**APPLICATION OF TOPICAL ANESTHETIC GEL (LET) FOR UNCOMPLICATED LACERATIONS**

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<th>SCOPE</th>
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**NOTE:** The first appearance of terms in bold in the body of this document (except titles) are defined terms – please refer to the Definitions section.

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**OBJECTIVES**

- This protocol is intended to assist health care professionals when initiating specific diagnostics, therapeutics, and interventions for patients, prior to the initial Physician or Nurse Practitioner (NP) assessment. Intended for patients who present to the Emergency Department (ED) or Urgent Care Centre (UCC), who may benefit from the application of topical anesthetic gel containing lidocaine, epinephrine and tetracaine (LET).

- To provide indication and direction to health care professionals for the application of LET gel to patients one (1) month of age and older who present with an uncomplicated laceration.

**APPLICABILITY**

Compliance with this document is required by all Alberta Health Services employees, members of the medical and midwifery staffs, students, volunteers, and other persons acting on behalf of Alberta Health Services (including contracted service providers as necessary).

**ELEMENTS**

1. **Points of Emphasis**

   1.1 LET gel provides local anesthesia and some hemostasis to the area of the skin with which it has been in contact and decreases pain and anxiety for patients.

   a) Although most commonly used in pediatrics populations, LET gel may be used for decreasing pain and anxiety in adult patient populations.
1.2 A patient-specific order from an authorized prescriber for the medication or to enact the protocol is required prior to the administration LET.

1.3 LET gel may be applied when the health care professional’s clinical judgement indicates that patients, particularly children, may require suturing for repair of laceration(s) within a one (1) hour time frame.

1.4 Application of LET gel should not delay patient treatment(s).

2. Inclusion Criteria

2.1 Patients aged one (1) month or older and who present with an uncomplicated laceration:
   a) length of wound does not exceed five (5) centimeters or two (2) inches; or
   b) gaping wound with minimal bleeding.

3. Exclusion Criteria

3.1 LET gel shall not be used for the following:
   a) infants less than one (1) month;
   b) lacerations to digits where digital ischemia exists;
   c) those with previous sensitivity, allergy or adverse reactions to topical anesthetics;
   d) patients with complicated lacerations with moderate to severe bleeding (e.g., arterial bleeds);
   e) those with severe hepatic disease;
   f) patient or parent/alternate decision-maker (ADM) indicate they do not wish to have topical anesthetic gel applied. Older children may prefer to use active coping strategies (e.g., distraction);
   g) laceration involving mucous membranes or in close proximity to mucous membranes; and/or
   h) patients with laceration(s) to genitals.

4. Application of LET Gel

4.1 Coordinate application time with the health care professional who will be performing the laceration repair:
   a) application of LET gel requires 20 – 30 minutes to provide effective anesthesia;
b) LET gel should be removed after a maximum of 60 minutes; and

c) duration of action of anesthesia following removal of LET gel is 45 – 60 minutes.

4.2 Apply up to three (3) millilitres (mL) LET gel to the laceration with a gel soaked gauze or cotton ball or by using a cotton tipped applicator, and then cover with an occlusive transparent dressing.

4.3 Constant pressure to the wound for 20 – 30 minutes will optimize the effect.

a) Pressure assists with the hemostasis and may enhance anesthesia properties.

b) Parent/ADM can be encouraged to participate in the application of pressure with instruction from the health care professional.

4.4 Topical local anesthesia is adequate if the skin is blanched and the patient is unable to perceive sharp sensation (e.g., touching with a needle) at the wound margin. When anesthesia is adequate the wound may be cleaned and sutured or glued.

5. Documentation

5.1 The health care professional shall document on the patient’s health record:

a) the medication order or order to enact the protocol;

b) the application of LET gel;

c) assessments;

d) reassessments;

e) interventions; and

f) patient’s responses to interventions.

DEFINITIONS

Alternate decision-maker means a person who is authorized to make decisions with or on behalf of the patient. These may include, specific decision-maker, a minor’s legal representative, a guardian, a ‘nearest relative’ in accordance with the Mental Health Act (Alberta) or an agent in accordance with a personal directive or a person designated in accordance with the Human Tissue and Organ Donation Act (Alberta). This also includes what was previously known as the substitute decision-maker.

Authorized prescriber means a health care professional who is permitted by federal and provincial legislation, their regulatory college, Alberta Health Services, and practice setting (where applicable) to prescribe medications.
Health care professional means an individual who is a member of a regulated health discipline, as defined by the Health Disciplines Act (Alberta) or the Health Professions Act (Alberta), and who practises within scope and role.

Health record means the Alberta Health Services legal record of the patient's diagnostic, treatment and care information.

Order means a direction given by a regulated health care professional to carry out specific activity(-ies) as part of the diagnostic and/or therapeutic care and treatment to the benefit of a patient. An order may be written (including handwritten and or electronic), verbal, by telephone or facsimile.

Patient means an adult or child who receives or has requested health care or services from Alberta Health Services and its health care providers or individuals authorized to act on behalf of Alberta Health Services. This term is inclusive of residents, clients and outpatients.

REFERENCES

- Alberta Health Services Governance Documents:
  - Assessment and Reassessment of Patients Guideline (#HCS-181-01)

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