

Title: Transfer of babies at-risk of hypoglycaemia to a primary birthing facility from Waikato Hospital			
Manual Classification: Service Specific NICU Medical	Effective Date: 1 June 2015	Expiry Date: 1 June 2018	Keywords: <i>(supply 5 keywords - search engine)</i> Blood glucose concentrations , late preterm, diabetes, growth restriction, infant of diabetic mothers
Facilitator <i>sign/date</i>	Sponsor <i>sign/date</i>	Process Authorised <i>sign/date</i>	
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1. Purpose of procedure:

To ensure appropriate management of babies at risk of neonatal hypoglycaemia transferring to primary birthing centres. Babies are only able to be transferred to primary birthing centres if the primary birthing centres are able to provide on-going reliable glucose oxidase glucose monitoring.

2. Definitions:

Neonatal hypoglycaemia is currently defined as a blood glucose concentration $< 2.6\text{mmol/l}$.^{1,2} Low blood sugar concentrations are linked with brain injury and poor neurodevelopmental outcome.³⁻⁵

Screen all at-risk babies including:⁶

- Preterm (< 37 weeks)
- Intrauterine growth restriction all infants $< 2.5\text{kg}$ or $> 4.5\text{kg}$
- If customized centile charts are available all babies $< 10\text{th}$ or $> 90\text{th}$ centile
- Infants of diabetic mothers
- Hypothermic babies
- Babies identified as not feeding well
- Maternal medications including:
 - Sodium Valproate
 - Beta blockers
 - Oral hypoglycaemics e.g. Metformin

If unsure check individual drugs

Babies requiring the screening protocol can transfer from Waikato Hospital to a primary birthing facility and complete screening (see flow diagram) when

- The initial blood glucose at one hour of after birth is $> 2.6\text{mM}$
- Feeding has been established
- Axilla temperature is between 36.5 C and $< 37.5\text{ C}$

If hypoglycaemia is diagnosed it must be treated prior to transfer. It is essential that all babies demonstrate a normal blood glucose concentration $> 2.6\text{mM}$ prior to discharge from Waikato Hospital.

3. When to screen:
(see flow diagram)

A blood glucose concentration should be taken 1 hour after birth regardless of feeding, then three to four hourly before feeds.

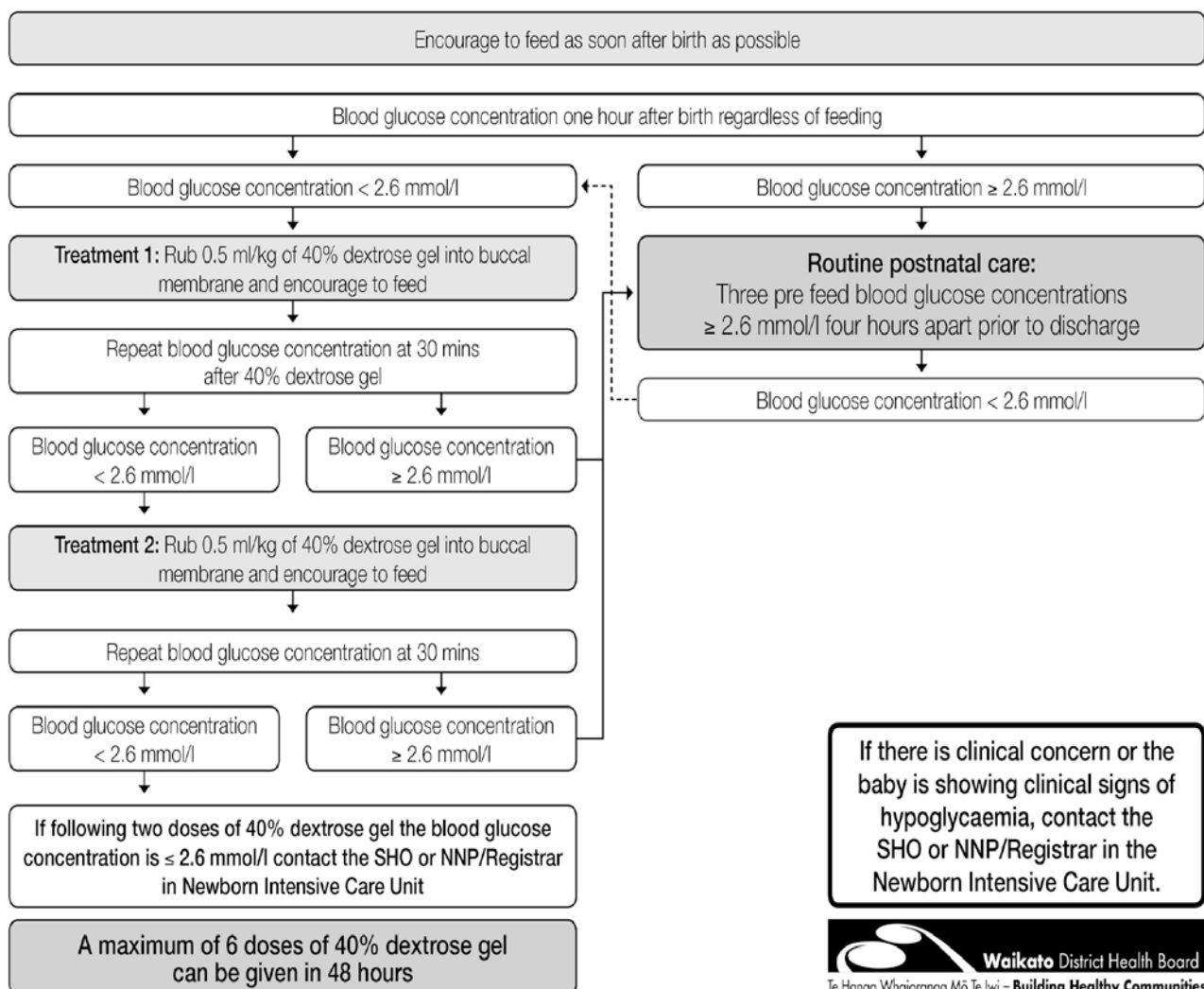
4. When can you stop screening?:
(see flow diagram)

If feeding well after three blood glucose concentrations ≥ 2.6 mmol/L three to four hours apart. Following a hypoglycaemic episode (<2.6 mmol/l) screening must continue until there are three blood glucose concentrations ≥ 2.6 mmol/l three to four hours apart.

If feeding is not established or there is clinical concern, then blood glucose screening should continue until hypoglycaemia is no longer considered to be a risk.

5. Procedure:
See flow diagram

Screening and initial treatment for babies at risk of hypoglycaemia



6. Associated documents

Protocol

Screening and initial treatment protocol for babies at-risk of hypoglycaemia
Dextrose Gel – standing orders.

PRACTICE NOTES.

- All babies at risk of neonatal hypoglycaemia should be encouraged to feed as soon after birth as possible (within the first hour).
- Babies without risk factors for hypoglycaemia may develop hypoglycaemia.
- Healthy, normally grown babies should NOT have blood glucose screening.
- Refer to the lactation consultant if there are problems with breastfeeding.

7. References:

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