Sulphonylureas

Overview

Can result in prolonged & profound hypoglycaemia and 1 pill may be fatal in children.

Toxic mechanism

Stimulate insulin secretion from pancreatic beta cells by inhibiting K^+ efflux.

Toxicokinetics

Well abs. Peak levels @4-6hr. Usually small Vd. Liver met to renally elim active metabolites.

Clinical features

Hypoglycaemia – sweating, tachycardia, confusions, seizures, coma, death.

Investigations

Screening: ECG, paracetamol, BSL (<4mmol/L can be early sign)
Specific bloods: serial BSL init q1h. (Insulin level - ?useful)

Risk assessment

One tablet can cause ↓BSL in non-diabetic. Prolonged ↓BSL which may be delayed 8-12h,

Management

Resus: If ↓↓BSL give 50% dextrose 50ml IV (child 10% dextrose 2-5ml/kg)
Supportive Care: Maintain euglycaemia – regular oral or IV glucose. Avoid giving too much glucose load as will stimulate further insulin release.
Decontamination: Charcoal if <1h post-OD (4h if slow-release)
Antidote: **Octreotide** (see Antidotes)

Disposition

Observe for minimum 12-24h especially in children if slow release.