NSAIDs

Overview

Generally benign unless massive. Ibuprofen most common. Mx symptomatic & supportive.

Toxic mechanism

COX1 & 2 inhibitors & thus block PG synthesis. Direct irritant to GIT. PG inhibition → renal glomerular vasoconstriction & mild reversible renal dysfunction. TXA inhibition → ↑bleeding time.

Toxicokinetics

Rapid oral abs. Highly protein bound with small VD.Hepatic met & renally excreted metabolites. $T_{\frac{1}{2}}$ usually <4hr (note naproxen 12hr & piricoxam 45hr).

Clinical features

Minor GIT symptoms (N, V, epigastric pain). Occ. Lethargy or drowsiness. Massive ibuprofen OD → shock, seizures, coma, ARF & metabolic acidosis. Mefenamic acid OD can → seizures.

Investigations

Deliberate OD screening tests: ECG, BSL, paracetamol level.
Specific, if symptomatic: FBC, UEC, LFT

Risk assessment

Generally benign apart from mild GIT symptoms. If >300mg/kg (child >400mg/kg) of ibuprofen risk of multi-system organ dysfunction.

Management

Resuscitation: Usual ABCs
Supportive: Seizures (anticipate if mefenamic acid) with BDZ, fluids.
Decontamination/Elimination: Not clinically useful.

Disposition

Medical discharge appropriate if asymptomatic at 6hr or when ambulant, P/U, eating & drinking, with minimal symptoms.