Flumazenil Intravenous for Adults

Who can administer

May be administered by registered competent doctor or nurse/midwife

Important information

- Contra-indicated in patients being given benzodiazepines for the treatment of a potentially life-threatening condition (eg. increased intracranial pressure or status epilepticus)
- See Monitoring requirements below

Available preparations

Anexate 500microgram per 5mL ampoule

Reconstitution

Already in solution

Draw up using a 5 micron filter needle

Infusion fluids

Sodium chloride 0.9% or Glucose 5%

Methods of intravenous administration

Bolus intravenous injection (preferred method)

- Administer initial dose over 15 seconds
- Consider slower rate of administration for patients on long term and/or high dose benzodiazepines [ref 1]

Continuous intravenous infusion

- Dilute to any convenient volume of infusion fluid [ref 1]
- For example: 500 micrograms (5mL) in 50mL [ref 1]
- Rate of infusion then titrated according to response

Dose in adults

IMPORTANT: If no clear effect on awareness and respiration is obtained after repeated dosing, consider other causes for intoxication

Reversal of sedative effects of benzodiazepines in anaesthesia and clinical procedures

- Initially, 200 micrograms over 15 seconds.
- If necessary further doses of 100 micrograms can be given at 60 second intervals
- Usual dose range 300 to 600 micrograms.
- Maximum total dose 1mg per course

Reversal of sedative effects of benzodiazepines in Intensive Care

- Initially, 300 micrograms over 15 seconds
- If necessary further doses of 100 micrograms can be given at 60 second intervals
- Maximum total dose 2mg per course
- **If drowsiness recurs after initial doses**
    - Give an infusion of 100 to 400 micrograms per hour
    - Rate of infusion then titrated according to response
    - Alternatively, give 300micrograms as an intravenous injection, adjusted according to response
    - The infusion should be interrupted every six hours to check whether re-sedation occurs (ref 1)

In situations of poisoning or overdoses

- Higher doses, or different intervals may be recommended by Toxbase, or by National Poisons Information Centre

Renal impairment

- No dosage adjustment is necessary

Hepatic impairment

- Careful titration of dosage is recommended in patients with impaired hepatic function

Monitoring

- Monitor for signs of resedation (for up to 4 hours (ref 2))- flumazenil is a short-acting agent. Repeat doses may be necessary- benzodiazepine effects may persist
- Monitor for withdrawal symptoms from benzodiazepines, especially if high doses or long-term exposure

Storage

Store below 25^{0}C

Do not refrigerate or freeze

References

Anexate SPC December 2020

1: Injectable Medicines guide, downloaded from Medusa 10/04/2025

2. Toxbase, accessed online 10/04/2025

Therapeutic classification

Benzodiazepine antagonist