

Significant flecainide OD can produce life-threatening arrhythmias. Aggressive measures may be required to maintain cardiovascular stability.

Toxicity / Risk Assessment

Toxic-dose is NOT well-established

- toxicity is expected with ingestion of 5x daily dose

- fatalities reported with ingestion of 18 mg/kg

Onset of effects in significant OD occurs in 1-2 hours

*Increased risk with age/underlying co-morbidities/
poor renal function/co-ingestants i.e. other
cardiovascular toxicants*

Clinical features:

Broad complex tachyarrhythmias

- Tachyarrhythmia mimicking VT

- Arrhythmias with rate related bundle-branch
block pattern

Bradyarrhythmias, AV nodal block, QT widening

Na⁺ channel blockade (QRS widening): myocardial
dysfunction

Other features: nausea, vomiting, blurred vision,
hypokalaemia, hyperglycaemia, seizures, coma

Management

Decontamination: Activated charcoal 50 g via NGT post intubation, or < 2 hours post ingestion alert patients

Na⁺ channel blockade with QRS duration > 120ms (Discuss with a clinical toxicologist)

NaHCO₃ (1 mL 8.4% solution = 1 mmol NaHCO₃)

ROLE OF NaHCO₃ IS POORLY DEFINED IN FLECAINIDE TOXICITY. Response to alkalinization is variable.

- Indications: arrhythmias with ↑QRS duration, hypotension not responding to Rx with IV fluid

- Bolus dose – 1 -2 mL/kg 8.4% NaHCO₃ solution as slow (2 minutes) IV push

- Patients who do not respond to an initial dose are unlikely to benefit from further doses

- Maximum dose of NaHCO₃ = 6 mL/kg (6 mmol/kg). Aim for serum pH 7.50-7.55.

- **AVOID SERUM pH >7.55.** Monitor K⁺ and maintain >3.0 mmol/L

- Discuss resistant arrhythmias or hypotension with a clinical toxicologist

- Hyperventilation (once intubated/mechanically ventilated): aim for serum pH 7.50-7.55

Hypotension

- Initially Rx with 20 mL/kg IV fluid (crystalloid). NaHCO₃ as above if not responsive to IV fluid

- Adrenaline is a reasonable first choice of inotrope

- Further inotrope/vasopressor support should be guided by echocardiogram findings

- **ECMO** should be considered on a case-by-case basis in severe poisoning non-responsive to serum
alkalinization and inotropic support (discuss with clinical toxicologist)

Flecainide is **NOT dialyzable.**

Disposition: Discharge pending mental health assessment if well with normal ECG 6 hours post exposure