



School of Medicine  
TEMPLE UNIVERSITY

***The 29th Annual  
Mid-Atlantic  
Burn Conference  
November 12-13, 2006***

---

Evaluation of a New Multi-Layer Foam Dressing for  
the Effective Management of Graft Site Coverage  
*By Chad Roarabaugh, PA-C and Sigrid Blome-Eberwein, M.D.*

---



*Presented by:*  
**Temple University Hospital Burn Center**

## Evaluation of a New Multi-Layer Foam Dressing for the Effective Management of Graft Site Coverage <sup>1</sup>

---

*Chad Roarabaugh, PA-C and Sigrid Blome-Eberwein, M.D.*

LEHIGH VALLEY HOSPITAL REGIONAL BURN CENTER  
ALLENTOWN, PENNSYLVANIA

At the 2006 Mid-Atlantic Burn Conference, a presentation was given on the clinical experiences and evaluation of a novel multi-layer foam dressing that combines a specific foam material with a durable membrane of proprietary silicone technology (Silon Dual Dress<sup>®</sup>). Burns and other large wound sites continue to pose a challenge to surgeons around the world, especially in sites where circular dressings cannot be applied, pressure or shear forces are at work and contamination is difficult to avoid. For these sites foam dressings have proven helpful; however, preparing these foam dressings has proven to be both time and resource-intensive (sterilizing, covering, etc.). Recently a new preassembled foam dressing has become commercially available. The new dressing consists of open-cell polyurethane foam laminated to a semi-occlusive film. We evaluated the new product as a cover over open wounds, autografts, xenografts and a variety of artificial skin substitutes including Integra<sup>®</sup> and TransCyte and in conjunction with other antimicrobial wound contact systems such as Acticoat<sup>®</sup>.

Approximately 150 patients have been treated with this novel dressing at the time of writing. The new foam dressing (Silon Dual-Dress<sup>®</sup>) is provided in sterile sheets up to 12x24 inches (30x60 cm) in size. We treated the wound sites as per standard operating procedures. Individualized wound contact dressings were applied as per our standard protocol. The foam dressing was then cut to fit and applied to the site with staples. When two pieces of dressings bordered each other the dressings were stapled together instead of to the wound margin. The dressing may be used as a flush dressing in which case various antibiotic solutions are used to infuse the site by catheters that lead into the dressing.

The Silon Dual-Dress<sup>®</sup> material exhibited good staple retention and performed as well as the dressing assembly we had been previously using in the OR. The elimination of the assembly process has significantly saved valuable operating time, increased physician and nursing efficiency and significantly reduced cost. In addition, the flexible silicone layer adds stability and protection to the entire dressing allowing for earlier mobilization of patients without the risk of shearing and graft loss. This dressing maintains a high absorbency (8.2 grams per water per gram of foam) while demonstrating minimal changes (<20%) in swelling or expansion – further providing a consistent graft contact dressing. We now use the new dressing on essentially all cases where the mechanical protection and/or shielding of the wound are indicated and have found this to be a significantly useful construct for difficult burn management.

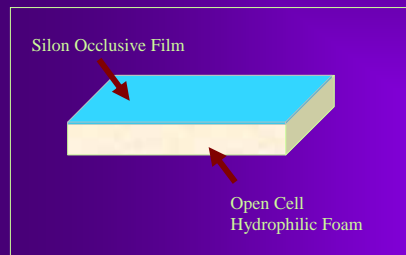
---

<sup>1</sup> [abstract]. In: Proceedings of the 29<sup>th</sup> Annual Mid-Atlantic Burn Conference; 2006 Nov 12-13; Philadelphia, PA

## DD50 Key Clinical Features

### The Industrialization Process

- Foam + Silicone



### Features

- High Absorbency: 8.2 g water/g foam
- Expansion: 20%
- Swelling: 20%



### Conclusions

- Dual Dress is a cost effective, user friendly dressing material that significantly enhances the management of difficult burn wounds and skin grafts

