## Skin Lesions

A skin **lesion** is any circumscribed area of injury to the skin or a wound to the skin. The following are the most commonly known skin lesions.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>abrasion</strong></td>
<td>A scraping or rubbing away of skin or mucous membrane as a result of friction to the area. An example of an abrasion is “carpet burn,” which can occur in children who run and slide across a carpet on their knees.</td>
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<tr>
<td><strong>abscess</strong></td>
<td>A localized collection of pus in any body part that results from invasion of pus-forming bacteria. The area is surrounded by inflamed tissue; a small abscess on the skin is also known as a pustule.</td>
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<tr>
<td><strong>bedsore</strong></td>
<td>An inflammation, sore, or ulcer in the skin over a bony prominence of the body—resulting from loss of blood supply and oxygen to the area due to prolonged pressure on the body part; also known as a decubitis ulcer or pressure sore. See Figure 5-6.</td>
</tr>
<tr>
<td><strong>blister</strong></td>
<td>A small thin-walled skin lesion containing clear fluid; a vesicle.</td>
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<tr>
<td><strong>bullae</strong></td>
<td>A large blister.</td>
</tr>
<tr>
<td><strong>carbuncle</strong></td>
<td>A circumscribed inflammation of the skin and deeper tissues that contains pus, which eventually discharges to the skin surface. The lesion begins as a painful node covered by tight, reddened skin. The skin later thins out and perforates, discharging pus through several small openings. Treatment may include administration of antibiotics and use of warm compresses.</td>
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<tr>
<td><strong>comedo</strong></td>
<td>The typical lesion of acne vulgaris, caused by the accumulation of keratin and sebum within the opening of a hair follicle. When a comedo is closed, it is called a whitehead, and the content within is not easily expressed. When a comedo is open, it is called a blackhead, and the oily content is easily expressed. Both forms of comedos are usually located on the face but may also appear on the back and chest.</td>
</tr>
<tr>
<td><strong>cyst</strong></td>
<td>A closed sac or pouch in or within the skin that contains fluid, semifluid, or solid material. A common example of a fluid-filled cyst is a hydrocele, which is a collection of fluid located in the area of the scrotal sac in the male. A common example of a solid-filled cyst is a sebaceous cyst, which is a cyst filled with a cheesy material consisting of sebum and epithelial debris that has formed in the duct of a sebaceous gland; also known as an epidermoid cyst. Sebaceous cysts frequently form on the scalp and may grow quite large.</td>
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</tbody>
</table>
fissure
(FISH-er)

A cracklike sore or groove in the skin or mucous membrane.

An example of a fissure is the cracklike sore in the skin that occurs with athlete’s foot or the groovelike sore, known as an anal fissure, that occurs in the mucous membrane near the anus. For an example of a fissure in the mucous membrane.

fistula
(FISS-tyoo-lah)

An abnormal passageway between two tubular organs (such as the rectum and vagina) or from an organ to the body surface.

Some fistulas are created surgically for therapeutic purposes and others may be the result of congenital defects, infection, or injury to the body. An example of a surgically created fistula is an arteriovenous fistula created for the purpose of hemodialysis. A rectovaginal fistula results from an abnormal passageway between the rectum and vagina. This opening allows feces from the rectum or anal canal to escape into the vaginal canal. The rectovaginal fistula can result from trauma during childbirth.

furuncle
(FOO-rung-kl)

A localized pus-producing (pyogenic) infection originating deep in a hair follicle, characterized by pain, redness, and swelling; also known as a boil.

