Almost all patients undergoing external beam radiation therapy are expected to develop acute skin reactions. Frequent nursing assessment and intervention, however, are required for all patients.

The incidence of radiodermatitis has decreased with megavoltage equipment, as Dini et al. (1993) noted, but even so, radiodermatitis continues to influence the therapeutic program and impair patients’ quality of life. Ratliff (1990) suggested that preventive interventions and early management could minimize the severity of the skin reaction. According to Sitton (1992), to prepare for these untoward skin reactions and attempt to minimize irritation of the treated skin, patients typically are told to gently wash the irradiated skin with mild soap and pat it dry. They are cautioned to avoid trauma and sun exposure to the area. McGowan (1989) and Walker (1982) further recommended loose-fitting clothing made of nonirritating fabrics for daily wear.

Recommendations for skin care products vary from among radiation department and physicians as determined by Barkham (1930s and 1950s suggested that skin type might affect ionizing radiation dermatitis in the same way as ultraviolet radiation. Based on this premise, more marked reactions in fair, blue-eyed blondes or redheads were expected. However, recent authors such as Lokkevik, Skovlund, Reitan, Hannisdal, and Tanum (1996) and Halperin, Gaspar, George, Darr, and Pinnell (1993) reported no differences in radiodermatitis related to skin type. Increased skin reactions are expected in patients with preexisting skin disorders, in areas of skin folds, or in areas where moisture may contribute to the irritation (e.g., the perineum).

Skin products currently in use are those that clinicians routinely have used in the past based on anecdotal data. More controlled studies of radiotherapy and skin reactions are needed.