

Impetigo

Common nonbullous impetigo typically begins with a small red macule that turns into a vesicle or pustule. When the vesicle breaks, a thick yellow crust forms from the exudate. (See Recognizing impetigo, page 736.) Autoinoculation may cause satellite lesions. Although it can occur anywhere, impetigo usually occurs around the mouth and nose and on the knees and elbows. Other features include pruritus, burning, and regional lymphadenopathy. A rare but serious complication of streptococcal impetigo is glomerulonephritis, which is more likely to occur when many members of the same family have impetigo.

Folliculitis, furunculosis, and carbunculosis

Pustules of folliculitis usually appear in a hair follicle on the scalp, arms, and legs in children; on the face of bearded men (sycosis barbae); and on the eyelids (styes). Deep folliculitis may be painful. Folliculitis may progress to the hard, painful nodules of furunculosis, which commonly develop on the neck, face, axillae, and buttocks. For several days these nodules enlarge, and then rupture, discharging pus and necrotic material. After the nodules rupture, pain subsides, but erythema and edema may persist for days or weeks. Carbunculosis is marked by extremely painful, deep abscesses that drain through multiple openings onto the skin surface, usually around several hair follicles. Fever and malaise may accompany these lesions.

Staphylococcal scalded skin syndrome

SSSS can usually be traced to a prodromal upper respiratory tract infection, possibly with concomitant purulent conjunctivitis. Cutaneous changes progress through three stages: Erythema: Erythema, which may begin diffusely or as a scarlatiniform rash, usually becomes visible around the mouth and other orifices and may spread in widening circles over the entire body surface. The skin becomes tender; Nikolsky's sign (sloughing of the skin when friction is applied) may appear. Exfoliation (24 to 48 hours later): In the more common, localized form of this disease, superficial erosions with a red, moist base and minimal crusting occur, generally around body orifices, and may spread to exposed areas of the skin. (See Identifying staphylococcal scalded skin syndrome, page 740.) In the more severe forms of this disease, large, flaccid bullae erupt and may spread to cover extensive areas of the body. These bullae eventually rupture, revealing sections of denuded skin; mucous membranes are spared. Desquamation: In this final stage, affected areas dry up, and powdery scales form. Normal skin replaces these scales in 5 to 7 days.

Tinea versicolor

Tinea versicolor typically produces raised or macular, round or oval, slightly scaly lesions on the upper trunk, which may extend to the lower abdomen, neck, arms, groin, thigh, genitalia and, rarely, the face. These lesions are usually tawny but may range from hypopigmented (white) patches in dark-skinned patients to hyperpigmented (brown) patches in fair-skinned patients. Some areas don't tan when exposed to sunlight, causing the cosmetic defect for which most people seek medical help. Inflammation, burning, and itching are possible but usually absent.

Dermatophytosis

Lesions vary in appearance depending on the site of invasion (inside or outside the hair shaft), duration of infection, level of host resistance, and amount of inflammatory response. Tinea capitis ranges in appearance from broken-off hairs with little scaling to severe painful, inflammatory, pus-filled masses (kerions) covering the entire scalp. Partial hair loss occurs in all cases. The cardinal clue is broken-off hairs. Tinea corporis produces flat lesions on the skin at any site except the scalp, bearded skin, hands,

or feet. These lesions may be dry and scaly or moist and crusty; as they enlarge, their centers heal, causing the classic ring-shaped appearance. In tinea unguium (onychomycosis), infection typically starts at the tip of one or more toenails (fingernail infection is less common) and produces gradual thickening, discoloration, and crumbling of the nail, with accumulation of subungual debris. Eventually, the nail may be destroyed completely. Tinea pedis, or athlete's foot, causes scaling and blisters between the toes. Severe infection may result in inflammation, with severe itching and pain on walking. A dry, squamous inflammation may affect the entire sole. (See Athlete's foot.) Tinea manuum produces scaling patches and hyperkeratosis on the palmar surface. It's usually unilateral and associated with tinea pedis. Tinea cruris (jock itch) produces red, raised, sharply defined, itchy or burning lesions in the groin that may extend to the buttocks, inner thighs, and the external genitalia. Warm weather, obesity, and tight clothing encourage fungus growth. Tinea barbae is an uncommon infection that affects the bearded facial area of men.

Scabies

Typically, scabies causes itching, which intensifies at night. Characteristic lesions are usually excoriated and may appear as erythematous nodules. These threadlike lesions are approximately 1 cm long and generally occur between fingers, on flexor surfaces of the wrists, on elbows, in axillary folds, at the waistline, on nipples and buttocks in females, and on genitalia in males.

