

Labour protocol for: **GDM or Type 2 patients requiring  $\geq 0.5$  units of insulin/kg per day during pregnancy**

Start protocol when either active labour starts, or if NPO or if scheduled for cesarian delivery at 0600 hr on day of cesarian delivery. Commence following infusions:

**Glucose infusion:** I.V. Dextrose 10% at 50 mls/hour with 10 mEq KCl/500 ml D<sub>10</sub>W

**Insulin infusion:** I.V. Insulin 50 Units Regular in 500 mls NaCl (N), i.e. 1 Unit = 10 mls  
Flush tubing and start at 10 mls/hour unless glucose  $\leq 4$ mmol/L

If glucose  $\leq 4$ mmol/L then just start with glucose infusion alone and hold insulin infusion.

### **Adjustments**

Capillary glucoses values are determined hourly and at each hourly determination use the following adjustment scale for the IV insulin infusion (IV ins infusion) as in Section A.

**If glucose falls by more than 2 mmol/L in one hour go to Section B.**

### **Section A If glucose is:**

- $\leq 3.0$  mmol/L stop the IV insulin infusion for 1 hour and increase the D<sub>10</sub>W to 100 ml/hr
- 3.1 - 3.5 mmol/L decrease IV ins infusion by 10 mls/hour, increase the D<sub>10</sub>W to 75 ml/hr
- 3.6 - 4.0 mmol/L decrease IV ins infusion by 5 mls/hour
- 4.1 - 6.0 mmol/L leave at the same insulin infusion rate
- 6.1 - 7.0 mmol/L increase IV ins infusion by 5 mls/hour
- 7.1 - 8.5 mmol/L increase IV ins infusion by 10 mls/hour
- 8.6 - 10 mmol/L increase IV ins infusion by 15 mls/hour
- 10.1 – 12 mmol/L increase IV ins infusion by 20 mls/hour
- $> 12$  mmol/L increase IV ins infusion by 20 mls/hour, stop glucose infusion for one hour

### **Section B**

If glucose falls by greater than 2 mmol/L in 1 hour and is now

$\geq 5.1$  mmol/L decrease IV insulin infusion rate to 10 mls/hour

$\leq 5.0$  mmol/L Stop IV insulin infusion

Anytime insulin infusion is stopped and glucose rises  $> 4.5$  mmol/L, restart insulin at 5 ml/hour

### **Postpartum:**

1. Stop insulin infusion with delivery of placenta, continue glucose infusion until patient is drinking or eating.
2. Resume normal diet, check glucose once on postpartum day one (2 hour postmeal) to confirm euglycemia, if  $>8.0$ mmol/l call diabetes care giver. If Type 2 DM use CDA diet (1800 kcal/day) and check glucose once daily 2 hour postmeal.
3. Give laboratory requisition for OGTT at 6 weeks. If Type 2 DM do not need OGTT, lab req. given for A1c, lipid profile, urine microalbumin/creatinine ratio and TSH.
4. Instruct patient to telephone for results of laboratory tests or make appointment in pregnancy diabetes clinic in 8 weeks.

Date: \_\_\_\_\_

Signed: \_\_\_\_\_