Glucagon intravenous for adults



Who can administer

May be administered by registered competent doctor or nurse/midwife

Important information

- Usually given by the subcutaneous or intramuscular route for the treatment of severe hypoglycaemia reactions
- Please ensure additional supplies are ordered by pharmacy if large doses by infusion are being administered
- Protect the airway in case of vomiting (ref 2)
- Equivalencies: a 1mg dose is the same as 1 unit

Available preparations

Glucagen Hypokit 1mg

Reconstitution

- Add 1.1mL water for injection (provided) to the vial containing the powder to produce a 1mg/1mL solution
- Shake gently until completely dissolved
- A syringe with a thinner needle and a finer graduation may be more suitable in diagnostic procedures

Infusion fluids

Glucose 5% or Sodium chloride 0.9% (ref 1)

Methods of intravenous administration

Bolus intravenous injection (doses of 1mg or less) (ref 1)

- Administer over one minute
- Rapid injection may be associated with increased nausea and vomiting (ref 2)

Slow intravenous injection (doses greater than 1mg) (ref 1)

- Administer over 3 to 5 minutes
- Rapid injection may be associated with increased nausea and vomiting (ref 2)

Intermittent intravenous infusion (unlicensed) (ref 1)

• There is no recommended final volume/concentration for dilution. It is usually convenient to dilute in 50 or 100mL, but larger or smaller volumes can be used if necessary

Dose in adults

Severe hypoglycaemia

Usually 1mg, given by the subcutaneous or intramuscular route

Diagnostic indication (inhibition of gastrointestinal motility)

- Relaxation of stomach, duodenal bulb, duodenum and small bowel: 0.2 to 0.5mg as intravenous injection
- Relaxation of colon: 0.5 to 0.75mg as intravenous injection
- Higher doses may be given for these indications if by subcutaneous or intramuscular route- see SPC

Beta-blocker/calcium channel blocker toxicity (unlicensed) (ref 2)

- Consult poisons centre
- Give 3 to 10mg (0.05 to 0.15mg/kg) as a slow intravenous injection over 2 to 5 minutes, followed by an infusion of 3 to 5mg/hour (0.05 to 0.1mg/kg/hour)
- Titrate the infusion to achieve an adequate clinical response

Anaphylactic reaction (refractory) in patients on beta-blocker therapy (unlicensed) (ref 2)

- Give 1 to 5mg as a slow intravenous injection over 5 minutes, followed by an infusion of 5 to 15 micrograms/minute
- Titrate the infusion to achieve an adequate clinical response

Renal or hepatic impairment

No dosage adjustment is required

Storage

- Store in a refrigerator between 2 and 8°C for full shelf life of product
- May be stored at room temperature for up to 18 months (providing the expiry date is not exceeded)

References

SPC December 2019

- 1: Injectable medicines guide Medusa, downloaded 24th November 2021
- 2: Uptodate- downloaded 24th November 2021

Therapeutic classification

Glycogenolytic hormone