

## Venlafaxine and desvenlafaxine overdose can cause life-threatening seizures and cardiovascular toxicity

### Toxicity / Risk Assessment

*Toxicity is dose-dependent and can be delayed up to 16 hours post ingestion (current formulations are extended release)*

#### Clinical features:

- **Seizures** (risk increases with greater ingested dose)
  - Likely in all ingestions >5 g venlafaxine
  - Can be delayed up to 16 hours post ingestion
  - Usually short duration and self-limiting
- **Serotonin toxicity:** increased risk with ingestions > 5 g or co-ingestion of other serotonergic agents  
e.g. SSRI, MAOIs, some TCAs
- **Cardiotoxicity** (rare unless ingestion >8 g)
  - **Left ventricular dysfunction** causing severe ↓BP, tachyarrhythmias (↑QT, ↑QRS)
- **Others:** tachycardia, mydriasis, sweating, agitation
- **Coma is NOT a feature of toxicity** (consider other causes)

### Management

Supportive care is the mainstay of management. Consider early intubation and ventilation in large ingestion (>8 g venlafaxine) to facilitate decontamination

#### **Decontamination:**

**Activated charcoal 50 g** should be given to alert and co-operative patients who have ingested >2 g up to 4 hours post ingestion

Consider **whole bowel irrigation** following large overdose (>8 g) (*Discuss with Clinical Toxicologist*)

#### Seizures

**Benzodiazepines:** Diazepam 5 mg IV every 5 minutes as necessary

#### Agitation & Autonomic hyperactivity

**Benzodiazepines:** Diazepam 2.5-5 mg IV 10 minutely PRN or 5-10 mg PO 30 minutely until sedated

**Serotonin Toxicity** – (*see separate serotonin toxicity guideline*)

#### Cardiotoxicity

- Inotropic support in ICU as required

#### **Disposition**

- ingestion < 2 g: can be discharged after 8 hrs observation if asymptomatic + normal ECG
- Ingestion 2 to 5 g: observe for minimum of 16 hours for seizure.
- Ingestion >5 g: observe with cardiac monitoring and IV access for 24 hours
- Ingestion >8 g: high risk of precipitous deterioration. Consider admission to an HDU setting for 24 hours of monitoring