

Hypoglycaemia Management in adults (aged 16 or older)

Hypoglycaemia is the commonest side effect of insulin and sulfonylureas in the treatment of diabetes and presents a major barrier to satisfactory long term glycaemic control. Hypoglycaemia should be considered in the differential diagnosis in any person with diabetes presenting acutely unwell or with altered consciousness or behaviour and seizures.

Definition

A hypoglycaemic episode occurs when any blood glucose level falls below 4mmol/L in a patient with diabetes. This is classified into mild if the episode is treated by the person alone and severe if the assistance of a third party is required for treatment.

Risk factors for hypoglycaemia

- Too much insulin or inappropriately high doses of oral hypoglycaemic agents (sulphonylureas)
- Hot weather
- Exercise
- Alcohol
- Patients with very tight glycaemic control
- Severe or frequent hypoglycaemia history
- Frequent nocturnal hypoglycaemia or unrecognized nocturnal hypoglycaemia
- Longstanding diabetes
- Early Pregnancy and breast feeding
- Poor insulin administration technique
- Impaired hypoglycaemia awareness
- Impaired renal function and renal dialysis
- Severe Hepatic Dysfunction
- A prior episode of hypoglycaemia which has been inadequately treated
- Patients with terminal illness
- Patients with lipohypertrophy

Possible Causes of Hypoglycaemia in hospitals

- Inappropriate use of stat doses or PRN doses of quick acting insulin
- Discontinuation of long term steroid therapy or reduction in steroid treatment
- Recovery from acute illness
- A mismatch between diabetes medications and timing and/or content of meals/feeds
- Change in size of meals
- Incorrect insulin dose prescribed/administered
- Insufficient blood glucose monitoring
- Poor compliance at home
- Nil by mouth or reduced oral intake or missed meals
- No bedtime snack

Clinical Features of Hypoglycaemia

Adrenergic: Pallor, tachycardia, sweating, tremor

Neuroglycopenic: Poor concentration, hunger, double vision, irritability, lips and tongue tingling, confusion, aggressive behaviour, poor judgement, altered personality, altered speech, altered consciousness, seizures, coma.

Management

Treatment of acute hypoglycaemia should be carried out without delay. **Please refer to algorithm.**