ICU Insulin Drip Order Set for Target Blood Glucose 110-140 mg/dL [1266]

Not for DKA, Hyperosmolar Syndrome, or Pregnancy.

Target Blood Glucose = 110-140 mg/dL - Recommend initiating protocol when blood sugar is GREATER OR EQUAL to 140 mg/dL for two consecutive readings.

Providers: If patient has active insulin / non-insulin ANTIHYPERGLYCEMIC orders, please consider discontinuing.

Nursing

Finger Stick Blood Glucose (FSBG) Monitoring

[X] Bedside glucose monitoring	Routine, Every hour -Monitor blood glucose every 1 hour unless otherwise specified -If blood glucose BETWEEN 110 - 140 mg/dL for 3 consecutive readings, monitor blood glucose every 2 hours and Call MD to transition to long acting subcutaneous insulin, if appropiate -Algorithm Advancement: If blood glucose GREATER THAN 140 mg/dL for 3 consecutive blood glucose readings after the initial blood glucose reading. ADVANCE TO THE NEXT HIGHER algorithm. Repeat step for every 3 consecutive readings above goal glucose range

Notify (Selection Required)

[X] Notify Provider	Routine, Until discontinued, Starting S, If Blood Glucose below 70 mg/dL AND If Blood Glucose greater than 360 mg/dL and on Algorithm 4, 5, or 6

Infusion Management - ICU Insulin Drip Algorithm 110-140 mg/dL

Initial Bolus Dose (Single Response)

( ) No Bolus	Routine, Once For 1 Occurrences
( ) For initial blood glucose of 200 - 300 mg/dL - insulin bolus from bag	5 Units, intravenous, once If initial blood glucose is 200 - 300 mg/dL, give 5 units IV BOLUS x 1 from insulin bag and start at MD specified algorithm
( ) For initial blood glucose of GREATER THAN 300 mg/dL - insulin bolus from bag	10 Units, intravenous, once If initial blood glucose is GREATER THAN 300 mg/dL, give 10 units IV Bolus x 1 from insulin bag and start at MD specified algorithm.

Choose One Algorithm Below for Initiation of Therapy: (Selection Required)

Glucose (mg/dL)	GLUCOSE GOAL 110-140 mg/dL
50 or less	1. Turn infusion off. Give D50% 50 mL. Notify MD. 2. Recheck blood glucose every 30 min until glucose is greater than 70 mg/dL. 3. When blood glucose is GREATER THAN 140 mg/dL, DECREASE TO THE NEXT LOWER algorithm and restart infusion at the appropriate rate.
51-69	1. Turn infusion off. Give D50% 25 mL or ½ cup of juice. Notify MD. 2. Recheck blood glucose every 30 min until glucose is greater than 70 mg/dL. 3. When blood glucose is GREATER THAN 140 mg/dL, DECREASE TO THE NEXT LOWER algorithm and restart infusion at the appropriate rate.
70-99	1. Turn infusion off. 2. Recheck blood glucose every 30 minutes until glucose is greater than 100 mg/dL then every one hour. 3. When blood glucose is GREATER THAN 140 mg/dL, DECREASE TO THE NEXT LOWER algorithm and restart infusion at the appropriate rate.

Glucose (mg/dL)	Algorithm 1 (units/hr)	Algorithm 2 (units/hr)	Algorithm 3 (units/hr)	Algorithm 4 (units/hr)	Algorithm 5 (units/hr)	Algorithm 6 (units/hr)
100-119	0.4	0.7	1.5	2.5	3.5	5
120-139	0.8	1.5	3	4	5	8
140-159	1	2	4	5.5	7.5	10
160-179	1.2	2.5	5	7	9	12
180-199	1.5	3	5.8	8.5	11	14
200-219	2	4	6.7	11	13	16
220-239	2.5	4.5	7.5	13	15	18
240-259	3	5	9	15.5	19	20
260-279	3.5	5.7	10	17.5	21	23
280-299	4	6.5	11.2	20	23	26
300-319	4.5	7	12.5	22.5	27	30
320-339	5	8	13.3	25.5	30	35
340-359	5.5	9	15	28.5	35	40
360 or greater	6	12	17	30 Call MD	40 Call MD	50 Call MD

Only Algorithms 1 - 4 are available for initiation of therapy. (Algorithms 5 & 6 are only for use during advancement of a patient's insulin needs)

[X] Select algorithm 1-4 (Single Response) (Selection Required)	
( ) Algorithm 1: Start here if insulin sensitive (e.g. BMI less or equal to 30, Type 1 Diabetes Mellitus, or End Stage Renal Disease)	0.4-50 Units/hr, intravenous, continuous Select Appropriate Algorithm: Algorithm 1
( ) Algorithm 2: Start here if mild insulin resistance (e.g. BMI greater than 30, Type 2 Diabetes Mellitus, or initial blood glucose less than 300 mg/dL)	0.4-50 Units/hr, intravenous, continuous Select Appropriate Algorithm: Algorithm 2
( ) Algorithm 3: Start here if moderate insulin resistance (e.g. After surgery, on steroid therapy, or initial blood glucose 300 mg/dl - 399 mg/dL)	0.4-50 Units/hr, intravenous, continuous Select Appropriate Algorithm: Algorithm 3
( ) Algorithm 4: Start here if severe insulin resistance (e.g. Status post organ transplantation or initial blood glucose 400 mg/dL or greater)	0.4-50 Units/hr, intravenous, continuous Select Appropriate Algorithm: Algorithm 4

Hypoglycemia Management (Selection Required)

[X] dextrose 50% injection	intravenous

Management of Patients with Nutritional Orders

[ ] insulin lispro (AdmeLOG) injection	3 Units, subcutaneous, 3 times daily before meals Give with each meal in addition to the infusion rate. HOLD this dose if patient is NPO or eating LESS THAN 50% of meal. Wait two hours before rechecking blood glucose and then adjust the infusion rate per algorithm.
[X] dextrose 10 % infusion	40 mL/hr, intravenous, continuous PRN, other, for interruption in TPN or tube feeds Start D10W at the previous TPN or tube feed rate up to a maximum rate of 40 mL/hr and DECREASE to the next LOWER algorithm on the table.