

Indications:

- Hyperglycaemia - initial BSL > 10.0 mmol/l
AND
- Known type 2 Diabetes mellitus
OR
- Suspected type 2 diabetes / insulin resistance
Risk factors: obesity,
⇒ age > 40,
⇒ Aboriginal,
⇒ family history of type 2DM,
⇒ "metabolic syndrome"
⇒ (BP, gout, proteinuria,
⇒ lipids)
⇒ Previous hyperglycaemias documented
⇒ Previous gestational DM

Contraindications

- Type 1 diabetes / diabetic ketoacidosis – use IV infusion
- Pancreatic insufficiency – eg. Chronic pancreatitis, CF
- End-stage renal disease / dialysis
- Severe hepatic impairment

Use with Precaution

- Stable diabetes with mild acute problem
- Acute alcohol intoxication (Precaution)

Monitoring

- Record BSLs QID
 - Immediately pre-meals (and pre-dose) and at 21:00 OR
 - Q6H for fasting patients
 - Increase frequency if hypoglycaemia or change in situation as per **DMO** instructions

Insulin calculation and prescription:

- Discontinue all oral hypoglycaemic agents (DMO may use discretion in patients on long term meds who are stable)
- Calculate TOTAL dose for first 24 hours:
 - = 0.4 units per kg / 24 hrs
 - May increase to 0.5 units per kg / 24 hours where :
 - known insulin resistance / chronic high BSLs
 - high initial BSL > 15 mmol
 - patients on oral hypoglycaemic agents / insulin
- Chart 50% of this dose as nocte (21:00) glargine (Lantus™)
- The other 50% is divided into 3 pre-prandial doses given 5 – 10 mins before meals. Short acting human insulin – eg. Insulin aspart (NovoRapid™)

Daily review and Adjustment of Doses

- Patients on Basal bolus Protocol should be reviewed daily to assess the adequacy of the dosing / glycaemic control in the context of their acute medical or surgical problem.
- Adjustment for persistent hyperglycaemia:
 - Increase all doses by ~ 20% (1 – 3 units)
- Adjustment for isolated hyperglycaemia (eg, midday BSL = 16)
 - Increase the preceding dose (eg breakfast dose) by ~ 20% for the next 24 hours. If 07:30 BSL is high, increase nocte glargine by 20% (ie. ~ 2 - 3 units)
- Adjustment for hypoglycaemia (BSL < 4.0)
 - Exclude reversible cause – eg, diet, sepsis, IV fluids
 - DMO review
 - Decrease next dose of short-acting insulin by 20%
 - Ensure appropriate low-GI snack is given
 - See management of Hypoglycaemia algorithm for symptomatic hypoglycaemic episode.
- **FASTING** patients
 - give long acting glargine as per above calculation
 - With-hold short-acting insulin whilst fasting
 - Monitor BSL q6h, observe for symptoms of hypoglycaemia

If hyperglycaemic – DMO / Anaesthetic review