Chapter 71
Caring for Clients with Skin, Hair and Nail Disorders

Tattoos & Body Piercing

- A Tattoo is pigmentation of the dermal layer of the skin with needles containing dye
- Body piercing is the insertion of a metal ring or barbell into a body part
Body Piercing and Tatoos

Skin Disorders

Dermatitis

- Inflammation of the skin
- Signs and Symptoms
  - Itching
  - Red rash
  - Localized swelling
  - Possible blister formation
- Two types
  - Allergic and irritant dermatitis

Dermatitis

Pathophysiology and Etiology

- Allergic contact Dermatitis
- Sensitive to 1 or more substances
  - Drugs
  - Fibers
  - Cosmetics
  - Plants
  - Dyes
Dermatitis

- Pt with **Allergic Contact Dermatitis**
  - Allergies cause sensitized mast cells in the skin to release histamine
    - Red rash, itching, and local swelling
- Pt with **Irritant Dermatitis**
  - The caustic agent in the substance
    - Damages the protein structure of the skin
    -Eliminates secretions that protect it

Dermatitis Assessment Finding

- Dilation of blood vessels ~
  - Redness
  - Swelling
  - Vesiculation ~ blister formation
  - Oozing
- Soreness or discomfort from irritation and all of above
- Itching ~ a prominent symptom
Medical Management

- Remove the substances causing the reaction ~ flush area w/ cool water
- Topical lotions ~ Calamine,
- Systemic drugs ~ Benadryl
- Moisturizing creams ~ Lanolin
- Corticosteroids ~ PO or Topically
- In severe cases ~ Wet Dressing with Burrow’s solution

Nursing Management

- Avoid agents causing Dermatitis
- Keep nails short
- Use light cotton bedding and clothing
- Wear white gloves when sleeping (so you do not scratch them)
- Avoid regular soap for bathing
- Use tepid bath water ~ pat don’t rub
- Notify MD if drug therapy fails

Acne Vulgaris

- **Acne Vulgaris** ~ Inflammation disorder that affects the sebaceous glands and hair follicles

  **Etiology**
  - Related to hormonal changes in puberty
  - Aggravated by cosmetics, picking and squeezing
  - No correlation with any specific food
Acne Vulgaris

**Pathophysiology**
- Sebum, keratin and bacteria accumulate and dilate the follicle
- Collective secretions ~ form a comedone – a blackhead
- Follicle become distended and irritated – a raised papule
- If follicle ruptures, inflammatory response extends into the dermis

**Assessment Findings**
- Comedones and pustules appear on
  - Face
  - Chest
  - Back
- Skin is excessively oily
- Oiliness of the scalp accompanies acne
- Severe acne can cause deep, pitted scars
Medical Management

• Drug therapy
• Topical applications
  – Benzoyl peroxide
  – Retin-A
• Oral applications
  – Accutane
  – Antibiotics – tetracycline and erythromycin
• Comedone can be removed and pustules can be drained with special instruments ~ MD (only by a professional)

Surgical Management

• Dermabrasion ~ removing the surface layers of scarred skin
• Chemical face peeling

Nursing Management

• Advise client
  – to keep hair and face clean, & hair away from face
  – avoid oily cosmetics, lotions and hair sprays
  – don’t pick lesions
• Female clients ~ Accutane (Isotretinoin)
  – Must not be or get pregnant!
  • Causes birth defects
Rosacea

- A chronic skin disorder characterized by a rosy appearance
- Unrelated to acne vulgaris
- Incurable but manageable
  - Assessment Finding
  - Early signs are blushing across the nose, forehead, cheeks and chin.
  - Later signs are papules, pustules, and orange peel texture
  - Rhinophyma—enlarged, red, nodular and bulbous nose

Rhinophyma
Furuncle, Furunculosis and Carbuncles

- Furuncle ~ a boil
- Furunculosis ~ multiple boils
- Carbuncles ~ furuncle that drains pus

Pathophysiology and Etiology
- They are caused by skin infections from (non pathogenic) organisms
- Impaired skin integrity ~ microorganism can enter and colonize
- Diabetes Mellitus ~ elevated glucose levels promote microbial growth

