

**Table 25-1** Nomenclature of Skin Lesions

Macroscopic Lesions	Definition
Excoriation	Traumatic lesion breaking the epidermis and causing a raw linear area (i.e., deep scratch); often self-induced
Lichenification	Thickened, rough skin (similar to a lichen on a rock); usually the result of repeated rubbing
Macule, Patch	Circumscribed, flat lesion distinguished from surrounding skin by color. Macules are 5 mm in diameter or less, patches are greater than 5 mm.
Onycholysis	Separation of nail plate from nail bed
Papule, Nodule	Elevated dome-shaped or flat-topped lesion. Papules are 5 mm or less across, while nodules are greater than 5 mm in size.
Plaque	Elevated flat-topped lesion, usually greater than 5 mm across (may be caused by coalescent papules)
Pustule	Discrete, pus-filled, raised lesion
Scale	Dry, horny, platelike excrescence; usually the result of imperfect cornification
Vesicle, Bulla, Blister	Fluid-filled raised lesion 5 mm or less across (vesicle) or greater than 5 mm across (bulla). Blister is the common term for either.
Wheal	Itchy, transient, elevated lesion with variable blanching and erythema formed as the result of dermal edema
Microscopic Lesions	Definition
Acanthosis	Diffuse epidermal hyperplasia
Dyskeratosis	Abnormal, premature keratinization within cells below the stratum granulosum
Erosion	Discontinuity of the skin showing incomplete loss of the epidermis
Exocytosis	Infiltration of the epidermis by inflammatory cells
Hydropic swelling (ballooning)	Intracellular edema of keratinocytes, often seen in viral infections
Hypergranulosis	Hyperplasia of the stratum granulosum, often due to intense rubbing
Hyperkeratosis	Thickening of the stratum corneum, often associated with a qualitative abnormality of the keratin
Lentiginous	A linear pattern of melanocyte proliferation within the epidermal basal cell layer
Papillomatosis	Surface elevation caused by hyperplasia and enlargement of contiguous dermal papillae
Parakeratosis	Keratinization with retained nuclei in the stratum corneum. On mucous membranes, parakeratosis is normal.
Spongiosis	Intercellular edema of the epidermis
Ulceration	Discontinuity of the skin showing complete loss of the epidermis revealing dermis or subcutis
Vacuolization	Formation of vacuoles within or adjacent to cells; often refers to basal cell-basement membrane zone area

niches harboring epithelial stem cells capable of regenerating superficial epithelial skin structures, which may be disrupted by trauma, burns, and other types of injuries.

Imbalances in factors affecting the delicate homeostasis that exists among skin cells may result in conditions as diverse as wrinkles and hair loss, blisters and rashes, and life-threatening cancers and disorders of immune regulation. For example, long-term exposure to sunlight fosters premature cutaneous aging, blunts immunologic responses to environmental antigens, and favors the development of a variety of premalignant and malignant cutaneous neoplasms. Ingested agents, such as therapeutic drugs, can cause an enormous number of rashes or exanthems. Systemic disorders, such as diabetes mellitus, amyloidosis, and lupus erythematosus, may also have important manifestations in the skin.

Skin conditions are very common, affecting about one third of the United States population each year. Since skin is uniquely accessible to visual examination, for the experienced observer it can yield numerous insights into the functional state of the body (if not the very soul of a patient). Close attention to the appearance and distribution of skin lesions is critical, as these characteristics are essential in formulating diagnoses and in understanding pathogenesis. To underscore this point, special emphasis is placed on the gross appearance of skin lesions under each specific entity.

Thousands of diseases affect the skin. Only those that are common or that illustrate important pathologic mechanisms are described here. Dermatologists and dermatopathologists have developed a set of terms to describe the gross and microscopic appearance of skin lesions that every student must be familiar with in order to be fluent in dermatopathology; the most important of these terms and definitions are given in [Table 25-1](#).

## Disorders of Pigmentation and Melanocytes

Focal or widespread loss of normal protective pigmentation can make individuals extraordinarily vulnerable to the harmful effects of sunlight (as in albinism). Changes in preexisting skin pigmentation may signify important primary skin disorders (e.g., malignant transformation of a mole) or point to the existence of an underlying systemic disorder (e.g., Addison disease, Chapter 24).

### Freckle (Ephelis)

**Freckles are the most common pigmented lesions of childhood in lightly pigmented individuals.** It is unclear whether freckles result from a focal abnormality in pigment production in a discrete field of melanocytes, enhanced melanin transfer to adjacent basal keratinocytes, or some