

 Flaminal®

# A Guide to Burns



**Simpler wound management,  
without compromise**

# First Aid<sup>1</sup>

Always remember...



## STOP

**Immediately get the person away from the heat source** to stop the burning. Do this safely - do not put yourself at risk of getting burnt



## REMOVE

**Remove any clothing or jewellery** that's near the burnt area of skin, including babies' nappies, but do not remove anything that's stuck to the skin. Remove contact lenses if able



## COOL

**Cool the burn area only.** Keep the rest of the patient (uninjured areas) warm. **IRRIGATE: In case of chemical burn,** commence urgent continuous large volume irrigation with lukewarm water for at least 20 minutes. As you flush the burn (not before), remove jewellery or articles of clothing with chemical on them, unless they're stuck to the person's body



## WARM

**Make sure the person keeps warm** by using a blanket, for example, but take care not to rub it against the burnt area



## COVER

**Cover the burn** by placing a layer of cling film over it - a clean plastic bag could also be used for burns on the hand



## FACE

**If the face or eyes are burnt, sit up as much as possible,** rather than lying down - this helps to reduce swelling. **Do not rub eyes.** Open eyes to irrigate - frequently blink during irrigation



## CALL

**CALL for medical advice**



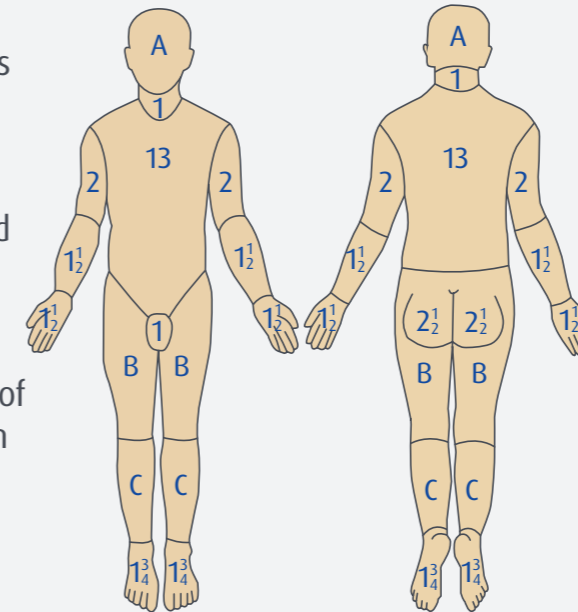
The best first aid should consist of cool running tap water for 20 minutes, ideally applied as soon as possible, but still effective up to 3 hours after injury, in order to reduce tissue damage<sup>2</sup>



# Wound Measurement

## The Lund & Browder Chart

This chart compensates for the variation in body shape with age and therefore can give an accurate assessment of burns area in children and adults<sup>21</sup>

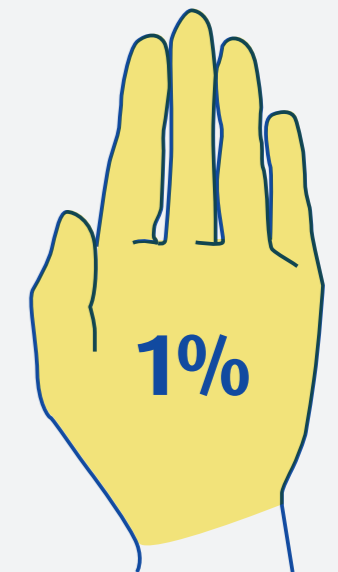


Area	Age 0	1	5	10	15	Adult
A = 1/2 of head	9 <sup>1</sup> / <sub>2</sub>	8 <sup>1</sup> / <sub>2</sub>	6 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>
B = 1/2 of one thigh	2 <sup>3</sup> / <sub>4</sub>	3 <sup>1</sup> / <sub>4</sub>	4	4 <sup>1</sup> / <sub>2</sub>	4 <sup>1</sup> / <sub>2</sub>	4 <sup>3</sup> / <sub>4</sub>
C = 1/2 of one lower leg	2 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	2 <sup>3</sup> / <sub>4</sub>	3	3 <sup>1</sup> / <sub>4</sub>	3 <sup>1</sup> / <sub>2</sub>

Reproduced with permission from: Hettiaratchy S, Papini R. Initial management of a major burn: II - assessment and resuscitation. BMJ 2004;329:101-3.

