Treating Severe Low Blood Sugar in a Child with Type 1 Diabetes

Severe low blood sugar can cause someone to pass out or have a seizure. Emergency help is needed. Give Glucagon. If there is no Glucagon available, call 911.

A severe low blood sugar occurs when there is not enough sugar reaching the brain. This can cause:

- Confusion and poor coordination
- Seizure
- Unconsciousness
- Temporary paralysis on one side

How to Treat if Your Child is Awake:

Give one of these 20 gram rapid-acting carbohydrates:

- 5 Dex4 glucose tablets
- 2/3 cup of regular pop or apple juice

***You will need to firmly coax your child to eat or drink.

How to Treat if Your Child is Unconscious or Having a Seizure:

- **Don't** force food or liquid into the mouth
- Place your child onto their side in a safe space
- Measure the blood sugar
- Give an injection of Glucagon®, or use Bagsimi® nasal spray
 - 4 years or younger, give 0.5 mL (0.5 mg) of Glucagon®
 - 5 years or older, give 1 mL (1 mg) of Glucagon®
 - Ages 4 and up, give Baqsimi[®]
- Call 911 if you cannot give Glucagon® or Baqsimi®, or right after giving it
- Call the diabetes clinic after treating to let them know this has occurred.
 - Glucagon® and Baqsimi® are one time use, you will need to call for a prescription renewal to get another

Glucagon

What is Glucagon?

Both Baqsimi® and Glucagon® contain the hormone glucagon. Glucagon is a hormone that triggers the liver to release stored sugar. It takes about 10 minutes for the sugar from the liver to reach the brain and for your child to wake up.

How to Give Glucagon®:

- Draw up the Glucagon® using the instruction sheet in the box
 - Remove the cap from the bottle
 - Inject the liquid from the syringe into the dry powder bottle
 - Roll the bottle gently to dissolve the powder
 - Draw the fluid back into the syringe (amount as per age on previous page)
- Inject the Glucagon® like an insulin injection. The leg is the best spot to inject.
- Once mixed, Glucagon® must be used or thrown out within 24 hours.

How to Give Bagsimi®:

- Remove plastic foil from Baqsimi® tube, and take the device out
- Place fingers on either side of the nozzle and insert into your child's nose
- Use thumb to push up on the bottom of the Baqsimi® container

After Using Glucagon

- Side effects of a severe low and Glucagon®/Baqsimi® are upset stomach, nausea, vomiting, and headache. This can last for a few days.
- When your child wakes up give ½ cup of juice or regular pop. Wait 15 minutes and then offer a snack of carbohydrates and protein (e.g. cheese and crackers, granola bar).
- Monitor the blood sugar consistently. Your child may need to come to emergency until blood sugars are stable.
- Contact your diabetes team, insulin dose will be decreased by 20% for the next 2-3 days after a severe low.

How to Prevent a Severe Low Blood Sugar

- Decrease insulin when you see a pattern of low blood sugars or more than 3 lows per week
- Supervise insulin injections.
- Have a safe plan for sleeping in.
- Know that the risk for severe lows goes up in the spring as kids are more active.
- Adjust for exercise (decreasing insulin/increasing food).
- Make sure meals and snacks are eaten on time and all the food is eaten.
- Check blood sugar in the middle of the night after a really active day or when the blood sugar is low at bedtime.
- Make sure that your teenager knows that alcohol can cause low blood sugars and drinking too much can cause a severe low.