

LRI Children's Hospital

Use of Sucrose Solution 24% (Algopedol) for Procedural Pain management in Infants Under 3 Months

Staff relevant to:	Medical & Nursing staff caring for infants under 3 months of age undergoing painful procedures.
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Reviewed by:	Z Syrett
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1. Introduction and Who Guideline applies to

To provide guidance for medical and nursing staff caring for infants under 3 months of age undergoing painful procedures. Examples of these procedures are; heel puncture, blood sampling & cannulation, lumbar puncture, long line insertion, immunisations, eye examinations, urinary catheterisation, IM/SC injections and ECG assessment.

Repeated exposure to painful procedures can cause hypersensitivity to stimuli. The consequences of receiving repeated episodes of painful procedures can lead to altered brain development and subsequent behaviour.

The analgesic effects of sweet solutions are mediated through taste. Sucrose is effective for reducing pain responses associated with invasive procedures. **It has no sedative effects and therefore should not be used to "settle" irritable babies.**

Related Documents

- Guideline for the management of pain and distress in neonates C13/2010.
- Non-nutritive sucking on the UHL Neonatal Units C24/2014

This procedure should be used in conjunction with the UHL Consent Policy to ensure the child receives safe care and children and families are able to understand the reasons for care to facilitate co-operation.

2. Guideline Standards and Procedures

2.1 Resources:

SUCROSE 24% (Algopedol)	(NOT per kg)
<1.5 kg	0.2ml
1.5 to 2 kg	0.3ml
2 to 2.5 kg	0.5ml
2.5 to 3 kg	1 ml
>3 kg	2 ml

(NOT per kg)

Preterm infants up to 4 times per 24 hours

Full term infants up to 6-8 times per 24 hours

Give **one drop at a time** onto the tongue to avoid choking / gagging

Dispose of any remaining solution in the clinical waste. If further medication is needed, open a new vial.

The following groups of babies should **not** receive Sucrose:

- Babies who are receiving nothing by mouth (can discuss with consultant)
- Oesophageal atresia or Tracheo-oesophageal atresia (pre-op)
- Ventilated or unstable infants

2.2 Procedure / Process for Use of Sucrose 24% (Algopedol) solution for procedural pain management

No.	Action
1	<p>Sucrose 24% solution to be administered orally 2 minutes prior to the procedure to ensure absorption is effective.</p> <p>Checking and administration to be carried out according to Leicestershire Medicines Code</p> <p>Administer by the use of an oral syringe on the anterior tip of the tongue or by the use of a dummy (baby to suck for two minutes if a dummy used), two minutes prior to the procedure.</p>

2.2 Procedure / Process for Use of Sucrose 24% (Algopedol) solution for procedural pain management

2	Monitor pain during and following procedure to enable evaluation of use of product.
3	Use other pain relieving measures as appropriate in conjunction with sucrose and evaluate effectiveness as follows: Physical: Swaddling, stroking, positioning, holding and rocking, non-nutritive sucking (dummies), smooth soothing vocalisation and pacifying Environmental: Decreasing sound and lighting; preventing over stimulation
4	Liaise with multi-disciplinary team on a regular basis to establish the need for invasive procedures to minimise pain and distress
5	Document effectiveness of interventions in infants notes

3. Education and Training

None

4. Monitoring Compliance

None

5. Supporting References

Stevens, B. & Ohlsson, A. Sucrose for analgesia in newborn infants undergoing painful procedures. *Cochrane.Database.Syst.Rev.* CD001069 (2000).

6. Key Words

Sucrose, painful procedures

The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs. As part of its development, this policy and its impact on equality have been reviewed and no detriment was identified.

CONTACT AND REVIEW DETAILS	
Guideline Lead (Name and Title) Zoe Syrett - Specialist Nurse	Executive Lead Chief Nurse
Details of Changes made during review: No changes	