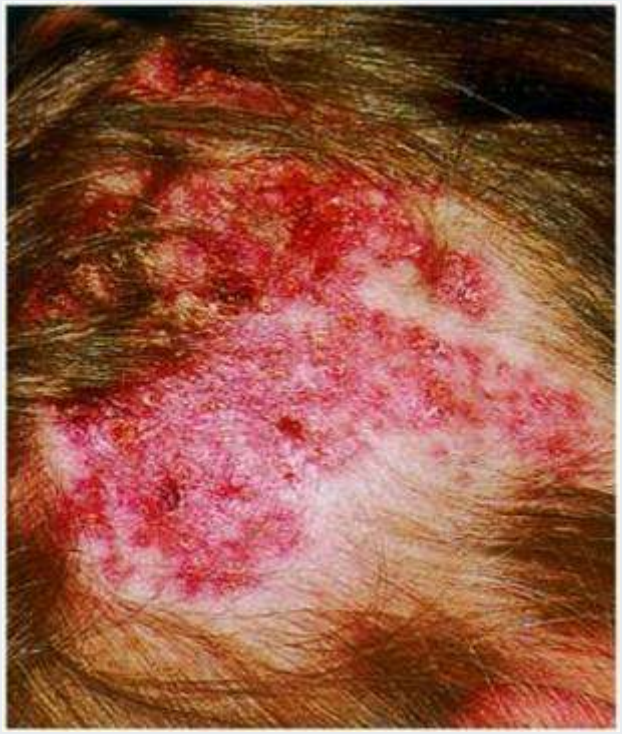
Bacterial Disorders of the Skin

- Folliculitis, furuncles, carbuncles, and felons *(continued)*
  - Medical management/nursing interventions
    - Warm soaks two to three times per day (promote suppuration)
    - May require surgical incision and drainage
    - Topical antibiotic cream or ointment
    - Medical asepsis

Fungal Infections of the Skin

- Dermatophytoses
  - Etiology/pathophysiology
    - *Microsporum audouinii* major fungal pathogen
      - Tinea capitis
        - Ringworm of the scalp
      - Tinea corporis
        - Ringworm of the body
      - Tinea cruris
        - Jock itch
      - Tinea pedis (most common)
        - Athlete's foot

Figure 43-7



(From Habif, T.P. [2004]. *Clinical dermatology: a color guide to diagnosis and therapy.* [4th ed.]. St. Louis: Mosby.)

Tinea capitis.

Fungal Infections of the Skin

- Dermatophytoses *(continued)*
  - Clinical manifestations/assessment
    - Tinea capitis
      - Erythematous around lesion with pustules around the edges and alopecia at the site
    - Tinea corporis
      - Flat lesions—clear center with red border, scaliness, and pruritus
    - Tinea cruris
      - Brownish-red lesions in groin area, pruritus, skin excoriation
    - Tinea pedis
      - Fissures and vesicles around and below toes

Fungal Infections of the Skin

- Dermatophytoses *(continued)*
  - Diagnostic tests
    - Visual inspection
    - Ultraviolet light for tinea capitis
      - Infected hair becomes fluorescent (blue-green)
  - Medical management/nursing interventions
    - Griseofulvin—oral
    - Antifungal soaps and shampoos
    - Tinactin or Desenex
    - Keep area clean and dry
    - Burow's solution (tinea pedis)

Inflammatory Disorders of the Skin

- Contact dermatitis
  - Etiology/pathophysiology
    - Direct contact with agents of hypersensitivity
      - Detergents, soaps, industrial chemicals, plants
  - Clinical manifestations/assessment
    - Burning
    - Pain
    - Pruritus
    - Edema
    - Papules and vesicles

Inflammatory Disorders of the Skin

- Contact dermatitis
  - Diagnostic tests
    - Health history
    - Intradermal skin testing
    - Elimination diets
  - Medical management/nursing interventions
    - Remove cause
    - Burow's solution
    - Corticosteroids to lesions
    - Cold compresses
    - Antihistamines (Benadryl)

Inflammatory Disorders of the Skin

- Dermatitis venenata, exfoliative dermatitis, and dermatitis medicamentosa
  - Etiology/pathophysiology
    - Dermatitis venenata: Contact with certain plants
    - Exfoliative dermatitis: Infestation of heavy metals, antibiotics, aspirin, codeine, gold, or iodine
    - Dermatitis medicamentosa: Hypersensitivity to a medication
  - Clinical manifestations/assessment
    - Mild to severe erythema and pruritus
    - Vesicles
    - Respiratory distress (especially with medicamentosa)

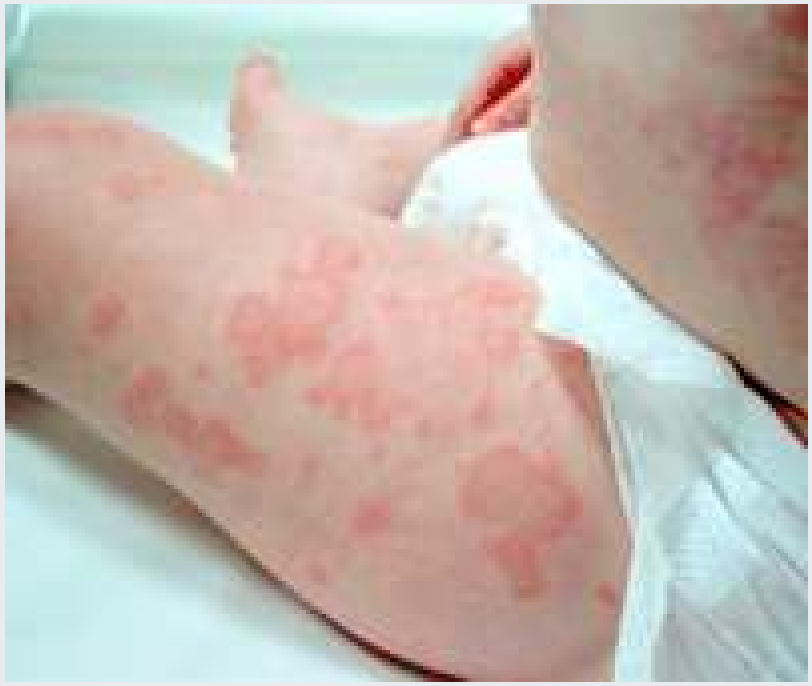
Inflammatory Disorders of the Skin

- Dermatitis venenata, exfoliative dermatitis, and dermatitis medicamentosa *(continued)*
  - Medical management/nursing interventions
    - All dermatitis
      - Colloid solution, lotions, and ointments
      - Corticosteroids
    - Dermatitis venenata
      - Thoroughly wash affected area
      - Cool, wet compresses
      - Calamine lotion
    - Dermatitis medicamentosa
      - Discontinue use of drug