Because a furuncle is caused by a staphylococcal infection, it is important to avoid squeezing or irritating the lesion in order to prevent the possible spread of the infection to surrounding tissue.

hives

Circumscribed, slightly elevated lesions of the skin that are paler in the center than its surrounding edges; see wheal.

laceration
(lass-er-AY-shun)

A tear in the skin; a torn, jagged wound.

macule
(MACK-yool)

A small, flat discoloration of the skin that is neither raised nor depressed. Some common examples of macules are bruises, freckles, and the rashes of measles and roseola.

nodule
(NOD-yool)

A small, circumscribed swelling protruding above the skin; a small node.
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<tr>
<td>papule</td>
<td>A small, solid, circumscribed elevation on the skin. Examples of a papule include a pimple, a wart, and an elevated nevus (mole).</td>
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<tr>
<td>polyp</td>
<td>A small, stalklike growth that protrudes upward or outward from a mucous membrane surface—resembling a mushroom stalk. An example of a polyp is a nasal polyp.</td>
</tr>
<tr>
<td>pustule</td>
<td>A small elevation of the skin filled with pus; a small abscess on the skin.</td>
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<tr>
<td>scales</td>
<td>Thin flakes of hardened epithelium that are shed from the epidermis.</td>
</tr>
<tr>
<td>ulcer</td>
<td>A circumscribed, open sore or lesion of the skin that is accompanied by inflammation. A decubitus ulcer, also known as a bedsore, is the breakdown of skin and underlying tissues resulting from constant pressure to bony prominences of the skin and inadequate blood supply and oxygenation to the area.</td>
</tr>
<tr>
<td>vesicle</td>
<td>A small thin-walled skin lesion containing clear fluid; a blister. The small fluid-filled blisters that occur with poison ivy are vesicles.</td>
</tr>
<tr>
<td>wheal</td>
<td>A circumscribed, slightly elevated lesion of the skin that is paler in the center than its surrounding edges; hives. A wheal is usually accompanied by intense itching and is of short duration. A mosquito bite is an example of a wheal. An allergic reaction to something may result in numerous wheals of varying sizes and intense itching, which is known as urticaria.</td>
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Pathological Conditions

acne vulgaris
(ACK-nee vul-GAY-ris)

A common inflammatory disorder seen on the face, chest, back, and neck; appears as papules, pustules, and comedos; commonly known as acne.

Acne vulgaris typically begins during adolescence due to the influence of sex hormones, largely androgens. Because it is a major cosmetic concern for the teenage population, acne should never be dismissed as trivial. This condition is characterized by:

1. the formation of comedos, papules, and pustules on the face, chest, back, and neck,
2. the increased secretion of sebum as evidenced by greasy skin, and
3. hyperkeratosis at the opening of the hair follicle, which blocks the discharge of sebum and promotes the colonization of anaerobic bacteria.

The formation of blackheads (open comedos) and whiteheads (closed comedos) occurs as a result of the growth of anaerobic bacteria, which can live without air. The degree of involvement varies from the small comedos to obstruction of the entire follicle when large pustules or abscesses form. Picking, scratching, or pressing of these lesions can lead to secondary infections and scarring. Although there is no cure for acne, treatment is directed at the following:

1. keeping the skin free of excess oil and bacteria through frequent cleansing,
2. avoiding heavy makeup and creams that can clog up the pores,
3. controlling infection with local antibiotics, and
4. decreasing the keratinization (hardening) of follicles by using keratolytic agents or retinoic acid.

albinism
(AL-bin-izm)

albin/o = white
-ism = condition

A condition characterized by absence of pigment in the skin, hair, and eyes.

Individuals with albinism lack the inherited ability to produce a brown skin coloring pigment, melanin. Persons with this inherited disorder:

1. are hypersensitive to light (photophobia),
2. are susceptible to skin cancer,
3. are prone to visual disturbances such as nearsightedness,
4. have pink or very pale blue eyes,
5. must avoid the sun in order to protect their eyes and skin from burning.

The widespread incidence of albinism is 1 in 20,000 births, equally male and female. The prevalence of albinism is higher in African Americans than Caucasians.
Tissue injury produced by flame, heat, chemicals, radiation, electricity, or gases. The extent of the damage to the underlying tissue is determined by the mode and duration of exposure, the thermal intensity or temperature, and the anatomic site of the burn. Burn degree is classified according to the depth of injury.

