

Local Anaesthetic (LAT) Gel in CED - Paediatric Full Clinical Guideline - Derby only

Reference no.: CH CLIN C30

1. Introduction:

To provide topical local anaesthetic (LAT Gel) for children requiring suturing of lacerations

2. Aim and Purpose:

To ensure correct treatment regime is followed within CED

3. Definitions:

Traumatic laceration to the skin and scalp are common presentations to the Children's Emergency Department (CED). Acceptable, safe and effective repair can be aided by using a topical anaesthetic, without needing to infiltrate with local anaesthetic^{1, 2, 3}. Local anaesthetic gels can be used in preference to injected Lidocaine as they are less painful to apply and equi-analgesic^{1, 2, 3}.

4. Main Body of Guidelines:

LAT gel (Lidocaine 4%, Adrenaline 0.1%, Tetracaine 0.5%) is combined in a gel and applied as a surface anaesthetic for lacerations of the skin. It is especially useful for lacerations involving the face and scalp. It has also been used for lacerations of the extremities but with less effectiveness (overall success rate of 53.7% (95% CI 41.1% to 66%)⁴.

Follow the treatment guideline overleaf.

Contraindications:

- Hypersensitivity to lidocaine, adrenaline or tetracaine or any of the other ingredients of LAT gel
- LAT gel should not be used on mucosal surfaces, genital area, digits, pinna of ear or burned/debrided areas
- History of cholinesterase deficiency

Adverse effects:

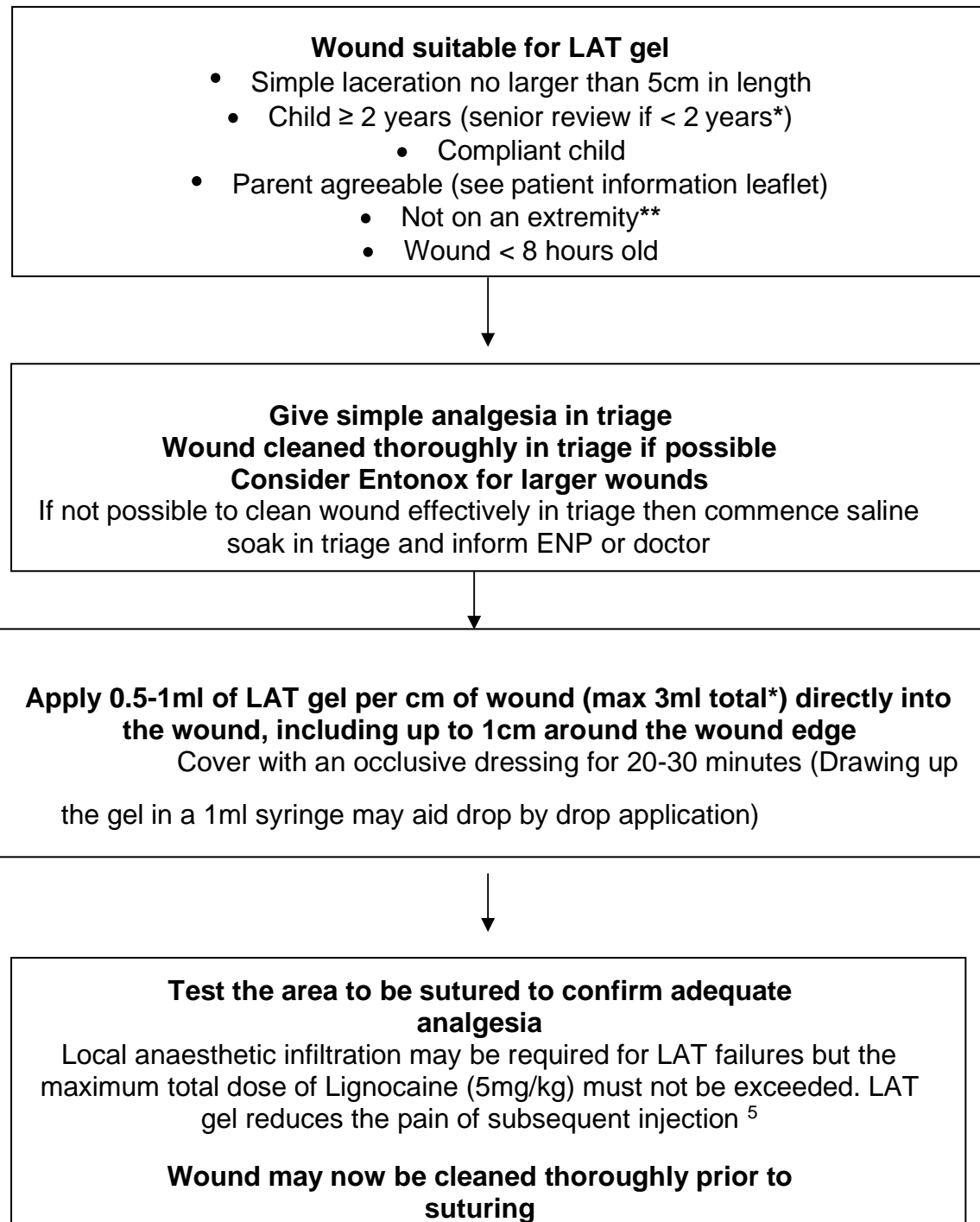
Local irritation including redness where the gel was applied, mild burning or itching sensation

Mild allergic reactions (which may cause localised rash or swelling)

Rarely severe allergic reactions

An information leaflet (see appendix) should be given to the parents/carers of all children before LAT gel is used.