Inflammatory Disorders of the Skin

- Urticaria
  - Etiology/pathophysiology
    - Allergic reaction (release of histamine in an antigen-antibody reaction)
    - Drugs, food, insect bites, inhalants, emotional stress, or exposure to heat or cold
  - Clinical manifestations/assessment
    - Pruritus
    - Burning pain
    - Wheals

Urticaria



Inflammatory Disorders of the Skin

- Urticaria *(continued)*
  - Diagnostic tests
    - Health history
    - Allergy skin test
  - Medical management/nursing interventions
    - Identify and alleviate cause
    - Antihistamine (Benadryl)
    - Therapeutic bath
    - Epinephrine
    - Teach patient possible causes and prevention

Inflammatory Disorders of the Skin

- Angioedema
  - Etiology/pathophysiology
    - Form of urticaria
    - Occurs only in subcutaneous tissue
    - Same offenders as urticaria
    - Common sites: eyelids, hands, feet, tongue, larynx, GI, genitalia, or lips

Inflammatory Disorders of the Skin

- Angioedema *(continued)*
  - Clinical manifestations/assessment
    - Burning and pruritus
    - Acute pain (GI tract)
    - Respiratory distress (larynx)
    - Edema of an entire area (eyelid, feet, lips, etc.)
  - Medical management/nursing interventions
    - Pharmacological management
      - Antihistamines, epinephrine, corticosteroids
    - Comfort measures

Inflammatory Disorders of the Skin

- Eczema (atopic dermatitis)
  - Etiology/pathophysiology
    - Allergen causes histamine to be released and an antigen-antibody reaction occurs
    - Primarily occurs in infants
  - Clinical manifestations/assessment
    - Papules and vesicles on scalp, forehead, cheeks, neck, and extremities
    - Erythema and dryness of area
    - Pruritus

Inflammatory Disorders of the Skin

- Eczema (atopic dermatitis) *(continued)*
  - Diagnostic tests
    - Health history (heredity)
    - Diet elimination
    - Skin testing
  - Medical management/nursing interventions
    - Pharmacological management
      - Corticosteroids
      - Coal tar preparations
    - Reduce exposure to allergen
    - Hydration of skin
    - Lotions—Eucerin, Alpha-Keri, Lubriderm, or Curel three to four times/day

Inflammatory Disorders of the Skin

- Acne vulgaris
  - Etiology/pathophysiology
    - Occluded oil glands
      - Androgens increase the size of the oil gland
    - Influencing factors
      - Diet
      - Stress
      - Heredity
      - Overactive hormones

Inflammatory Disorders of the Skin

- Acne vulgaris *(continued)*
  - Clinical manifestations/assessment
    - Tenderness and edema
    - Oily, shiny skin
    - Pustules
    - Comedones (blackheads)
    - Scarring from traumatized lesions
  - Diagnostic tests
    - Inspection of lesion
    - Blood samples for androgen level

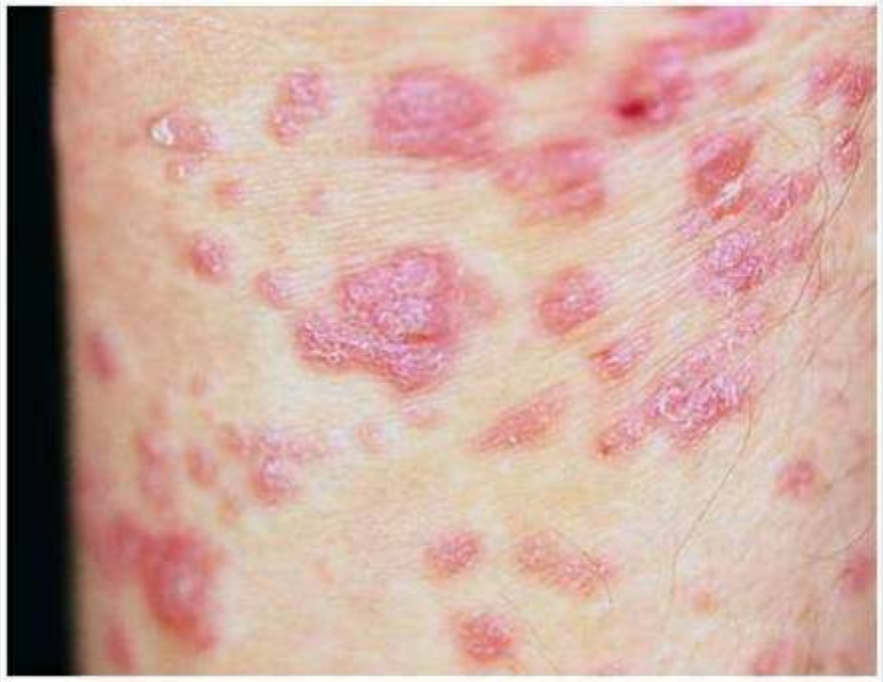
Inflammatory Disorders of the Skin

- Acne vulgaris *(continued)*
  - Medical management/nursing interventions
    - Pharmacological management
      - Topical therapies (benzoyl peroxide, vitamin A acids, antibiotics, sulfur-zinc lotions)
      - Systemic therapies (tetracycline, isotretinoin)
    - Keep skin clean
    - Keep hands and hair away from area
    - Wash hair daily
    - Water-based makeup

Inflammatory Disorders of the Skin

- Psoriasis
  - Etiology/pathophysiology
    - Noninfectious
    - Skin cells divide more rapidly than normal
  - Clinical manifestations/assessment
    - Raised, erythematous, circumscribed, silvery, scaling plaques
    - Located on scalp, elbows, knees, chin, and trunk

Figure 43-10



(Courtesy of the Department of Dermatology, School of Medicine, University of Utah.)

Psoriasis.