Cutaneous larva migrans

A transient rash, tingling, or, possibly, a small vesicle appears at the point of penetration, usually on an exposed area that has come in contact with the ground, such as the feet, legs, or buttocks. The incubation period is typically 1 to 6 days. The parasite may be active almost as soon as it enters the skin. Local pruritus begins within hours following penetration. As the parasite migrates, it etches a noticeable thin, raised, red line on the skin, which may become vesicular and encrusted. Pruritus quickly develops, often with crusting and secondary infection following excoriation. Onset is usually characterized by slight itching that develops into intermittent stinging pain as the thin, red lines develop. The larva's apparently random path can cover from 1 mm to 1 cm a day. Penetration of more than one larva may involve a much larger area of the skin, marking it with many tracks.

Pediculosis

Clinical features of pediculosis capitis include itching; excoriation (with severe itching); matted, foul-smelling, lusterless hair (in severe cases); occipital and cervical lymphadenopathy (posterior cervical lymphadenopathy without obvious disease is characteristic); and a rash on the trunk, probably due to sensitization. Adult lice migrate from the scalp and deposit oval, gray-white nits on the proximal one-third of hair shafts. Pediculosis corporis initially produces small, red papules (usually on the shoulders, trunk, or buttocks). Later, wheals (probably a sensitivity reaction) may develop. Untreated pediculosis corporis may lead to vertical excoriations and ultimately to dry, discolored, thickly encrusted, scaly skin, with bacterial infection and scarring. In severe cases, headache, fever, and malaise may accompany cutaneous symptoms. Pediculosis pubis causes skin irritation from scratching, which is usually more obvious than the bites. Small gray-blue spots (maculae caeruleae) may appear on the thighs or upper body. Small red spots are often seen in the underclothing.

Acne vulgaris

The acne plug may appear as a closed comedo, or whitehead (if it doesn't protrude from the follicle and is covered by the epidermis), or as an open comedo, or blackhead (if it does protrude and isn't covered by the epidermis). The black coloration is caused by the melanin or pigment of the follicle.

Rupture or leakage of an enlarged plug into the dermis produces inflammation and characteristic acne pustules, papules or, in severe forms, acne cysts or abscesses.

Hirsutism

Hirsutism typically produces enlarged hair follicles as well as enlargement and hyperpigmentation of the hairs themselves. Excessive facial hair growth is the complaint for which most patients seek medical help. Generally, hirsutism involves appearance of thick, pigmented hair in the beard area, upper back, shoulders, sternum, axillae, and pubic area. Frontotemporal scalp hair recession is often a coexisting condition. Patterns of hirsutism vary widely, depending on the patient's race and age. **ELDER TIP** Elderly women commonly show increased hair growth on the chin and upper lip. In secondary hirsutism, signs of masculinization may appear—deepening of the voice, increased muscle mass, increased size of genitalia, menstrual irregularity, and decreased breast size

Alopecia

In male-pattern alopecia, hair loss is gradual and usually affects the thinner, shorter, and less pigmented hairs of the frontal and parietal portions of the scalp. In women, hair loss is generally more diffuse; completely bald areas are uncommon but may occur. Alopecia areata affects small patches of the scalp but may also occur as alopecia totalis, which involves the entire scalp and eyebrows, or as alopecia universalis, which involves the entire body. Although mild erythema may occur initially, affected areas of scalp or skin appear normal. “Exclamation point” hairs (loose hairs with dark, rough, brushlike tips on narrow, less pigmented shafts) occur at the periphery of new patches. Regrowth hairs are thin and may be white or gray. They're usually replaced by normal hair. In trichotillomania, patchy, incomplete areas of hair loss with many broken hairs appear on the scalp but may occur on other areas such as the eyebrows.

Rosacea

Rosacea generally begins with periodic flushing across the central oval of the face, accompanied later by telangiectasia, papules, pustules, and nodules. Rhinophyma is commonly associated with severe untreated rosacea but may occur alone. Rhinophyma usually appears first on the lower half of the nose, and produces red, thickened skin and follicular enlargement. It's found almost exclusively in men older than age 40. Related ocular lesions are uncommon.

