

PERIOPERATIVE MANAGEMENT OF CO-MORBIDITIES

INSULIN ADMINISTRATION DURING & AFTER EMERGENCY GYNAECOLOGICAL SURGERY FOR WOMEN WITH TYPE 1 AND TYPE 2 DIABETES

1. Notify the anaesthetist of the woman's:

- type of diabetes
- if known usual diabetes medication. (Insulin +/- oral hypoglycaemic agents)

Type 2 diabetes, if all blood sugar levels (BGL) are below 8mmol/L insulin may not be needed whilst fasting.

Recommence oral hypoglycaemic agents with the first meal.

Type 1 diabetes, once fasting, the woman will require intravenous (IV) access.

2. Prior to surgery:

- Obtain blood glucose level.³
- If fasting BGL >8, notify the Anaesthetist who may consider peri-operative insulin depending on type of surgery.
- Commence IV infusion of 10% glucose at 100mL / hour via an infusion pump.
- Using a 50mL syringe pump, commence a solution of 50units of a short-acting insulin in 50mL of Sodium Chloride 0.9% ^{4.*} (i.e. 1unit per mL).
Note: Alternative to sodium Chloride: 50units Actrapid in 500mL Haemacel (1unit / 10mL)
- Titrate insulin dosage to BGL as shown in the table below.

PRE OPERATIVE INSULIN GUIDELINES

Blood Glucose Level (mmol/L)	Rate of Insulin Infusion – Sodium Chloride 0.9%	Measure BGL in:	Rate of Insulin Infusion- Haemacel
Less than 5	Withhold insulin OR decrease by 50% if in progress	One hour	<i>Withhold insulin decrease by 50% if in progress</i>
5 to 8	1mL / hour (i.e. 1unit/hr)	Two hours OR post op four hours	10mL / hour (i.e. 1unit/hr)
Over 8	2mL / hour (i.e. 2units/hr)	One hour	20mL / hour (i.e. 2units/hr)
Over 15	Bolus 2units Call anaesthetist 2mL / hour	One hour	
Over 20	Call anaesthetist for instructions	One hour	

REFERENCES (STANDARDS)

National Standards –1 Clinical care is Guided by Current Best Practice
 Legislation - Nil
 Related Policies - Nil
 Other related documents – Elective Surgery

RESPONSIBILITY

Policy Sponsor	Medical Director- OGCCU
Initial Endorsement	June 2003
Last Reviewed	
Last Amended	August 2015
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