



## ENDOCRINOLOGY & DIABETES UNIT

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DATE: \_\_\_\_\_

## MANAGEMENT OF HYPOGLYCEMIA IN HYPERINSULINISM

Your child has been prescribed the following daily medications to treat hyperinsulinism:

**Octreotide (Sandostatin): Daily Dosing:** \_\_\_\_\_

**Diazoxide: Daily Dosing:** \_\_\_\_\_

If a dose is forgotten, give it as soon as you remember. If it is close to the next dose, give the next dose and continue with doses as scheduled. By taking this medication as prescribed, it will help prevent hypoglycemia, however, your child may still experience occasional low blood sugars.

**Hypoglycemia** (low blood sugar) can occur when the blood glucose (sugar) drops below the normal range, i.e. below 3.0 mmol/L. The onset can be sudden.

**Causes:** Hypoglycemia can result from late or missed meals, increased exercise without food, a missed dose of medication, or unknown causes.

**How will you recognize hypoglycemia?**

	<b>MILD</b> BG 2.5-3.0 mmol/L	<b>MODERATE</b> BG 2.0-2.4 mmol/L	<b>SEVERE</b> BG 1.9 mmol/L or below
<b>SIGNS &amp; SYMPTOMS</b>	<ul style="list-style-type: none"><li>• sweaty</li><li>• shaky</li><li>• hungry</li><li>• pale</li><li>• dizzy</li><li>• mood changes</li><li>• tired/sleepy</li></ul>	<ul style="list-style-type: none"><li>• irritable</li><li>• blurry/double vision</li><li>• difficulty concentrating</li><li>• confused</li><li>• poor coordination</li><li>• difficulty speaking</li><li>• headache</li><li>• tired/sleepy</li><li>• nightmares</li></ul>	<ul style="list-style-type: none"><li>• unconscious</li><li>• convulsions/seizures</li></ul>

**What should you do if you suspect hypoglycemia?**

If possible, test the blood sugar with a meter to confirm hypoglycemia, and then proceed with the treatment described on the next page.

**Mild hypoglycemia (2.5–3.0 mmol/L):**

**For patients 1 to 12 months of age:**

- Give 6 grams of sugar by mouth once. Give  $\frac{1}{8}$  cup (30 mL or 1 ounce) of 20% sugar water. Prepare 20% sugar water solution by mixing 1 tablespoon (15 mL) of table sugar in  $\frac{1}{4}$  cup (60 mL or 2 ounces) of sterile water and shake for 1 minute. Discard after 24 hours. **DO NOT USE HONEY!**

**For patients from 1 to less than 5 years of age:**

- Give 6 grams fast-acting carbohydrate by mouth once:  $1\frac{1}{2}$  dextrose tablets (Dex4®) or 45 mL (1.5 ounces) of orange or apple juice.

**For patients from 5 to 10 years of age:**

- Give 12 grams of fast-acting carbohydrate by mouth once: 3 dextrose tablets (Dex4®) or 90 mL (3 ounces) of orange or apple juice.

**For patients greater than 10 years of age:**

- Give 16 grams of fast-acting carbohydrate by mouth once: 4 Dextrose tablets (Dex4®) or 120 mL (4 ounces) of orange or apple juice.

Recheck blood sugar 15 minutes after treatment and repeat treatment until blood sugar is above 4.0 mmol/L.

Follow with a snack (e.g. cheese and crackers) or meal. For 1-12 months, follow with breast milk or formula.

If you cannot get blood sugar to stay above 4.0 mmol/L, page the endocrinologist on call at 604-875-2161.

**Moderate hypoglycemia (2.0–2.4 mmol/L):**

- Give octreotide (Sandostatin®) \_\_\_\_\_ units subcutaneously (small syringe, short needle).
- Give diazoxide \_\_\_\_\_ mg (or \_\_\_\_\_ mL) orally.
- If it is less than 1 hour before the regular dose time, this is an early dose.
- If it is more than 1 hour before the regular dose time, this is an extra dose.
- Recheck the blood sugar 15 minutes later.
- If above 3.0 mmol/L, follow with treatment for mild lows.

If your child is unresponsive or unable to take anything safely by mouth, you will need to give the hormone glucagon.

See also our handout [Glucagon for Severe Low Blood Sugar \(Hypoglycemia\) in Endocrine Patients](#).

**Please note that paramedics cannot give glucagon; therefore, we suggest you give glucagon yourself even if you've called 911.**

Glucagon can also be used in small doses to treat milder hypoglycemia during times of stomach illness, or when your child is unable to keep any food or fluids down or refuses to eat.

See also our handout [Mini-Dose Glucagon to Prevent Serious Hypoglycemia in Endocrine Patients](#).