Inflammatory Disorders of the Skin

- Psoriasis *(continued)*
  - Medical management/nursing interventions
    - Pharmacological management
      - Topical steroids
      - Keratolytic agents
        - Tar preparations
        - Salicylic acid
      - Photochemotherapy: PUVA
        - Oral psoralen
        - Ultraviolet light

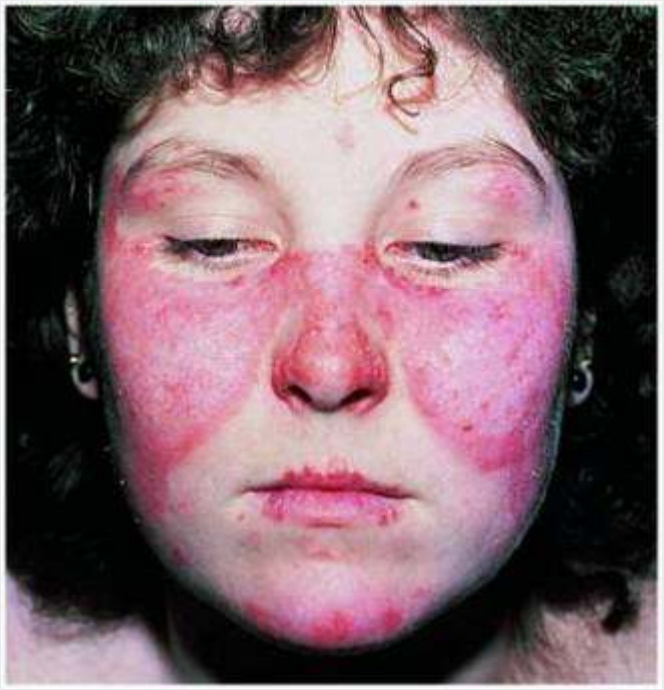
Inflammatory Disorders of the Skin

- Systemic lupus erythematosus
  - Etiology/pathophysiology
    - Autoimmune disorder
    - Inflammation of almost any body part
      - Skin, joints, kidneys, and serous membranes
    - Affects women more than men
    - Contributing factors
      - Immunological, hormonal, genetic, and viral

Inflammatory Disorders of the Skin

- Systemic lupus erythematosus *(continued)*
  - Clinical manifestations/assessment
    - Erythema butterfly rash over nose and cheeks
    - Alopecia
    - Photosensitivity
    - Oral ulcers
    - Polyarthralgias and polyarthritis
    - Pleuritic pain, pleural effusion, pericarditis, and vasculitis
    - Renal disorders
    - Neurological signs (seizures)
    - Hematological disorders

Figure 43-11



(From Habif, T.P., et al. [2005]. *Skin disease: diagnosis and treatment.* [2nd ed.]. St. Louis: Mosby.)

Systemic lupus erythematosus (SLE) flare.

Inflammatory Disorders of the Skin

- Systemic lupus erythematosus *(continued)*
  - Diagnostic tests
    - Antinuclear antibody
    - DNA antibody
    - Complement
    - CBC
    - Erythrocyte sedimentation rate
    - Coagulation profile
    - Rheumatoid factor
    - Rapid plasma reagin
    - Skin and renal biopsy
    - C-reactive protein
    - Coombs' test
    - LE cell prep
    - Urinalysis
    - Chest x-ray film

Inflammatory Disorders of the Skin

- Systemic lupus erythematosus *(continued)*
  - Medical management/nursing interventions
    - No cure; treat symptoms, induce remission, alleviate exacerbations
    - Pharmacological management
      - Nonsteroidal anti-inflammatory agents, antimalarial drugs, corticosteroids, antineoplastic drugs, anti-infective agents, analgesics, diuretics
    - Avoid direct sunlight
    - Balance rest and exercise
    - Balanced diet

Parasitic Diseases of the Skin

- Pediculosis
  - Etiology/pathophysiology
    - Lice infestation
    - Three types of lice
      - Head lice (capitis)
        - Attaches to hair shaft and lays eggs
      - Body lice (corporis)
        - Found around the neck, waist, and thighs
        - Found in seams of clothing
      - Pubic lice (crabs)
        - Looks like crab with pincers
        - Found in pubic area

Parasitic Diseases of the Skin

- Pediculosis *(continued)*
  - Clinical manifestations/assessment
    - Nits and/or lice on involved area
    - Pinpoint raised, red macules
    - Pinpoint hemorrhages
    - Severe pruritus
    - Excoriation
  - Diagnostic tests
    - Physical examination

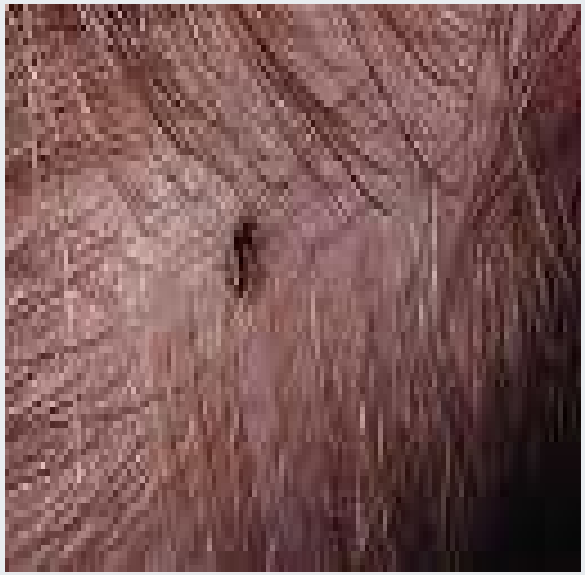
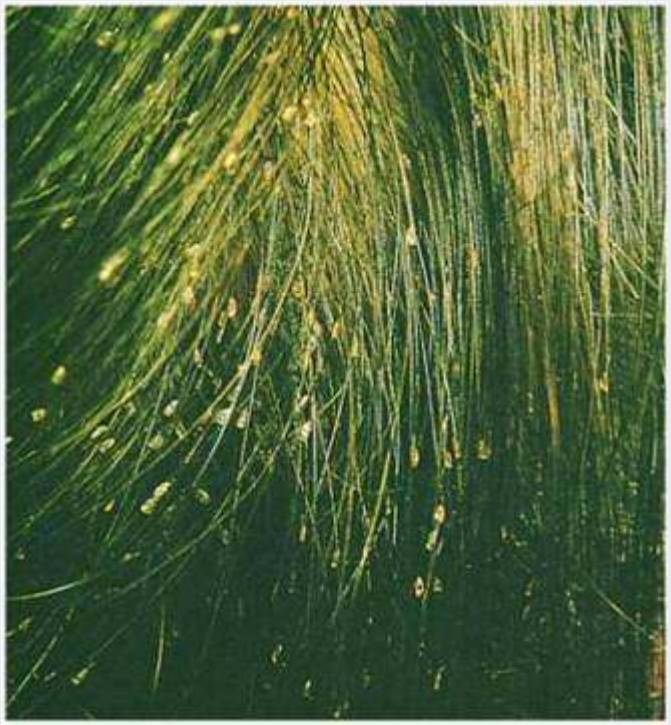


Figure 43-12



(From Baran R., Dawber, R.R., & Levene, G.M. [1991]. *Color atlas of the hair, scalp, and nails*. St. Louis: Mosby.)

