Mini-Dose Glucagon

Glucagon is needed to prevent hospital admission of children with low blood sugars (hypoglycemia) due to illness or not eating.

To be used when:
- Blood sugar levels are < 70 mg/dL and your child is awake but not able to eat or refuses to eat.
- You are trying to stop your child’s hypoglycemia from getting worse, and to avoid a trip to the hospital.

How to Prepare Glucagon
1. Open glucagon pack and flip the orange lid off the bottle.
2. Remove protective rubber needle cover from glucagon syringe.
3. Inject all of the water into the glucagon bottle and mix.
4. Remove glucagon syringe and throw away.
5. Use an insulin syringe (smallest available) to draw up the glucagon dose (see dose guide).

Initial dose guide-1 unit per year of age to a maximum of 15 units

<table>
<thead>
<tr>
<th>Age in Years</th>
<th>Dose in Units</th>
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<tbody>
<tr>
<td>1 year old</td>
<td>1 unit</td>
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<tr>
<td>2 years old</td>
<td>2 units</td>
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<tr>
<td>3 years old</td>
<td>3 units</td>
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<tr>
<td>4 years to 15 years old</td>
<td>4-15 units based on age (Max 15 units)</td>
</tr>
<tr>
<td>Over 15 years old</td>
<td>15 units</td>
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</tbody>
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How to Give Mini-Dose Glucagon
1. Draw up the “mini-dose” of glucagon with an insulin syringe (smallest available).
2. Give glucagon under the skin as you would insulin.
3. Repeat blood sugar at 30 minutes and 1 hour.
   a. If blood sugar is < 100mg/dL at 30 minutes give double the initial dose.
4. Keep testing blood sugar every hour. If blood sugar is < 70 mg/dL you can repeat the effective glucagon dose if it has been 2 or more hours since the last glucagon dose.

- You can repeat this cycle to keep blood sugar from 70-100 mg/dL, with “mini-doses” of glucagon every 2-3 hours.
- Make sure to have good sugar/fluid intake. Push sugar-containing fluids ½ to 1 cup per hour.
- Keep in touch with Pediatric Diabetes Team.
- Your child may need to be seen in the emergency room or be admitted to hospital if there is no improvement.
- Replace your glucagon emergency kit as soon as possible.
References
Haymond MW Mini-dose glucagon rescue for hypoglycaemia in children with Type 1 Diabetes. Diab Care 2001; 24:643-5
Hasan K: Mini dose glucagon is effective at diabetes camp. J Paediatrics 2004; June 144 (6):834