

## Micrografting Pre-Op Procedure & Post-Operative Dressing Protocol

as Described by

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There are two important requirements for micrograft take:

1. **Wound bed preparation** must be diligent
  - a. No necrosis
  - b. No biofilm
  - c. Minimal contamination, and
  - d. Adequate blood supply to the wound bed (healthy granulation tissue in a chronic wound, clean vascularized acute wound).
  
2. A **moist environment** must be maintained for at least 14 days post-grafting procedure.

### Dressing Protocol

The recommended dressing consists of four components:

1. Contact layer (non-adherent interface)
2. Hydrogel
3. Moist Dressing (foam)
4. Compressive wrap if wound is on upper or lower extremity

### *Sample Dressing Combination*

1. Mepitel® interface on top of the micrografts (others: Tegaderm® Interface, Adaptic®)
  
2. A 3 mm (1/8") layer of Hydrogel on top of the contact layer. The hydrogel can be mixed with 0.5% Gentamicin cream in a 4:1 ratio if the wound is contaminated.
  - a. Commonly found hydrogels include Normlgel®, Tegaderm® Hydrogel, and Surgilube®.
  - b. **No petroleum-based products should be used as a contact layer.**
  
3. Adhesive moist foam dressing. It is imperative that the foam is held in place with adhesive (self-contained or adhesive tape).
  - a. Typical foam dressings include Mepilex® Border, Optifoam®, and Allevyn® Border.
  
4. In the lower extremity an outer gauze and compressive wrap is applied to complete the dressing.

In addition, the donor site should also have a similar moist dressing. A hydrogel should be applied first and remain in place until the site is healed.

## *Dressing Changes*

Every 3 Days post-grafting until wound is healed:

1. Remove foam
2. Leave Interface layer in place so as not to disturb skin micrografts
3. Add 1/8" layer of Hydrogel (with Gentamicin cream if deemed necessary)
4. Add new moist adhesive foam
5. Add compressive wrap in upper/lower extremity

### **Note about Negative Pressure Wound Therapy**

The use of negative pressure with minced skin is acceptable as long as the pore size of the interface layer is small enough to prevent the 0.8mm x 0.8mm grafts from being pulled through the dressing. Negative pressure without a contact layer must be strictly avoided, as this can pull the grafts into and through the foam or gauze.

### **Patient Instructions**

**Elevate** leg or arm at least to level of heart for two weeks. May lower limb for 5 min/hour during first week and 10 minutes/hour during second week. If the wound is elsewhere on the body, there is no limitation to activity. Grafted wounds must be **immobilized** (immobilizing boot for foot).

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