Mini-Dose Glucagon to Prevent Severe Hypoglycemia

Mild to moderate low blood glucose in a person on insulin therapy is typically treated by eating a small amount of carbohydrate. But if the person is unable to eat or keep down the carbohydrate, then mini-dose glucagon can be used to raise the blood glucose gently.

In the case of severe hypoglycemia with seizures or unconsciousness, then full-dose glucagon should be used instead of mini-dose glucagon.

Mini-dose glucagon will typically raise the blood glucose 50 to 100 mg/dl within 30 minutes and lasts for about one hour without causing nausea.

Instructions:
1. Open the Glucagon Emergency Kit and mix the liquid with the powder according to the instructions on the Kit.

2. Take an insulin syringe and use the insulin "units" scale on the syringe to measure the appropriate amount:
   - 0 to 2 years old: 2 “units” on the insulin syringe
   - 3 to 15 years old: one “unit” for every year of age, for example: 3 years old – 3 “units” on the insulin syringe
   - 12 years old – 12 “units” on the insulin syringe
   - 16 years or older: 15 “units” on the insulin syringe

3. Inject the mini-dose of glucagon just as you would inject insulin (subcutaneously in arm, leg, buttock or stomach).

4. Store the remaining glucagon in the refrigerator.

5. Check the blood glucose every 15 minutes. If the blood glucose has not started to rise at 15 minutes or is not above 80 mg/dl at 30 minutes, then repeat the mini-dose BUT use twice the original dose.

6. Repeat the original mini-dose glucagon injection every hour as needed to keep the blood glucose above 80 mg/dl.

7. The glucagon vial can be used for 24 hours after mixing if kept in the refrigerator.

If you need additional assistance or have questions regarding mini-dose glucagon, please contact the Diabetes Center at Nationwide Children’s Hospital at 614-722-4425. For medical emergencies, call 911.