

Sucrose 24% for analgesia in infants undergoing minor procedures

SESLHDPR/475

POLICY STATEMENT

The Registered Nurse (RN) / Registered Midwife (RM) is authorised to instigate nurse/midwife-initiated medication without an authorised prescriber's order under the specific circumstances set out in the **INDICATIONS** section and provided there are no contraindications present.

It is important for nursing and midwifery staff to remain aware that:

- Minor ailments may be symptoms of other more serious diseases or may be adverse reactions to medication already prescribed
- Nurse-initiated medication may interact with the patient's prescribed medication
- The maximum daily recommended dose of the medication must not be exceeded¹

The administering nurse/midwife must record the administration on an approved paper or electronic medication chart, clearly indicating that the medicine was nurse initiated.

If the patient continues to require the medication (i.e., more than two doses in 24 hours) then a medical officer (MO) must be consulted and a regular or PRN order obtained.

A change in the patient's condition such as newly occurring or increasing severity of symptoms must be reported to the MO and investigated.

INDICATIONS

Relief of pain for neonates and infants up to 4 months of age undergoing minor procedures such as heel prick, venepuncture, arterial puncture, dressing changes etc.

CONTRAINDICATIONS

Known fructose or sucrose intolerance

PRECAUTIONS

Use with Caution in preterm neonates, intubated infants, infants who are muscle relaxed, infants with confirmed or suspected necrotising enterocolitis, infants with altered or impaired gag and swallow reflexes and infants who are nil by mouth.

Major procedures (e.g., insertion of a chest drain) requiring increased pain relief – consider other pain relief measures.

Any disruption of the integrity to the oral mucosa due to diagnosed yeast infection, oral surgery/trauma or mucositis.

Infants requiring investigations for hypoglycaemia and inborn errors of metabolism.

No analgesia effect if oral sucrose is given via other routes (e.g., NG tube).

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HISTORY/ASSESSMENT

Assess suitability of procedure for use of analgesia

PROTOCOL/ADMINISTRATION GUIDELINES

Caution: CHECK for allergies and/or contraindications			
Drug	Dose	Route	Frequency
Sucrose 24%	0.1 mL (= 0.024 g or 2 drops)	Administer onto buccal mucosa – under tongue or anterior tongue towards cheek. Offer a pacifier if this is part of the infant's care. Encourage non-nutritive sucking, as it may increase the pain relief effect.	Up to 3 doses
Administer 2 minutes prior to the procedure			

MONITORING - POTENTIAL ADVERSE EFFECTS/INTERACTIONS

The most widely used indicator for pain intensity is cry (less reliable indicator in preterm infants) followed by physiological indicators such as changes in heart rate, respiratory rate and oxygen saturation.

Monitor infant for gagging and choking.

DOCUMENTATION

A record of the administration must be made on the approved paper or electronic medication chart noting that the medication was nurse initiated.

A further record of the medication administered including indication, dose and effect must be included in the patient's health care record.

PRACTICE POINTS

- Sucrose is not appropriate for the management of continuing pain or distress.
- Sucrose is only effective when given orally, directly onto the infant's tongue. There is no analgesic effect if sucrose is given directly into the stomach via a nasogastric tube.
- The peak effect appears to occur at 2 minutes and lasts approximately 4 minutes.
- Consider other methods of pain relief such as:
 - Breast feeding or non-nutritive sucking using a dummy/pacifier (if this is a normal part of the infant's care and infant is able to suck)
 - Full or partial swaddling
 - Reduction in noxious stimuli or over stimulation
 - Holding and cuddling by a parent or carer
 - Gentle handling, repositioning if necessary, before procedure

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REFERENCES/FURTHER READING

1. [NSW Health Policy Directive Medication Handing PD2022_032](#)
2. Australasian Neonatal Medicines Formulary ([ANMF](#)). Sucrose 24%. 15 July 2021. .

REVISION and APPROVAL HISTORY

Date	Version Number	Author and Approval
July 2015	DRAFT	Pharmacy Department, Royal Hospital for Women
September 2015	1	Approved by SESLHD Drug & QUM Committee
May 2018	DRAFT 2	Reviewed by nursing and pharmacy staff. Minor wording updates made.
July 2018	2	Approved by SESLHD Quality Use of Medicines Committee
August 2021	DRAFT 3	Reviewed by nursing and pharmacy staff. Minor wording updates made.
September 2021	3	Approved by SESLHD Quality Use of Medicines Committee
June 2023	DRAFT 4	NSW Medicines Formulary review. Aged group changed to <i>up to 4 months</i> . Reviewed by nursing and pharmacy staff.
September 2023	4	Approved by SESLHD Drug and Therapeutics Committee