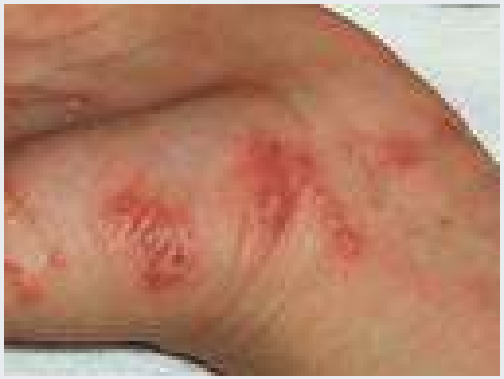
Eggs of *Pediculus* attached to shafts of hair.

Parasitic Diseases of the Skin

- Pediculosis *(continued)*
  - Medical management/nursing interventions
    - Pharmacological management
      - Lindane (Kwell); pyrethrins (RID)
      - Topical corticosteroids
    - Cool compresses
    - Assess all contacts
    - Wash bed linens and clothes in hot water
    - Properly clean furniture or nonwashable materials

Parasitic Diseases of the Skin

- Scabies
  - Etiology/pathophysiology
    - *Sarcoptes scabiei* (itch mite)
    - Mite lays eggs under the skin
    - Transmitted by prolonged contact with infected area
  - Clinical manifestations/assessment
    - Wavy, brown, threadlike lines on the body
    - Pruritus
    - Excoriation



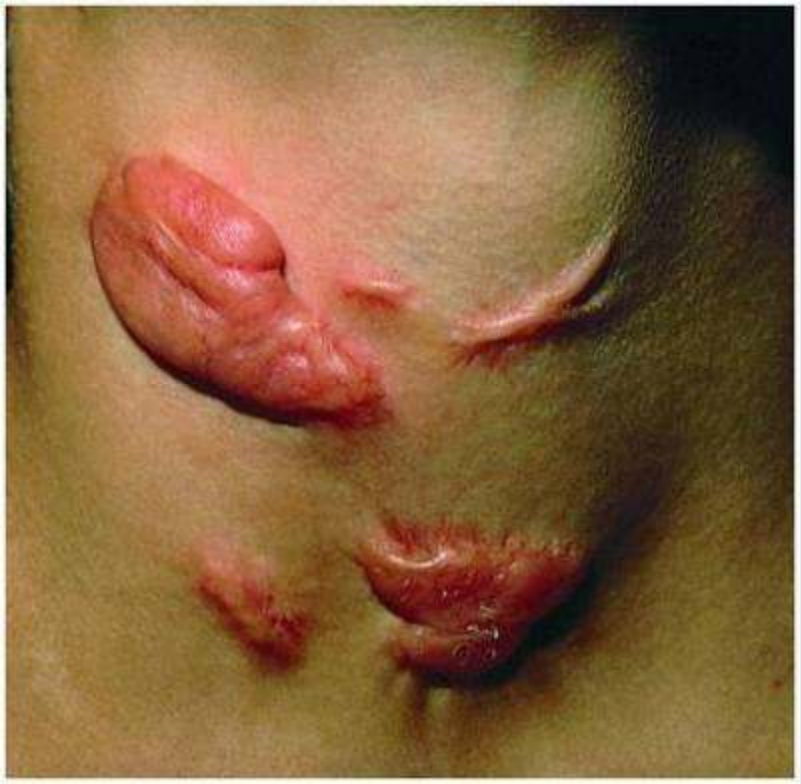
Parasitic Diseases of the Skin

- Scabies *(continued)*
  - Diagnostic tests
    - Microscopic examination of infected skin
  - Medical management/nursing interventions
    - Pharmacological management
      - Lindane (Kwell), pyrethrins (RID), crotamiton (Eurax), 4% to 8% solution of sulfur in petrolatum
    - Treat all family members
    - Wash linens and clothing in hot water

Tumors of the Skin

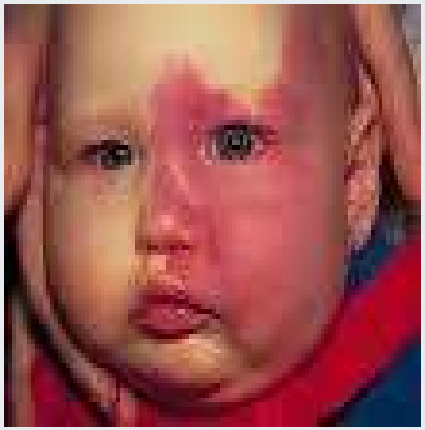
- Keloids
  - Overgrowth of collagenous scar tissue; raised, hard, and shiny
  - May be surgically removed, but may recur
  - Steroids and radiation may be used
- Angiomas
  - A group of blood vessels dilate and form a tumor-like mass
  - Port-wine birthmark
  - Treatment: electrolysis; radiation

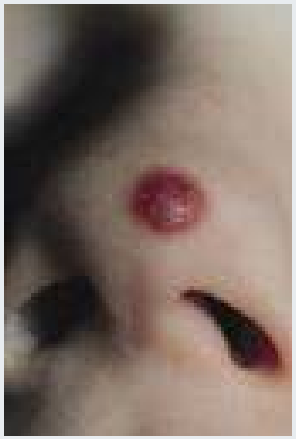
Figure 43-15



(From Zitelli, B.J., Davis, H.W. [2007]. *Atlas of pediatric physical diagnosis.* [5th ed.]. St. Louis: Mosby.)

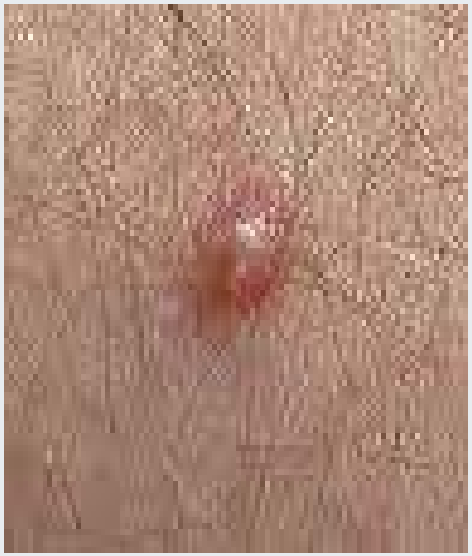
Keloids.

