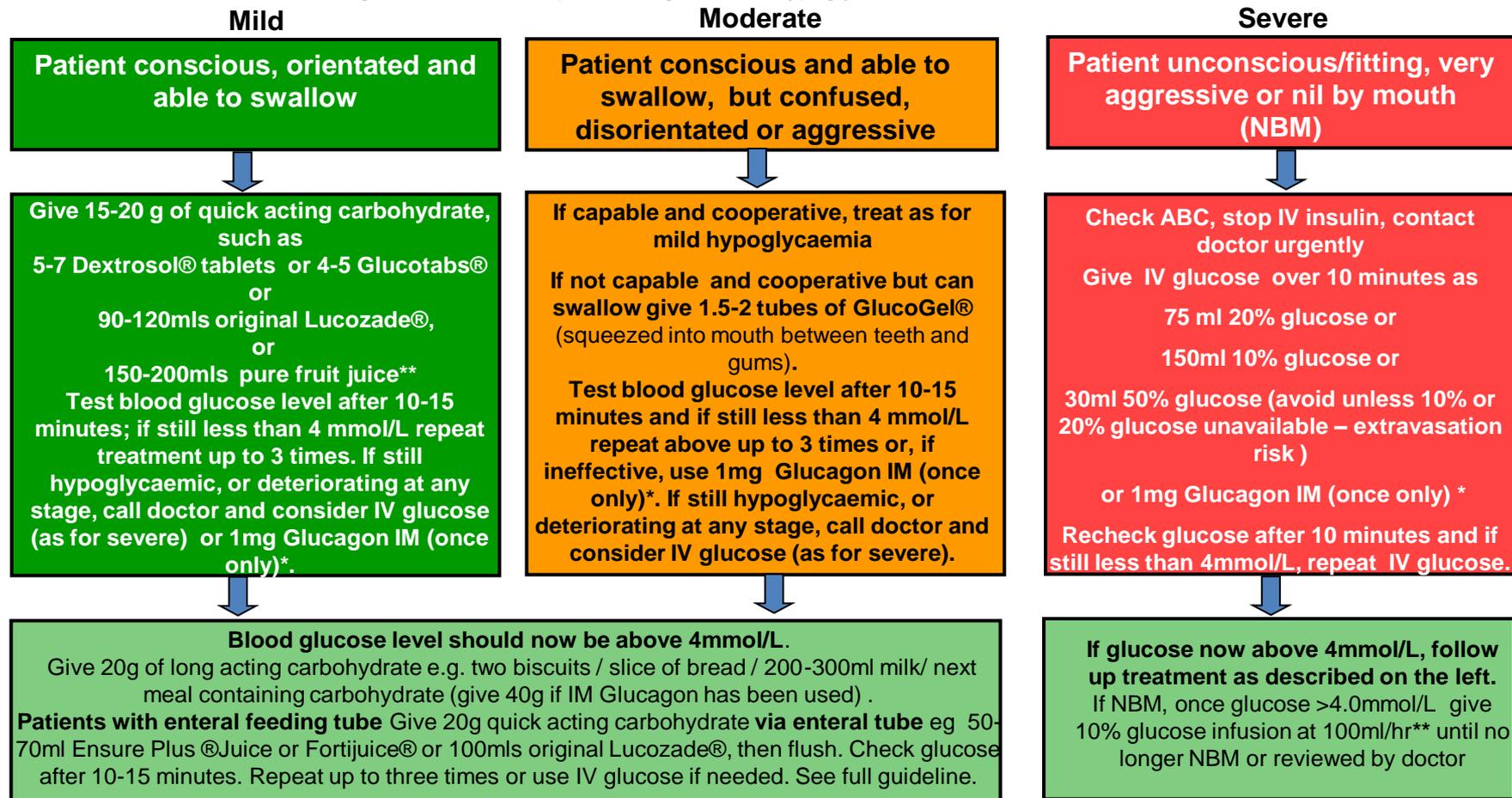


Algorithm for the Treatment and Management of Hypoglycaemia in Adults with Diabetes Mellitus in Hospital

Hypoglycaemia is a serious condition and should be treated as an emergency regardless of level of consciousness. Hypoglycaemia is defined as blood glucose of less than 4mmol/L (if not less than 4mmol/L but symptomatic give a small carbohydrate snack for symptom relief).

For further information see the full guideline "The Hospital Management of Hypoglycaemia in Adults with Diabetes Mellitus" at www.diabetes.nhs.uk



DO NOT OMIT SUBSEQUENT DOSES OF INSULIN. CONTINUE REGULAR CAPILLARY BLOOD GLUCOSE MONITORING FOR 24 TO 48 HOURS. REVIEW INSULIN / ORAL HYPOGLYCAEMIC DOSES. GIVE HYPOGLYCAEMIA EDUCATION AND REFER TO DIABETES TEAM

*GLUCAGON MAY TAKE UP TO 15 MINUTES TO WORK AND MAY BE INEFFECTIVE IN UNDERNOURISHED PATIENTS, IN SEVERE LIVER DISEASE AND IN REPEATED HYPOGLYCAEMIA. DO NOT USE IN ORAL HYPOGLYCAEMIC AGENT- INDUCED HYPOGLYCAEMIA.

**IN PATIENTS WITH RENAL/CARDIAC DISEASE, USE INTRAVENOUS FLUIDS WITH CAUTION. AVOID FRUIT JUICE IN RENAL FAILURE

SITUATION

Hypoglycaemia – blood glucose level <4mmol/L

- A potentially dangerous side effect of insulin therapy and sulphonylureas
- Prompt treatment is required

BACKGROUND

Common causes of hypoglycaemia

- Inadequate food intake, fasting, delayed or missed meals
- Too much insulin or sulphonylurea
- Insulin administration/drug administration at an inappropriate time
- Problems with insulin injection technique/injection site causing variable insulin absorption
- Increased physical activity
- Alcohol

At risk groups

- Strict glycaemic control, impaired hypoglycaemic awareness, cognitive impairment, extremes of age, breast feeding mother with diabetes

Conditions that increase risk of hypoglycaemia

- Malabsorption, gastroparesis
- Abrupt discontinuation of corticosteroids, hypoadrenalism, renal or hepatic impairment, pancreatectomy

ASSESSMENT

Assess recent pattern of blood glucose levels i.e. last 48 hours.

- Establish when and what the patient last ate
- Check insulin/ diabetes medication is being prescribed and administered at correct dose, time, and in relation to food intake
- Check for signs of lipohypertrophy (lumpy areas at injection sites) which may affect insulin absorption
- Check credibility of blood glucose monitoring e.g. handwashing before testing

RECOMMENDATION

Treat hypoglycaemia as per protocol. Observe patient until recovery complete and provide information on hypoglycaemia management. Consult diabetes team for advice if necessary, and refer all patients with severe hypoglycaemia.

- Establish the cause of hypoglycaemia and take action to prevent recurrence. Inform patient if medication dose is changed
- Do not omit insulin in type 1 diabetes** - treat hypoglycaemia and administer insulin as usual after dose review
- Blood glucose is likely to be high following hypoglycaemia; additional correction doses should not be given
- If receiving IV insulin treatment, check blood glucose every 15 minutes until above 4.0 mmol/L, then re-start IV insulin after review of infusion rates and requirement for IV insulin