

Protocol for the use of sucrose solution for procedural pain management

Sucrose

- ❑ Reduces distress associated with painful procedures in babies < 3 months of age
- ❑ Is safe, and easily administered.
- ❑ Must be prescribed on the drug chart (as required) or administered under patient group directive
- ❑ Will only be effective if administered orally
- ❑ Should be used in conjunction with other non-pharmacological comfort measures (non-nutritive sucking, positioning, etc) and appropriate analgesia.

Preparation

- ❑ 24% sucrose solution (sucrose & water) (Sweet-Ease)

Indications

Sucrose should be prior to invasive procedures such as:

Heel puncture	Venepuncture + Cannulation
Urinary catheterisation	Eye examination
Naso-gastric tube insertion	IM/SC injections
Lumbar puncture	

It can also be used for procedures likely to cause distress such as:

Colostomy bag change	Removing tape
Scalp electrode placement	Dressing change
Suturing	Painful physiotherapy

Contra-indications

- ❑ Fructose or sucrose intolerance
- ❑ Direct administration onto tongue or buccal surface is unavailable (not effective via any other route)
- ❑ Paralysed and sedated

Cautions

- ❑ Suspected or confirmed necrotizing enterocolitis (NEC)
- ❑ Intubated patients

Administration

- ❑ Administer 0.1ml of sucrose solution onto anterior aspect of tongue or inside cheek, or dip dummy into solution to coat
- ❑ 1 to 2 minutes prior to procedure
- ❑ Offer a dummy if part of babies normal care (the dummy promotes non-nutritive sucking which will enhance the effect of the sucrose)
- ❑ Repeat the dose upon commencement of the procedure and every 2 minutes **if required**
- ❑ **Maximum dose per administration:** 27-31 weeks: 0.5ml; 32-36 weeks: 1ml; ↑ 37 weeks/↓ 3 month: 2ml (no daily maximum has been identified)
- ❑ The peak action is 2 minutes
- ❑ The duration of action is 5-10 minutes
- ❑ Discard remaining solution after use (single use only)
- ❑ Observe for gagging, choking, coughing and vomiting

Assessment and Documentation

- An appropriate Pain Assessment tool should be used to assess the infant before, during and after the procedure: these scores must be recorded in patient record
- All doses administered must be recorded on the patients prescription chart

References

Lefrack et al (2006) Sucrose analgesia: identifying potentially better practices *Pediatrics* 118: 197-202

Morash D and Fowler K (2004) An evidence-based approach to changing practice: Using sucrose for infant analgesia *Journal of Pediatric Nursing* 19(5): 366-370

Stevens B et al (2004) Sucrose for Analgesia in newborn infants undergoing painful procedures *Cochrane Database Systematic review*; (3): CD001069