

Periwound Challenges Improve Patient Satisfaction in Wound Care

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Summary: In wound care, we usually focus nearly all of our efforts on the wound area while paying little attention to the periwound area. Although the periwound area may seem unimportant, it matters to patients. A female patient was admitted with a wound at the perianal area. Wound dressing was performed using standard wet-to-dry gauzes. The patient had several small complaints including irritant contact dermatitis, skin maceration, pain during dressing change, and fecal contamination to the wound. In this case, we ended up switching to a different method of wound dressing. We went from using wet-to-dry gauzes for the primary dressing to a hydrofiber with silver dressing and from gauze and Micropore as a secondary dressing to an adhesive sodium carboxymethylcellulose foam dressing. This resolved all complaints. The patient's satisfaction score using visual analog scale increased from 2 to 10 (out of 10 points). This example shows how even small details can make a significant difference in wound care. Because periwound care is often neglected, therapeutic algorithm that integrates major challenges in periwound care into wound healing strategies is proposed. (*Plast Reconstr Surg Glob Open* 2019;7:e2134; doi: 10.1097/GOX.0000000000002134; Published online 22 March 2019.)

In wound care, we usually focus nearly all of our efforts on the wound area while paying little attention to the periwound area. Although the periwound area may seem unimportant, it matters to patients. Thus, if we were to put more effort into periwound care, it could make a positive difference in terms of patient experience and satisfaction.¹

Figures 1, 2 show a particularly difficult wound care case. The patient was admitted with a wound at the perianal area. Wound dressing was performed using standard wet-to-dry gauzes. In this case, the patient had several small

complaints regarding the wound that had not been attended to. First, she had irritant contact dermatitis caused by Transpore and Micropore (3M, USA). It was suggested that this could be due to irritation from the adhesive substance used in the tape, which was made of acrylate adhesive (Fig. 1).² Second, there was a mild skin maceration at the border of the wound caused by the wet-to-dry gauzes (see **figure, Supplemental Digital Content 1**, which displays problems from standard wound care, <http://links.lww.com/PRSGO/A993>). Third, she experienced significant pain during dressing change (pain score: 7/10). Finally, she had difficulty in defecation, as the feces would contaminate the external layer of gauze and later penetrate wound bed. Table 1 summarized problems found in this patient, which reflected major pitfalls in periwound care. These details may seem insignificant as they do not hinder the healing of the wound. However, if more care is taken in this respect, physicians may be able to provide a better experience for the patient and improve patient satisfaction.

In this case, we ended up switching to a different method of wound dressing. We went from using wet-to-dry gauzes for the primary dressing to a hydrofiber with silver dressing (Aquacel Ag⁺ Extra; ConvaTec, UK) and

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Fig. 1. Standard wound care. The secondary dressing was gauze and Micropore, which caused irritant contact dermatitis and allowed feces to contaminate the wound bed.



Fig. 2. Wound care with careful attention to the minute details. The secondary dressing was a Na-CMC foam dressing (Adhesive Aquacel Foam). The irritant contact dermatitis was resolved.



Fig. 3. Therapeutic algorithm for major challenges in periwound care.

Table 1. Major Pitfalls in Periwound Care and Corrective Strategies

| Major Pitfalls in Periwound Care | Corrective Strategies |
|---|--|
| Fixation of dressing, allergy to adhesive tapes, or skin trauma during tape removal | Use other types of adhesive substance such as soft silicone adhesive |
| Skin maceration | Use higher absorbent dressing or increase frequency of dressing change |
| Pain with dressing change or periwound bleeding | Use dressing with lower wound adherence property |
| Protective ability of dressing to external contamination | Use dressing with external protective layer |

from gauze and Micropore as a secondary dressing to an adhesive sodium carboxymethylcellulose (Na-CMC) foam dressing (Adhesive Aquacel Foam; ConvaTec, USA). This resolved the irritant contact dermatitis, as the adhesive substance used in the adhesive Na-CMC foam was made from silicone (Fig. 2). The macerated skin was also resolved after 5 days due to the adequate absorbency of the Na-CMC foam. The foam combined with the exudate inside the wound area, becoming a soft gel that blocked the exudate from leaving the wound area.³ In addition, the patient's pain score using visual analog scale was significantly reduced⁴ from 7 to 2. Finally, defecation was easier as the external top layer of the Na-CMC foam, which was made of polyurethane film, was waterproof and was able to prevent feces from penetrating the wound bed (see **figure, Supplemental Digital Content 2**, which displays results of wound care with careful attention to the minute details, <http://links.lww.com/PRSGO/A994>). The patient's satisfac-

tion score using visual analog scale increased from 2 to 10 (out of 10 points). Because periwound care is often neglected, therapeutic algorithm that integrates major challenges in periwound care into wound healing strategies⁵⁻⁷ is proposed in Figure 3.

This example shows how even small details can make a significant difference in wound care.

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