Assessment Findings

- Lesions raised
- Painful
- Pustule surrounded by erythema
- Area feels hard to touch
- Lesions has pus within days and later a core
- Pt may experience fever, anorexia, weakness, and malaise
Medical & Surgical Management

- Hot wet soaks
- Antibiotics
- Surgical incision and drainage

Nursing Management

- Aseptic technique
- Teach client:
  - No picking ~ keep hands away
  - Wash hands before and after med use
  - Use separate towels and face cloths
  - Wash laundry separately in hot water & bleach

Psoriasis

- **Psoriasis** ~ is a chronic, noninfectious inflammatory disorder of the skin

Pathophysiology and Etiology

- Etiology is unknown
- Predisposition ~ Genetics *
- Aggravated by:
  - Emotional distress
  - Hormonal cycles
  - Infection
  - Season changes

Psoriasis Pathophysiology

- The disorder seems to require a trigger
  - Ex. An infection
- Possible link with the immune system
  - R/T Exacerbation and remission
- Keratinocytes
  - Skin cells proliferate faster than normal
  - Excessive cells accumulate, elevate and form scaly lesions ~ plaque
Assessment Finding
Psoriasis lesions
- Patches of erythema
  - On elbows, knees, trunk and scalp
- Silvery scales
- Lesions may tend to shed
- Itching
- Diagnosed by biopsy and visual exam

Medical Management
- Psoriasis has no cure ~ tends to recur
- Symptomatic treatment ~ Individualized ~ topical, injections and photochemotherapy
- Topical
  - Coal tar extract (anthralin) & Corticosteroids
  - Methotrexate (chemotherapeutic)
  - Tegison and Retinol
- Injections ~ Kenacort
- Photochemotherapy ~ UV light and a psoralen drug
Nursing Management

• Assessment ~ possible triggers
• Plan ~ Deal with emotional state, physical support & control symptoms
• Interventions ~ support medical plan of care and emotional support****
• Evaluate the effectiveness of plan and pt status
• See Nursing careplans pg. 1272

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Scabies
Pathophysiology and Etiology

• Scabies is caused by a infestation of an itch mite (Sarcoptes scabiei)
• **Spread by skin to skin contact**~ common in confined areas with large groups such as nursing homes, day cares, prisons, etc.
• Scabies mite can not survive more than 2 days off the body

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Scabies
Signs and Symptoms

• Intense Itching ~ especially at night
• Excoriation of skin ~ from scratching
• Skin burrows ~ female mite lays eggs

Diagnostic Findings

• Drop mineral oil on lesion & scrap off skin onto slide
• Examine microscopically ~ mites, eggs, feces
• Ink test ~ highlights burrows
Medical Management

- Scabicides — chemical that destroy mites
- Avoid contact with those who have scabies (transmission is close personal contact)

  - **Nursing Management**
    - Bathe thoroughly before treatment
    - Wash clothes, towels and linen in HOT water
    - Vacuum furniture and unwashable items
    - Itching may last 2-3 weeks post treatment
Dermatophytoses

- Dermatophytoses ~ superficial parasitic fungal infections
- Named for area infected:
  - Tinea pedis ~ foot (athlete’s foot)
  - Tinea capitis ~ head
  - Tinea corporis ~ body (ringworm)
  - Tinea cruris ~ groin (jock itch)

Assessment findings
- Appears as rings of papules or vesicles with a clear center
  - Skin itches and becomes red, scaly, cracked & sore

Diagnosis
- Lesion are scraped and examined microscopically
- Wood’s light shows areas of fluoresce ~ a green-yellow color
Medical/Nursing Management

- Medical management:
  - Antifungal agents may require long term use.
  - Includes topical and oral agents.
    - Topical ~ Whitfield's ointment, Tinactin & Micatin
    - Oral ~ Grisactin (griseofulvin)

