

Isolated single-agent ingestion of SGLT2 inhibitors is relatively well tolerated, hypoglycaemia is rare

Toxicity / Risk Assessment

Approximate toxic doses in adults:

Dapagliflozin 0.7 mg/kg

Empagliflozin 1.25 mg/kg

Ertugliflozin 0.7 mg/kg

Canagliflozin 15 mg/kg

Paediatric: toxic dose not well defined

Clinical features:

GI upset, nausea, vomiting

Drowsiness

Tachycardia, hypertension

Hypoglycemia – rare in isolated single-agent ingestion – more severe in presence of

other glucose lowering agents

HAGMA with raised urine or plasma ketones

Euglycaemic Diabetic ketoacidosis (EDKA) – can occur with therapeutic use if there is concurrent poor oral intake

Management: Focus on stabilization, rehydration, correcting any underlying metabolic imbalance

Decontamination: Consider 50g activated charcoal (1g/kg in children) if patient presents within 2 hours of ingestion

Hypoglycemia:

- usually mild
- maintain euglycaemia by providing oral complex carbohydrates
- if BSL <3.3 mmol/L: 50 ml of 50% glucose IV in adults or 2 ml/kg of 10% glucose IV in children
- beware of relapse of hypoglycemia following initial correction with glucose administration

Euglycemic DKA (EDKA):

- commence insulin (Actrapid) infusion at 1-2 units/hour
- commence 10% Dextrose IV (100 mL/hour and titrate as required) to maintain BSL between 6-10 mmol/L
- oral complex carbohydrate
- monitor acid-base and ketones

Diabetic Ketoacidosis (DKA):

- manage along conventional lines

Disposition

- asymptomatic + no hypoglycaemia or acid-base disturbance: observe for 6 hours post ingestion, monitor BSLs hourly, do not discharge at night
- symptomatic patients +/- hypoglycaemia or acid-base disturbance: will require admission for ongoing management