Venlafaxine and Desvenlafaxine

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)
  - L**eft ventricular dysfunction** causing severe ↓BP, tachyarrhythmia**s** (↑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

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