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Glucose is an essential metabolic fuel for the brain and a constant supply is critical for normal neurological function. **Hypoglycaemia** is defined as a BGL < 4.0 mmol/L and this can occur in any patient, regardless of a history of diabetes.[1]

Intravenous glucose is the recommended first line management strategy in patients unable to swallow oral glucose and treatment should aim to achieve a BGL of 4.0–8 mmol/L. If there is no improvement in conscious state following such an increase in BGL, other causes for the ALOC should be considered.

**Clinical features**

**Autonomic features (warning signs)**
- Diaphoresis, hunger, tingling around the mouth, tremor, tachycardia, pallor, palpitations and anxiety.
- These warning signs may be lost in patients with repeated or prolonged hypoglycaemia.[2]

**Neurological features**
- **Consider hypoglycaemia in all patients who have an ALOC.**
- Lethargy, change in behaviour, headache, visual disturbance, slurred speech, dizziness, ALOC, seizures, coma.
- Patients may present with signs/symptoms mimicking intoxication or stroke.

**Other considerations**
- Chronic, poorly controlled diabetics may be relatively hypoglycaemic despite having a BGL > 4.0 mmol/L.[2]
- Signs of hypoglycaemia may be masked in patients taking beta blocker medications.[3]

**Risk Assessment**
- Caution is required if the patient is agitated, aggressive or violent.
- Consideration should be given to the possibility of an accidental, or intentional hypoglycaemic agent medication overdose.
**Additional information**

- Diabetes Service Referral is to be considered for all patients (irrespective of whether transported or not) who present with diabetic related complications, e.g. hypo/hyperglycaemia. A patient may suspend their own insulin pump if part of a personal diabetes management plan.
- Insulin pump settings are not to be suspended/adjusted by attending clinicians.

**Mandatory transport criteria**

If the patient has ANY of the following, they must be transported to hospital.

- Newly diagnosed diabetes
- No previous diagnosis of diabetes
- Pregnant
- Patient recovered but unable to be monitored by a responsible adult for 4 hours, or patient unable to self-care
- Not returned to normal mental state within 10 minutes of IV glucose, or incomplete recovery to normal conscious state
- Intentional overdose of glucose lowering agent
- Severe hypoglycaemia episode within previous 48 hours
- Risk of prolonged or recurrent hypoglycaemia
  - Unwitnessed onset or prolonged episode
  - Patient taking long acting oral hypoglycaemic agent that causes hypoglycaemia
  - Unable or unwilling to consume long acting carbohydrate
- Seizure
- Suspected cause of hypoglycaemia due to illness that requires further investigation
- Injury sustained from hypoglycaemic episode requiring further investigation

*Advise patient to consume complex carbohydrates (e.g. sandwich) following oral glucose.

**Consider:**

- Glucagon
- Diabetes Service Referral

*Clinicians are only to perform procedures for which they have received specific training and authorisation by the QAS.*