Hypoglycemia Intervention

The protocols for treating hypoglycemia are based on the particular level of hypoglycemia seen in the patient. Mild, moderate, and severe hypoglycemia may manifest in vastly different presentations in patients as the blood glucose falls below 70 mg/dL. Interventions for treating hypoglycemia include carbohydrate ingestion for mild to moderate hypoglycemia, along with glucagon and IV dextrose for severe hypoglycemia. Patients should be educated on methods to prevent hypoglycemia, and self-monitoring should be encouraged.

PLAY PICMONIC

Interventions

Mild to Moderate Hypoglycemia

Mild to Moderate Hippo-glue-bottle

Patients with mild to moderate hypoglycemia, who have the ability to swallow, can be managed conservatively via the administration of simple, and then complex carbohydrates.

Simple Carbohydrate (Oral Dextrose, Fruit Juice, Candies)

Simple-plate of Carbs with Pineapple Juice, Oral Sugar-rose Tablets and Candy

If conscious, the patient should be given simple carbohydrates orally, as their basic structure allows for them to be easily digested and then absorbed into the bloodstream. Examples of simple carbohydrates include oral dextrose, fruit juice, skim milk, sugar, hard candies, saltine crackers, and honey.

Complex Carbohydrate (Whole Grains, Vegetables)

Complex-plate of Carbs with Bread-loaf and Vegetables

If the patient is conscious after receiving simple carbohydrates and the ability to swallow is intact, the patient should then be given a more complex carbohydrate. This is done to prevent a rapid drop of blood glucose levels, as simple carbohydrates are easily metabolized, while complex carbohydrates are broken down and absorbed slower. This allows a slow and steady rise in blood glucose, without an abrupt decrease in blood sugar. Complex carbohydrates include breads, grains, cereals, legumes, fresh fruits and vegetables, and do not lead to a rapid spike with subsequent drop in blood sugar. Complex carbohydrates are classified as oligosaccharides and polysaccharides.

Severe Hypoglycemia or Unconscious

Severe Hippo-glue-bottle is Unconscious

Patients with severe hypoglycemia, or those that are unconscious, and/or those that are unable to swallow should be given glucagon and dextrose. These interventions can be given intramuscularly (IM) or intravenously (IV). Loss of consciousness and severe hypoglycemia are emergencies, and the patient should be taken to the hospital, while their primary care physician should also be notified.

50% Dextrose

50% Sugar-rose

Dextrose may be administered intravenously (IV) as ordered in cases of severe hypoglycemia. Direct administration of dextrose into the intravenous system increases blood glucose levels immediately, reducing the risk of hypoglycemic complications.

Glucagon

Glue-King-Kong

Glucagon is a hormone which stimulates the liver to release stored glucose into the bloodstream. Glucagon can be administered intramuscularly (IM) or subcutaneously. Friends and family members should be educated about how to properly administer glucagon to the patient at risk of severe hypoglycemia.

Considerations

Monitor Blood Glucose Q 10-15 Minutes

Testing Blood-vessel Glue-bottle with Q-clock showing 10 to 15 minutes

In the event of a hypoglycemic episode, blood glucose levels should be reassessed every 10-15 minutes. This should continue after intervention until it is seen that blood sugar levels remain stable for several hours.

Give Small Meal After Intervention

Small Meal

Once the patient is conscious, the patient should be advised to eat a small meal that includes protein, as this will prevent a recurrent drop in blood glucose levels.

Patient Education

Hypoglycemia Prevention

Prevent Hippo-glue-bottle poster

Education about scenarios that precede hypoglycemic events, such as skipping meals, improper insulin dosing, and exercising without eating, will help prevent recurrent hypoglycemic events.

Encourage Self-Monitoring

Self-Monitor

Educating patients on how to self-monitor blood glucose levels provides valuable information to those at risk for developing hypoglycemic events. Proper education engages the patient and involves them in their own healthcare, and decreases adverse outcomes.