

Glucose Gel

Glucose gel 40% (Glucose15[®])

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Note:

This guideline provides advice of a general nature. This statewide guideline has been prepared to promote and facilitate standardisation and consistency of practice, using a multidisciplinary approach. The guideline is based on a review of published evidence and expert opinion.

Information in this statewide guideline is current at the time of publication.

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Health practitioners in the South Australian public health sector are expected to review specific details of each patient and professionally assess the applicability of the relevant guideline to that clinical situation.

If for good clinical reasons, a decision is made to depart from the guideline, the responsible clinician must document in the patient's medical record, the decision made, by whom, and detailed reasons for the departure from the guideline.

This statewide guideline does not address all the elements of clinical practice and assumes that the individual clinicians are responsible for discussing care with consumers in an environment that is culturally appropriate and which enables respectful confidential discussion. This includes:

- The use of interpreter services where necessary,
- Advising consumers of their choice and ensuring informed consent is obtained,
- Providing care within scope of practice, meeting all legislative requirements and maintaining standards of professional conduct, and
- Documenting all care in accordance with mandatory and local requirements

Synonyms

Dextrose, d-Glucose

Dose and Indications

For Acute Management of Neonatal Hypoglycaemia

Inclusion criteria:

- > Plasma glucose level (PGL) between 1.5 and 2 mmol/L **and**
- > Asymptomatic of hypoglycaemia **and**
- > \geq 35 weeks gestation **and**
- > < 48 hours of age **and**
- > Physiologically stable

Buccal

0.5mL/kg/dose



Glucose

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Preparation and Administration

Buccal

Do not squirt the gel directly into neonate's mouth or down a nasogastric tube. Always rub into the buccal mucosa!

- > Draw up the prescribed amount of gel into a 3mL enteral feeding syringe using a drawing up straw. Remove all air bubbles to ensure accurate measurement of the medication. Label the syringe with a green oral medication label
- > Apply to infant's buccal mucosa following drying with sterile gauze. Massage into mucosa with a gloved hand.
- > Offer breastfeed or formula if the baby is being formula fed.
- > Seal the tube with a purple syringe cap and place in the fridge for further dose if required. Can be stored in a refrigerator for 48 hours after opening
- > Use one tube per neonate

Adverse Effects

Rare

Hyperglycaemia

Monitoring

- > Check PGL 30 - 60 mins after the administration of the Glucose Gel 40%
- > If repeat PGL is 1.5mmol - 2.5mmol inform the NNP/MO. They may prescribe a second dose of glucose gel 40% if the neonate is not symptomatic
- > Therapeutic goal: PGL >2.5 mmol/L
- > If the PGL is <2.6mmols or the neonate is symptomatic following the second dose, seek advice from a neonatal consultant

Practice Points

- > If at any point, the neonate is symptomatic of hypoglycaemia or PGL is less than 1.5mmol/L, contact medical staff
- > If needing more than two doses, consult a neonatal consultant
- > Up to six doses may be given in 48 hours
- > A tube of oral glucose contains 37.5g of glucose 40% gel, a single tube will only ever be required



Glucose

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References

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- > Harris DL, Gamble GD, Weston PJ, Harding JE. What happens to blood glucose concentrations after oral treatment for neonatal hypoglycemia?. *The Journal of pediatrics*. 2017 Nov 1;190:136-41.
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