# Flecainide

**Flecainide OD can produce life-threatening cardiac toxicity. Aggressive measures may be required to maintain cardiovascular stability.**

## Toxicity / Risk Assessment

*Toxic-dose is NOT well-established*

*Significant toxicity is expected with ingestions > 1000 mg*

*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

- Ventricular tachyarrhythmias
- Arrhythmias with rate related bundle-branch block pattern
- Bradyarrhythmias, AV nodal block, QT prolongation, $Na^+$ channel blockade (QRS prolongation): impaired cardiac inotropy

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

## Management

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

**ROLE OF $NaHCO_3$ IS POORLY DEFINED IN FLECAINIDE TOXICITY. Response to alkalinisation is variable.**

(*$Na^+$ channel blockade with QRS duration > 120m - discuss with a clinical toxicologist)*

**Indications for serum alkalinisation:**

- Seizures, QRS prolongation (> 120ms) with arrhythmia or hypotension, on induction prior to intubation

**To achieve serum alkalinisation:**

- Bolus doses of 1 mL/kg 8.4% NaHCO3 solution as slow (2 minutes) intravenous push
- Repeat bolus doses every 5 minutes to rapidly acquire serum pH in 7.50-7.55 range
- NaHCO3 infusion is **NOT** indicated to maintain serum pH. Maintain serum pH with hyperventilation
- Discuss resistant arrhythmias or hypotension with a clinical toxicologist

**Hypotension**

- Initially treat with 20 mL/kg IV fluid (crystalloid). $NaHCO_3$ as above if not responsive to IV fluid
- Adrenaline is the first choice of inotrope
- Further inotrope/vasopressor support should be guided by echocardiogram findings

**Resistant arrhythmia with hypotension**: lignocaine 100 mg as an IV bolus (discuss with clinical toxicologist)

**ECMO** should be considered on a case-by-case basis in severe poisoning non-responsive to serum alkalinisation and pharmacological 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