



# SCREENING FOR NEONATAL HYPOGLYCAEMIA, A SINGLE CENTRE EXPERIENCE

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### Background

Significant Neonatal Hypoglycaemia (NH) is considered as a major risk for neuro-developmental problems. Over the years, several guidelines have been issued in an attempt to minimise these potentially harmful sequelae<sup>1,2,3,4</sup>. This is a review of the ongoing screening for neonatal hypoglycaemia in our centre.

### Aims

To determine the adherence to guidelines on the screening of NH on the Postnatal Ward. Furthermore, this aimed at establishing the optimum frequency and number of Blood Glucose (BG) recordings that are required to detect hypoglycaemia at the pre-set high risk group of babies.

### Method

The records of all babies born Mediclinic City Hospital from 1 August 2011 till the end of February 2012 were retrospectively reviewed. Babies who qualify for NH screening are the Infants of Diabetic Mothers (IDMs), babies with Low Birth weight < 2500g, babies who were > 4000g at birth and late preterm babies (35-37 completed weeks of gestation).

Babies at risk of hypoglycaemia are offered the first feed within 30-60 minutes after birth. BG was checked before the 2nd, 3rd and 4th feeds. When three consecutive blood glucose levels were  $\geq 2.6$  mmol/l, the BG is checked before alternate feeds for further 3 readings.

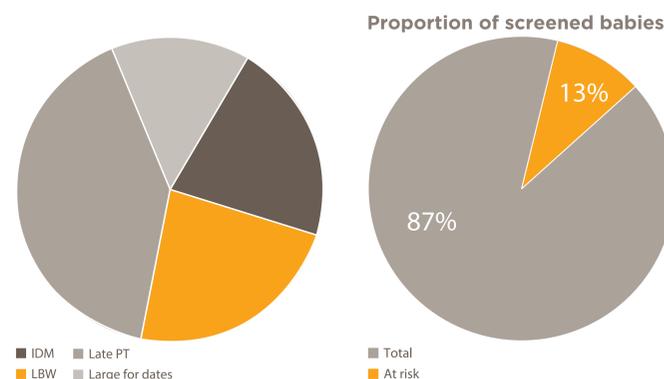


### Results

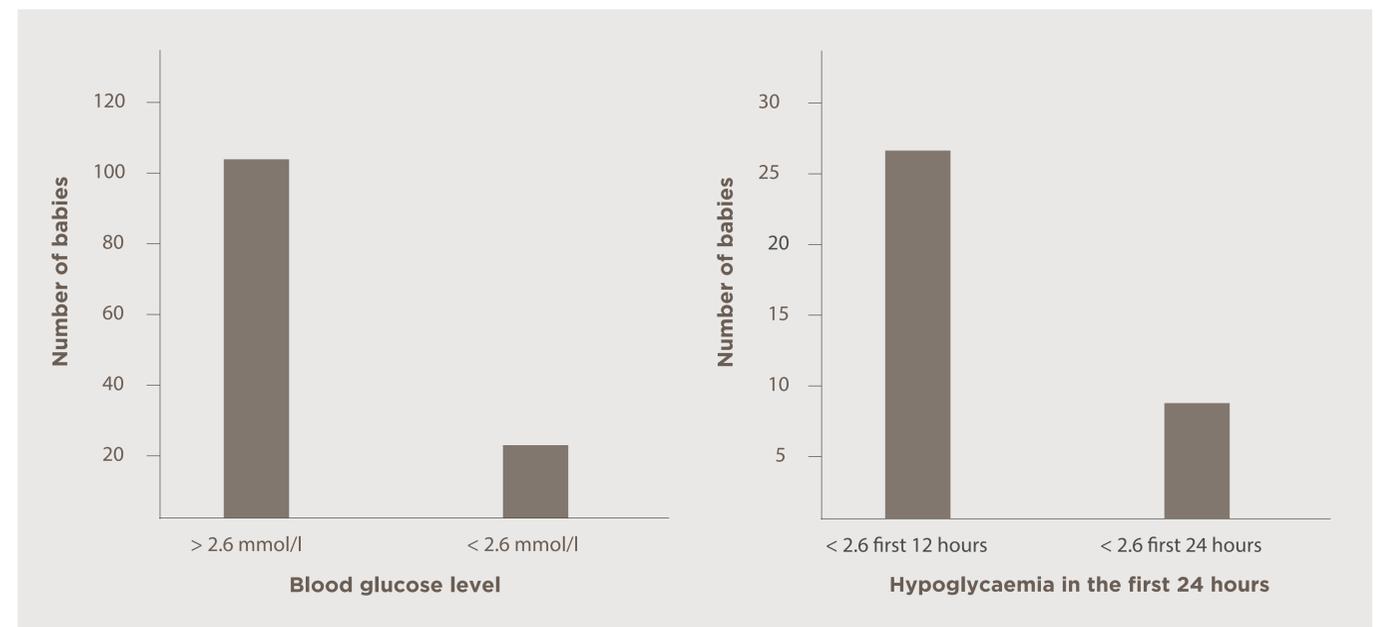
1099 babies were born over the study period. As an example the total number of IDMs was 59 babies (5.3%). 113 babies were late preterms (10.2%).

None of the babies at risk of hypoglycaemia has missed monitoring. In these high risk babies, the lowest BG was detected during the first 12 hours of monitoring. It was 1.3 mmol/l.

During the 6 hourly pre feed BG checks (after three consecutive 3 hourly readings), the lowest BG was 2.4 mmol/l. These recordings were managed successfully by feeding and re-checking BG pre next feed.



**Conclusions:** The procedure for screening for NH on postnatal ward was followed. Low BS was mainly detected in the first 12 hours of monitoring. The subsequent monitoring did not show significantly low BS irrespective of the category. Based on these results, one may safely consider shortening the period required for screening. Larger scale studies will still be required to resolve this issue<sup>5</sup>.



### References

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