Methylthioninium chloride (Methylene blue) intravenous for adults

Who can administer

May be administered by registered competent doctor or nurse/midwife

Important information

- **This monograph only refers to the INTRAVENOUS use of this product**
- **Advise contact with the National Poisons Information Centre (NPIC) before using this drug**
- Unlicensed preparation
- **Flush line** before and after with **Glucose 5%**
- Intravenous methylthioninium chloride **should be avoided in patients who have been treated recently with serotonergic antidepressants**, e.g.SSRIs, SNRIs, MAOIs, venlafaxine, and opioids (fatal serotonergic symdrome reported)
    - If combination cannot be avoided, monitor for the emergence of serotonin syndrome and if symptoms occur, discontinue use of methylthioninium and initiate supportive treatment

Available preparations

Proveblue Methylthioninium chloride (methylene blue) injection 5mg per mL

Available as **10mg in 2mL** and **50mg in 10mL** ampoules (50mg in 10mL usually in stock)

Reconstitution

Already in solution

Draw up using a 5 micron filter needle

Infusion fluids

Glucose 5% ONLY

Methods of intravenous administration

Slow intravenous injection

- Dilute in 50 to 100mL Glucose 5%

- Administer **very slowly over 5 minutes** to prevent high local concentrations of the compound from producing additional methaemoglobin

Dose in adults

Methaemoglobinaemia

- After discussion with NPIC, give 1 to 2mg/kg initially
- Give further doses as advised by NPIC (which are normally given after 30 to 60 minutes)

Renal impairment

- Should be used with caution in patients with moderate to severe renal disease since there is limited data available. Lower doses may be needed. Contact NPIC

Monitoring

- Monitor MetHb concentrations every 30 to 60 minutes to assess effectiveness, or sooner if cyanosis recurs
    - Note that methaemoglobinaemia may recur and further treatment may be required
- Monitor all patients until at least 6 hours after treatment
- Monitor ECG, blood pressure, oxygen saturations
- Monitor for **serotonin syndrome** if administered to patients who are on serotonergic drugs

Storage

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

References

Proveblue SPC 23/05/2024

Also consulted: Toxbase printed 02/07/2025

Therapeutic classification

Antidotes and chelators