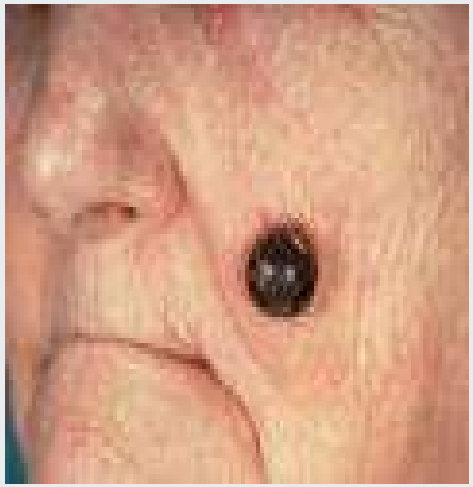




Tumors of the Skin

- Verruca (wart)
  - Benign, viral warty skin lesion
  - Common locations: Hands, arms, and fingers
  - Treatment: Cauterization, solid carbon dioxide, liquid nitrogen, salicylic acid
- Nevi (moles)
  - Congenital skin blemish
  - Usually benign, but may become malignant
  - Assess for any change in color, size, or texture
  - Assess for bleeding or pruritus

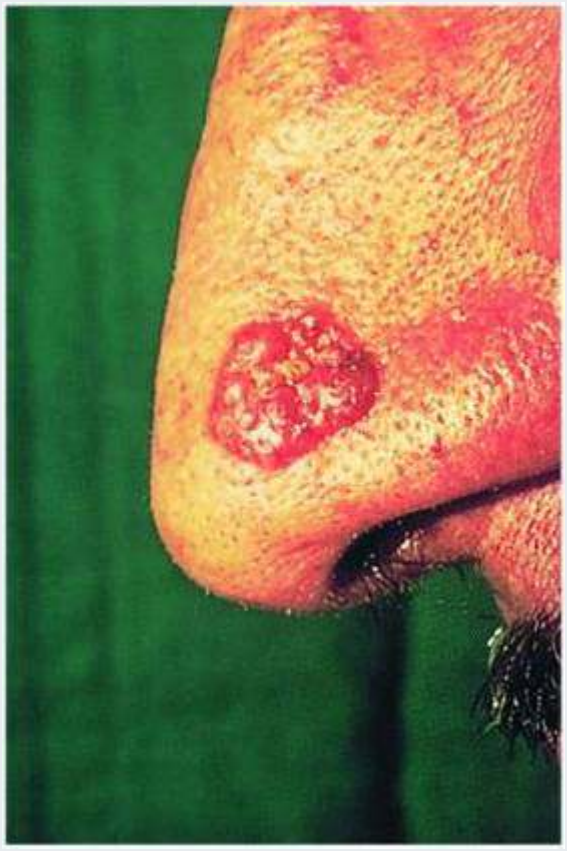




Tumors of the Skin

- Basal cell carcinoma
  - Skin cancer
  - Caused by frequent contact with chemicals, overexposure to the sun, radiation treatment
  - Most common on face and upper trunk
  - Favorable outcome with early detection and removal
- Squamous cell carcinoma
  - Firm, nodular lesion; ulceration and indurated margins
  - Rapid invasion with metastasis via lymphatic system
  - Sun-exposed areas; sites of chronic irritation
  - Early detection and treatment are important

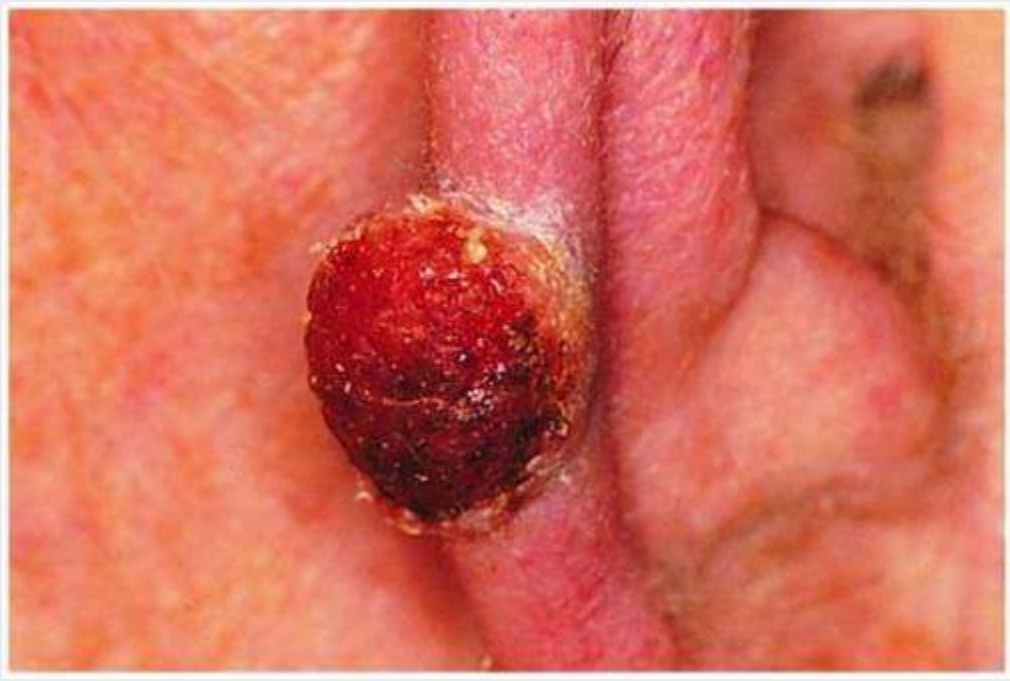
Figure 43-16



(From Belcher, A. E. [1992]. *Cancer nursing*. St. Louis: Mosby.)

Basal cell carcinoma.

