

Who can administer

Administration RESTRICTED - see [Appendix 1](#)

Important information

- Stored as a controlled drug in GUH
- For use by anaesthetists only
- **Extravasation** can cause local tissue necrosis and severe pain - use central line or large peripheral line ^(ref 1).
- **Resite cannula** at first signs of **inflammation**
- **Accidental** intra-arterial injection causes severe arterial spasm and an intense burning pain around the injection site ^(ref 1)
- For Y-site compatibility [see below](#)

Available preparations

Thiopental 500mg vial

Reconstitution

Water for injection

20ml per 500mg vial (produces a 25mg/ml (2.5%) solution)

Methods of intravenous administration

Bolus intravenous injection

- Administer required dose over 10 to 15 seconds^(ref 1) (20 seconds for Thiopentone Inresa brand ^(ref 5))
- However it is recommended to administer incremental doses rather than one bolus dose in order to achieve greater control and better recovery ^(ref 4)

For administration by other routes - see Further Information

Dose in adults

Use in anaesthesia

- It is recommended to administer incremental doses rather than one bolus dose in order to achieve greater control and better recovery ^(ref 4)
- A test dose of 25 to 75mg can precede the main administration ^(ref 1,2). Monitor for at least 60 seconds to assess tolerance or unusual sensitivity to the drug ^(ref 1)
- Give 100 to 150 mg over 10 to 15 seconds^(ref 2,3)
- A repeat dose of 100 to 150mg may be given after 30 to 60 seconds^(ref 2,3)
- No fixed dosage recommendations can be given since the dose will need to be carefully adjusted according to response. Factors such as age, sex, weight should be taken into account^(ref 4)
- Maximum dose 500mg^(ref 3)

Use in convulsive states (ref 3,4)

- Give 75 to 125mg as soon as possible after the convulsion begins
- Further doses may be required

Use in neurological patients with raised intracranial pressure (ref 2)

- Intermittent bolus doses of 1.5 to 3mg/kg may be given to reduce elevations of intracranial pressure if controlled ventilation is provided

Reduced doses may be required in the following patients (ref 4)

- Elderly
- Patients pre-medicated with narcotic analgesics
- Hepatic impairment
- Shock
- Dehydration
- Severe anaemia
- Hyperkalaemia
- Toxaemia
- Myxoedema
- Other metabolic disorders
- Severe renal impairment (ref 3)

Increased doses may be required in the following patients (ref 4)

- Patients with a history of drug or alcohol abuse

Monitoring

- Severe or refractory hypokalaemia during the infusion has been reported, severe rebound hyperkalaemia may occur after administration has stopped (ref 1)
- Endotracheal intubation equipment, oxygen and resuscitation equipment should be readily available (ref 1)
- Monitor blood pressure (ref 1), respiratory function
- Monitor injection site (can cause extravasation)

Further information

Rectal administration (ref 4)

- Give 25 to 45mg/kg dissolved in 25ml water.
- Anaesthetic effects are usually seen within 10 minutes of administration

Storage

- Controlled drug
- Do not store above 25°C

References

1: Injectable medicines guide, downloaded from Medusa 11th Jan 2023

2: Martindale- downloaded from Medicinescomplete 12th Jan 2023

3: BNF- downloaded from Medicinescomplete 11th Jan 2023

4:.SPC March 2019 (no longer marketed but SPC on file)

5: Thiopentone Inresa SPC 06/09/2014

Search synonym thiopentone

Therapeutic classification

Barbiturate