

Transition from IV to SQ insulin

This worksheet suggests only starting doses of SQ insulin; daily assessment of insulin needs and dose adjustment is required. (See other side for explanation of suggested doses)

Average hourly rate of IV insulin [£]			Dose of basal insulin			Dose of Scheduled short/rapid insulin**			Correction Scale
1	unit/hour	=	8	units once daily	and	2	units every 6 hours (or before meals)	and	Very low dose
1.5	units/hour	=	12	units once daily	and	3	units every 6 hours (or before meals)	and	Very low dose
2	units/hour	=	16	units once daily	and	4	units every 6 hours (or before meals)	and	Very low dose
2.5	units/hour	=	20	units once daily	and	5	units every 6 hours (or before meals)	and	Very low dose
3	units/hour	=	24	units once daily	and	6	units every 6 hours (or before meals)	and	Very low dose
4	units/hour	=	32	units once daily	and	8	units every 6 hours (or before meals)	and	Very low dose
5	units/hour	=	40	units once daily	and	10	units every 6 hours (or before meals)	and	Low dose
6	units/hour	=	48	units once daily	and	12	units every 6 hours (or before meals)	and	Low dose
7	units/hour	=	56	units once daily	and	14	units every 6 hours (or before meals)	and	Low dose
8	units/hour	=	30	units q12h	and	16	units every 6 hours (or before meals)	and	Moderate Dose
9	units/hour	=	36	units q12h	and	18	units every 6 hours (or before meals)	and	Moderate Dose
10	units/hour	=	40	units q12h	and	20	units every 6 hours (or before meals)	and	Moderate Dose

* CAUTION: Patients without a history of insulin-requiring diabetes who are receiving <2 units/hour of IV insulin may not require transition to scheduled SQ insulin. For these patients, consider starting "low dose" correction insulin. Start basal insulin only if BG is uncontrolled on correction insulin

£ Usually best determined by taking the average rate of insulin over the past 8 hours.

** Use rapid acting analog three times daily before meals in patients eating meals

What to include in your transition orders:

- Discontinue IV insulin infusion 60 minutes after the first doses of SQ insulin
- For patients who are on continuous enteral nutrition (tube feedings):
 - Check capillary BGs and give scheduled regular insulin every 6 hours
 - If enteral feeds are stopped/held/interrupted:
 - **Do NOT hold basal insulin or the correction insulin**
 - Hold scheduled regular insulin
 - Start an IV infusion of 10% Dextrose (D10) at the same rate as the feedings
- For patients tolerating meals:
 - Check capillary BGs before meals and at bedtime
 - Give the scheduled meal insulin or rapid acting analog three times daily before meals
 - Rapid acting insulin is best dosed 15 minutes prior to the meal, however, if the nurse suspects the patient may not eat, the rapid acting insulin can be given within 15 minutes of starting each meal. 50% of the rapid acting insulin dose may be given if the patient eats ½ or less of the meal.
 - If the meal is missed or the patient is NPO:
 - **Do NOT hold the basal insulin or the correction insulin**
 - Hold the scheduled meal insulin

Transition from IV to SQ Insulin: Explanation of the Suggested Doses

- Determine the average hourly rate of intravenous insulin (over the past 8 hours) and multiply by 24 hours to determine the daily IV insulin requirement
- Convert 2/3rds (about 70%) of the daily IV insulin requirement to subcutaneous insulin
 - Give 50% as basal insulin, ordered daily.
 - Give 50% as scheduled short/rapid acting insulin in divided doses
 - If the patient is on enteral nutrition, divide into 4 doses of regular insulin and give every 6 hours. If enteral feeds are stopped abruptly, start an IV infusion of 10% Dextrose (D10) at the same rate as the feedings and hold scheduled regular insulin
 - If the patient is eating, divide into 3 doses of a rapid acting analog and give before meals. Hold if patient is NPO
 - Short/rapid acting insulin can be adjusted to allow for changes in diet/steroids/etc. It may be adjusted or held based upon patient conditions
- Order correction insulin which is given regardless of nutrition status to cover hyperglycemia
 - Very Low Dose Scale: recommended for patients on 0-32 units of basal insulin
 - Low Dose Scale: recommended for patients on 33-56 units of basal insulin
 - Moderate Dose Scale: recommended for patients on >56 units of basal insulin
 - High Dose Scale: not recommended as an initial scale
- Discontinue intravenous insulin infusion 60 minutes after the first dose of subcutaneous insulin is given

CAUTION: Patients without a history of insulin-requiring diabetes who are receiving <2 units/hour of IV insulin may not require transition to scheduled SQ insulin. For these patients, consider starting "low dose" correction insulin. Start basal insulin only if BG is uncontrolled on correction insulin

For assistance in dosing, please contact the pharmacist in your unit.