**First-degree (superficial) burns:**
1. produce redness and swelling of the epidermis,
2. are painful, and
3. heal spontaneously with peeling in about three to six days and produce no scar.

An example of a first-degree or superficial burn is sunburn.

**Second-degree (partial-thickness) burns:**
1. exhibit a blistering pink to red color and some swelling,
2. involve the epidermis and upper layer of the dermis,
3. are very sensitive and painful, and
4. heal in approximately two weeks without a scar if no wound infection or trauma occurs during the healing process.

An example of a second-degree or partial-thickness burn is flash contact with hot objects, such as boiling water.

**Third-degree (full-thickness) burns:**
1. cause tissue damage according to the duration and temperature of the heat source,
2. involve massive necrosis of the epidermis and entire dermis, and may include part of the subcutaneous tissue or muscle,
3. appear brown, black, tan, white, or deep cherry red (will not blanch) and are wet or dry, sunken, with eschar (dry crust) and coagulated capillaries,
4. produce pain according to the amount of nerve tissue involved (where nerve endings are destroyed pain will be absent), and
5. will take a long time to heal and will likely require debridement(s) and grafting.

The classification of burns as first, second, or third degree helps to evaluate the severity of the burn. However, other factors influence the severity, such as:
1. the age of person burned,
2. the percentage of body surface burned,
3. the location of burn on the body, and
4. concurrent injuries.
**callus**  
(CAL-us)

A common (usually painless) thickening of the epidermis at sites of external pressure or friction, such as the weight-bearing areas of the feet and on the palmar surface of the hands. This localized hyperplastic area of up to 1 inch in size is also known as a callosity.

A callus may be caused by pressure or friction from ill-fitting shoes, deformities of the foot, or improper weight bearing. It may also be the result of repeated trauma to the skin such as that which occurs with manual labor or strumming a string instrument (guitar, banjo, etc.).

Treatment for calluses involves relieving the pressure or friction points on the skin. Metatarsal pads may also provide relief. The best treatment is prevention (i.e., by wearing shoes that fit well and avoiding unnecessary trauma to the hands and feet).

**carcinoma, basal cell**  
(car-sih-NOH-mah, BAY-sal sell)

- **carcin/o** = cancer  
- **-oma** = tumor

The most common malignant tumor of the epithelial tissue, occurring most often on areas of the skin exposed to the sun.

**Basal cell carcinoma** presents as a slightly elevated nodule with a depression or ulceration in the center that becomes more obvious as the tumor grows. If not treated, the basal cell carcinomas will invade surrounding tissue, which can lead to destruction of body parts (such as a nose). Treatment includes surgical excision, curettage and electrodesication, cryosurgery, or radiation therapy (see the section on diagnostic tests and procedures for descriptions of these). Basal cell carcinomas rarely metastasize, but they tend to recur—especially those that are larger than 2 cm in diameter.

**carcinoma, squamous cell**  
(car-sih-NOH-mus sell)

- **carcin/o** = cancer  
- **-oma** = tumor

A malignancy of the squamous (or scalelike) cells of the epithelial tissue, which is a much faster growing cancer than basal cell carcinoma and which has a greater potential for metastasis if not treated.

These squamous cell lesions are seen most frequently on sun-exposed areas such as the:

1. top of the nose,  
2. forehead,  
3. margin of the external ear,  
4. back of the hands, and  
5. lower lip.

The squamous cell lesion begins as a firm, flesh-colored or red papule, sometimes with a crusted appearance. As the lesion grows it may bleed or ulcerate and become painful. When **squamous cell carcinoma** recurs, it can be quite invasive and create an increased risk of metastasis.

