

clotrimazole (Lotrimin) or terbinafine (Lamisil), may be used when the infection is present on the trunk, extremities, groin, or feet. If the infection is on the scalp, oral agents may be needed.

Candidal infections, also known as yeast infections, are caused by *Candida albicans*. This infection is associated with a pruritic red rash that may be painful. When it occurs in the mouth, this infection is commonly known as **thrush**; white plaques are usually present on the oral mucosa. Topical antifungals such as nystatin may be ordered.

■ INFLAMMATORY CONDITIONS AND MEDICATIONS

Inflammatory conditions of the skin include burns, atopic dermatitis, and psoriasis. The most common treatments for burns are anesthetics and antibiotics. Atopic dermatitis is treated with corticosteroids, immunomodulators, and antihistamines. Antipsoriatic agents and ultraviolet (UV) therapy are used to treat psoriasis.

Burns

Burns damage the skin by removing water from it, by causing it to blister, or by removing it entirely. Burns are classified as first-, second-, or third-degree according to the level of tissue damage (Fig. 11-2).

First-degree burns involve only the epidermis. The skin becomes red and painful to touch. The most common first-degree burn is sunburn. People with few melanocytes (darkening cells), and thus fair skin, are especially vulnerable to sunburn.

Nonpharmacological treatment for sunburn includes application of cool water for 20 minutes and of an herb called aloe vera. An old home remedy of applying butter or lard to sunburn causes more damage and should not be used. Pharmacological treatment of sunburn includes lidocaine-containing medications such as Solarcaine.

A burn is classified as second degree if a blister forms over the burn due to tissue damage that extends into the dermis, and the burn turns yellow. Cover second-degree burns with a sterile dressing, and administer an antibiotic such as silver sulfadiazine (Silvadene) to the burn as prescribed. The dressing can help absorb exudate if the blister should break. Silvadene helps to prevent infection that could result because the natural barrier against microorganisms has been severely damaged.

A third-degree burn is the most severe and affects all layers of skin, subcutaneous tissue, and possibly even muscle and bone. The patient with such a burn has lost much skin integrity and is at great risk for infection and fluid loss. Immediate treatment includes maintaining the patient's airway (if burns are around the face and neck) and administering oxygen and intravenous fluids as needed. Collagenase (Santyl), which débrides (or removes) tissue, is sometimes prescribed to eliminate the dead tissue. However, it also removes healthy tissue and must be applied only to the wound as ordered. An antimicrobial nonstick dressing may be ordered. Other drugs may be ordered to absorb exudates (DuoDERM) or to stimulate formation of healthy new granulation tissue (e.g., becaplermin [Regranex]). Systemic medications may include analgesics, anti-inflammatory agents, and antibiotics. The patient may or may not complain of pain because the nerves have been destroyed in this area. Usually, if pain is present, it is caused by a mixture of second- and third-degree burns.

Atopic Dermatitis

Atopic dermatitis is also called **eczema**. It is an allergic disorder usually associated with other atopic diseases, such as asthma or allergic rhinitis. It causes cutaneous inflammation that is evidenced by extremely dry patches of itchy skin. Initial methods of treatment include avoiding allergens, removing irritants, and maintaining hydration. Agents that may be needed include topical corticosteroids, such as hydrocortisone acetate 1% (Cortef), or topical immunomodulators, such as tacrolimus (Protopic) or pimecrolimus (Elidel). Corticosteroids decrease inflammation to reduce the damage it causes. Immunomodulators (immune response modifiers) used for atopic dermatitis are topical preparations that temporarily modify the skin's immune reaction. They do not affect the immune system of the entire body. Oral antihistamines such as diphenhydramine (Benadryl) may relieve itching but can cause mood changes, bone defects, or hematological problems if they are used for prolonged periods.