

PAEDIATRIC NURSING PRACTICE MANUAL  
SECTION 9

WOUND CARE

9.2 ABRASIONS

9.2.1 CARE OF ABRASIONS

**Aims**

1. To minimise pain and discomfort.<sup>1</sup>
2. To promote healing and minimise infection.<sup>2</sup>
3. To minimise scarring.<sup>3</sup>

**Background information**

An abrasion is a superficial injury where the skin is rubbed or torn.<sup>1</sup>

Management of abrasions will vary according to their location and size. Closed treatment is indicated when there is a risk of friction to the skin surface (eg. buttock, back, leg). Open treatment is preferred for abrasions to the face.

Treatment of abrasions includes meticulous cleansing using a wide range of techniques from swabbing to scrubbing, and irrigating at a range of pressures.<sup>2</sup> Cleansing is essential for the prevention of infection and tattoo scarring, and to remove foreign bodies such as grit.<sup>3</sup>

Deep abrasions that have ingrained dirt such as gravel rash may require a surgical scrub in theatre.<sup>3</sup>

**Key Points:**

1. Refer to [Emergency Department Clinical Guidelines: Wound Management](#) and [A Guide to Choosing an Appropriate Dressing](#).
2. Use standard aseptic non touch technique for all care and cleansing of abrasions/wounds. Refer to [A&NTT® framework](#).
3. Irrigation is the preferred method for cleansing open wounds when foreign matter is visible. Debris in the wound can be loosened utilising a syringe in order to produce gentle pressure. Gauze swabs and cotton wool should be used with caution as:
  - a) fibres from these swabs can shed into the wound, causing infection and delayed healing.
  - b) can increase the risk of mechanical damage to new tissue.<sup>7</sup>
4. Cleansing/irrigation fluid should be gently warmed before use to minimise pain/discomfort.<sup>2,9,10</sup> Sterile 0.9% saline is the solution of choice.<sup>1,2,3,8</sup> Refer to [PNPM 9.9.3 Wound Cleansing Solutions](#)
5. Implement pain management strategies in consultation with the child/carer and refer to [Acute Pain Service](#) protocols and guidelines.
  - Utilise developmentally appropriate distraction and comforting techniques throughout the procedure.
  - Administer analgesia at least 30-45 minutes prior to wound cleansing.
  - For extensive abrasions, and/or if the child does not tolerate wound cleansing with simple analgesia, liaise with Acute Pain Service for a pain management plan.

## Equipment

Dressing/utility pack (size and depth of abrasion will determine type of pack required)

Sterile cotton tip applicators

Sterile saline 0.9% <sup>2,3</sup>

Waterproof occlusive <sup>2</sup> or hydrocolloid dressing <sup>3,4</sup>

Topical application as recommended or Chlorhexidine acetate ointment 0.3% <sup>3</sup>

Non sterile gloves

Waste bag

### **Irrigation Equipment:**

Any of the following combinations will produce optimum irrigation pressures (4-15psi):

Syringe	Cannula/needle
10mL	22 gauge cannula (sharp removed)
30mL	18 gauge non-bevelled drawing up needle
30-60mL	18-20 gauge cannula (sharp removed)

PROCEDURE	ADDITIONAL INFORMATION
Gently warm the saline by standing the ampoule(s) in warm tap water for 2-3 minutes whilst preparing equipment. <sup>9,10</sup>	
Perform 2 minute hand hygiene. Prepare equipment using aseptic non touch technique.	<a href="#">Refer to A&amp;NTT<sup>®</sup> framework</a>
<b>For irrigation:</b> Draw up the saline using an appropriate syringe. Apply gentle pressure to the plunger and irrigate the wound to remove any visible debris. <b>Or,</b> Swab the wound until clean using cotton tip applicators.	Ensure the tip of the syringe, cannula/needle do not come into contact with the wound. There should be minimal debridement of viable tissue. <sup>3,5</sup>
Remove excess moisture.	Moisture reduction will reduce the likelihood of maceration of healthy skin. <sup>6</sup>
<b>CLOSED TREATMENT</b> Apply a waterproof occlusive or hydrocolloid dressing. Leave the dressing/s intact for 3-7 days.	Occlusive dressings prevent nerve endings from drying out and therefore reduces pain and discomfort. <sup>1</sup>

PROCEDURE	ADDITIONAL INFORMATION
<p><b>OPEN TREATMENT</b></p> <p>Apply a thin layer of emollient or prescribed topical preparation to the area.</p> <p>Open abrasion care is performed BD and PRN when:</p> <ul style="list-style-type: none"> <li>• there is significant exudate and crusting at the site</li> <li>• the child complains of a dry and 'pulling' wound</li> </ul>	<p>Topical medication must be ordered by a medical officer.</p>
<p>Discard equipment and perform hand hygiene.</p> <p>Continue to assess the child for signs of pain/discomfort.</p>	

**Resource:**

Click on the link for [ANTT® Critical Steps Training Movies - Wound Care Guideline](#)

**References:**

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