Treatment is surgical excision with the goal of removing the tumor completely, along with a margin of healthy surrounding tissue. Cryosurgery for low-risk squamous cell carcinomas is also common.
**dermatitis**

(der-mah-TYE-tis)

*dermat/o* = skin

*-itis* = inflammation

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**Inflammation of the skin, seen in several forms.** *Dermatitis* may be acute or chronic, contact or seborrheic.

**Contact dermatitis** occurs as the skin responds to an irritant or allergen with redness, pruritus (itching), and various skin lesions. Two forms of contact dermatitis are allergic contact dermatitis and irritant contact dermatitis.

**Allergic contact dermatitis** develops by sensitization. When coming in contact with a substance for the first time, no immediate inflammation occurs but future exposure to this substance will result in severe acute inflammation with pruritic red vesicular oozing lesions at the area of contact. Common causes of allergic contact dermatitis include plants such as poison oak and poison ivy; drugs; some metals such as copper, silver, mercury, and jewelry; and many industrial cleaners.

**Irritant contact dermatitis** occurs following repeated exposure of a mild irritant or initial exposure of a strong irritant. This severe inflammatory reaction is characterized by a fine, itchy rash of clearly defined red papules and vesicles. The chronic features of irritant contact dermatitis are dryness and scaling with a dull reddened appearance. Some of the common causes of irritant contact dermatitis are soaps, detergents, oven cleaners, and bleaches.

**Seborrheic** *(seb-oh-REE-ik)* *dermatitis* is a very common inflammatory condition seen in areas where the oil glands are most prevalent, such as the:

1. scalp,
2. area behind the ears,
3. eyebrows,
4. sides of the nose,
5. eyelids, and
6. middle of the chest.

The skin affected by seborrheic dermatitis appears reddened with a greasy, yellowish crusting or scales. If itching occurs it is usually mild. The most common form of seborrheic dermatitis is seen in infants from birth to 12 months of age and is called cradle cap (see Figure 5-21). It may also occur in adults, and statistics show it is higher in persons:

1. with disorders of the central nervous system, such as Parkinson’s disease,
2. recovering from a stressful medical crisis, such as a heart attack,
3. confined for long periods of time in the hospital or a long-term care facility, and
4. with disorders of the immune system, such as AIDS.
eczema
*(EK-zeh-mah)*

An acute or chronic inflammatory skin condition characterized by erythema, papules, vesicles, pustules, scales, crusts, or scabs and accompanied by intense itching.

These lesions may occur alone or in any combination. They may be dry or they may produce a watery discharge with resultant itching.

Long-term effects of eczema may result in thickening and hardening of the skin, known as lichenification, which is due to irritation caused from repeated scratching of the itchy area. Redness and scaling of the skin may also accompany this. Severe itching predisposes the areas to secondary infections and possible invasion by viruses.

An estimated 9 to 12% of the population is affected by eczema, occurring most commonly during infancy and childhood. The incidence decreases in adolescence and adulthood. There is no exact cause known. However, statistics support a convincing genetic component in that children whose mother and father are affected have an 80% chance of developing eczema. This inflammatory response is believed to be initiated by histamine release, with lesions usually occurring on the flexor surfaces of the arms and legs, the hands, the feet, and the upper trunk of the body.

Although there is no specific treatment to cure eczema, local and systemic medications may be prescribed to prevent itching. It is important to stress daily skin care and avoidance of known irritants. Chronic eczema is often frustrating to control and may recur throughout most of the individual's life.

exanthematous viral diseases
*(eks-an-THEM-ah-tus)*

A skin eruption or rash accompanied by inflammation, having specific diagnostic features of an infectious viral disease.

There are more than 50 known viral agents that cause exanthems (eruptions of the skin accompanied by inflammation). The most common viral agents cause childhood communicable infections such as:

1. rubella (German measles),
2. roseola infantum,
3. rubeola (measles), and
4. erythema infectiosum (fifth disease).

gangrene

Tissue death due to the loss of adequate blood supply, invasion of bacteria, and subsequent decay of enzymes (especially proteins) —producing an offensive, foul odor.