Figure 43-17



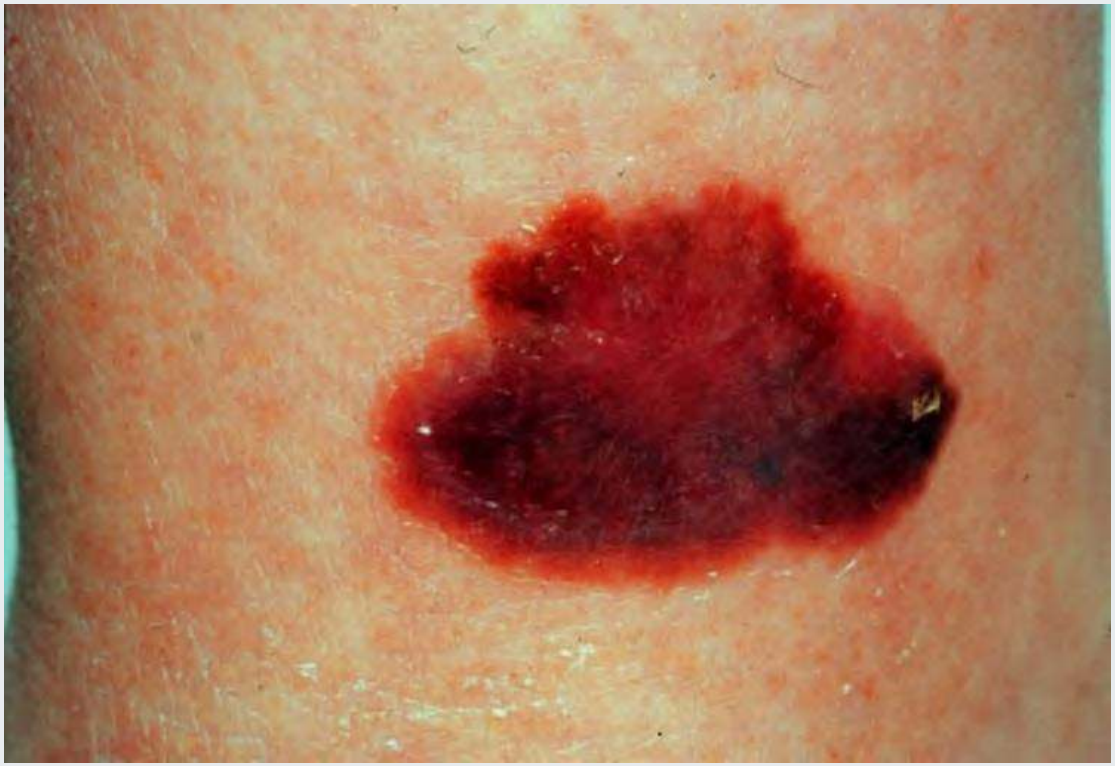
(Courtesy of the Department of Dermatology, School of Medicine, University of Utah.)

Squamous cell carcinoma.

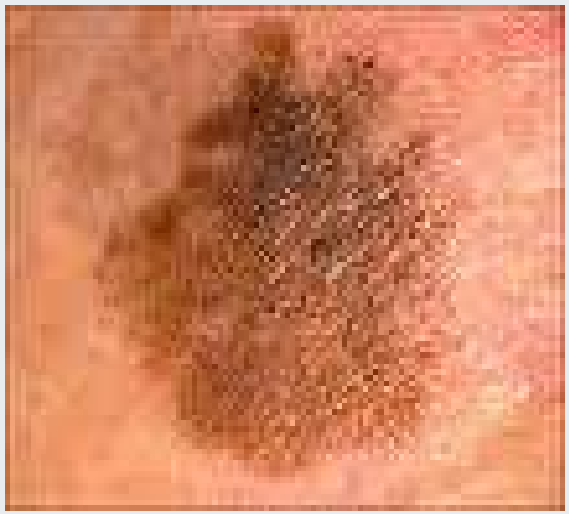
Tumors of the Skin

- Malignant melanoma
  - Cancerous neoplasm
    - Melanocytes invade the epidermis, dermis, and subcutaneous tissue
  - Greatest risk
    - Fair complexion, blue eyes, red or blond hair, and freckles
  - Treatment
    - Surgical excision
    - Chemotherapy
      - Cisplatin, methotrexate, dacarbazine

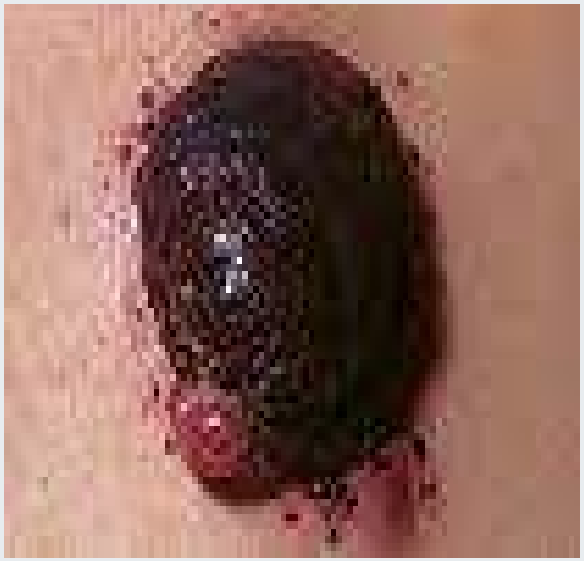
Superficial spreading melanoma



Lentingo melanoma



Nodular melanoma



Acral Lentiginous melanoma

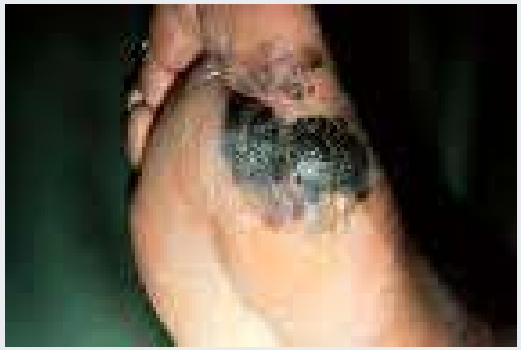
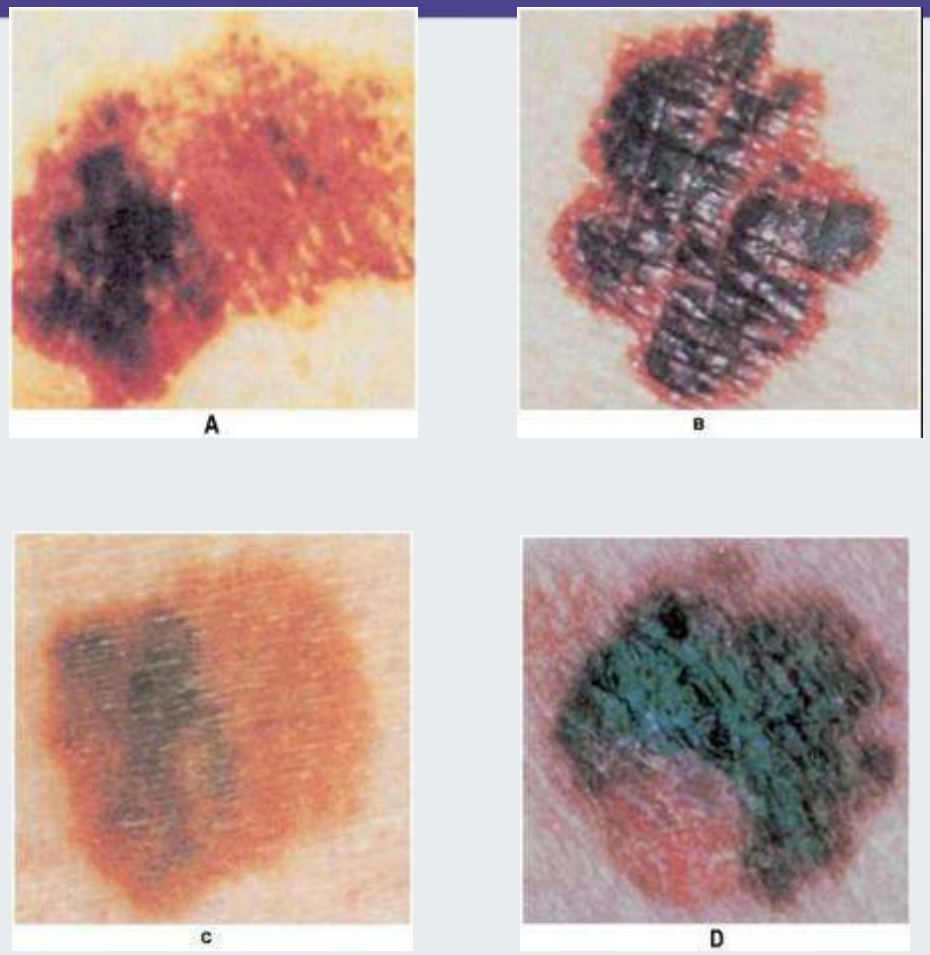


