**EndoTool IV® Protocol – Continuous Intravenous Insulin Infusion Management**

- **Do Not Use Abbreviations**
  - **DO NOT USE**
    - Daily
    - Every Other Day
    - Units
    - 2 mg
    - 0.2 mg
    - Morphine Sulfate
    - Magnesium Sulfate
  - **USE**
    - Q.D.
    - QOD
    - q.d.
    - qod
  - **No Trailing Zero**
    - u
    - µg
    - mg
  - **Lack of Leading Zero**
    - 0
    - mg
    - mL
  - **MS**
    - Morphine Sulfate
  - **MgSO₄**
    - Magnesium Sulfate

- **Discontinue all other current insulin orders, all oral hypoglycemic agents and insulin pump.**
- **Initial blood glucose (FSBG) entered into EndoToo IV® should not be greater than 5 minutes old. If more than 20 minutes has elapsed before insulin drip is available for initiation, repeat FSBG prior to entering data into Endotool® program.**
- **Standard drip concentration: 100 units of regular insulin / 100 ml 0.9% Normal Saline**
- **Prime tubing with a minimum of 20 ml insulin infusion, prior to starting infusion.**
- **Carrier fluid for insulin infusion - 0.9% Normal Saline at 10 mL/hr**
- **If TPN or tube feeding on hold – infuse D10W at same rate until TPN or TF is resumed.**
- **Mix all medications in saline unless not compatible.**
- **Initiate EndoTool IV® software by entering the necessary patient information; Follow EndoTool IV® software instructions: Glycemic control, IV insulin infusion rate, IV insulin bolus doses, D50W bolus doses, Recovery carbohydrates and time frame for next BG check.**
- **D50W IV PRN hypoglycemia as instructed per Endotool IV®**
- **Finger Stick Blood Glucose Monitoring:** refer to Hospital Policy.
  - a. If at any time a FSBG is < 70 mg/dL or > 350 mg/dL, it must be repeated for verification. **Once verified with FSBG; treat as appropriate.**
  - b. **In addition, any FSBG extreme values (< 40 mg/dL or > 400 mg/dL and/or “LOW” or “HI” meter readings) require a STAT lab draw for blood glucose.**
  - c. If meter reads “LOW” enter 10mg/dL **OR** if meter reads “HI” enter 600 mg/dL into the Endotool IV® software. **DO NOT DELAY TREATMENT.**
- **When pts BG is mathematically stable as indicated by EndoTool IV®, Notify Intensivist/Pharmacist During Daily Morning Rounds for evaluation of readiness for transition to SQ insulin based on EndoTool IV® conversion orders.**
- **EndoTool IV® SubQ correctional orders MUST be reviewed daily by MD to determine if adjustments to dosing are required.**

**Notify MD if:**
1. Pt remains severely hypoglycemic(glucose <70mg/dl) after treating event twice
2. Insulin drip rate is ≥ 50 units/hr for 2 hours

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