

Diseases of the Integumentary System

GENERAL TERMINOLOGY

Skin lesion—any abnormality of the skin.

Macule—a flat, reddened patch of skin.

Papule—a raised, reddened bump on the skin.

Vesicle—a blister-like growth containing clear, serous fluid.

Blister—a bubble of fluid below the skin.

Pustule—a small blister filled with pus.

Dermatosis—any skin disorder, particularly one that does not involve inflammation.

Dermatitis—acute or chronic inflammation of the skin from any cause (e.g., sunburn, allergy, infection).

Pruritus—itching.

TUMORS

Neoplasms [*neo* = new; *plasm* = growth]—tumors; abnormal tissue that grows more rapidly than normal.

Hyperplasia [*hyper* = above, more than; *plasis* = formation]—excessive formation of normal cells resulting in an abnormal number of cells.

Metastasis—the spread of a tumor from its site of origin to distant sites.

Benign tumors—nonspreading, localized tumors that usually grow more slowly.

Osteoma—a benign bone tumor.

Lipoma—a benign fatty tumor.

Nevus—a birthmark or mole.

Papilloma—a benign growth on the skin or mucous membrane.

Myoma—a benign muscle tumor.

Angioma—a benign blood vessel tumor.

Adenoma—a benign tumor of the glands.

Chondroma—a benign cartilaginous tumor.

Lymphoma—lymph tissue tumor (can be benign or malignant).

Malignant tumors (cancer)—tumors that are able to metastasize.

Mutation—a change or alteration in the genetic code.

Sarcoma—a malignant tumor arising in tissue other than epithelial tissue.

Carcinoma—a malignant tumor of epithelial tissue (i.e., skin, mucous membranes).

Melanoma—a malignant tumor involving the melanocytes of the skin; represents about 2% of skin cancers; greater than 50% mortality rate (most threatening form of skin cancer); may start out as a nevus that enlarges, changes color, ulcerates, and bleeds easily; metastasizes very quickly.

Basal cell carcinoma—a malignant tumor caused by the development of neoplastic cells in the basal layers of the skin (stratum basale); accounts for more than 60% of skin cancers; appears first as a

bump and then enlarges, crusts, and breaks open; hardly ever metastasizes to other areas of the body.

Squamous cell carcinoma—a malignant tumor caused by the development of neoplastic cells in the superficial layers of the skin (above the stratum basale); accounts for more than 35% of skin cancers; appears as a firm, red, keratinized tumor on the surface of the skin; can metastasize to the underlying layers of the skin.

The main cause of skin cancer is exposure to direct sunlight. The ultraviolet (UV) light rays in sunlight penetrate the skin, breaking down the connective tissue and producing mutations in the genetic code in skin cells. The American Cancer Society recommends using a good sunscreen, protective clothing, and sunglasses to help block UV radiation and prevent skin cancer. Also, stay out of tanning booths! They deliver concentrated doses of up to 20 times the amount of UV light found in natural sunlight.

BACTERIAL DISORDERS

Cellulitis—noncontagious inflammation of the skin and deeper tissues.

Cause: widespread bacterial infection (*Staphylococcus*).

Contraindications/indications: may be associated with a contagious condition; consult with client's doctor.

Impetigo—a contagious bacterial infection of the skin; characterized by localized skin redness and vesicles around the nose, mouth, axilla, groin, hands, and feet that burst and form crusts.

Cause: bacterial infection (*Streptococcus* or *Staphylococcus*).

Contraindications/indications: avoid affected area; consult with client's doctor.

Folliculitis—contagious inflammation of a hair follicle; often contracted from hot tubs.

Cause: bacterial infection (*Staphylococcus*, *Pseudomonas*).

Contraindications/indications: do not massage infected region; refer to doctor.

Acne—noncontagious inflammation of the sebaceous glands in the skin.

Cause: hypersecretion of sebum (oil) owing to hormonal changes in the body.

Contraindications/indications: not contagious; avoid massage if affected areas are painful, itching, or weeping.

VIRAL DISORDERS

Fever blisters (herpes simplex)—open sores and vesicles around the lips and gums; contagious condition.

Cause: herpes simplex virus type 1 infection.

Contraindications/indications: do not massage affected area.

Chickenpox—a skin condition characterized by a rash that develops into pustules and vesicles lasting approximately 5 to 7 days.

Cause: acute form of varicella-zoster virus (VZV) infection transmitted through airborne route; VZV grows in the respiratory tract and is spread through the body by the lymphatic and circulatory systems.

Contraindications/indications: do not massage; wait for rash to subside.

Shingles (herpes zoster)—an eruption of a rash and pustules along a dermatome (sensory area of skin innervated by one particular spinal nerve) of the nerve root; burning pain typically precedes the classic dermatomal rash by several days; causes intense pain (postherpetic neuralgia) and can persist for several months after the rash resolves and can be highly debilitating.

