

sucrose

24% oral mixture

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Dose and Indications

Reduction of procedural pain

Doses can be expressed in drops. There are approximately 20 drops/mL in a 24% solution

Oral

Weight (grams)	Dose
≤ 1500grams	up to 0.5mL (or 10 drops) of a 24% solution
1500grams to 3500grams	up to 1mL (or 20 drops) of a 24% solution
≥3500grams	up to 2mL (or 40 drops) of a 24% solution

Maximum of 5 doses in 24 hours

Preparation and Administration

Oral

Drop the appropriate dose of sucrose onto the baby's tongue 2 minutes prior to procedure. A dummy or comforter may be given to suck following the oral administration of the sucrose.

Adverse Effects

The adverse effects of repeated doses in neonates are unknown.

Hyperglycaemia has not been reported but may need to be considered with chronic high doses of sucrose.

Practice Points

- > Sucrose reduces procedural pain from single events including:
 - Intravenous insertion
 - suction
 - lumbar puncture
 - dressing changes
 - heel prick
 - venipuncture
 - bladder tap
 - removal of tapes from lines or tubes
- > Sucrose may be contraindicated for intravenous insertion immediately before a general anaesthetic – seek anaesthetic advice
- > Sucrose 24% has an osmolarity of about 1000mOsm/L
- > Sucrose is only effective when given orally and is ineffective if given directly into the stomach ie via nasogastric tube

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- > Other natural sugars (eg glucose in breast milk) may have a role in the management of procedural pain in infants
- > Efficacy is enhanced if sucrose is combined with the use of a pacifier, and if the baby is held throughout the procedure. Parental comforting and positioning have also been suggested as helpful in combination with the sucrose.

References

- > Anand KJS. Consensus statement for the Prevention and Management of Pain in the Newborn. Arch Pediatr Adolesc Med. 2001;155:173-180
- > Stevens B, Yamanda J, Ohlsson, A, 2004, Sucrose for analgesia in newborn infants undergoing painful procedures. The Cochrane Library. 2004; Issue 3, Chichester UK.
- > Royal Children's Hospital Melbourne, Current Guidelines for the use of oral sucrose.
- > Grazel, R. Neonatal pain management with oral sucrose: 2003 update, Clinical Column, Document Number 7C, The Online Journal of Knowledge and Synthesis for Nursing.

Version control and change history

PDS reference: OCE use only

Version	Date from	Date to	Amendment
1.0	November 2012	current	Original version