



School of Medicine
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A New Option for the Nursing Wound Management of
Toxic Epidermal Necrolysis Syndrome - A Case Report
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Presented by:
Temple University Hospital Burn Center

A New Option for the Nursing Wound Management of Toxic Epidermal Necrolysis Syndrome – A Case Report¹

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At the 2006 Mid-Atlantic Burn Conference, a presentation was given on the nursing evaluation of a use of a silicone based, non-adherent, transparent wound contact layer Silon-TSR[®] in the comparison of a standard of care treatment with a biosynthetic wound dressing as a within patient treatment design. Toxic Epidermal Necrolysis Syndrome (TENS) is an uncommon, acute, life-threatening, medication-induced disorder with a reported mortality rate of 20 to 60 percent. Different variables have been identified as risk factors and often these individuals are treated in the Burn Intensive Care Units due to the intensive skin loss and associated, widespread medical complications.

Various treatment modalities have been employed to address the massive skin sloughing that accompanies this syndrome but pain continues to be a consistent complaint among patients afflicted with this syndrome. An established, silicone based, non-adherent wound care material (Silon-TSR[®]) was uniquely employed with one patient at Temple University Burn Center and demonstrated more comfort and better durability as compared to a conventional biosynthetic dressing material management option. Additionally, there were significant differences resulting in less nursing time required per dressing; decreased overall pain assessment and decreased material costs with the Silon-TSR[®] material (see Table 1). This case report will show potential for this material as a more effective and cost saving treatment than the standard of care and warrants more extensive investigation as a useful burn wound care intervention for the management of skin sloughing syndromes.

Table 1 Comparative Nursing Analysis of Treatment over a 7 Day Period.

Type of Dressing Material Used	Silon-TSR[®]	Porcine Xenograft
Number of rolls required per dressing change (UE only)	1 roll	4 rolls
Wound Integration Present	NO	YES
Transparent for Wound Visualization	YES	NO
Days Between Dressing Changes	5 DAYS	2 DAYS
Wound Odor Present / Maceration	NO	YES
Limited Range Of Motion noted	NO	YES
Average Pain Reported (VAS)	1.2*	7.2*
Average Unit Cost per Roll	\$50.00/roll	\$110.00/roll
Nursing Time Required per Dressing	15 minutes*	45 minutes*
Average Material Cost per Week	\$100.00*	\$1,210.00*

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

Clinical Comparison of Silon-TSR and Porcine Xenograft

Treatment Comparison

Porcine Dressing - RUE

- Required daily dressing changes.
- Difficult to keep in place.
- Integrated into wound bed as skin healed beneath.
- Unable to assess the wound underneath.



Treatment Comparison

Silon-TSR® - LUE

- Easily visualize the wound without having to remove the material.
- “Cling” to itself & did not integrate into the wound bed.
- Fenestrations limited moisture build up and allowed exudates to pass thru.
- Thin and flexible to allow for ROM.
- Provided a non-adherent environment for re-epithelialization to occur.
- Fewer dressing changes required.

