Night time Hypoglycaemia

Information for parents and/or caregivers

Welcome to the Southern Adelaide local Health Network. This information sheet aims to answer any questions you may have about your child having night time hypoglycaemia (low blood sugar levels) and requiring corn-starch therapy.

What is night-time Hypoglycaemia?

The patient with night time hypoglycaemia is usually a young child whose metabolism is slightly atypical, allowing blood sugar levels to fall lower than is ideal. Hypoglycemia is a condition that occurs when the sugar levels in your blood are too low. Episodes nearly always occur before breakfast after an overnight fast. Usually it is only significant if the fast is longer than normal or is associated with an illness such as gastroenteritis.

Symptoms of night time hypoglycaemia

The Symptoms of hypoglycaemia can include:

- **Shakiness**
- Dizziness
- Sweating
- Hunger
- Headache
- Irritability
- Pale skin colour
- Sudden moodiness or behaviour changes, such as crying for no apparent reason
- Clumsy or jerky movements
- Difficulty paying attention or confusion
- Lethargy
- Unresponsiveness
- Seizures

Treatment

Once night time hypoglycaemia is suspected, there are methods of preventing the blood sugar level dropping overnight.

- Extended long fasts should be avoided. The child should be given a bedtime snack of carbohydrates (e.g. toast or pasta or milk or jatz crackers) and should be awakened and fed after the usual duration of sleep.
- Raw (uncooked) corn-starch is mixed into a paste, typically with water or milk. This helps children sustain their blood sugar levels for longer periods.

Uncooked corn-starch (also known as corn flour) is a slowly absorbed carbohydrate. It takes between 4-6 hours for the corn-starch to be completely digested. Corn starch can be purchased from your local supermarket. Because the corn-starch is slowly digested, the amount of time spent fasting is decreased. This helps to prevent hypoglycaemia overnight.

When Should I use Corn-starch?

- Corn-starch should be given before bed in children who have a medical need for it.
- Children diagnosed with Ketotic hypoglycaemia or other metabolic conditions which prohibit overnight fasting are likely to benefit from corn-starch.

How Much Corn-starch is needed?

The goal is to provide the amount of calories needed during the first 4-6 hours of sleeping. The amount of calories needed is based on the weight of the child. The following table provides a general guideline for dosing*.

Corn-starch dosing

Age	Mean Weight	Corn-starch
12-18 months	10 kg	2 teaspoons
18-36 months	12.5 kg	3 teaspoons
3-5 yrs	15 kg	3.5 teaspoons
5-8 yrs	17 kg	4 teaspoons
8-12 yrs	22 kg	5 teaspoons
12-15 yrs	30 kg	2 Tablespoons
Older Adolescents		1-2 Tablespoons**

If an episode of hypoglycaemia is suspected, carbohydrates such as crackers, sandwich, apple juice and fluids should be given promptly. If vomiting prevents this, your child should be taken to the local emergency department for treatment.

Dial 000 for an ambulance if you have any difficulty waking your child

Children "outgrow" hypoglycaemia, presumably because fasting tolerance improves as body mass increases. In most children the episodes become milder and more infrequent by 4 to 5 years of age and rarely occur after age 9.

Adapted from

Cornstarch fact sheet: barth syndrome foundation: 2006

For more information

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