Nursing Management

- Teach:
  - Use Anti-fungal agent as prescribed
  - Separate and don't share towels and personal hygiene items
  - Keep infected areas clean and dry
  - Avoid excessive heat and tight fitting clothes
  - Don't go bare foot in locker rooms or showers
  - Keep areas dry as possible

Shingles

- Shingles (herpes zoster) ~ is a skin disorder that develops after an infection with varicella (chickenpox)
  - Pathophysiology and Etiology
    - Acute reactivation of the varicella zoster virus
    - Virus lies dormant in nerve roots until immune system is suppress
    - Viral reactivation produces inflammatory symptoms in the Dermatome ~ skin nerve ends
    - Raised, fluid – filled, painful skin eruptions
    - If affect cranial nerves ~ complications
    - Contagious until lesions crust over & fall off

Assessment Findings

- Initial S/S:
  - Low grade Fever
  - Headache
  - Malaise
  - Red blotchy along the dermatome
  - Itch or numbness
- In 24-48 hours
  - Vesicles appear along the nerve pathway
  - Unilateral eruptions on trunk, head or neck
  - Severely painful w/ severe itching
- Vesicles rupture and crust over ~ few days
- Pain and Itching ~ months ~2 years
- Scarring ~ possible secondary infections
Medical Management

• Oral or Topical acyclovir (Zovirax)
• Corticosteroids
• Symptomatic TX;
  – Analgesics ~ pain
  – Anti-pruritics ~ itch

Nursing Management

Teach:
• Avoid immunocompromised people & people who have not had chickenpox
• Cool or warm compresses or showers
• Wear loose clothing & don’t scratch area
• Teach use of medications

Skin Cancer

Facts
• Skin cancer is the most common cancer (highly malignant with poor prognosis)
• 1 in 6 Americans acquire skin cancer each year
• 3 types of cells in the epidermis
  – Squamous cells
  – Basal cells
  – Melanocytes ~ contain color pigment
• See table 71-2, pg 1277
Pathophysiology and Etiology

- Predisposing factors to malignant tumors:
  - Thinning ozone layer
  - Increased & repeated exposure to UV rays (~
tanning, farmers, fishing, & construction
  - Residence in high altitudes
  - Decreased melanin in skin (fair-skinned)
  - Prior radiation therapy
  - Scar tissue and ulceration of long duration
- Usually originates in skin as primary lesion
  - Prompt removal prevents spread

Assessment Finding

- New growth or change in color
- Smooth or rough
- Flat or elevated
- Itchy or tender
- May bleed
- Confirmed by biopsy

HINTS TO MALIGNANT MELANOMA

- Asymmetry
- Border Irregularity
- Color Variegation
- Diameter Greater Than 6mm
Medical and Surgical Management

- Depends on size & location of lesion
- Squamous and basal cells carcinomas may involve:
  - Electrodesiccation
  - Surgical excision
  - Cryosurgery
  - Radiation
- Melanoma may involve
  - Radical excision
  - Chemotherapy
  - Skin grafting
Nursing Management

- Examine and measure abnormal lesions
- Give emotional support w/ Tx
- Client Ed:
  - Always use sun screen & lip balm w/ sunscreen * reapply ≤ 2 hr
  - Wear a hat that covers back of neck
  - Stay in the shade
  - Avoid prolong sun exposure & artificial tanning
  - Wear tightly woven, loose fitting clothes
  - Seek treatment ASAP for any suspicious lesion

Scalp and Hair Disorders

Seborrhea, Seborrhea Dermatitis and Dandruff

- **Seborrhea** ~
  - excessive production of secretions from the sebaceous glands ~ mainly on scalp
- **Seborrhea Dermatitis** ~
  - red areas covered with yellowish greasy scales ~ inflammatory component
- **Dandruff** ~
  - loose scaly material of dead keratinized epithelium shed from the scalp

Pathophysiology and Etiology

- Dermatologists believe tiny fungus (pityrosporum ovale) cause dandruff
- Most people harbor this fungus
- Factors
  - Excessive perspiration
  - Inadequate diet
  - Stress
  - Hormone activity
Assessment Finding

