



# **UNIT 3**

## **Integumentary System Pathological Conditions**

# ABRASION

- ❑ Scraping, or rubbing away of a surface, such as skin, by friction.
  - *Abrasion may be the result of trauma, such as a skinned knee, therapy, as in dermabrasion of the skin for removal of scar tissue, or normal function, such as wearing down of a tooth by mastication.*



Dermabrasion: Before and After

# ABSCESS

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- ❑ Localized collection of pus at the site of an infection (characteristically a staphylococcal infection).

# FURUNCLE

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- ❑ Abscess that originates in a hair follicle; also called a *boil*.

# CARBUNCLE

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- ❑ Cluster of furuncles in the subcutaneous tissue.
  - *An abscess can occur in any body part. Treatment includes oral antibiotics and I&D to drain the purulent material.*

# ACNE

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- ❑ Inflammatory disease of sebaceous follicles of the skin, marked by comedos (blackheads), papules, and pustules.
  - *Acne is especially common in puberty and adolescence. It usually affects the face, chest, back, and shoulders.*

# ALOPECIA

- ❑ Absence or loss of hair, especially of the head; also known as *baldness*.



# COMEDO

- ❑ Discolored, dried sebum plugging an excretory duct of the skin; also called *blackhead*.





# CYST

- ❑ Closed sac or pouch in or under the skin with a definite wall that contains fluid, semifluid, or solid material.
  - *The cyst may enlarge as sebum collects and may become infected.*



# ECZEMA

- ❑ Redness of the skin caused by swelling of the capillaries.
  - *Eczematous rash may result from various causes, including allergies, irritating chemicals, drugs, scratching or rubbing the skin, or sun exposure. It may be acute or chronic.*



# HEMORRHAGE

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- ❑ Loss of a large amount of blood in a short period, externally or internally.
  - *Hemorrhage may be arterial, venous, or capillary.*

# CONTUSION

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- Hemorrhage of any size under the skin in which the skin is not broken; also known as a *bruise*.

# ECCHYMOSIS

- ❑ Skin discoloration consisting of a large, irregularly formed hemorrhagic area with colors changing from blue-black to greenish brown or yellow; commonly called a *bruise*.



# PETECHIA

- Minute, pinpoint hemorrhagic spot of the skin.
  - *A petechia is a smaller version of an ecchymosis.*



# HEMATOMA

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- ❑ Elevated, localized collection of blood trapped under the skin that usually results from trauma.

# HIRSUTISM

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- ❑ Condition characterized by excessive growth of hair or presence of hair in unusual places, especially in women.



# IMPETIGO

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- ❑ Bacterial skin infection characterized by isolated pustules that become crusted and rupture.

# PSORIASIS

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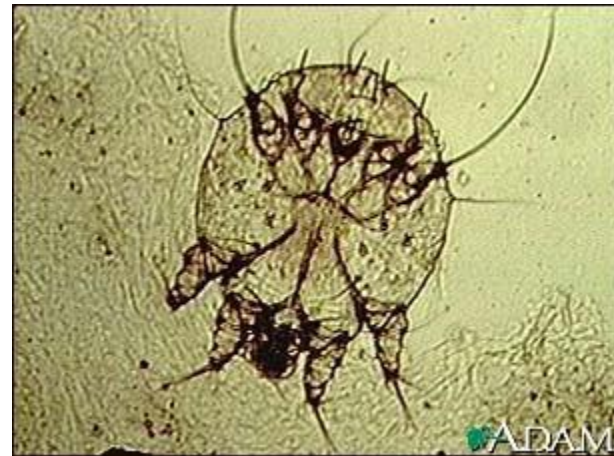
- ❑ Chronic skin disease characterized by itchy red patches covered with silvery scales.
  - *Psoriasis runs in families and may be brought on by anxiety. Topical corticosteroids, vitamin D, ultraviolet light, ultraviolet light exposure, and saltwater immersion are among the many methods that have been used effectively to treat the condition.*

# SCABIES

- Contagious skin disease transmitted by the itch mite.



Scabies



Itch Mite

# SKIN LESIONS

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- ❑ Areas of pathologically altered tissue caused by disease, injury, or a wound due to external factors or internal disease.
  - *Evaluation of skin lesions, injuries, or changes to tissue helps establish the diagnosis of skin disorders. Lesions are described as primary or secondary.*

# PRIMARY LESIONS

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- Initial reaction to pathologically altered tissue that may be flat or elevated.