Treatment Pathway



*Consider using in child < 2 years after senior review – maximum dose of 2ml in 1-2 years. Not to be used in <1 yrs.

** It has also been used for lacerations of the extremities but with less effectiveness (overall success rate of 53.7% (95% CI 41.1% to 66%)⁴. Suggest senior review for these wounds

5. References

- 1 Topical Lidocaine Adrenaline Tetracaine (LATGEL) Versus Injectable Buffered Lidocaine for Local Anaesthesia in Laceration Repair. (1997) *West J Med*; 167 (2) ;79-81. Ersnt et al.
- 2 Association of Paediatric Anaesthetists of Greta Britain and Northern Ireland: Good Practice in Postoperative and Procedural Pain: 2008
- 3 BestBets: Topical anaesthetic versus lidocaine infiltration to allow closure of skin wounds in children; April 2005
- 4 The Anaesthetic Effectiveness of LAT Gel of Finger Lacerations, Pediatric Emergency Care, Dec 2004, 20, Issue 12, 812-815
- 5 Acad Emerg Med. 2001 Mar;8(3):223-30. LET versus EMLA for pretreating lacerations: a randomized trial. Singer AJ, Stark MJ.

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PATIENT INFORMATION LEAFLET: LAT GEL

(LIDOCAINE 4%, ADRENALINE 0.1%, TETRACAINE 0.5%)

Read this leaflet carefully before your child uses LAT gel

- If you have any further questions ask your doctor or nurse

1. What is LAT gel and what is it used for?

LAT gel contains 3 medicines called lidocaine, adrenaline and tetracaine. It works by numbing the surface of the skin for a short time. It is put on the skin before cleaning of wounds and putting in stitches. It helps to stop pain on the skin but there may still be feelings of pressure and touch.

2. Before you use LAT gel

Do not use LAT gel if:

- Your child is allergic (hypersensitive) to lidocaine, adrenaline or tetracaine or any of the other ingredients listed in section 6 (further information)
- Your child is allergic to any other anaesthetics
- Your child has a history of cholinesterase deficiency

3. How to use LAT gel

LAT gel will be applied by your doctor or nurse.

LAT gel should not be used on the following areas:

- Inside the nose or mouth
- In or near the eyes or ears
- Fingers and toes
- Genital area

Using LAT gel

- Gloves should always be worn when handling LAT gel
- Where to put the gel, how much to use and how long to leave it on will depend on what it is needed for
- Your doctor or nurse will apply the gel

Adults and Children over 1 year

The gel is put on to the skin in a thick layer. The usual dose is 0.5-1ml of gel per cm of wound length up to a maximum of 2ml for those aged 1-2 years; 3ml for those 3 years and over. The maximum wound length LAT gel should be used on is 5cm.

The wound should be covered with a dressing and left for 20-30 minutes. The procedure should then be undertaken immediately as the duration of effect is not known.

Skin that has been numbed with LAT gel will be blanched (will appear white).

If you get LAT gel in your eye rinse well with lukewarm water or salt (sodium chloride) solution. Be careful to avoid getting anything in your eye until feeling returns.

If LAT gel is accidentally swallowed, talk to your doctor, pharmacist or nurse straight away

If you use more LAT gel than you should talk to your doctor, pharmacist or nurse straight away, even if you do not feel any symptoms

4. Possible side effects

Like all medicines LAT gel can cause side effects, although not everybody gets them.

Severe allergic reactions

If you have a severe allergic reaction, **stop using LAT gel and see a doctor straight away.** The signs may include sudden onset of:

- Rash
- Feeling short of breath
- Low blood pressure which may make you feel faint or dizzy
- Swelling of the face, lips, tongue or other parts of the body

Other possible side effects

- Redness where the gel was applied
- Mild burning or itching sensation where the gel was applied
- Mild allergic reactions (which may cause rash or swelling)

If any of the side effects get serious, or if you notice any side effects not listed in this leaflet, please tell your doctor, pharmacist or nurse.

5. How to store LAT gel

Keep out of the reach and sight of children

Do not store above 25°C and do not freeze

Do not use LAT gel after the expiry date shown on the packaging

6. Further information

What LAT gel contains

- The active substances are lidocaine, adrenaline and tetracaine. Each gram of gel contains 40mg of lidocaine, 1mg of adrenaline and 5mg of tetracaine.
- The other ingredients are sodium metabisulphate, disodium edetate, hydroxymethylcellulose.