Gangrene can occur in two forms:

1. **dry gangrene**, seen in an extremity that is dry, cold, and shrunken, and which has a blackening appearance (late complication of diabetes mellitus)

2. **moist gangrene** follows the cessation of blood flow to tissue after a crushing injury, embolism, tourniquet, or tight bandage. If untreated, it will progress quickly to death.

The necrotic tissue must be removed through **debridement** or **amputation** in order to restore healing. Treatment should be aimed at the prevention of gangrene.
herpes zoster (shingles)
(HER-peez ZOS-ter)

An acute viral infection characterized by painful vesicular eruptions on the skin following along the nerve pathways of underlying spinal or cranial nerves.

Ten to 20% of the population are affected by herpes zoster, with the highest incidence in adults over 50. This acute eruption is caused by reactivation of latent varicella virus (the same virus that causes chickenpox).

Symptoms of herpes zoster include:

1. severe pain before and during eruption,
2. fever,
3. itching,
4. gastrointestinal disturbances,
5. headache,
6. general tiredness, and
7. increased sensitivity of the skin around the area.

The lesions usually take three to five days to erupt, and then progress to crusting and drying (with recovery in approximately three weeks). Treatment involves the use of antiviral medications, analgesics, and sometimes corticosteroids (which aid in decreasing the severity of symptoms).

hyperkeratosis
(high-per-kair-ah-TOH-sis)

hyper- = excessive
kerat/o = hard, horny; also refers to cornea of the eye
-osis = condition

impetigo
(im-peh-TYE-goh or im-peh-TEE-goh)

Contagious superficial skin infection characterized by serous vesicles and pustules filled with millions of staphylococcus or streptococcus bacteria, usually forming on the face.

Impetigo progresses to pruritic erosions and crusts with a honey-colored appearance. The discharge from the lesions allows the infection to be highly contagious. Treatment includes:

1. cleaning lesions with antibacterial soap and water using individual washcloths,
2. administration of oral and topical antibiotics,
3. Burrow’s solution compresses, and
4. good handwashing.

It is important to instruct the individual to complete the entire regime of systemic antibiotics in order to prevent the possibility of complications due to secondary infections, such as acute glomerulonephritis and/or rheumatic fever.
Kaposi’s sarcoma
(CAP-oh-seez sar-KOH-ma)
sarc/o = flesh
-oma = tumor

Vascular malignant lesions that begin as soft purple-brown nodules or plaques on the face and oral cavity but can occur anywhere on the body, and gradually spread throughout the skin.

This systemic disease also involves the gastrointestinal tract and lungs. Kaposi’s sarcoma occurs most often in men, and there is an increased incidence in men infected with AIDS. It is also associated with diabetes and malignant lymphoma. Radiotherapy and chemotherapy are usually recommended as methods of treatment. Kaposi’s sarcoma may also be treated with cryosurgery or laser surgery.

keloid
(KEE-loyd)
kel/o = fibrous growth
-oid = pertaining to

An enlarged, irregularly shaped, and elevated scar that forms due to the presence of large amounts of collagen during the formation of the scar.

keratosis
(kair-ah-TOH-sis)
kera/t/o = hard, horny; also refers to cornea of the eye
-osis = condition

Skin condition in which there is a thickening and overgrowth of the cornified epithelium.

seborrheic keratosis
(seb-oh-REE-ik kair-ah-TOH-sis)

Appears as brown or waxy yellow wartlike lesion(s), 5 to 20 mm in diameter, loosely attached to the skin surface.

Seborrheic keratosis is also known as senile warts.

actinic keratosis
(ak-TIN-ic kair-ah-TOH-sis)

A premalignant, gray or red-to-brown, hardened lesion caused by excessive exposure to sunlight. Also called solar keratosis.

leukoplakia
(loo-koh-PLAY-kee-ah)
leuk/o = white

White, hard, thickened patches firmly attached to the mucous membrane in areas such as the mouth, vulva, or penis.

