Chloramphenicol Intravenous for Adults

Who can administer

May be administered by registered competent doctor or nurse/midwife

Important information

- See monitoring requirements
- Must be approved by **micro/ID**
- **Unlicensed** preparation
- See under 'Dose' for adjustments required in **renal or hepatic impairment**

Available preparations

Chloramphenicol 1g vial

Reconstitution

Water for injection and Sodium chloride 0.9%

To produce a 10% solution add 9.2ml to 1g vial to produce a 1000mg in 10ml solution (ref 1)

Methods of intravenous administration

Slow intravenous injection

- Administer over at least 1 minute [ref 1]

See also further information

Dose in adults

Usual dose

- Give a stat dose of 25mg/kg and contact micro/ID for further advice (ref 2)
- Dose is 12.5mg/kg to 25mg/kg every six hours (ref 3,4)
- Doses at the higher end of range (25mg/kg)are used for serious infections such as septicaemia and meningitis provided high doses are reduced as soon as clinically indicated
- **Maximum dose 4g daily** (ref 4,5). **Avoid repeated courses and prolonged treatment**

Renal impairment

- eGFR less than 10mL/min - use usual dose but use only if no alternative [ref 2]
- Increased risk of bone marrow depression. Monitor closely.
- See below re monitoring of levels [ref 3]

Hepatic impairment

- **Avoid if possible** - increased risk of bone-marrow depression; consider reducing dose and monitor levels (but see below) [ref 3]

Monitoring

- **Baseline FBC** required before and every two days during treatment as chloramphenicol can cause severe bone marrow depression
- Serious and fatal blood dyscrasias (aplastic anaemia, hypoplastic anaemia, thrombocytopenia, granulocytopenia) have occurred after both short and long-term use
- Note: an irreversible type of marrow depression leading to **aplastic anaemia** with a high rate of mortality can occur weeks or months after therapy (ref 4)
- Plasma concentration monitoring recommended in the elderly and in hepatic and renal impairment - however, not routinely available
- **Recommended plasma concentration** (ref 3)
  - **Peak** (2 hours after intravenous administration)10 to 25mg/L
  - **Trough** (just before dose is due) less than 15mg/L

Further information

- If required, chloramphenicol can be added to either Sodium chloride 0.9% or Glucose 5% and given as an infusion over 20-30 minutes and volume is determined by patient's fluid requirements [(ref 1)]

Storage

Store below 25^{0}C

References

UK Kemicetine SPC 08/09/2021

1. Injectable medicines information guide downloaded from Medusa 20/01/2023

2. GAPP app guidelines 2021

3. BNF accessed online 20/01/2023

4. Martindale- downloaded via http://www.medicinescomplete.com20/01/2023

5: Uptodate, downloaded 20/01/2023

Therapeutic classification

Antibiotic