# SECONDARY LESIONS

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- Result from the changes that take place in the primary lesion due to infection, scratching, trauma, or various stages of a disease.
  - *Lesions are also described by their appearance, color, location, and size as measured in centimeters. Review the primary and secondary lesions illustrated in Figure 3-9.*

# TINEA

- ❑ Fungal infection whose name commonly indicates the body part affected; also called *ringworm*.
  - Examples of *tinea* include *tinea barbae* (beard), *tinea corporis* (body), *tinea pedis* (athlete's foot), *tinea versicolor* (skin), and *tinea cruris* (jock itch).



# ULCER

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- ❑ Lesion of the skin or mucous membranes marked by inflammation, necrosis, and sloughing of damaged tissues.
  - *Ulcers may be the result of trauma, caustic chemicals, intense heat or cold, arterial or venous stasis, cancers, drugs, and infectious agents.*



# PRESSURE ULCER

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- ❑ Skin ulceration caused by prolonged pressure, usually in a person who is bedridden; also known as *decubitus ulcer* or *bedsore*.
  - *Pressure ulcers are most commonly found in skin overlying a bony projection, such as the hip, ankle, heel, shoulder, and elbow.*

# URTICARIA

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- Allergic reaction of the skin characterized by eruption of pale-red elevated patches that are intensely itchy; also called *wheals* or *hives*.

# VERRUCA

- ❑ Rounded epidermal growths caused by a virus; also called *wart*.
  - *Types of warts include plantar warts, juvenile warts, and venereal warts. Warts may be removed by cryosurgery, electrocautery, or acids; however, they may regrow if virus remains in the skin.*



# VITILIGO

- ❑ Localized loss of pigment characterized by milk-white patches; also called *leukoderma*.



# BIOPSY

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- ❑ Removal of a small piece of living tissue from an organ or other part of the body for microscopic examination to confirm or establish a diagnosis, estimate prognosis, or follow the course of a disease.
  - *Types of biopsy include aspiration biopsy, needle biopsy, punch biopsy, shave biopsy, and frozen section.*

# SKIN TEST

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- ❑ Method for determining induced sensitivity (allergy) by applying or inoculating a suspected allergen or sensitizer into the skin and determining sensitivity (allergy) to the specific antigen by an inflammatory skin reaction to it.
  - *The most commonly used skin tests are the intradermal, patch, and scratch tests.*

# CRYOSURGERY

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- ❑ Use of subfreezing temperature, commonly with liquid nitrogen, to destroy abnormal tissue cells, such as unwanted, cancerous, or infected tissue.

# DEBRIDEMENT

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- ❑ Treatment that involves removal of foreign material and dead or damaged tissue, especially in a wound, and is used to promote healing and prevent infection.



# ELECTRODESSICATION

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- ❑ Process in which high-frequency electrical sparks are used to dehydrate and destroy diseased tissue.

# INCISION & DRAINAGE (I&D)

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- ❑ Incision of a lesion, such as an abscess, followed by the drainage of its contents.

# SKIN GRAFT

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- Surgical procedure to transplant healthy tissue by applying it to an injured site.
  - *Human, animal, or artificial skin is used to provide a temporary covering or permanent layer of skin over a wound or burn.*

# ALLOGRAFT

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- ❑ Transplantation of healthy tissue from person to another person; also called *homograft*.

# AUTOGRAFT

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- ❑ Transplantation of healthy tissue from one site to another site in the same individual.

# SYNTHETIC

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- ❑ Transplantation of artificial skin produced from collagen fibers arranged in a lattice pattern.
  - *With a synthetic skin graft, the recipient's body does not reject the synthetic skin (produced artificially) and healing skin grows into it as the graft gradually disintegrates.*

# XENOGRAFT

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- ❑ Transplantation (dermis only) from a foreign donor (usually a pig) and transferred to a human; also called a *heterograft*.
  - *A xenograft is used as a temporary graft to protect the patient against infection and fluid loss.*

# SKIN RESURFACING

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- ❑ Procedure that repairs damaged skin, acne, scars, fine or deep wrinkles, or tattoos or improves skin tone irregularities through the use of topical chemicals, abrasion, or laser.
  - *In cosmetic surgery, skin resurfacing may involve dermabrasion, chemical peels, cutaneous lasers, and other techniques.*



# CHEMICAL PEEL

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- Use of chemicals to remove outer layers of skin to treat acne scarring and general keratoses as well as cosmetic purposes to remove fine wrinkles on the face; also called *chemabrasion*.

# CUTANEOUS LASER

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- ❑ Any of several laser treatments employed for cosmetic and plastic surgery.
  - Cutaneous laser includes treatment of pigmented lesions, wrinkles, vascular malformations, and other cosmetic skin surface irregularities.

# DERMABRASION

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- ❑ Removal of acne scars, nevi, tattoos, or fine wrinkles on the skin through the use of sandpaper, wire brushes, or other abrasive material on the epidermal layer.