

1. APPENDIX 1: TYPE I DIABETES – INSULIN REGIME PERI-DELIVERY

Basal insulin (eg Lantus) to continue.

- Any doses due during established labour or evening prior to morning elective caesarean section delivery to be at pre-delivery dose (written agreed plan to be established pre- anticipated delivery or by 36 weeks gestation)
- Once labour established or prior to elective caesarean section delivery IV sliding scale insulin and IV infusion one litre 5% Dextrose (+20mmol KCL per litre) per 8 hrs to be commenced
- Mealtime prandial insulin (eg novorapid) dosing to be suspended whilst on sliding scale insulin
- Monitor bm's hourly
- Pre-agreed personalised plan should state personalised sliding scale rates or will indicate use of standard sliding scales (2) or (3), **NOT (1)**, as defined later
- Where no pre-specified plan start with sliding scale (2)
- Personalised sliding scale rates calculated according to pre-delivery total prandial insulin (eg novorapid) dosing requirements. Total prandial insulin requirement in any 24hr period is divided by 24 and **rounded down** to next whole number to give insulin requirement where bm 4.1 – 7.0 mmol/L. Other points on the sliding scale then extrapolated – **see table for guidance**; except bm 0 – 4 always has sliding scale off as continued basal insulin will meet this need.
- On delivery of placenta any sliding scale rates are halved (includes standard sliding scales), **but see table for minimum infusion rates**.
- Pre-meal subcutaneous prandial insulin (eg novorapid) doses are thereafter re-established according to pre – pregnancy requirements
- These same sliding scales can be applied for glycaemic control after betamethasone injections

Table: Personalised IV insulin sliding scales:

Bm reading (mmol/L)	Initial Insulin infusion rates (units/hr)	Insulin infusion rates post delivery placenta (units/hr)
0 – 4.0	0	0
4.1 – 7.0	b (min 1)	0.5b (min 0.5)
7.1 – 11.0	1.5b (min 2)	0.75b (min 1)
11.1 – 14.0	2b (min 3)	b (min 2)
14.1 – 17.0	3b (min 4) (call Diabetes team)	1.5b (min 3) (call Diabetes team)
>17.0	4b (min 6) (call Diabetes team)	2b (min 6) (call Diabetes team)

Where b = total daily prandial insulin (eg novorapid) dose divided by 24 and rounded down to next whole number

Worked example:

Type 1 Diabetic previously on 16 units Lantus at bedtime and 6 units novorapid with each of 3 meals. Morning ECSD planned at 38 weeks. At 36 weeks requiring 44 units Lantus at bedtime and 16 units novorapid with each meal (ie 48 units per 24 hrs). Advised to reduce Lantus to 16 units night before ECSD. Morning of ECSD starved therefore no novorapid dose. Commenced sliding scale and IV dextrose infusion. Sliding scale bm 0 – 4: no additional insulin, 4.1 – 7.0: 2 units/h ($48/24 = 2$), 7.1 – 11.0: 3 units/h, 11.1 – 14.0: 4 units/h, 14.1 – 17.0: 6 units/h, >17: 8 units/h. On delivery of placenta insulin infusion rates are halved. In this case sliding scale bm 0 – 4: no additional insulin, 4.1 – 7.0: 1 units/h ($48/24 = 2$), 7.1 – 11.0: 1.5 units/h, 11.1 – 14.0: 2 units/h, 14.1 – 17.0: 3 units/h, >17: 6 units/h (minimum applied). On resuming eating novorapid restarted at 6 units with each meal. Sliding scale stopped. Lantus continued at 16 units.

IF DIABETIC CONTROL NOT MAINTAINED (bm's > 14) THE DIABETIC TEAM SHOULD BE CONTACTED FOR ADVICE (on-call medicine middle grade if out of hours)

REMEMBER these sliding scale rates are dependant on **CONTINUING BASAL INSULIN (eg LANTUS)** throughout