

INPATIENT TREATMENT OF HYPOGLYCAEMIA IN ADULTS WITH DIABETES

BLOOD GLUCOSE \leq 4.0 mmol/L

Wherever possible, check the blood glucose prior to administering treatment. If the patient is asymptomatic, repeat the test.
Treatment should be guided by severity of presentation (mild, moderate, severe)

Mild	Moderate	Severe
<p>Patient conscious, orientated and able to swallow.</p>	<p>Patient conscious and able to swallow, but confused, disorientated or aggressive</p>	<p>Patient unconscious/fitting or very aggressive or nil by mouth.</p>
<p>Check ABCDE, stop IV insulin (if running) Give 15 – 20g quick acting glucose* e.g. 4-5 x Gluco-Tabs (4g glucose per tablet) 1 x 60 ml bottle of Gluco (Lift) Juice 150-200 ml pure fruit juice (not if on low Potassium diet)</p> <p>Test blood glucose after 10-15 mins and if $<$ 4.0 mmol/l repeat treatment up to 3 times. If still hypoglycaemic, call doctor and consider IV dextrose or IM Glucagon as per severe pathway.</p>	<p>Check ABCDE, stop IV insulin (if running). If capable and co-operative treat per mild pathway. If not co-operative give 2 tubes of Gluco-Gel** (10g glucose per tube).</p> <p>Test blood glucose after 10-15 mins and if $<$ 4.0 mmol/l repeat treatment up to 3 times. If still hypoglycaemic, call doctor and consider IV dextrose or IM Glucagon as per severe pathway</p>	<p>Check ABCDE, Stop IV insulin (if running), Request urgent medical support. Give 100ml of 20% Dextrose or 200ml of 10% Dextrose over 15 mins. If IV access not possible, use 1mg Glucagon IM*.</p> <p>Recheck glucose after 10 minutes and if still $<$ 4.0 mmol/l, repeat treatment as above.</p>
↓	↓	↓
<p>Check glucose after 10-15 minutes. Once blood glucose is $>$ 4.0 mmol/l. Give 20g of long acting carbohydrate e.g. two biscuits, slice of bread, 200-300 ml milk or next carbohydrate containing meal. Give 40g if IM Glucagon has been used. For patients with enteral feeding tube give 20g quick acting carbohydrate via enteral tube e.g. 50-70 ml Ensure Plus juice or Fortijuice.</p>		<p>If glucose now 4.0 mmol or above, follow up treatment as described on the left. If NBM, once glucose $>$ 4.0 mmol/l give 10% glucose infusion at 100ml/hr until no longer NBM or reviewed by doctor.</p>
<p>DO NOT omit subsequent insulin doses. Continue regular (at least QDS) capillary blood glucose monitoring for 24-48 hours. Review insulin and/or oral hypoglycaemic doses. If previously on IV insulin would generally consider restarting insulin once glucose is $>$ 4.0 mmol/l but may require review of regime. Give hypoglycaemia education and refer to diabetes inpatient team if required.</p>		
<p>BEWARE: Patients receiving diabetes tablets (e.g. Sulphonylurea) +/- long acting insulin may have prolonged (36-48 hours) or recurrent hypoglycaemia. Groups at particular risk include severe hypoglycaemia, acute kidney injury, or malnutrition. Consider an IV insulin infusion of 10% Dextrose at 100ml/hr. until capillary glucose is stable at $>$ 4.0 mmol/l</p>		
<p>*Glucagon may take up to 15 minutes to work and maybe ineffective in treating hypoglycaemia in undernourished patients, in severe liver disease, sulfonylurea induced hypoglycaemia and in repeated hypoglycaemia.</p>		
<p>'Looming hypoglycaemia' A glucose value of 4.0-6.0 mmol/l could indicate looming hypoglycaemia especially if recurrent or in patients on Sulphonylurea or insulin. This may require increased monitoring, oral carbohydrate snack or IV dextrose depending on the situation e.g. if person is fasting, intravenous treatment would be preferred to avoid risk of postponing the procedure. However, the approach is individualized and advice from the diabetes team should be sought.</p>		

Adapted from Joint British Diabetes Society. The Hospital Management of Hypoglycaemia in Adults with Diabetes Mellitus Revised April 2021 [JBDS 01 HypoGuideline FINAL 23.04.21.pdf \(amazonaws.com\)](https://www.jbds.org.uk/wp-content/uploads/2021/04/JBDS_01_HypoGuideline_FINAL_23.04.21.pdf)