Oral leukoplakia varies in size and occurs gradually over a period of several weeks. It begins without symptoms, but eventually develops sensitivity to hot or highly seasoned foods.

Causes of oral leukoplakia vary from irritating tobacco smoke to friction caused by a rough tooth or dentures. A biopsy should be performed when oral leukoplakia persists for more than two to three weeks because approximately 3% develop into cancerous lesions.

malignant melanoma
(mah-LIG-nant mel-ah-NOH-mah)
melan/o = black, dark
-oma = tumor

Malignant skin tumor originating from melanocytes in preexisting nevi, freckles, or skin with pigment; darkly pigmented cancerous tumor.

These tumors have irregular surfaces and borders, have variable colors, and are generally located on the trunk in men and on the legs in women. The diameter of most malignant melanomas measures more than 6 mm. Around the primary lesion, small satellite lesions 1 to 2 cm in diameter are often noted.
Persons at risk for malignant melanomas include those with a family history of melanoma and those with fair complexions. There is also an increased risk to develop particular forms of malignant melanomas with excessive sun exposure. Generally, most melanomas are extremely invasive and spread first to the lymphatic system and then metastasize throughout the body to any organ (with fatal results). All nevi and skin should be inspected and self-examined regularly, remembering the ABCDs of malignant melanoma:

- **Asymmetry**—any pigmented lesion that has flat and elevated parts should be considered potentially malignant.
- **Borders**—any leakage across the borders of brown pigment or margins irregularly shaped are suspicious.
- **Color**—variations whether red, black, dark brown, or pale are suspicious.
- **Diameter**—any lesions with the preceding characteristics measuring more than 6 mm in diameter should be removed.

Treatment is surgical removal, and for distant metastases chemotherapy and radiation therapy. The depth of surgical dissection and the prognosis depends on the staging classification of the tumor. The five-year survival rate is approximately 60% for all forms of malignant melanomas.

**nevus (mole)**

*(NEV-us)*

An accumulation of melanocytes, creating a flat or raised rounded macule or papule with definite borders. Nevi should be monitored for changes in size, color, thickness, itching, or bleeding. When any of these changes are noted, immediate professional assessment should be sought because of the potential for developing malignant melanoma.

**onychocryptosis**

*(on-ih-koh-krip-TOH-sis)*

onych/o = nail
crypt/o = hidden
-osis = condition

Ingrown nail. The nail pierces the lateral fold of skin and grows into the dermis, causing swelling and pain.

Ingrown nails most commonly involve the large toe.

**onychomycosis**

*(on-ih-koh-my-KOH-sis)*

onych/o = nail
myc/o = fungus
-osis = condition

A fungal infection of the nails.

The nail becomes opaque, white, thickened, and friable (easily broken).

**pediculosis**

*(pee-dik-you-LOH-sis)*

A highly contagious parasitic infestation caused by blood-sucking lice.

Pediculosis may occur on any of the following parts of the body:

1. head (pediculosis capitis),
2. body (pediculosis corporis),
3. eyelashes and eyelids (pediculosis palpebrarum), and
4. pubic hair (pediculosis pubis).
With all types of pediculosis, a rash or wheals, intense pruritus, and the presence of louse eggs (nits) on the skin, hair shafts, or clothing are characteristic. When nits are present on the hair shaft, they appear as tiny silvery-gray beads that cling to the hair strand. When thumping the hair strand, the nit will not fall from the strand (as would dandruff). Pediculosis can be spread directly through close physical contact or indirectly through articles of clothing, brushes, bed linens, and towels.

Treatment includes use of a special shampoo followed by removal of the nits with a fine-tooth comb. The treatment must be repeated weekly until nits are no longer present. Lice on the eyelid and lashes require a special ophthalmic ointment. Due to the intense itching, secondary infections can be a concern requiring antibiotic treatment.