- Hair is oily
- Red or scaly patches on scalp
- Flaky

Medical Management

- Frequent shampooing with or without medicated product
- Topical applications of Corticosteroids

Nursing Management

- Pt education

Alopecia

- Alopecia ~ baldness
- Affects follicles ~ partial or total hair loss
- Temporary or permanent
- Normal to shed 50-100 hairs a day

Possible causes

- Medications
- Inadequate diet
- Thyroid disease
- Tinea infection
- Improper use of hair products/ hair styles
Alopecia

- Alopecia Areata ~ autoimmune disorder
  - Patchy loss ~ size of coin
  - Can progress to total hair loss
  - (poss. total body)
  - Antibodies attack and destroy hair follicle
- Androgenetic Alopecia ~ male pattern baldness
  - Affect men and women
  - Genetically acquired
  - Hair production stops

Assessment findings

- Hair thinning
- History of baldness
- Not associated with health problems

Medical Management

- Medication ~ Minoxidil (Rogaine)

Surgical Management

- Hair grafting
- Scalp reduction

Nursing Management

- Emotional support

Head Lice

Pediculosis ~ infestation with lice

Pathophysiology and Etiology

- Lice are crawling brown insects
  - Size of sesame seeds, don’t fly or jump
- Feed on human blood
  - Bites cause itching
- Can’t live longer than 24 hour w/o blood
- Life span ~ 30 days
  - 1 female can lay 100-400 nits
- Egg (nits) hatch in 7-10 days
- Lice are transmitted through direct contact
  - Sharing clothing, combs and brushes
Assessment Finding

- Itching
- Scratching can lead to secondary infection
- Nits cling to hair ~ small, yellowish-white ovals

Medical Management
- Nonprescription shampoos, gels & liquids containing pediculicides ~ Nix, RID
Nursing Management of lice
Patient education is very important!!
• Recognize lice and nits
• Use pediculicides as prescribed
  – Do not shampoo or condition hair before
  – Contraindicated in children 2 or younger,
    Pregnant & nursing women
• Wash clothing and vacuum furniture,
  bedding, and carpets
• See Nursing guidelines Box71-1, pg 1281**

Nail Disorders
Onychomycosis
• Onychomycosis is a fungal infection of the
  fingernails or toenails
  Pathophysiology and Etiology
  • The fungus is a tiny plantlike parasite that thrives in
    warm, dark, moist environment
  • The nail becomes elevated, thick, it changes color,
    loosens and the nail plate is destroyed
  • Onychomycosis & tinea pedis often occurs together
  • Older adults and the immunocompromised are at
    higher risk
  • Women with artificial nails

Assessment Finding
• One or more nails are
  – Thick
  – Yellowed and friable
  – Elevated and distorted
  – Possibly painful
• Medical and Surgical Management
  – Systemic drug therapy (long term) ~
    • Examples: Lamisil or Sporanox
  – Removal of infected nail
Toe Nail Fungus

Onychomycosis

Nursing Management
- Pt education
- Comply with medication therapy
- Alternate shoes daily ~ leather
- Never go barefoot ~ at pools or public showers
- Avoid any damage to skin around nail

Onychocryptosis
- Onychocryptosis ~ ingrown toenail

Pathophysiology and Etiology
- An inherited curvature in the nail plate poses a higher incidence for some people
- The corner of the nail becomes trapped under the skin
- As the nail grows it cuts into the flesh and creates an opening for bacteria also causing inflammation
- Athletes have increased risk due to trauma
Onychocryptosis-ingrown toenail

Medical and Surgical Management

• Treat the infection
  — Local and systemic antibiotics
• H₂O₂
• Soak feet in warm water and Epsom salts ~ dry well
• Wedge cotton under nail
• DM or PVD pts need to see a Podiatrist
• Persistent infections ~ surgically remove nail border and root

Onychocryptosis

Nursing Management

• Soak feet
• Change dressing
• Monitor for signs and symptoms of infection
• Comply with medication therapy
• Pt education wear comfortable shoes
• Trim toe nails, keep clean and dry
General Considerations

- Pharmacologic- p1283*****
- Gerontologic-p1283*****