**Adult Insulin Infusion Protocol**

* Orders to be checked to start infusion when BG > 200 mg/dL X 3. CT population start infusion for BG > 180 mg/dL X 1
* Target BG range 101-180mg/dL
* When new IV tubing is used, completely prime the tubing. Once primed, waste an additional 20mL of insulin infusion using the IV pump prior to connecting the patient.
* Titrate insulin infusion only when BG level has been checked
* Patients with renal failure (CrCl less than 40 mL/min, urine output less than 30 mL/hr, or receiving dialysis) limit infusion rate increases to be NO SOONER THAN EVERY 3 HOURS
* **PATIENTS WITH TYPE 1 DIABETES OR EQUIVALENT: DO NOT DISCONTINUE DRIP UNTIL INSULIN MAINTENANCE REGIMEN IS IMPLEMENTED. NOTIFY PROVIDER WHEN STOPPING INFUSION**

**Monitoring:**

* **BG q1 hour** with insulin infusion initiation and post any titration
* May decrease glucose POC checks to every **2 hours** if the insulin infusion rate has not changed, the patient has **3** consecutive values in the 110-150 range and BG decreased by less than 40mg/dL since previous result.

**IV Bolus from Bag: Use only for Initial Initiation of Insulin Infusion or if patient has been off infusion > 24 hours**

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| --- | --- | --- | --- | --- | --- |
| **181-220 mg/dl** | **221-280 mg/dl** | **281-330 mg/dl** | **331-380 mg/dl** | **381-430 mg/dl** | **> 430 mg/dl** |
| Give 4 units IV bolus Infusion @ 1unit/h | Give 4 units IV bolus Infusion @ 2 units/h | Give 6 units IV bolus Infusion @ 2 units/h | Give 8 units IV bolus Infusion @ 3 units/h | Give 10 units IV bolus Infusion @ 3 units/h | Call MD for orders |

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| **Blood Glucose (BG)** | **If BG decreasing or the same as last value– infusion changes** | **If BG increasing – infusion changes** |
| **Less than 70 mg/dl** | D/C insulin infusion. Follow hypoglycemia orders. Notify covering MD. |
| **70 - 100 mg/dl** | Stop infusion. Resume BG Q 1 hour | Continue to hold infusion |
| **101-160 mg/dl** | **If BG decreased by greater than or equal to 40 mg/dl, decrease infusion by 50% or stop infusion if less than or equal to 2 units/hour.** Resume BG Q 1 hourIf BG decreased by less than 40 mg/dl, continue same rate  | Maintain at present rate |
| **161-200 mg/dl** | **If BG decreased by greater than or equal to 60 mg/dl, decrease infusion by 50% or stop infusion if less than or equal to 2 units/hour.** Resume BG Q 1 hourIf decreased by less than or equal to 60 mg/dl, continue same rate  | Increase by or restart at 1 unit/hour |
| **201-250 mg/dl** | **If BG decreased by greater than or equal to 60 mg/dl continue same rate** If decreased by less than or equal to 60 mg/dl, increase by 1 unit/hour | Give 4 units insulin IV bolus then increase infusion by or restart at 2 units/hour  |
| **251-300 mg/dl** | Increase by 2 units/hour | Give 4 units insulin IV bolus then increase infusion by or restart at 2 units/hour  |
| **301-349 mg/dl** | Increase by 2 units/hour | Give 6 units insulin IV bolus then increase infusion by or restart at 3 units/hour  |
| **350-400 mg/dl** | Increase by 3 units/hour | Give 6 units insulin IV bolus then increase infusion by or restart at 3 units/hour  |
| **Greater than 400 mg/dl** | Notify covering MD | Notify covering MD |

Updated 12/28/2018