## Palmer Surface

Palm and fingers approximates to 1% Total Body Surface Area (Good for small burns or scattered burns)

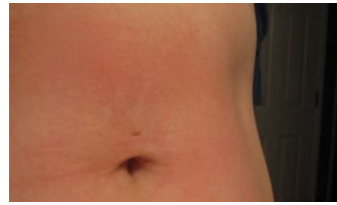


## When to refer to a specialist burn centre<sup>3</sup>

- ➔ All burns  $\geq 2\%$  TBSA in children or  $\geq 3\%$  in adults
- ➔ All full thickness burns
- ➔ Any burn with suspicion of non-accidental injury should be referred to a Burn service for expert assessment within 24 hours
- ➔ Any chemical, electrical or friction burn
- ➔ Any unwell/febrile child with a burn
- ➔ All circumferential burns
- ➔ Any burn not healed in 2 weeks
- ➔ Burns that involve the face, hands, feet, genitalia, or perineum
- ➔ Any cold injury
- ➔ Any concerns regarding burn injuries and co-morbidities that may affect treatment or healing of the burn

# Depth of Burn<sup>4,20</sup>

## Superficial Epidermal



- | 👁 Appearance   | 👋 Sensation   | 🎯 Management Aims   |
|--|---|---|
| <ul style="list-style-type: none"> <li>■ Dry, red</li> <li>■ Blanches with pressure</li> </ul> | <ul style="list-style-type: none"> <li>■ Painful</li> </ul> | <ul style="list-style-type: none"> <li>■ Apply cooling</li> <li>■ Moisturise often</li> <li>■ Administer pain relief/analgesia</li> </ul> |

## Superficial Partial Thickness



- | 👁 Appearance  | 👋 Sensation   | 🎯 Management Aims  |
|---|---|--|
| <ul style="list-style-type: none"> <li>■ Blisters</li> <li>■ Moist, red, weeping</li> <li>■ Blanches with pressure</li> </ul> | <ul style="list-style-type: none"> <li>■ Painful to temperature, air and touch</li> </ul> | <ul style="list-style-type: none"> <li>■ Manage exudate</li> <li>■ Prevent deterioration of burn depth</li> <li>■ Promote mobility and function</li> </ul> |

## Deep Dermal



- | 👁 Appearance   | 👋 Sensation  | 🎯 Management Aims  |
|--|--|--|
| <ul style="list-style-type: none"> <li>■ Blisters (intact or collapsed)</li> <li>■ Moist and wet</li> <li>■ Variable colour (dark pink/red or white)</li> <li>■ Fixed red staining may be present</li> <li>■ Blanching is delayed or absent</li> </ul> | <ul style="list-style-type: none"> <li>■ Sensation is variable (sensitive to deep pressure only or dull pain)</li> </ul> | <ul style="list-style-type: none"> <li>■ Alleviate pain/promote comfort</li> <li>■ Prevent deterioration of burn depth</li> <li>■ Prevent infection</li> <li>■ Promote mobility and function</li> <li>■ Promote wound healing and minimise scarring</li> <li>■ Healing - &gt;21 days, usually requires surgical treatment</li> </ul> |

## Full Thickness



- | 👁 Appearance  | 👋 Sensation   | 🎯 Management Aims   |
|---|---|---|
| <ul style="list-style-type: none"> <li>■ Waxy white to leathery grey to charred and black</li> <li>■ Dry and inelastic quality</li> <li>■ No blanching with pressure</li> </ul> | <ul style="list-style-type: none"> <li>■ No sensation to burn wound</li> <li>■ Pain may be present from surrounding (uninjured but inflamed) tissues</li> </ul> | <ul style="list-style-type: none"> <li>■ Prevent infection</li> <li>■ Promote function</li> <li>■ Promote wound healing and minimise scarring</li> <li>■ Healing - Rare, unless surgically treated</li> </ul> |

# What is Flaminal®?



⚙ DEFEND	🛡 PROTECT	✅ IMPROVE
<b>AGAINST INFECTION &amp; CONTAMINATION<sup>10,13</sup></b> <b>DEBRIDES &amp; DESLOUGHS<sup>12</sup></b>	<b>GRANULATION TISSUE &amp; WOUND EDGES<sup>17</sup></b>	<b>THE WOUND</b>
<ul style="list-style-type: none"> <li>■ Balances moisture in the wound<sup>12</sup></li> <li>■ Reduces bioburden &amp; biofilm formation<sup>10,13</sup></li> </ul>	<ul style="list-style-type: none"> <li>■ Promotes a cleaner wound bed<sup>17</sup></li> <li>■ Speeds up healing<sup>6</sup></li> </ul>	<ul style="list-style-type: none"> <li>■ Better Scar Quality<sup>6</sup></li> <li>■ Allows visibility of the wound bed</li> </ul>

