Hypoglycaemia

Hypoglycaemia means low blood glucose. It is often called a ‘hypo’ and is defined as a blood glucose level less than 4.0mmol/l. Some people don’t feel the symptoms of a hypo at this level but it is important to treat any level less than 4.0mmol/l.

Signs and symptoms of hypoglycaemia:
There are many different signs and symptoms of hypoglycaemia and not everyone will experience them all. Below are some of the signs and symptoms that may be experienced.

- Feeling shaky
- Hunger
- Pale
- Headache
- Stomach ache
- Mood swings
- Poor concentration
- Feeling dizzy
- Feeling confused
- Feeling unsteady
- Slurred speech
- Jelly legs or tired legs

Possible causes of hypoglycaemia:

- Exercise
- Overestimating the amount of carbohydrate in a meal (and therefore taking more insulin than needed)
- Not finishing a meal after giving insulin
- Illness
- Going a long time without eating
- Stress and worry

*Overnight hypos can occur. Talk to your team if this is causing you concern.*

Remember, if there are any of these signs or symptoms:

- Check the blood glucose level
- If it is below 4.0mmol/l take immediate action
- Treatment will be dependent on the child or young person (CYP)’s weight. Turn the page for more information
### Treatment of hypoglycaemia: Insulin pen therapy

<table>
<thead>
<tr>
<th></th>
<th>MILD</th>
<th>MODERATE</th>
<th>SEVERE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Able to self-manage</strong>&lt;br&gt;(Conscious and able to swallow)</td>
<td>Needs some help to manage</td>
<td>Unable to self-manage</td>
<td></td>
</tr>
</tbody>
</table>

#### BODY WEIGHT RANGE

<table>
<thead>
<tr>
<th>Less than 15kg</th>
<th>15kg-30kg</th>
<th>30kg-50kg</th>
<th>Over 50kg</th>
<th>Glucogel</th>
<th><strong>Urgent assistance required</strong>&lt;br&gt;Place CYP in the recovery position&lt;br&gt;Contact emergency services&lt;br&gt;Glucagon hypo kit can be used (only if trained to do so)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Give 5g fast acting carbohydrate e.g.</strong>&lt;br&gt;55ml Lucozade Energy</td>
<td><strong>Give 10g fast acting carbohydrate e.g.</strong>&lt;br&gt;110ml Lucozade Energy</td>
<td><strong>Give 15g fast acting carbohydrate e.g.</strong>&lt;br&gt;170ml Lucozade Energy</td>
<td><strong>Give 20g fast acting carbohydrate e.g.</strong>&lt;br&gt;220ml Lucozade Energy</td>
<td>Squeeze gel slowly into the mouth. The gel should be swallowed.</td>
<td>&lt;br&gt;<strong>Wait 15 minutes and recheck blood glucose levels. If blood glucose is still less than 4.0mmol/l, repeat glucose treatment. It is not uncommon to have to repeat this more than once.</strong>&lt;br&gt;The CYP should start to recover in 15 to 30 minutes</td>
</tr>
<tr>
<td>20ml Lift (Gluco juice)</td>
<td>40ml Lift (Gluco juice)</td>
<td>60ml Lift (Gluco juice)</td>
<td>80ml Lift (Gluco juice)</td>
<td>&lt;br&gt;<strong>Give 1.5 glucose tablets</strong>&lt;br&gt;<strong>Give 3 glucose tablets</strong>&lt;br&gt;<strong>Give 5 glucose tablets</strong>&lt;br&gt;<strong>Give 6 glucose tablets</strong></td>
<td>&lt;br&gt;<strong>Give 1 Jelly baby</strong>&lt;br&gt;<strong>Give 2 Jelly babies</strong>&lt;br&gt;<strong>Give 3 Jelly babies</strong>&lt;br&gt;<strong>Give 4 Jelly babies</strong>&lt;br&gt;<strong>Give 1 and a half Starbursts</strong>&lt;br&gt;<strong>Give 3 Starbursts</strong>&lt;br&gt;<strong>Give 5 Starbursts</strong>&lt;br&gt;<strong>Give 6 Starbursts</strong></td>
</tr>
</tbody>
</table>

Reference: ISPAD Clinical Practice Consensus Guidelines 2018: Assessment and management of hypoglycemia in children and adolescents with diabetes