**Alert**

40% glucose, on average, raises blood glucose by 0.4 mmol/L (95% CI −0.14—0.14) and should not be used alone in the treatment of moderate to severe hypoglycaemia. This can be a nurse initiated medication according to the local hospital guideline. **DO NOT squirt gel directly into the baby’s mouth to avoid choking.**

**Indication**

Prevention and treatment of mild hypoglycaemia in neonates ≥35 weeks’ gestation and <48 hours of life.

**Action**

Glucose gel contains glucose, a simple carbohydrate, in concentrated aqueous solution, which can be administered by direct application to mucosal surfaces of the mouth, including buccal and lingual surfaces. Absorption from these sites may allow rapid access to the circulation. Some proportion of the dose may be swallowed and absorbed from the gastrointestinal tract.

**Drug Type**

Glucose 40%.

**Trade Name**

Dextrose 40% Oral Gel syringe (Biomed, New Zealand)

**Presentation**

**ORAL Dextrose 40% Gel syringe (Biomed, New Zealand):** Each 2.5 mL syringe contains Glucose (1 g), methyl hydroxybenzoate (2.25 mg), propyl hydroxybenzoate (0.25 mg) and ethanol (5% v/v).

**Glutose15 Oral Glucose Gel:** 15 g of glucose / 37.5 g tube. 200 mg of glucose gel 40% is equivalent to 0.5 mL. Lemon flavoured. Contains citric acid monohydrate, water, dextrose, glycerin, methylparaben, potassium sorbate, propylparaben, carboxymethylcellulose, sodium citrate.

**40% glucose in Water for Injection:** Supplied in 2 mL oral syringe by Baxter (glucose syringe product GLR.082).

**Dosage/Interval**

0.5 mL/kg/dose (200 mg/kg/dose). Doses can be repeated as per the local hospital guidelines. 1 mL/kg/dose (400 mg/kg/dose) as a single dose has also been used.

**Route**

ORAL

**Maximum Daily Dose**

1.5 mL/kg

**Preparation/Dilution**

This can be a nurse initiated medication according to the local hospital guideline.

**Dextrose 40% Gel:**

1. Wearing a clean glove, gently dry the infant’s buccal mucosa with gauze. NOTE: If using tube, draw up required dose of gel slowly in an oral-only 5 mL syringe.
2. Dispense one-half of the dose from oral syringe onto gloved finger
3. Massage into the buccal mucosa of one cheek. **DO NOT SQUIRT DIRECTLY INTO BABY’S MOUTH.**
4. Repeat with remaining half-dose inside the other cheek.
5. Large doses may be divided into 4 equal amounts and given alternating between cheeks.
6. Commence breastfeeding or administer expressed breast milk or formula.
7. Discard the unused portion of the gel.

**Glucose 40% solution (Baxter)**

1. Wearing a clean glove, gently dry the infant’s buccal mucosa with gauze.
2. Instil the prescribed dose slowly into the side of the mouth onto the buccal mucosa and massage it in with a gloved finger. **DO NOT SQUIRT DIRECTLY INTO BABY’S MOUTH.**
3. Commence breastfeeding or administer expressed breast milk or formula.
4. Discard the unused portion.

**Monitoring**

Measure blood glucose 30 minutes after administration and subsequent management is as per the hospital guideline.

**Contraindications**

No information.

**Precautions**

<35 weeks gestation; infants at risk of aspiration or in whom feeds are contraindicated.

**Drug Interactions**

No information.
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<td><strong>Compatibility</strong></td>
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<td><strong>Stability</strong></td>
<td>Glucose 15 Gel: 12-month shelf life. Check the expiry date prior to administration. Dextrose 40% Gel 2.5 mL syringe:</td>
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<td><strong>Storage</strong></td>
<td>Glucose 15 Gel: In room temperature. Dextrose 40% Gel syringe (Biomed): 2-8°C (refrigerate).</td>
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<td><strong>Special Comments</strong></td>
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**Adverse Reactions**

- Risk of aspiration if the gel is squirted directly into mouth.

**Compatibility**

- No information.

**Incompatibility**

- No information.

**Stability**

- Glucose 15 Gel: 12-month shelf life. Check the expiry date prior to administration.
- Dextrose 40% Gel 2.5 mL syringe:

**Storage**

- Glucose 15 Gel: In room temperature.
- Dextrose 40% Gel syringe (Biomed): 2-8°C (refrigerate).

**Special Comments**

- 40% glucose, on average raises blood glucose level by 0.4 mmol/L (95% CI −0.14–0.14).²

**Evidence summary**

- Refer to full version.

**References**

- Refer to full version.

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