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Team Lead: Regional Director - Pharmacy	Program Area: Pharmacy and Therapeutics
	Policy Section: General
Approved by: VP - Medical Services	
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Review Date:	Procedures – Oral Sucrose
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STANDARD GUIDELINE SUBJECT:

Pain Relief in Infants Requiring Procedures – Oral Sucrose

PURPOSE:

To provide pain relief for infants undergoing minor procedures.

Facilities in the region are in compliance with the Baby Friendly Initiative and continue to support breastfeeding and skin to skin for procedural pain relief when applicable. An alternative to these methods could be oral sucrose.

IMPORTANT POINTS TO CONSIDER:

Directions for Mixing Sucrose Solution

Sucrose Solution Directions:

- Using an ORAL syringe draw up 0.5 mL of simple syrup
- add 1.5 mL water
- Total volume = 2 mL

Dose for Infants (by current weight):

- 1 2 kg = 0.5 mL
- greater than 2 kg = 2 mL

Expires in 24 hours, at room temperature

PROCEDURE:

1. Sucrose solution is administered orally for relief of pain caused by minor procedures with a prescriber's order to infants who are less than 4 months. For infants up to one year of age sucrose solution may also be effective. For these infants give them a "test dose" to determine individual effectiveness.

- 2. Use may include, but not limited to the following procedures:
 - arterial, venous or capillary puncture
 - injections
 - tape removal
 - lumbar puncture
 - suturing or suture removal
 - urinary catheterization
 - dressing change
 - NG insertion
 - circumcision
- 3. Use sucrose solution up to 8 doses in a 24 hour period. If a patient has more than 8 procedures in that time frame consider other methods of pain management.
- 4. The amount of sucrose solution to use is determined based on the following table:

Infant Weight	Oral Dosage of Sucrose Solution
1 to 2 kg	0.5 mL
Greater than 2 kg	2 mL

- 5. For optimal effect give some sucrose solution 2 minutes prior to the painful procedure, some immediately upon beginning and some half way through, if the procedure lasts longer than 10 minutes.
- Skin to skin contact and breastfeeding will be encouraged in conjunction with sucrose solution for nonpharmacologic pain management whenever possible.
- 7. A parent/guardian may also provide a pacifier, which can be used in conjunction with sucrose solution to enhance analgesic effect.
- 8. After the nurse mixes the sucrose solution, it can be kept for 24 hours at room temperature once it has been diluted.
- 9. Assess the analgesic effectiveness of the sucrose solution and need for subsequent administrations during and following the procedure.
- 10. For any infant who demonstrates unexplained nausea, vomiting, abdominal pain and hypoglycemia after exposure to sucrose solution consider the possibility of the infant having Hereditary Fructose Intolerance, a rare enzyme deficiency disorder which would require a consult to Children's Metabolic service.

*Note: Simple Syrup refers to the undiluted form/full strength (80% sucrose) and Sucrose Solution refers to the diluted form (20-50% sucrose).

REFERENCES:

HSC Practice Guidelines – Sucrose for Procedural Pain Relief in Infants. Women's/Child Health programs Newborn: 80.275.333 : April 2009

Prevention and treatment of neonatal pain. www.uptodate.com. Last update: February 10, 2011