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Therapeutic Pearls

Treatment of moist desquamation for patients undergoing radiotherapy $\overset{\bigstar, &\bigstar}{\leftarrow}$



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ABSTRACT

Moist desquamation occurs in approximately 36% of patients who receive radiation therapy and is associated with severe opioid-resistant pain and discomfort. Moist desquamation is typically at its worst within 1 to 3 weeks after treatment conclusion and resolves over a period of 6 weeks. Herein, we present a therapeutic pearl for the treatment of moist desquamation based on methods from the burn literature, with the goal of helping patients who undergo radiation therapy for breast cancer and other indications.

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Therapeutic challenge

Moist desquamation occurs in approximately 36% of patients receiving radiotherapy, and it is associated with severe opioid-resistant pain and discomfort (Suresh et al., 2018). Moist desquamation is typically at its worst within 1 to 3 weeks after treatment conclusion and resolves over a period of 6 weeks. We previously reported ways to reduce its incidence in patients undergoing radiotherapy (Suresh et al., 2018).

This is an area of concern for women's health: Breast cancer is the most common female malignancy in the United States, and a large proportion of patients receive radiation therapy (Kole et al., 2017).

Solution

If moist desquamation develops, the overall approach is to promote healing and patient comfort. We recommend against the use of petroleum jelly, standard gauze, and occlusive petrolatum gauze because not only can these agents traumatize the wound bed, but

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the tape that is used to hold them in place can also be problematic. Instead, we recommend starting with Skintegrity wound cleanser (Medline, Northfield, IL) or 0.5% chlorhexidine solution to cleanse the wound (Fowble et al., 2016). After local cleansing, debridement of dead tissue should be performed.

Subsequently, the wound should be covered using one of two methods. These methods contain ionic silver, which has been reported in the burn literature to reduce local pain with dressing changes and provide broad-spectrum antimicrobial properties with no delay in wound healing (Barnea et al., 2010). The first method involves dressing the wound with a hydrophilic silver ion dressing, such as Aquacel Ag (ConvaTec, Princeton, NJ), and a nonstick silicone dressing, such as Mepitel Border Lite Dressing (Mölnlycke Health Care, Ontario, Canada) for secondary protection. The second option entails using an all-in-one dressing, such as Mepilex Ag antimicrobial foam dressing (Mölnlycke Health Care, Ontario, Canada).

Whichever dressing is used, the wound should be re-examined and cleansed every 24 to 48 hours, and the dressing should be changed at that time as well. The primary dressing should be wet thoroughly if it does not come off easily to avoid damaging new skin with dressing removal and avoid pain. This frequency of dressing change is important because moist desquamation is associated with significant weeping.

Healing usually occurs over 3 to 4 days, but wound management should continue until the wound fully heals, which can take up to 3 weeks.

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