Propofol 1% Intravenous for Adults

Who can administer

Administration RESTRICTED - see Appendix 1

Important information

- May only be initiated by Intensivists/Anaesthetists
- Facilities for maintenance of airways, artificial ventilation and other resuscitation facilities should be immediately available at all times

Available preparations

Propofol 1% 200mg per 20mL ampoule (Fresenius)

Propofol 1% 500mg in 50mL vial (Fresenius)

Propofol 1% 1000mg in 100mL vial (Braun)

Reconstitution

- Already in solution
- **Draw up using a 5 micron filter needle (ampoules)**
- Shake before use
- **Replace infusion after 12 hours**
- **For single administration in an individual patient**

Methods of intravenous administration

Sedation in patients in the intensive care unit

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

- Administration via **central line or a large peripheral vein** (ref 1)
- Draw up required volume (50mL) and administer using a syringe driver

Bolus Intravenous Injection

- Administer required dose as a bolus intravenous injection

Dose in adults

Sedation in the intensive care unit:

- The dose should be adjusted according to the depth of sedation required
- Usual administration rates are in the range of 0.3 to 4mg/kg/hour.
- Titrate every 5 to 10 minutes in increments of 0.3 to 0.6mg/kg/hour (ref 1)

Status Epilepticus (unlicensed use)(ref 1)

- **Loading dose**

    - Give 1 to 2mg/kg followed by 0.5 to 2mg/kg every three to five minutes until seizures are suppressed
    - **Maximum total loading dose** is 10mg/kg

- **Continuous intravenous infusion**
    - Initial rate of 1.2mg/kg/hour titrated to cessation of electrographic seizures of burst suppression
- **Usual dose range:** 1.8mg to 3.6 mg/kg/hour
- **Maximum dose:** 12mg/kg/hour
- Use with caution in doses greater than 4.8mg/kg/hour for greater then 48 hours

Monitoring

- Monitor blood pressure, ECG and monitor for respiratory depression (pulse oximetry)
- Propofol-related infusion syndrome (PRIS) is a rare complication of propofol. It is generally associated with doses of greater than 4mg/kg/hour and prolonged use greater than 48 hours
- Characteristics of PRIS include metabolic acidosis, rhabdomyolysis, hyperkalaemia, hepatomegaly, renal failure, hyperlipidaemia, cardiac arrhythmia and cardiac failure
- May cause local pain, swelling and/or tissue necrosis
- Monitor for hypertriglyceridaemia- discolouration of urine [ref 2]

Storage

- Store below 25^{0}C
- Do not freeze

References

Propofol Injection 1% (Fresofol) SPC Fresenius Kabi September 2019
1.UptoDate accessed online 19/01/2021
2.Medusa NHS Injectable Medicines Guide assessed online 20/01/2021

Therapeutic classification

Short acting general anaesthesic agent