DECREASING THE INCIDENCE OF SKIN TEARS IN THE EXTENDED CARE SETTING WITH THE USE OF A NEW LINE OF ADVANCED SKIN CARE PRODUCTS CONTAINING OLIVAMINE™ *

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PRODUCT OVERVIEW
Olivamine™ is a blend of antioxidants, including the most potent free-radical scavenger, hydroxyproline (derived from siliceous olives), amino acids (the main building blocks for collagen), their co-factors (vitamin A, B6, B3, C, and D3) and methylsulfonylmethane (MSM), which drive the conduction of pain fibers. The ingredients are all known to play a vital role in basic cellular construction and protection. The components of Olivamine are treated with photo acoustic resonance to reshape them into a more bioavailable form that decreases inflammation 11-fold. The products contain all natural ingredients including organic aloe vera and natural oils to nourish the skin. The cleanser is surfactant-free, (true no-rinse technology), utilizing phospholipids as the cleansing agent, built to moisturize, and dimensions. The skin strengthening cream nourishes the skin at a cellular level. The barrier contains Olivamine to nourish the skin cells. In addition, active ingredient dimethicone and six other high-quality silicones offer protection that resists wash-off, and prevents excessive transdermal water loss (= TEWL).

RESULTS
Once the new skin care protocol with the four-pronged approach to skin care: Clean, Moisturize, Protect, and Nourish, was put into place, there were no skin tears in a six month period. Comparing that figure to previous data, there were approximately 180 skin tears reported during a six month timeframe. It was felt that both of these skin tears were caused by excessive trauma and possibly unavoidable. This represents a substantial decline in nosocomial skin tears. Factors such as cost to treat, pain and suffering from these wounds was taken into consideration. Overall, skin appearance and function increased across the board.

CASE STUDY – GL
GL is an 85-year-old white female who was admitted to the ECF on 11-14-01 with diagnoses of NIDDM, HTN and peripheral neuropathy. She has a long-standing history of numerous leg ulcers and skin tears on lower extremities, often due to her crawling back to bed from her wheelchair. Significant lab values include albumin of 4.0, WBC of 9.4 and H/H of 31.1. She is incontinent of urine and wears adult briefs. Her Braden score is 19.

CASE STUDY – KL
KL is a 95-year-old white female, GM, was admitted to the ECF on 1-8-04 with a diagnosis of ASHD, CAD, hyperlipidemia and history of CABG x 3 in 1994. She had a Braden score of 14 on admission with bruising to both the upper and lower extremities, tissue paper thin skin, retracted buttocks with no open areas, and her ankles were edematous. Her lab values include: Albumin 3.8, WBC 6.5, H/H 12.8 and 32.7.

CASE STUDY – GM
A 95-year-old white female, GM, was admitted to the ECF on 1-6-04 with a diagnosis of pneumonia and C-difficile diarrhea. She also suffers with ASHD, CAD, hyperlipidemia and history of CABG x 3 in 1994. She had a Braden score of 14 on admission with bruising to both the upper and lower extremities, tissue paper thin skin, retracted buttocks with no open areas, and her ankles were edematous. Her lab values include: Albumin 2.5, WBC 15.6, H/H 11.0 and 32.7.

COST ANALYSIS
The following tables represent national average costs for the previous skin care regime, including skin tear treatment twice per week and the study regime based on total body skin care.

Previous Skin Care (Daily)

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Cost per application</th>
<th>Average Cost per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aloe Vera 3-in-1 Cleansing Foam</td>
<td>$ .19</td>
<td>$1.33</td>
</tr>
<tr>
<td>Aloe Vera Skin Conditioner</td>
<td>$.06</td>
<td>$.36</td>
</tr>
<tr>
<td>Sensi Care Protective Barrier</td>
<td>$.21</td>
<td>$1.47</td>
</tr>
<tr>
<td>Sensi Care Protective Barrier</td>
<td>$.45</td>
<td>$3.15</td>
</tr>
</tbody>
</table>

Current Skin Tear Treatment (2 times/week)

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Cost per application</th>
<th>Average Cost per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wound closure strips (2 per wound)</td>
<td>$.50</td>
<td>$1.00</td>
</tr>
<tr>
<td>Transparent dressing</td>
<td>$.75</td>
<td>$1.50</td>
</tr>
<tr>
<td>Dressing change (11 mm; forepart)</td>
<td>$6.66</td>
<td>$33.33</td>
</tr>
<tr>
<td>Dressing change (11 mm; forepart)</td>
<td>$4.58</td>
<td>$9.16</td>
</tr>
</tbody>
</table>

Total Weekly cost $12.31

Study Skin Care (Daily)

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Cost per application</th>
<th>Average Cost per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remedy 4-in-1 Skin Cleansing Lotion</td>
<td>$.24</td>
<td>$1.68</td>
</tr>
<tr>
<td>Remedy Skin Repair Cream</td>
<td>$.06</td>
<td>$.56</td>
</tr>
<tr>
<td>Remedy Nutraceutical</td>
<td>$.10</td>
<td>$.70</td>
</tr>
<tr>
<td>Remedy Nutraceutical</td>
<td>$.42</td>
<td>$2.94</td>
</tr>
</tbody>
</table>

The new skin care regime represents a cost savings of $9.37 per week vs treatment regime. This cost savings does not account for the fact that the majority of study residents were treated with this 4-in-1 skin cleansing lotion and either the skin strengthening cream or the dimethicone/silicone barrier, but not both.

REFERENCES

CONCLUSIONS
The facility has completed a cost-analysis projection to present to its administration for adoption of these products. Choosing an advanced skin care regimen with Olivamine™ containing products is financially responsible not only considering overall costs but also striving to offer potential solutions from surveyors for nosocomial acquired tears. An added benefit is providing comfort, empowerment to both the staff and patients and good customer service.

METHODOLOGY
In this case study, a population that was extremely prone to traumatic injury and unintentional separation — in essence, a skin tear.

OBJECTIVE
Apply the four-pronged approach of cleansing, moisturizing, protecting and nourishing the skin with a novel advanced skin care line containing Olivamine® to create a skin care program that actually strengthens the skin and decreases the incidence of skin tears. Prior to initiating this study, the facility evaluated at least one new skin tear per day.

PROBLEM
The anatomy of aging skin makes skin tears nearly inevitable in the elderly. In addition, harsh soaps and surfactant cleansers as well as non-nutritional moisturizers and protectants containing hydrocarbons such as petrolatum and mineral oil, which do not contribute to lipid replacement, and further add to the skin’s vulnerability. It is reported that 1.5 million skin tears occur each year in institutionalized adults. State surveyors often fine the extended care facility claiming the injury was avoidable, despite prudent care. These alterations in skin integrity can additionally cause unnecessary pain and suffering to residents.

INTRODUCTION
Maintaining skin integrity in our frail elders is an ongoing challenge deserving more attention. According to the literature review, very little conclusive evidence exists to support the use of various skin care products or treatments. Basic strategies are employed, such as clothing patients in long sleeves, the use of gentle adhesives and paper tape, judicious use of pillows and blankets in the restricted environment, and education of staff on using a gentle hand.

As the skin ages, the basement membrane (junction of epidermis and dermis) thins making it “loose”, thus more prone to traumatic injury and unintentional separation — in essence, a skin tear.

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