Figure 1) Screening for neonatal hypoglycemia. IDM Infant of diabetic mother; IV Intravenous; LGA Large-for-gestational-age; SGA Small-for-gestational-age. CPS Statement: www.cps.ca/english/statements/FN/fn04-01.htm

ALGORITHM FOR THE SCREENING AND IMMEDIATE MANAGEMENT OF BABIES AT RISK FOR NEONATAL HYPOGLYCEMIA

NEWBORN BABY

Is the baby unwell?

 Routeline Care: Initial Feed

Is the baby at risk? SGA, LGA, IDM or preterm

 Routeline Care: Feed on demand as long as infant remains well

Routine Care: Feeding on demand as long as infant remains well

Baby becomes unwell

CHECK GLUCOSE NOW: INVESTIGATE FOR CAUSE AND TREAT ANY UNDERLYING CONDITION

<2.6 mmol/l in an unwell baby CONSIDER IV TREATMENT

<1.8 mmol/l at 2 hours of age or <2.0 mmol/l at subsequent checks CONSIDER IV TREATMENT

1.8 - 2.0 mmol/l at 2 hours of age or 2.0 - 2.5 mmol/l at subsequent checks

Refeed and recheck glucose in 1 hour

Remains <2.6 mmol/l despite feeding CONSIDER IV TREATMENT

Rises to ≥2.6 mmol/l after feeding

ONCE ONLY

>2.0 mmol/l at 2 hours of age or ≥2.6 mmol/l at subsequent checks

CHECK GLUCOSE AT 2 HRS AND EVERY 3-6 HOURS (BEFORE FEEDS) AS LONG AS INFANT REMAINS WELL, UNTIL FEEDS ARE ESTABLISHED AND GLUCOSE ≥2.6 mmol/l

<2.0 mmol/l at 2 hours of age or ≥2.6 mmol/l at subsequent checks

INITIATE INTRAVENOUS INFUSION OF 10% DEXTROSE AT A RATE OF 80ml/kg/day (5.5mg glucose/kg/min). CHECK GLUCOSE 30 min AFTER ANY CHANGE AND ADJUST THERAPY (UP TO 100 ml/kg/day and/or 12.5% DEXTROSE) IN ORDER TO MAINTAIN GLUCOSE LEVEL ≥2.6 mmol/l. IF RATES IN EXCESS OF 100 ml/kg/day OF 12.5% DEXTROSE ARE REQUIRED INVESTIGATION, CONSULTATION AND/OR PHARMACOLOGICAL INTERVENTION ARE INDICATED. MAY START WEANING IV 12 HOURS AFTER STABLE BLOOD GLUCOSE IS ESTABLISHED. CONTINUED BREASTFEEDING IS ENCOURAGED.

WHEN TO STOP TESTING: IDM AND LGA DO NOT REQUIRE RETESTING IF SUGAR ≥2.6 mmol/l AFTER 12 HOURS OF AGE AS THEY USUALLY PRESENT BY THIS TIME. PRETERM AND SGA INFANTS DO NOT REQUIRE RETESTING AFTER 36 HOURS PROVIDED STABLE LEVELS AND INTAKE ARE ACHIEVED.

NOTE: REPEATED GLUCOSE LEVELS <2.6 mmol/l IN AN AT RISK BABY REQUIRE FURTHER INTERVENTION

NO

YES

YES

NO

NO

YES