

<b>Title</b>	LAT Gel clinical guideline
<b>Section on CEM site</b>	Paediatrics
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### Purpose:

To outline a standard operating procedure for the use of Lignocaine, Adrenaline and Tetracaine gel within Clyde Emergency Departments

### Background:

- LAT gel (Lignocaine 4%, Adrenaline 0.1%, Tetracaine 0.5%) is an established topical anaesthetic option for use in children
- It can avoid the need for distressing local anaesthetic infiltration
- Packaged in single use 3ml bottles
- For topical use on broken skin
- Onset 30 minutes
- Duration 20-60 minutes

### Indications

- Children over 1 year
- Wounds of scalp, forehead, chin, limb or trunk

### Contraindications

- ANY previous reaction to local / general anaesthetic or cholinesterase deficiency
- Wound on or near mucous membrane including eye, nose, mouth or genitalia
- Wound >5 cm length
- Concern about tissue viability i.e. crush/ flap
- Wound > 8 hours old
- Concerns re injury to underlying structures i.e tendon, nerve, blood vessel
- Extremity wound (ear / nose / finger) discuss with ED consultant / registrar
- Heavily contaminated wounds
- Wounds deeper than subcutaneous layer (seek ED senior review)

### Dose:

- 1-2 years: Maximum = **2ml**
- 3 or older: Maximum = **3ml**

### Application: (see associated GGC application guide)

- Draw maximum dose as per age into syringe
- Apply maximum one half of volume directly into wound with syringe
- Apply the remaining half of volume onto cut gauze swab, secured with Tegaderm dressing over wound
- Leave in situ for **30 minutes**
- Once dressing removed, area should appear blanched
- Test for anaesthetic effect prior to procedure, suture within 15mins of dressing removal
- On occasion, LAT gel can be 'topped up' with 1% lignocaine:  
**The maximum dose is 0.1ml / kg (IBW) of 1% lignocaine**  
 (An 18 kg child could receive 1.8 ml of 1% lignocaine)
- Do not repeat LAT gel application or 'top up' dose of lignocaine

LAT Gel in Paediatric lacerations: Leeds Teaching Hospitals NHS Trust. <http://www.lhp.leedsth.nhs.uk/detail.aspx?id=3182>

Best evidence topic review: Ferguson C, Loryman B, Body R. Topical anaesthetic versus lidocaine infiltration to allow closure of skin wounds in children. *Emergency Medicine Journal* 2005;22:507-509.

Use of topical wound anaesthetic – LAT Gel in the paediatric emergency department: Leicester Hospitals NHS Trust





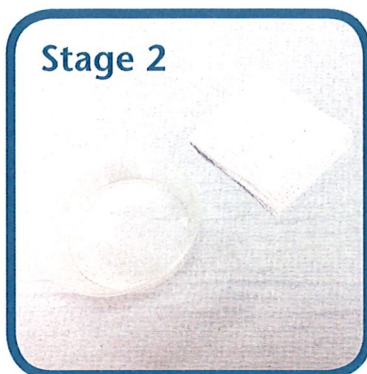
# How to Apply LAT Gel

**Stage 1**



Pour the LAT gel into a gallipot

**Stage 2**



Take a small gauze swab

**Stage 3**



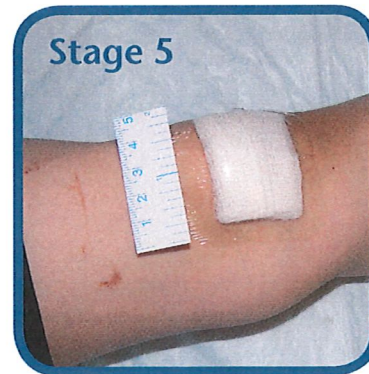
Cut a small piece of gauze which corresponds to the size of the wound

**Stage 4**



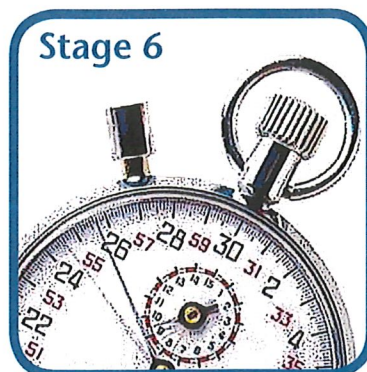
Soak the small piece of gauze in the LAT gel

**Stage 5**



Place the gauze on top of the wound ensuring that it covers the wound edges. And cover the gauze with a Tegaderm

**Stage 6**



Leave in situ for 30 minutes

