Metaraminol (as bitartrate) Intravenous for Adults

Who can administer

Administration RESTRICTED - see Appendix 1

Important information

- **Extravasation** may cause tissue necrosis (see further information below)

Available preparations

Metaraminol 10mg per 1ml ampoule

Reconstitution

Ampoules

- **Draw up using a 5 micron filter needle**

Infusion fluids

Sodium chloride 0.9% or Glucose 5%

Methods of intravenous administration

Bolus intravenous injection using ampoules (emergency use) (Ref 1)

- Dilute 10mg injection (1ml) with 19ml sodium chloride 0.9% to give a concentration of 0.5mg per ml
- Administer required dose followed by a 10 to 20ml Sodium chloride 0.9% flush

Continuous intravenous infusion (administer using an electronically controlled infusion device)

- Add (15 to 100mg) to 500ml of infusion fluid
- Higher concentrations have been used, where clinically indicated (up to 10mg in 20ml (0.5mg per ml)) (ref 1)
- Adjust rate to maintain blood pressure
- See under dose for more details

Dose in adults

Bolus intravenous injection (Hypotensive states) [ref 2]

- Stat doses of 0.5mg to 1mg, repeated every 3 to 4 minutes if required
- Onset of action is around 1 to 2 minutes, the duration of response 20 to 60 minutes
- See Further information for further details

Intravenous infusion

- Usual dose range 15 to 100mg infused at a rate adjusted to maintain blood pressure at desired level
- Onset of action is around 1 to 2 minutes
- Adjust rate to maintain blood pressure
- When stopping infusion, reduce the rate of infusion gradually. Abrupt withdrawal can case acute hypotension [ref 1]

See under 'Further information' below re site of administration

Monitoring

- Blood pressure, heart rate, ECG, central venous pressure, drowsiness, urine output, infusion site [ref 1]
- May cause hypersensitivity reactions (contains sodium metabisulphite)

Further information

- When given peripherally the drug should **preferably be given in the large veins of the antecubital fossa or the thigh**. These veins are preferable particularly in patients with peripheral vascular disease, diabetes mellitus, Buerger's disease, or conditions with coexistent hypercoagulability
- **For intravenous injection**: the dose stated above differs from the manufacturers recommendations (0.5 to 5mg). However the strategy of giving smaller doses and repeating if necessary may minimise the possibility of hypertension and bradycardia [ref 2]. If using bolus doses in excess of 2mg, consider waiting up to 10 minutes before repeating dose

Storage

- Store below 25^{0}C

References

Metaraminol 10 mg/ml Solution for Injection or Infusion SPC December 2020

1: Injectable Medicines Administration Guide, Medusa, accessed 23/01/2025

2: Email correspondence, Dr B Harte, UHG, 24th Jan 2019

Therapeutic classification

Vasoconstrictor sympathomimetics

BNF
Blood pressure conditions