**Flaminal® a versatile, unique dressing designed to simplify burn care**

- ➡ Speeds up healing time<sup>6,11</sup>
- ➡ Manages moisture balance<sup>12</sup>
- ➡ Continuously debrides the wound<sup>12</sup>
- ➡ Reduces bacteria released from biofilm<sup>10,13</sup>
- ➡ Non-cytotoxic<sup>10</sup>
- ➡ Easy to apply even in the most difficult areas<sup>16</sup>
- ➡ Better scar quality<sup>6</sup>
- ➡ Minimises patient pain and discomfort<sup>14,15</sup>
- ➡ Can be used at all stages of wound healing
- ➡ Reduces wound odour caused by bacteria<sup>17,18,19</sup>



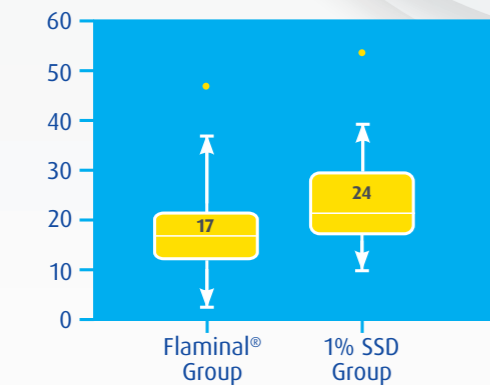
# Evidence

**Flaminal® Forte protection from Gram positive & Staphylococcal infections comparable to Nano-crystalline silver dressing<sup>5</sup>**

### Patient Case Series:

- ➔ 16 Silver foam
  - ➔ 13 Nano-crystalline silver
  - ➔ 25 Patients which used Flaminal® Forte
- 
- ➔ Burns percentage ranged from 5 to 20% Total Body Surface Area (TBSA)  
Flaminal® Forte proved to be **as effective** at reducing wound colonisation as Nano-crystalline Silver (significant reduction by day 7)  
Significantly **more effective than a Silver Foam** (16 days)
  - ➔ As effective as Nano-crystalline silver in reducing wound colonisation in burn injuries<sup>5</sup>

**Flaminal® Forte faster healing times<sup>6</sup> leading to potential improved scar outcomes<sup>8,9</sup> when treating partial thickness burns**



Wound healing time was shortened in the Flaminal® group compared with 1% SSD group (p<0.0001)

### Conclusions;

- 17 days median healing time in Flaminal® group<sup>6</sup>
- Faster healing in wounds treated with Flaminal® vs. 1% SSD<sup>6</sup>
- Healing in less than 21 days incurs less risk of hypertrophic scarring<sup>8,9</sup>

## Flaminal®: Reduction in Bioburden & Biofilms<sup>7</sup>

Antimicrobial agent	Type	Biofilm efficacy	Guidance for use
Enzyme alginate gel	Alginate gel with two enzymes: ■ Lactoperoxidase ■ Glucose oxidase	<ul style="list-style-type: none"> <li>■ Prevents formation of biofilms at concentration 0.05% (w/v)<sup>12,13</sup></li> <li>■ Inhibits growth of established biofilms at higher concentrations</li> <li>■ Does not disrupt biofilm biomass<sup>12,13</sup></li> </ul>	<ul style="list-style-type: none"> <li>■ Concentrations of alginate of 0.5% (w/v) on level of exudate<sup>12,13</sup></li> </ul>
Iodine (povidone and cadexomer)	<ul style="list-style-type: none"> <li>■ Solution</li> <li>■ Impregnated wound dressings</li> </ul>	<ul style="list-style-type: none"> <li>■ Inhibits development of new biofilm<sup>10, 14</sup></li> <li>■ Eradicates young biofilm colonies<sup>10, 15</sup></li> </ul>	<ul style="list-style-type: none"> <li>■ Contraindicated in individuals with thyroid or renal disease</li> </ul>



# How to Apply Flaminal®

Cover the wound with a sufficiently thick layer (0.5cm) with Flaminal®



Flaminal® can remain in place as long as the gel structure is intact (1 to 4 days, depending on the amount of exudate).

## Ordering Information



Lower Alginate Content  
Indicated for slightly to moderately-exuding wounds

Pack Size	PIP Code	NHS CAT Code
5 x 15g tubes	324-2971	ELG021
1 x 50g tube	344-9600	ELG025
500g tub	-	ELG029



Higher Alginate Content  
Indicated for moderately to highly-exuding wounds

Pack Size	PIP Code	NHS CAT Code
5 x 15g tubes	324-2963	ELG022
1 x 50g tube	344-9592	ELG023
500g tub	-	ELG028

NOTE: Flaminal® is indicated for 2nd degree burns (deep, superficial)





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