Vitiligo

Vitiligo produces depigmented or stark-white patches on the skin; on fair-skinned whites, these are almost imperceptible. Lesions are usually bilaterally symmetrical with sharp borders, which occasionally are hyperpigmented. Lesions that are small initially can enlarge and even progress to total depigmentation (universal vitiligo). These unique patches generally appear over bony prominences on the back of the hands; on the face, the axillae, genitalia, nipples, or umbilicus; around orifices (such as the eyes, mouth, and anus); within body folds; and at sites of trauma. The hair within these lesions may also turn white. Because hair follicles and certain parts of the eyes also contain pigment cells, vitiligo may be associated with premature gray hair and ocular pigmentary changes.

Melasma

Typically, melasma produces large, brown, irregular patches, symmetrically distributed on the forehead, cheeks, and sides of the nose. Less commonly, these patches may occur on the neck, upper lip, temples and, occasionally, on the dorsa of the forearms.

Photosensitivity reactions

Immediately after sun exposure, a phototoxic reaction causes a burning sensation followed by erythema (sunburn-type reaction), edema, desquamation, and hyperpigmentation. Berlock dermatitis produces an acute reaction with erythematous vesicles that later become hyperpigmented. Photoallergic reactions may take one of two forms. Developing 2 hours to 5 days after light exposure, polymorphous light eruption (PMLE) produces erythema, papules, vesicles, urticaria, and eczematous lesions on exposed areas; pruritus may persist for 1 to 2 weeks. Solar urticaria begins minutes after exposure and lasts about an hour; erythema and wheals follow itching and burning sensations.

Dermatitis

Atopic skin lesions generally begin as erythematous areas on excessively dry skin. **PEDIATRIC TIP** In children, lesions typically appear on the forehead, cheeks, and extensor surfaces of the arms and legs. In adults, lesions appear at flexion points (antecubital fossa, popliteal area, and neck). During flare-ups, pruritus and scratching cause edema, crusting, and scaling. Eventually, chronic atopic lesions lead to multiple areas of dry, scaly skin, with white dermatographia, blanching, and lichenification. Common secondary conditions associated with atopic dermatitis include viral, fungal, or bacterial infections, and ocular disorders. Because of intense pruritus, the upper eyelid is commonly hyperpigmented and swollen, and a double fold occurs under the lower lid (Morgan-Dennie folds, Morgan folds, Dennie pleats, or Mongolian lines). Atopic cataracts are unusual but may develop between ages 20 and 40. Kaposi's varicelliform eruption, a potentially fatal, generalized viral infection, may develop if the patient with atopic dermatitis comes in contact with a person who's infected with herpes simplex.

Toxic epidermal necrolysis

Early symptoms include inflammation of the mucous membranes, a burning sensation in the conjunctivae, malaise, fever, and generalized skin tenderness. After such prodromal symptoms, TEN erupts in three phases: diffuse, erythematous rash vesiculation and blistering large-scale epidermal necrolysis and desquamation. Large, flaccid bullae that rupture easily expose extensive areas of denuded skin, permitting both loss of tissue fluids and electrolytes and widespread systemic involvement.

Warts

Clinical manifestations depend on the type of wart and its location: common (verruca vulgaris): rough, elevated, rounded surface; appears most frequently on extremities, particularly hands and fingers; most prevalent in children and young adults condyloma acuminatum (moist wart or genital wart): usually small, pink to red, moist, and soft; may occur singly or in large cauliflower-like clusters on the penis, scrotum, vulva, cervix, vagina, and anus; can also occur on oral mucosa following oral-genital exposure; considered a sexually transmitted disease digitate: fingerlike, horny projection arising from a pea-shaped base; occurs on scalp or near hairline filiform: single, thin, threadlike projection; commonly occurs around the face and neck P flat (also known as juvenile or verruca plana): multiple groupings of up to several hundred slightly raised lesions with smooth, flat, or slightly rounded tops; common on the face, neck, chest, knees, dorsa of hands, wrists, and flexor surfaces of the forearms; usually occur in children but can affect adults; often linear distribution because of spread from scratching or shaving periungual: rough, irregularly shaped, elevated surface; occurs around edges of fingernails and toenails; when severe, may extend under nail and lift it off nail bed, causing pain plantar: slightly elevated or flat; occur singly or in large clusters (mosaic warts), primarily at pressure points of feet.