Cause: delayed or recurrent form of VZV infection; virus remains dormant in nerve tissue after a typical VZV infection that causes chickenpox, but may become reactivated years later.

Contraindications/indications: do not massage affected area; refer to doctor.

Warts (verrucae)—contagious infection of the epidermis; many different varieties (e.g., plantar, linear).

Cause: viral infection.

Contraindications/indications: contagious; do not massage affected area.

Herpes simplex virus type 1 is generally associated with infections of the upper half of the body, and herpes simplex virus type 2 generally affects the urinary tract and genital region and is therefore known as genital herpes.

FUNGAL DISORDERS

Tinea pedis (athlete's foot)—itchy, shallow lesions on the foot and between the toes.

Cause: fungal infection of the feet.

Contraindications/indications: avoid affected area; refer to doctor.

Tinea cruris (jock itch)—shallow lesions in the groin area.

Cause: fungal infection of the groin.

Contraindications/indications: avoid affected area; refer to doctor.

The term *ringworm* (*tinea corporis*) is often used to refer to a general fungal infection of the skin.

PARASITIC DISORDERS

Scabies—itchy eruptions that usually affect the webs of the hands, wrists, elbows, gluteal cleft, or nipples; papules and vesicles are very common.

Cause: *Sarcoptes scabiei* (itch mite) infection.

Contraindications/indications: avoid affected area; refer to doctor.

Pediculosis (crabs)—itchiness of the scalp, pubic area, or other places on the skin.

Cause: blood-sucking lice transmitted through personal contact and sharing of combs, brushes, bedding, towels, and clothing.

Contraindications/indications: avoid direct contact with client; refer to doctor.

OTHER SKIN DISORDERS

Psoriasis—chronic skin disorder characterized by oval, silvery, plaquelike scales with patches of red, especially on the scalp, ears, genitalia, and skin over bony prominences such as the elbows, knees, hands, feet, and low back.

Cause: unknown; suspected genetic influence; “triggers” such as emotional stress, skin injury, and/or medications cause outbreak.

Contraindications/indications: avoid affected areas if painful, itching, or weeping; massage can reduce stress, which can aggravate the condition; refer to doctor.

Scleroderma (now called progressive systemic sclerosis) [*skleros* = hard; *derma* = skin]—an autoimmune disease characterized by deposition of collagen in the skin, lungs, heart, kidneys, and gastrointestinal tract; two to three times more frequent in females than males; most common signs include inflexible, cold-sensitive fingers and a masklike face (owing to decreased tissue elasticity); can also experience esophageal dysfunction (difficulty swallowing or acid reflux), calcium deposits under the skin, and development of red spots, particularly under the tongue and in the mouth.

Cause: autoimmune disorder; specific cause unknown.

Contraindications/indications: avoid affected region; refer to doctor.

Atopic eczema (atopic dermatitis)—noncontagious, general inflammation of the skin; characterized by blisterlike formations that burst and form crusts; commonly involves the scalp, arms, trunk, and legs; may develop dry, pigmented areas of skin that begin around the elbows and knees and spread to the neck, hands, or feet.

Cause: unknown; may be an allergic reaction.

Contraindications/indications: do not massage any areas that are painful, itchy, or weeping.

Lupus erythematosus—a chronic inflammatory disease that often shows periods of exacerbation and relapse; renal failure and central nervous system problems are the most common causes of death, but can affect most body systems; 85% of cases are female; African-Americans are three times more susceptible than whites; sometimes manifests itself as a butterfly rash across the nose and cheek, giving the appearance of a wolf (thus the term *lupus*, meaning “wolf”).

Cause: autoimmune disorder of unknown cause in which the body produces an immune response against the nuclear components of the cell; suspected factors include stress, sunlight, and infections.

Contraindications/indications: refer to doctor.

Urticaria (hives)—itchy skin eruptions.

Cause: usually an allergic response to an allergen or irritating agent; may be influenced by psychogenic factors (e.g., stress).

Contraindications/indications: do not massage any affected areas that are painful, itchy, or weeping.

Decubitus ulcers (bedsores)—dark patches or ulcerations of the skin that lead to necrosis of the skin.

Cause: prolonged pressure over bony prominences, usually from lying or sitting in one position for too long without moving.

Contraindications/indications: do not massage affected area; massage as a preventive measure is most effective in improving circulation and alleviating pressure.

Be careful of the types of lotions, oils, and creams you use. An ingredient in one of these products might be the irritant causing an outbreak of hives. Try to use hypoallergenic products, and ask all clients about any known allergies they may have.

BURNS

Contraindications/indications: consult with client's doctor; avoid the area if painful.

First-degree burn—affects the epidermis; redness of the skin is usually followed by shedding of the skin.

Second-degree burn—affects the epidermis and dermis; redness and blistering; can leave scars when healed.

Third-degree burn—affects all layers of the skin and frequently some of the underlying tissue (e.g., muscle); open wounds with black charring and white patches of necrotic tissue; leaves scars when healed.