

ORAL SUCROSE FOR PROCEDURAL PAIN IN THE INFANT

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Critical Points

1. Sucrose is a medication ordered by providers and documented in the Medication Administration Record (MAR).
2. Oral sucrose is ordered as a 24% solution PRN for procedural pain for neonates and infants 28 weeks gestational age to 12 months of age. It is administered via either of two methods:
 - Pacifier
 - Drip method
3. Do not use in infants who are chemically paralyzed or whose airway is compromised.
4. When administered as recommended, the onset of action of 24% oral sucrose is 2 minutes (maximum effect) and the duration is 3 – 5 minutes.
5. Oral sucrose is not effective when administered in an oro or nasogastric (OG/NG).
6. Oral sucrose does not cause elevation of serum glucose, increase the risk of oral thrush, increase OG/NG output, or reach the stomach.
7. Oral sucrose is recommended for use in infants to address mild procedural pain associated with:
 - Heel sticks
 - Peripheral IV placement
 - Venipuncture
 - NG/Replogle placement
 - Urinary catheterization
 - Dressing changes
 - Eye exams
 - IM or SQ injections
8. Oral sucrose may be used as an adjunct to opioid analgesics for more severe pain related to procedures such as:
 - PICC placement
 - Chest tube insertion/removal
 - Lumbar puncture
9. Oral sucrose may be given when pain behaviors are present and cannot be managed with standard measures.

Supplies

- 24% oral sucrose in individual dose dispensing container
- Pacifier

ORAL SUCROSE FOR PROCEDURAL PAIN IN INFANT (*continued*)

Procedure

1. Obtain provider order for oral sucrose.
2. Assess patient's pain level using an appropriate pain tool for developmental age prior to administering oral sucrose.
3. Administer sucrose:
 - a. Pacifier method:
 - i. Dip pacifier in sucrose and give immediately prior to painful procedure.
 - ii. Starting with one dip of sucrose, repeat throughout procedure, using the minimal amount needed to achieve pain relief.
 - b. Drip method:
 - i. Drip sucrose on infant's tongue from twist tip vial if unable to suck from a pacifier or pacifier is denied by family/caregiver.
 - ii. Starting with one drip administer sucrose and assess tolerance before administering more to intubated infants.
4. Provide additional comforting behaviors such as containment and swaddling during the procedure when possible.
5. Assess level of pain during procedure using same pre-procedure pain tool to determine effectiveness and adequacy of sucrose dose.
6. Notify provider if oral sucrose is not adequate for pain relief.
7. Discard unused portion of sucrose after completion of procedure.

Documentation

1. Document oral sucrose administration in MAR.
2. Document patient's response to sucrose administration.

References

Level of Evidence (FAME*)	Level*	Reference
	E2	Passariello, A., Montaldo, P., Palma, M., Cirillo, M., Di Guida, C., Esposito, S., Caruso, M., Pugliese, M., & Giliberti, P. (2019). Neonatal painful stimuli: Skin conductance algesimeter index to measure efficacy 24% of sucrose oral solution. <i>The Journal of Maternal-Fetal & Neonatal Medicine</i> , 33(21), 3596–3601. https://doi.org/10.1080/14767058.2019.1580690
	E2	Stevens, B., Yamada, J., Campbell-Yeo, M., Gibbins, S., Harrison, D., Dionne, K.,...Riahi, S. (2018). The minimally effective dose of sucrose for procedural pain relief in neonates: a randomized controlled trial. <i>BMC Pediatrics</i> , 18(1), 85. doi:10.1186/s12887-018-1026x
	E2	Stevens, B., Yamada, J., Ohlsson, A., Haliburton, S., & Shorkey, A. (2016). Sucrose for analgesia in newborn infants undergoing painful procedures. <i>Cochrane Database of Systematic Reviews</i> , 2017(2). https://doi.org/10.1002/14651858.cd001069.pub5

ORAL SUCROSE FOR PROCEDURAL PAIN IN INFANT (*continued*)

Procedure History

Author:	Linda LeFrak, RN, MS, CNS; Lisa Tsang, RN, MN (Adapted from ICN unit-based procedure “Oral Sucrose for Procedural Pain in Neonates” authored by: Carol Lingenfelter, RN; Steve Kloman, RN, MSN, in 10/03)
Originated:	7/14 (Approved by Patient Care Standards Committee, 7/14) (Original unit-based procedure: 10/03)
Resources:	Lisa Tsang, RN, MN; Shelley Diane, RN, MS, CNS; Jeannie Chan, RN, MS, CNS; Elizabeth Papp, RN, MSN, CNS; Sarah Lucas, PharmD
Reviewed:	
Reviewed / Revised:	(Original unit-based procedure reviewed/revised 6/07 & 5/12 by Linda LeFrak, RN, MS, CNS) 7/16: Stephanie Mazely, RN; Lisa Tsang, RN, MN 11/18: Jeannie Chan, RN, MS, CNS; Elizabeth Papp, RN, MSN, CNS; Mary Kay Stratigos, RNC-NIC 02/22: Jeannie Chan, RN, MS, CNS