Figure 43-18

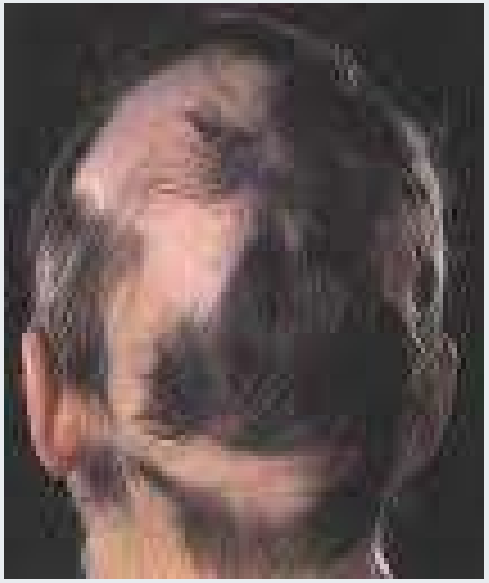


(From Habif, T.P. [2004]. *Clinical dermatology: a color guide to diagnosis and therapy.* [4th ed.]. St. Louis: Mosby.)

The ABCDs of melanoma.

Disorders of the Appendages

- Alopecia
  - Loss of hair
  - Cause: Aging, drugs, anxiety, disease
  - Usually grows back unless from aging
- Hypertrichosis (hirsutism)
  - Excessive growth of hair
  - Causes: Heredity, hormone dysfunction, medications
  - Treatment: Dermabrasion, electrolysis, chemical depilation, shaving, plucking



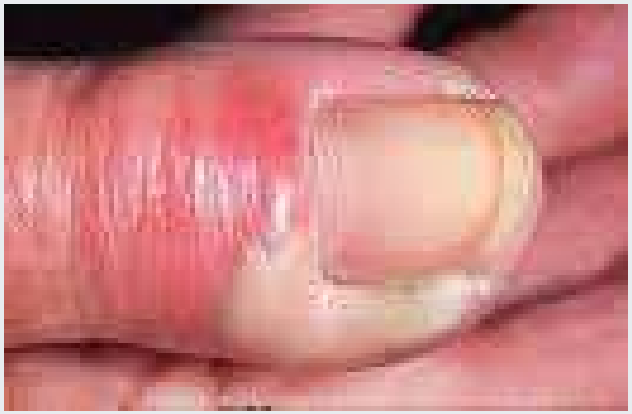
Hirsutism

Disorders of the Appendages

- Hypotrichosis
  - Absence of hair or a decrease in hair growth
  - Causes: Skin disease, endocrine problems, malnutrition
  - Treatment: Identify and remove cause
- Paronychia
  - Disorder of the nails
  - Infection of nail spreads around the nail
  - Treatment: Wet dressings, antibiotic ointment, surgical incision and drainage

Hypotrichosis

Paronychia



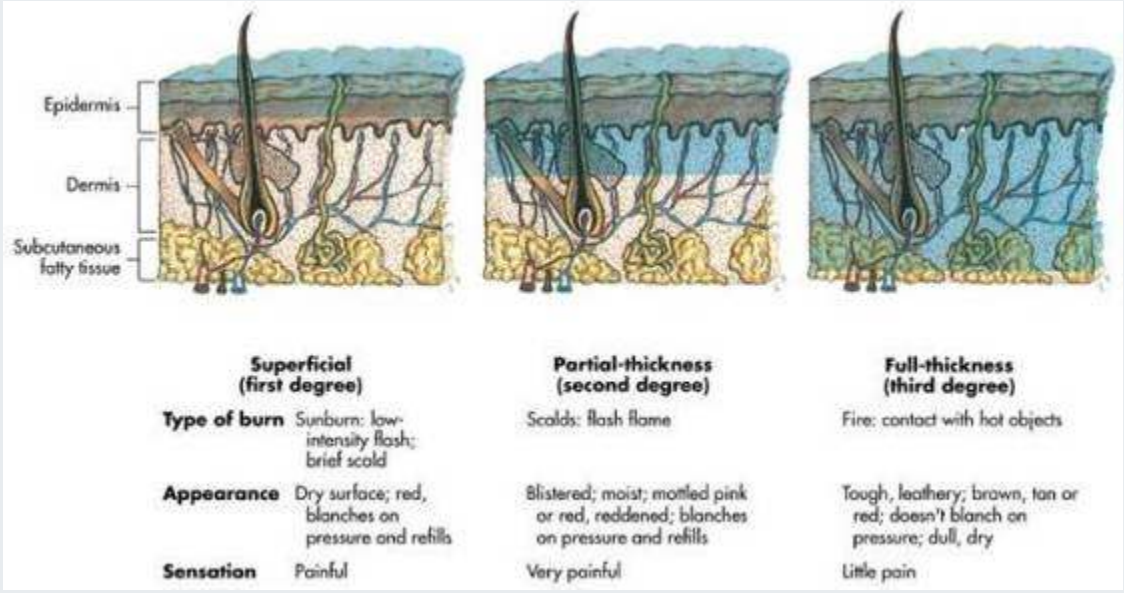
Burns

- Etiology/pathophysiology
  - May result from radiation,thermal energy, electricity, chemicals
- Clinical manifestations/assessment
  - Superficial (first degree)
    - Involves epidermis
    - Dry, no vesicles, blanches and refills, erythema, painful
    - Flash flame or sunburn

