



# TheAlfred

Victorian Adult Burns Service

Guide to the Management of Minor Superficial  
Burns



## Introduction

The purpose of this document is to assist in the management of minor superficial burns.

## Referral Criteria to Specialised Burns Service

People with the following injuries should be referred to a specialised burns service

- **Burns greater than 10% of total body surface area (TBSA).**
- **Burns of special areas—face, hands, feet, genitalia, perineum, and major joints.**
- **Full-thickness burns greater than 5% of TBSA.**
- **Electrical burns.**
- **Chemical burns.**
- **Burns with an associated inhalation injury.**
- **Circumferential burns of the limbs or chest.**
- **Burns in the very young or very old.**
- **Burns in people with pre-existing medical disorders that could complicate management, prolong recovery, or increase mortality.**
- **Burns with associated trauma.**



## **Assessment**

### **Patient History**

Don't forget your ABC (primary survey)

Past medical history and co-morbidities

### **Burn History**

How did it occur?

When did it occur?

What first aid if any was attended to?

### **Burn Assessment**

With all burns it is important to re-assess the depth on a regular basis as burn depth can change and progress over time

The local inflammatory process, inadequate patient resuscitation or supervening infection can deepen burn depth.

The effective use of first aid will minimise the severity of the burn wound

**All burns including minor burns should be reassessed within  
48 hours of injury for progression of depth.**

## Burn Depth & Characteristics

Depth	Erythema (1st Degree)	Superficial Partial Thickness (2nd Degree)	Deep Partial Thickness (2nd Degree)	Full Thickness (3rd Degree)
<b>Pathology</b>	Involves epidermis only	Involves epidermis and upper dermis, most adnexal structures intact	Involves epidermis and significant part of dermis, only deeper adnexal structures intact	Epidermis, dermis and cell adnexal structures destroyed
<b>Colour</b>	Red, warm	Pink	Pale pink/ blotchy red	White/charred
<b>Circulation</b>	Normal, increased	Hyperaemic	Sluggish	Nil
<b>Sensation</b>	Present	Painful ++ hypersensitive	Decreased sensation	Nil
<b>Blisters</b>	None or (days) later or desquamation	Yes (hours)	Early—usually large and rupture within hours	Epidermis destroyed, no blistering
<b>Healing Time</b>	Within a few days	Within 2–3 weeks by re-epithelialisation	Longer than 2–3 weeks high risk of hypertrophic scarring	No healing—granulation and wound contraction may cause chronic ulceration

## Superficial Burn Wounds

Superficial burns are easy to assess and will heal with appropriate dressings. These burn wounds heal by a process of re-epithelialization as surviving keratinocytes in the injured skin proliferate to restore the epidermal barrier (regeneration). This process occurs over a period of 7 – 10 days. Wounds that take longer than 3 weeks to heal are usually at increased risk of developing poor scarring and are best treated surgically.

The principle of management of superficial burn wounds is to promote healing by optimising the wound environment. Choice of appropriate dressing products will facilitate this.

Prevention of infection and promotion of moist wound healing are key factors for good outcome

**The nature of an acute burn wounds changes over time.**

- **Significant exudate is produced in the first 24 – 48 hours after injury. During this period an absorbent dressing should be selected**
- **After the exudative phase has passed, dressings with less absorbency capacity that promote a moist wound healing may be appropriate.**
- **During the healing phase, dressing changes should be minimised to avoid damaging regenerating epithelium.**



## **Wound Management**

There is no concrete advice to provide regarding burn wound specific dressing selection. Dressing selection should be based on general wound healing principles and goals.

### **Exudative Phase**

Significant exudate is produced in the first 24 – 48 hours after injury. Therefore an absorbent dressing should be selected. Types of dressing products that may be used include alginates (e.g. Algisite M, Kaltostat, Aquacel) and as secondary dressings Zetuvit, or multiple gauze layers. Foam dressings may also be used.

Debride slough and non-viable tissue. Where slough is dry, dressing products that hydrate the wound bed such as gels (e.g. Intrasite gel, Solugel) can assist the debriding process.

### **Healing Phase**

Dressing products should be reassessed after 48 hours as exudate reduces. Products which are less absorbent such as Jelonet, hydrocolloids and films may be appropriate depending on amount of exudate.

When the wound bed is predominantly healthy red regenerating epithelium, protection of the wound bed is mandatory. A simple protective dressing such as Jelonet or Cuticerin is suitable.



## **Blisters**

If the blister is larger than 2.5cm, limits joint movement, making the assessment of the burn wound difficult or causing pain and discomfort, consider aspirating its contents.

Smaller blisters should be left intact and covered with an occlusive dressing.

## **Using Silver**

The choice of using silver will depend on whether:

- Wound is potentially contaminated during the process of injury or after
- Wound is clinically infected

Types of silver dressings include Acticoat, Acticoat Absorbent, SSD Cream and Aquacel Ag.

## **Fixamol or Hypafix**

Surgical tapes applied directly to burns wounds is not recommended. These do not allow for frequent wound bed assessment and can tear freshly healed epithelium on removal.



## **Key Factors in the Early Burn Management**

### **Pain Management**

Pain in a superficial dermal burn injury is severe. Pain management should consider both background and procedural pain.

For mild to moderate pain a combination of Paracetamol, Naproxen and Tramadol should be beneficial.

For moderate to severe pain, the addition of Oxycodone, Oxycontin or Morphine may be required. These medications should be prescribed for painful dressing procedures.

### **Minimise Risk of Infection**

Infection can convert a superficial burn to a full thickness injury. Contaminated or infected wounds require antimicrobial dressings and wound microbiological culture. Aseptic technique is of course mandatory.

### **Oedema Management**

Localised oedema interferes with wound healing and joint mobilization. Oedema control entails elevation of the burnt limb and appropriate splinting and bandaging.



## Contact Details

The contact details for the Victorian Adult Burns Service are as follows:

### **General Enquiries**

Burns Unit Office

Telephone: (03) 9076 3626

Email: [burnsunit@alfred.org.au](mailto:burnsunit@alfred.org.au)

### **Referrals for Transfer**

Burns Registrar on call via switchboard

Telephone (03) 9076 2000

### **Wound Advice**

Burns Liaison Nurse/Care Coordinator

Via switchboard

Telephone: (03) 9076 2000

Mobile: 0429 419 415