Psoriasis

The most common complaint of the patient with psoriasis is itching and, occasionally, pain from dry, cracked, encrusted lesions. Psoriatic lesions are erythematous and usually form well-defined plaques, sometimes covering large areas of the body. (See Psoriatic plaques.) Such lesions most commonly appear on the scalp, chest, elbows, knees, shins, back, and buttocks. The plaques consist of characteristic silver scales that either flake off easily or can thicken, covering the lesion. Removal of psoriatic scales frequently produces fine bleeding points (Auspitz sign). Occasionally, small guttate lesions appear, either alone or with plaques; these lesions are typically thin and erythematous, with few scales. Widespread shedding of scales is common in exfoliative or erythrodermic psoriasis and may also develop in chronic psoriasis. Rarely, psoriasis becomes pustular, taking one of two forms. In localized pustular (Barber's) psoriasis, pustules appear on the palms and soles and remain sterile until opened. In generalized pustular (von Zumbusch's) psoriasis, which often occurs with fever, leukocytosis, and malaise, groups of pustules coalesce to form lakes of pus on red skin. These pustules also remain sterile until opened and commonly involve the tongue and oral mucosa. In about 30% of patients, psoriasis spreads to the fingernails, producing small indentations and yellow or brown discoloration. In severe cases, the accumulation of thick, crumbly debris under the nail, causes it to separate from the nail bed. Some patients with psoriasis develop arthritic symptoms (psoriatic arthritis), usually in one or more joints of the fingers or toes, or sometimes in the sacroiliac joints, which may progress to spondylitis. Such patients may complain of morning stiffness. Joint symptoms show no consistent linkage to the course of the cutaneous manifestations of psoriasis; they demonstrate remissions and exacerbations similar to those of rheumatoid arthritis.

Lichen planus

Lichen planus may develop suddenly or insidiously. Initial lesions commonly appear on the arms or legs (generally on the wrist and medial sides of the thighs) and evolve into the generalized eruption of flat, glistening, purple papules marked with white lines or spots (Wickham's striae). These lesions may be linear from scratching or may coalesce into plaques. Lesions often affect the mucous membranes (especially the buccal mucosa), male genitalia and, less often, the nails. These lesions are painful, especially when ulcers develop. Mild to severe pruritus is common.

Corns and calluses

Both corns and calluses cause pain through pressure placed on underlying tissue by localized thickened skin. Corns contain a central keratinous core, are smaller and more clearly defined than calluses, and are usually more painful. The pain they cause may be dull and constant or sharp when pressure is applied. "Soft" corns are caused by the pressure of a bony prominence. They appear as whitish thickenings and are commonly found between the toes, most often in the fourth interdigital web. "Hard" corns are sharply delineated and conical, and appear most frequently over the dorsolateral aspect of the fifth toe. Calluses have indefinite borders and may be quite large. They usually produce dull pain on pressure, rather than constant pain. Although calluses commonly appear over plantar warts, they're distinguished from these warts by normal skin markings.

Pityriasis rosea

Pityriasis typically begins with an erythematous "herald" patch, which may appear anywhere on the body, although it occurs most commonly on the trunk. Although this slightly raised, oval lesion is about 2 to 6 cm in diameter, approximately 25% of patients don't notice it. A few days to several weeks later, yellow-tan or erythematous patches with scaly edges (about 0.5 to 1 cm in diameter) erupt on the trunk and extremities—and, rarely, on the face, hands, and feet in adolescents. Eruption continues for 7 to 10 days, and the patches persist for 2 to 6 weeks. Occasionally, these patches are macular,

vesicular, or urticarial. A characteristic of this disease is the arrangement of lesions, which produces a pattern similar to that of a pine tree. Accompanying pruritus, if present, is usually mild but may be severe.

Hyperhidrosis

Axillary hyperhidrosis frequently produces such extreme sweating that patients often ruin their clothes in 1 day and develop contact dermatitis from clothing dyes; similarly, hyperhidrosis of the soles can easily damage a pair of shoes. Profuse sweating from both the soles and palms hinders the patient's ability to work and interact socially. Patients with this condition often report increased emotional strain.

Pressure ulcers

Pressure ulcers commonly develop over bony prominences. Early features of superficial lesions are shiny, erythematous changes over the compressed area, caused by localized vasodilation when pressure is relieved. Superficial erythema progresses to small blisters or erosions and, ultimately, to necrosis and ulceration. An inflamed area on the skin's surface may be the first sign of underlying damage when pressure is exerted between deep tissue and bone. Bacteria in a compressed site cause inflammation and, eventually, infection, which leads to further necrosis. A foul-smelling, purulent discharge may seep from a lesion that penetrates the skin from beneath. Infected, necrotic tissue prevents healthy granulation of scar tissue; a black eschar may develop around and over the lesion.