CLUES FOR COST-EFFECTIVE BURN CARE FOR MINOR BURNS (260)

*Abali A. E.¹, Kavuncubası S.², Yalılı A.³, Haberal M.¹

¹Baskent University, Burn and Fire Disaster Institute, Ankara, Turkey
²Baskent University, Faculty of Health Sciences, Department of Health-Care Management, Ankara, Turkey
³Baskent University, Faculty of Health Sciences, Department of Nursing and Health Services, Ankara, Turkey

Aim: Cost-effective outpatient management should be a current issue in modern burn-care approach, because majority of burn cases are treated as outpatients. This study sought to investigate factors which influenced the costs of burn care for minor burn cases treated in the outpatient service of a burn center.

Methods: Subjects of the study were 240 patients who were treated at the outpatient service between Jan the 1st and June the 30th 2014. Total cost of the outpatient burn-care (costs of the equipments + costs of the interventions) were documented for each patient. The data were compared in regards to age, sex, burn cause, total body surface area (TBSA) burned, burn depth, the number and components of medical/surgical interventions.

Results: According to our data, mean cost of the interventions which were applied to minor-burn cases was 202.45 ±2.31 $ (min: 4.9$, max: 1900$). Mean cost of equipments which were used in those interventions was 19.5 ±18.9$ (min: 0.4 $ max: 131.5$). There were no significant differences among the costs of out-patient therapies in regards to age, sex, burn cause, and TBSA burned (p>.05). Factors which influenced the costs were depths of burn wounds, number and components of interventions.

Conclusions: Appropriate first aid which protects the minor burns from deepening is essential. Cost effective approaches which achieve clean and uninfected burn wounds with less numbers of wound-dressing changes are needed. Discussion on the factors which influence cost-effectiveness of outpatient burn-care will improve the costs of outpatient burn facilities all around the world.

Figure 1

Table:

<table>
<thead>
<tr>
<th>Burn depths</th>
<th>Costs ($) (intervention - equipment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epidermal</td>
<td>96.8±95.0* - 4.9±3.3*</td>
</tr>
<tr>
<td>Dermal</td>
<td>246.3±239* - 15.9±18.2*</td>
</tr>
<tr>
<td>Epidermal + Dermal</td>
<td>149.4±8.85* - 18.5±30.8*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of interventions</th>
<th>Costs ($) (intervention - equipment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=4 and N&lt;4</td>
<td>149.5±101.2* - 10.9±10*</td>
</tr>
<tr>
<td>N&gt;4</td>
<td>483±319* - 39±23*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components of intervention</th>
<th>Costs ($) (intervention - equipment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wound dressing</td>
<td>149.4±101* - 10.6±11.8*</td>
</tr>
<tr>
<td>Debridement + wound dressing</td>
<td>457±318.9* - 29.4±24.50*</td>
</tr>
</tbody>
</table>