**pemphigus**

*(PEM-fih-gus)*

A rare incurable disorder manifested by blisters in the mouth and on the skin which spread to involve large areas of the body, including the chest, face, umbilicus, back, and groin.

These painful blisters ooze, form crusts, and put off a musty odor. The serious risk is the secondary infection with the large areas of skin involved. Treatment involves administration of drugs, prevention of excessive fluid loss, and prevention of infection.

**pilonidal cyst**

*(pye-loh-NYE-dal)*

A closed sac located in the sacrococcygeal area of the back, sometimes noted at birth as a dimple.

The cyst causes no symptoms unless it becomes acutely infected. When the **pilonidal cyst** is infected, an incision and drainage are indicated—followed by removal of the cyst or sac.

**psoriasis**

*(soh-RYE-ah-sis)*

A common, noninfectious, chronic disorder of the skin manifested by silvery-white scales covering round, raised, reddened plaques producing itching (pruritus).

The process of hyperkeratosis produces various-sized lesions occurring mainly on the scalp, ears, extensor surfaces of the extremities, bony prominences, and perianal and genital areas. See Figure 5-23 for a visual reference. There is no cure for psoriasis. Treatment for **psoriasis** includes topical application of various medications, phototherapy, and ultraviolet light therapy in an attempt to slow the hyperkeratosis.
**Rosacea**

(roh-ZAY-she-ah)

Rosacea is a chronic inflammatory skin disease that mainly affects the skin of the middle third of the face. The individual has persistent redness over the areas of the face, nose, and cheeks.

The small blood vessels of the cheeks enlarge and become visible through the skin, appearing as tiny red lines (known as telangiectasia). Pimples may also be present with rosacea, resembling teenage acne.

Rosacea occurs most often in adults between the ages of 30 to 50, especially those with fair skin. Rosacea may be mistaken for rosy cheeks, sunburn, or acne. However, it differs from acne in that there are no blackheads or whiteheads present.

Treatment is directed at controlling the symptoms. Individuals may be advised to avoid situations (i.e., stress, sunlight, spicy foods, hot beverages, alcohol, and exposure to extreme heat or cold) that could trigger blushing or flushing of the skin, since this is thought to aggravate rosacea. Treatment may also involve both oral and topical antibiotics. Individuals with rosacea are also advised to use mild facial cleansers, and moisturizers and sunscreens that do not contain alcohol. There is no cure for rosacea, but it can be controlled with proper regular treatment.

**Scabies**

(SKAY-beez)

A highly contagious parasitic infestation caused by the “human itch mite,” resulting in a rash, pruritus, and a slightly raised thread-like skin lines.

Scabies is seen most frequently on the genital area, armpits, waistline, hands, and breasts. Scabies can be spread directly through close physical contact or indirectly through articles of clothing, brushes, bed linens, and towels.

Treatment includes the use of special sulfur preparations, shampoos, and topical ointments. Due to the intense itching, secondary infections can be a concern requiring antibiotic treatment.

**Scleroderma**

(sklair-ah-DER-mah)

scler/o = hard; also refers to sclera of the eye
derm/o = skin
-a = noun ending

A gradual thickening of the dermis and swelling of the hands and feet to a state in which the skin is anchored to the underlying tissue.

The severity of this disease varies from a mild localized form only affecting the skin (seen in persons in the 30- to 50-year age group) to a generalized form known as progressive systemic scleroderma (PSS) with progressive systemic involvement (persons die from pulmonary, cardiac, GI, renal, or pulmonary involvement).

No cure is available for scleroderma. Therefore, the treatment is aimed at decreasing symptoms and treating the involved system with medications appropriate to the dysfunction. Physiotherapy may be recommended for some patients to restore and maintain musculoskeletal function as much as possible.
**Systemic Lupus Erythematosus**

A chronic, multisystem, inflammatory disease characterized by lesions of the nervous system and skin, renal problems, and vasculitis. A red rash known as the “butterfly rash” is often seen on the nose and face.

