DIABETES CONTROL MATTERS

A LOOK AT INSULIN DRIPS – *Patient's Edition*

Persons with diabetes are subjected to hospitalizations and major operations more frequently than those without diabetes. It is important that blood glucose control be maintained throughout the hospital stay to promote wound healing and assure a full recovery. Insulin therapy may be required even in people with type 2 diabetes during illness or surgery. It is recommended that during any hospitalization, the blood glucose values should not be allowed to exceed 200 mg/dl without taking action.

Insulin may be administered in multiple injections or by continuous intravenous infusion (IV). With the increased use and accuracy of bedside blood glucose monitoring, IV insulin therapy has become the preferred method of insulin delivery in many situations.

IV insulin therapy requires the use of mechanical pumps that deliver the prescribed volumes accurately. Regular insulin is administered by continuous infusion, with changes in the rate based on the bedside blood glucose results. At the same time, the patient is also given an IV containing glucose, which helps to prevent hypoglycemia and provides fluids.

IV Insulin Therapy has many potential uses during hospitalization. It is preferred because it is more convenient, safer, and eliminates complex insulin injection orders. It results in fast, safe, efficient attainment of target blood glucose levels and better results for the patient.

Only human Regular insulin should be given by IV. Regular insulin given IV works within minutes and only lasts for about 20 minutes at commonly used doses. *If your IV appears to be malfunctioning in any way you should notify your caregiver immediately.*

AMERICAN DIABETES ASSOCIATION GOALS FOR BLOOD GLUCOSE

	GOALS	ACTION SUGGESTED
Pre meals	**80-120 mg/dl**	**<80 or >140 mg/dl**
Bedtime	**100-140 mg/dl**	**<100 or >160 mg/dl**
Hemoglobin A1c	**<7%**	**>8%**

Potential Indications for IV Insulin Therapy

- DKA (Diabetic Ketoacidosis)
- Surgery (before, during & after)
- IV or tube feedings
- Patients with severe infections
- After a Heart Attack or Open Heart Surgery
- Pregnancy (during delivery)
- Insulin resistance / Glucose toxicity
- Fluid restricted patients
- Diabetes out of control
- Blood glucose levels that are difficult to control (e.g. patients on steroid therapy)

Advantages of IV Insulin Therapy

- Reduces blood glucose fluctuations seen with insulin injections.
- Easier to correct high blood sugar while avoiding low blood sugar.
- Concentration of insulin can be varied easily.

Important Elements When IV Insulin Therapy is Stopped

✓ Initiate diabetes management orders:
- Diabetes medication
- Monitoring schedule
- Medical nutrition therapy (diet)
- Establish blood glucose target levels

✓ ***Insulin treated patients must be given SQ insulin 1 hour prior to discontinuation of the insulin drip.***

Blood Glucose Target
100 – 140 mg/dl