Injectable Treatments for Metabolic Glycemic Disorders

Injectable Treatments for Metabolic Glycemic Disorders are drugs administered by injection used specifically to treat a disorder of metabolism of glucose.

Injectable Treatments for Metabolic Glycemic Disorders: Requirements for Delegation

- Category 3 certification for direct service personnel (DSP)
- Nurse delegation to Category 3 certified DSP administering the injection
- Assessment and determination by the delegating nurse that the injectable treatment is prescribed for a metabolic glycemic disorder

Examples of Metabolic Glycemic Disorders include medical conditions specifically related to metabolism such as Type II Diabetes, Prediabetes, and Metabolic syndrome.

Non-insulin treatments that may improve blood sugar in adults with metabolic glycemic disorders include:

- Victoza® (liraglutide)
- Byetta® (exenatide)

These drugs help control blood sugar by:

- Slowing food from leaving the stomach, which controls blood sugar after eating a meal
- Helping prevent the liver from making too much sugar that the body does not need
- Helping the pancreas produce more insulin when blood sugar levels are high

These medications are not substitutes for insulin and should NEVER be given to a person with Type 1 diabetes.

Never:

- Never mix these drugs in the same syringe as insulin (though they may be given at the same time as insulin).
- If giving insulin at the same time, do NOT give injections in sites next to each other.

Common Side Effects:

- Low blood sugar (hypoglycemia)
- Headache
- Upset stomach
- Vomiting

Weight loss may happen when people use these medications. People using these medications need to have routine weight monitoring. Weight changes should be reported to the delegating nurse.
**Metabolic Syndrome** is a cluster of symptoms that together become a diagnosable condition. It first received recognition as a diagnosable condition in the late 1990s. Some indications a person may have Metabolic Syndrome include:

- high blood pressure
- elevated cholesterol levels / elevated triglycerides
- high blood sugar
- abdominal fat

**Metabolic Syndrome** is associated with being overweight and inactive, along with having a condition called insulin resistance.

**Insulin resistance** is when the body does not use the insulin it produces to remove excess sugar (glucose) from the blood stream. This causes a rise in blood sugar. The pancreas continues to produce more and more insulin to remove the excess sugar from the blood. The sugar in the blood becomes resistant to (not affected by) the effects of insulin and therefore builds up in the blood stream.

**Risk factors for developing Metabolic Syndrome** include:

- **Age** (the older you are, the more likely you are to develop Metabolic Syndrome)
- **Race** (Mexican-Americans are at greatest risk in the USA)
- **Large waist line** (carrying excess weight in the stomach area)
- **Diabetes** (family history of Type II diabetes or having had gestational diabetes - diabetes during pregnancy - increases risk)
- **Other diseases** (risk is higher if the person has a history of cardiovascular disease, nonalcoholic fatty liver disease or polycystic ovary syndrome)

**Treatment** generally consists of lifestyle changes. If lifestyle changes are not successful, the person may need to be put on medications to control blood pressure and elevated cholesterol. Over time, the person’s risk for developing diabetes and cardiovascular disease (CVD) increases.
Prediabetes

Prediabetes is not a disease. Persons with prediabetes are at risk for developing diabetes, but do not yet have it. Their blood sugar is higher than it should be, but not high enough to be diagnosed as having the disease of diabetes.

- Normal blood sugar ranges between 70-100 milligrams per deciliter.
- Persons with prediabetes have blood sugar readings between 101 and 125.
- Persons with untreated diabetes exhibit blood sugar readings of 126 or higher.

In addition to blood sugar readings between 101 – 125, the person with prediabetes will exhibit a cluster of other signs or traits that indicate increased risk for eventually developing Type II diabetes. These other signs / traits include:

- Increased thirst
- Unusual fatigue
- High levels of stress
- Alcohol consumption
- Cloudy or blurry vision
- Lack of physical activity
- Slow wound healing time
- Above normal body weight
- Increased daytime urination
- Waist circumference greater than hip circumference

Prediabetic or not, you can change the odds of getting Type II diabetes by:

- Maintaining a healthy weight
- Eating a healthy diet to control blood sugar
- Engaging in physical activity 30 minutes a day