

Managing Skin Grafts and Donor Sites

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Skin grafts are frequently used over large and/or difficult-to-heal wounds such as burns, pressure ulcers, venous ulcers, diabetic ulcers, and traumatic wounds. They can be created and applied in various ways. The split-thickness skin graft (STSG), which involves removing the epidermis and part of the dermis from the donor site and applying it to a well vascularized wound bed, is the most common. When the patient does not have donor tissue available, various biological and synthetic options are available.

The coverage provided by the STSG is superficial while the tissue grows in to complete the graft process. In order for the skin graft to survive, the grafted area must be well vascularized and have a low bacterial burden because infection can cause graft failure. Mesh often is used to cover the graft and hold the graft in the correct position using sutures, staples, or glue. The area then may be immobilized with a firm dressing.

The donor site typically is dressed with petrolatum gauze and covered with sterile gauze, bandage roll, and a light compression wrap. The donor site dressing usually is changed within 3 days. Because dressing change can be painful, the patient usually needs to be medicated before wound care; the clinician also should ensure the dressing is moistened before removal in order to avoid traumatizing the area during the dressing change process.

The graft site initially is dressed with soft sterile gauze covered with ABD pads and then wrapped with soft bandage rolls in order to immobilize the area; after 7 days, the graft site dressing is changed. To avoid damage to the graft, the gauze dressing should be liberally moistened with saline solution before removal. The site then is redressed with petrolatum gauze, soft gauze, ABD pads, and soft bandage rolls. This dressing subsequently is changed two times per week. The graft site should be assessed for graft take/failure, infection, pain, and drainage at each dressing change. ■

Commentary from Ferris Mfg. Corp.

PolyMem® QuadraFoam® dressings are ideal for use on both graft and donor sites.¹⁻⁵ These multifunctional dressings cleanse the wound while absorbing exudate. They also help reduce graft and donor site-associated edema and pain.¹⁻⁵ These nonadherent dressings reduce the risk of damaging healing tissues during dressing changes. A case series⁴ that described the use of these dressings on 800 donor sites over 4 years found the dressings had many advantages over conventional paraffin gauze. Clinicians found Poly-Mem dressing use 1) dramatically reduced patient pain both while the dressing was in place and during dressing changes, 2) significantly reduced the need for pain medication, 3) was associated with 30% to 50% faster epithelialization, 4) significantly reduced donor site infection rate, and 5) facilitated faster dressing changes because the dressings did not stick to the donor site, eliminating the need to cleanse the wound during the dressing changes. The accompanying images illustrate clinician experience.⁴ ■



Donor site after harvesting split-thickness skin graft. PolyMem Max® placed on site.



Dressing changed when the absorbed exudate is visible at the approximate wound margin.



Full epithelialization after 7 days. Patient's donor site was pain-free during PolyMem use.

Reference

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