### ICRC BURNS OVERVIEW

**FOR HOSPITAL STAFF**

#### SIMPLIFIED CALCULATION OF PERCENTAGE TOTAL BODY SURFACE AREA (%TBSA)

<table>
<thead>
<tr>
<th>Adult Homunculus</th>
<th>Child Homunculus</th>
</tr>
</thead>
<tbody>
<tr>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>12%</td>
<td>16%</td>
</tr>
<tr>
<td>16%</td>
<td>20%</td>
</tr>
<tr>
<td>20%</td>
<td>24%</td>
</tr>
<tr>
<td>24%</td>
<td>28%</td>
</tr>
<tr>
<td>32%</td>
<td>36%</td>
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</tbody>
</table>

Or use patient’s palm to calculate %TBSA: 1 PALM (without fingers) = 1%TBSA

#### FLUID REQUIREMENTS IN FIRST 48 HOURS

<table>
<thead>
<tr>
<th>HOURS SINCE BURN</th>
<th>FLUID REQUIREMENTS</th>
<th>TREATMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24 HOURS</td>
<td>2 ml/kg x %TBSA of Ringers Lactate (1/2 in first 8 hours, 1/2 in following 16 hours)</td>
<td>First aid Consider clean up under anaesthesia Dressing</td>
</tr>
<tr>
<td></td>
<td>Target Urine Output = 0.5 ml/kg/hr</td>
<td>First aid Clean up under anaesthesia Debridement Split skin grafting</td>
</tr>
<tr>
<td>24-48 HOURS</td>
<td>To be guided by urine output</td>
<td></td>
</tr>
</tbody>
</table>

**SPECIAL CONSIDERATIONS:**
- Burns > 50%TBSA: Use 50%TBSA in calculation above
- Inhalation injury/electric burns: Have increased fluid requirements, use 3 ml/kg x %TBSA

#### APPEARANCE

**SUPERFICIAL**
- Erythema, no blisters, dry

**SUPERFICIAL PARTIAL THICKNESS**
- Erythema, moist, blisters, rapid capillary refill

**DEEP PARTIAL THICKNESS**
- Blotchy red/pale, extensive blisters, sluggish capillary return, dryer than superficial partial thickness burns

**FULL THICKNESS**
- White, charred, leathery, eschar, dry

#### TREATMENT

**SUPERFICIAL**
- First aid

**SUPERFICIAL PARTIAL THICKNESS**
- First aid
- Consider clean up under anaesthesia
- Dressing

**DEEP PARTIAL THICKNESS**
- First aid
- Clean up under anaesthesia
- Debridement
- May require skin grafting

**FULL THICKNESS**
- First aid
- Clean up under anaesthesia
- Debridement
- Split skin grafting

**Dressings:** Apply 1% silver sulfadiazine (3-5mm thick) directly by hand in all burned areas, then apply greasy dressing. Cover with sterile compresses (do not encircle limb with one compress) and wrap with loose crepe bandage

**Provide all patient’s appropriate tetanus and, in case of surgical intervention, surgical antibiotic prophylaxis**

#### HEALING TIME

<table>
<thead>
<tr>
<th></th>
<th>&lt;5 days</th>
<th>5-21 days</th>
<th>Variable</th>
<th>Months-years</th>
</tr>
</thead>
</table>

#### OUTCOME

**SUPERFICIAL**
- No residual scarring

**SUPERFICIAL PARTIAL THICKNESS**
- Minimal scarring

**DEEP PARTIAL THICKNESS**
- Scarring

**FULL THICKNESS**
- If untreated: Severe disfigurement, permanent impairment

#### SPECIAL COMMENTS

Superficial epidermal burns are NOT included in the assessment of % TBSA burnt.