Skin lesions may also spread to the mucous membranes or other tissues. Pain and swelling of the joints (along with weakness, weight loss, and fatigue) are symptoms of the disease process. Treatment consists of the use of the systemic steroids, topical steroids on skin lesions, salicylates or non-steroidal anti-inflammatory drugs (NSAIDS) to relieve joint pain and swelling, and protection from sunlight.

**Tinea**

A more commonly known as ringworm, a chronic fungal infection of the skin that is characterized by scaling, itching, and sometimes painful lesions. The lesions are named according to the body part affected. See Figures 5-24A through C.

**Ringworm of the scalp** is more common in children.

The infection may lead to hair loss. Symptoms of tinea capitis include small, round, elevated patches, severe itching and scaling of the scalp. Treatment with topical antifungal agents is sufficient for clearing the condition. See Figure 5-24A.

**Ringworm of the body** is characterized by round patches with elevated red borders of pustules, papules, or vesicles that affect the nonhairy skin of the body. The lesion actually looks like a circle and is raised. See Figure 5-24B.

Ringworm of the body is most common in hot, humid climates and in rural areas. Tinea corporis can be spread through skin contact with an infected person or skin contact with an infected domestic animal, especially cats.

**Ringworm of the groin** is also known as jock itch.

This type of ringworm occurs more commonly in adult males. It is characterized by red, raised, vesicular patches in the groin area that are accompanied by pruritus.

Tinea cruris is more likely to occur during the hot, humid summer months and is aggravated by heat, physical activity, tight-fitting clothes, and perspiration. Topical antifungal agents are recommended for treatment.
Ringworm of the foot is also known as athlete’s foot.

It affects the space between the toes and the soles of the feet, with lesions varying from dry and peeling to draining painful fissures with a foul odor and pruritus. Adults are most susceptible to *tinea pedis*. See Figure 5-24C.

Drying the feet well after bathing and applying powder between the toes will keep the moisture from building up and help to prevent the recurrence of the fungal infection. Treatment with topical antifungal agents is helpful in clearing the condition, although recurrence is common.

Treatment for all types of tinea that are severe or resistant to the topical antifungal agents includes the administration of oral antifungal medications that act systemically. If this becomes necessary, the drug of choice is griseofulvin.

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**tinea pedis**

(TIN-ee-ah PED-is)

*ped/o* = foot

*-is* = noun ending

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**wart (verruca)**

(ver-ROO-kah)

A benign, circumscribed, elevated skin lesion that results from hypertrophy of the epidermis; caused by the human papilloma virus.

The virus can be spread by touch or contact with the skin shed from a wart. They may occur alone or in clusters.

The *common wart* (*verruca vulgaris*) occurs on the face, elbow, fingers, or hands. These are seen largely in children and young adults.

**Plantar warts** occur either singly or in clusters on the sole of the foot. These warts can be painful, causing individuals to feel as if they have a stone in their shoe. Plantar warts occur primarily at points of pressure, such as over the metatarsal heads and the heel of the foot.

**Condyloma acuminata** (or *venereal warts*) are transmitted via sexual contact and are found on the female genitalia, the penis, or the rectum. These warts develop near the mucous membrane/skin junctures on the prepuce of the penis or on the female vulva. The growths appear as small, soft, moist, pinkish or purplish projections that appear singly or in clusters.

**Seborrheic warts** or **seborrheic keratoses** are seen in the elderly population. These are benign, circumscribed, slightly raised lesions that occur on the face, neck, chest, or upper back and are often accompanied by itching. The lesions range from yellowish-tan to dark brown and are covered with either a greasy scale or a rough, dry scale depending on the location. Treatment for seborrheic warts includes curettage, cryotherapy, or electrodesication in conjunction with a local anesthetic. These methods of treatment are discussed later in the chapter.