Burns

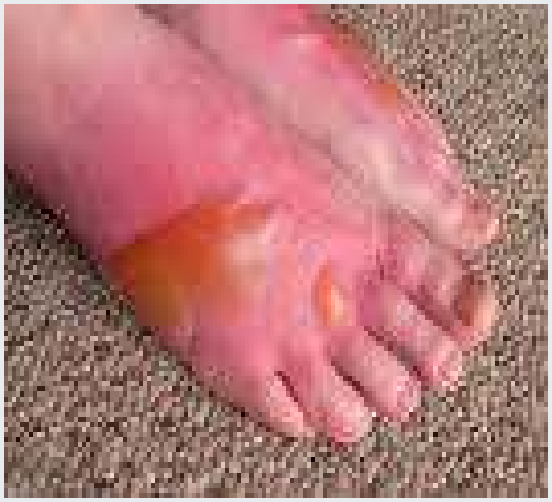
- Clinical manifestations/assessment *(continued)*
  - Partial-thickness (second degree)
    - Involves epidermis and at least part of dermis
    - Large, moist vesicles, mottled pink or red, blanches and refills, very painful
    - Scalds, flash flame
  - Full-thickness (third degree)
    - Involves epidermis, dermis, and subcutaneous
    - Fire, contact with hot objects
    - Tough, leathery brown, tan or red, doesn't blanch, dry, dull, little pain

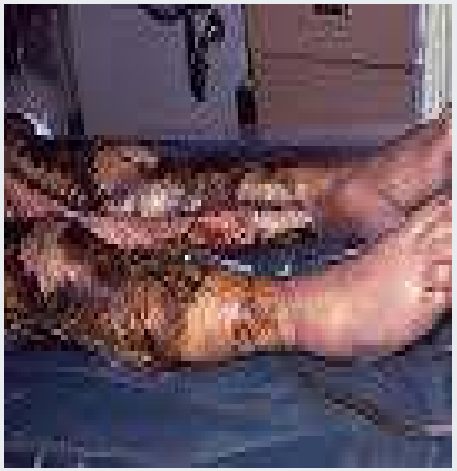
Figure 43-19



(From Hockenberry MJ, Wilson D [2007]. *Wong's nursing care of infants and children*. [8th ed.] . St. Louis: Mosby.)

Classification of burn depth.





Burns

- Medical management/nursing interventions
  - Emergent phase (first 48 hours)
    - Maintain respiratory integrity
    - Prevent hypovolemic shock
    - Stop burning process
    - Establish airway
    - Fluid therapy
    - Foley catheter; nasogastric tube
    - Analgesics
    - Monitor vital signs
    - Tetanus

Burns

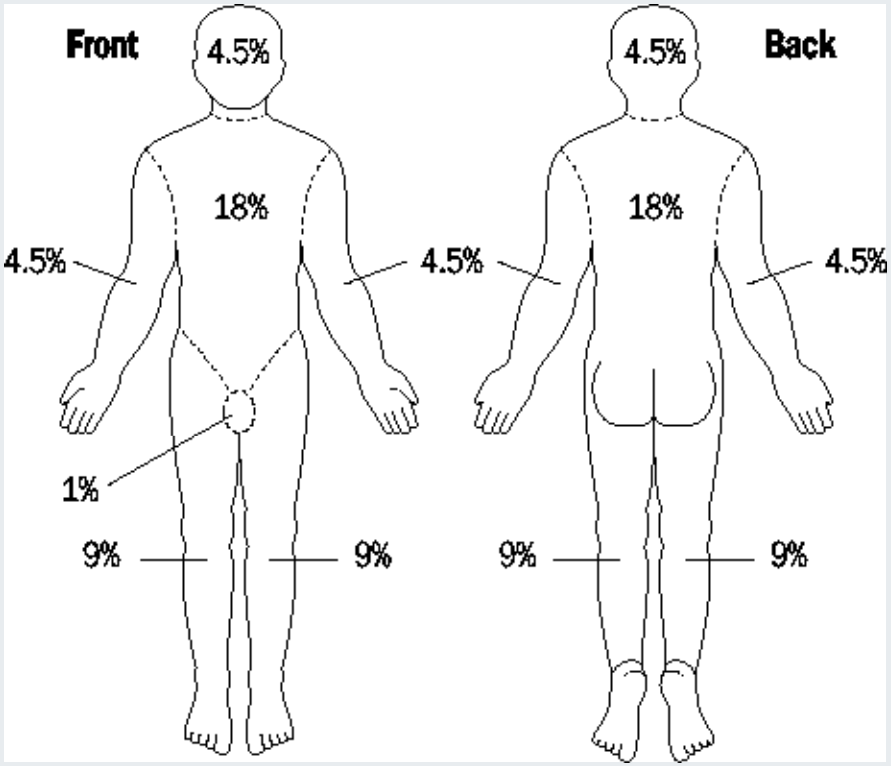
- Medical management/nursing interventions *(continued)*
  - Acute phase (48 to 72 hours after burn)
    - Treat burn
    - Prevention and management of problems
      - Infection, heart failure, contractures, Curling's ulcer
    - Most common cause of death after 72 hours is infection
    - Assess for erythema, odor, and green or yellow exudate
    - Diet: High in protein, calories, and vitamins
    - Pain control
    - Wound care: Strict surgical aseptic technique

Burns

- Medical management/nursing interventions *(continued)*
  - Acute phase *(continued)*
    - Range of motion
    - Prevent linens from touching burned areas
    - CircOlectric bed
    - Clinitron bed
    - Topical medication: Sulfamylon; Silvadene
    - Skin grafts
      - Autograft
      - Homograft (allograft)
      - Heterograft

Smoke inhalation

Rule of 9's



Burns

- Medical management/nursing interventions *(continued)*
  - Rehabilitation phase
    - Goal is to return the patient to a productive life
    - Mobility limitations: Positioning, skin care, exercise, ambulation, ADLs
    - Patient teaching
      - Wound care and dressings
      - Signs and symptoms of complications
      - Exercises
      - Clothing and ADLs
      - Social skills

Nursing Process

- Nursing diagnoses
  - Anxiety
  - Pain
  - Knowledge, deficient related to disease
  - Infection, risk of
  - Trauma, risk for
  - Social interaction, impaired
  - Self-esteem, risk for situational low