

CV Surgery Insulin Protocol

INSULIN DRIP

1. Mix drip with 100 Units Novolin R (Regular Insulin) into 100 mL of Normal Saline (1Unit/1 mL)
2. Prime IV tubing with Insulin Drip and place on infusion pump.
3. **Start Insulin Drip** with the following formula:
 - a. $(\text{Blood Glucose} - 60) \times 0.03 = \text{Number of Units of Insulin/Hour}$
 - b. Note: Use the current blood glucose, and the **starting “multiplier” is 0.03**
4. **Titrate the drip** hourly based on the following criteria:
 - a. BG > 140 Increase multiplier by 0.01
 - b. BG \leq 100 Decrease multiplier by 0.01
 - c. BG is between 101 – 140 No change in the multiplier
5. Recalculate the insulin dose every hour with the latest BG even if the multiplier does not change
6. If BG < 80, recheck in 30 minutes
7. If BG < 60:
 - a. Give D5W IV push using the following formula:
 1. $(100 - \text{BG}) \times 0.3 = \text{Milliliters of D50W to be given IV push}$
 - b. Decrease the insulin drip multiplier by 0.01 and continue insulin drip
 - c. Recheck BG in 15 minutes
8. While on the drip, **call the Hyperglycemic Management Team** if any below occur:
 - a. BG < 60 twice in a row after intervention
 - b. BG < 70 twice in a row
 - c. BG > 200 on 3 consecutive Accuchecks and trend isn't moving toward target zone
 - d. Do not D/C insulin drip between 11pm and 5am. If by 9pm, it looks like you may have criteria to wean off the drip before 5am, then call for specific orders
9. Obtain lab glucose for verification if BG < 50 OR > 450

WEANING INSULIN DRIP

1. Convert to a subcutaneous insulin regimen, if you have no increase in the multiplier for 8 hours. A decrease in the multiplier is considered a favorable condition for weaning the insulin drip.
2. Call the Hyperglycemic Management Team for the subcutaneous Novolin N weaning dose order. Have the patient's weight (kg), HgbA-1C, and the total number of insulin units given on the insulin drip over the past 24 hours.
3. Administer Novolin N dose subcutaneously **2 hours prior to the discontinuation of the drip.**
4. See flow sheet at the bottom of this reference text for further weaning instructions.
5. **If BG is trending up, call the Hyperglycemic Management Team.**

CV SURGERY SLIDING SCALE – REGULAR INSULIN SUBCUTANEOUS

	<60 -> 1 Amp D50W IV push
	60-70 -> ¼ Amp D50W IV push
Symptomatic	70-80 -> ½ Amp D50W IV push
Non-symptomatic	70-80 -> No treatment and recheck BG in 1 hour
	81-140 -> 0 Units
	141-160 -> 2 Units
	161-180 -> 4 Units
	181-200 -> 6 Units
	201-224 -> 8 Units
	225-249 -> 10 Units
	250-299 -> 12 Units
	300-324 -> 14 Units
	>325 -> 20 Units, Call Hyperglycemic Management Team

