

Animals do not seem to be affected by the oil; however, dogs or other animals that have run or played in the plants may carry the sap on their fur, and animals that eat the plants can transfer the oil in their saliva. Shoes, tools, and toys can transfer the oil. Golf balls that have been in the rough are another source of contact.

Urushiol has an effect as soon as it touches the skin. It penetrates through the epidermis as a mixture of compound molecules called *catechols*. These catechols bond skin proteins and initiate an immune response. The full-blown reaction is evident after about 2 days, with redness, swelling, and itching at the site of contact. Several days later, streaked or spotty blisters oozing serum from damaged cells produce the characteristic impetiginous lesions (see [Fig. 13-1, B](#)). The lesions dry and heal spontaneously, and the itching stops by 10 to 14 days.

Therapeutic Management

Treatment of the lesions includes application of calamine lotion, soothing Burow solution compresses, and/or Aveeno baths to relieve discomfort. Topical corticosteroid gel is effective for prevention or relief of inflammation, especially when applied before blisters form. Oral corticosteroids may be needed for severe reactions and those affecting the face, throat, or genital region, and a sedative (such as diphenhydramine) may be ordered.

Nursing Care Management

The earlier the skin is cleansed, the greater the chance of removing the urushiol before it attaches to the skin. When the child has made contact with the plant, the area is immediately flushed (preferably within 15 minutes) with *cold* running water to neutralize the urushiol not yet bonded to the skin. Once the oil has been removed from the skin, the allergen has been neutralized. The rash that results from poison ivy cannot be spread to another child; only direct contact with the oil can cause the response. Use of harsh soap and scrubbing the exposed skin is contraindicated because it removes protective skin oils and dilutes the urushiol, allowing it to spread. All clothing that has come in contact with the plant is removed with care and thoroughly laundered in hot water and detergent. Every effort is made to prevent the child from scratching